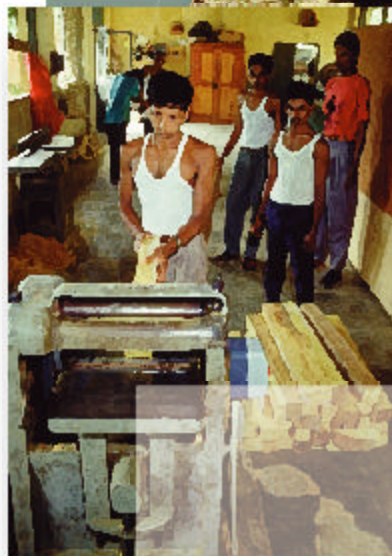


# TOWARDS EQUITABLE PARTNERSHIPS BETWEEN CORPORATE AND SMALLHOLDER PARTNERS

Relating partnerships to social, economic and environmental indicators

WORKSHOP SYNTHESIS







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and environmental indicators

## WORKSHOP SYNTHESIS

CIFOR – Bogor, Indonesia,  
21– 23 May 2002

Synthesis of a workshop to develop joint proposals  
for an action learning programme among farm foresters,  
private companies, and research and extension agencies

Co-sponsored by the  
Center for International Forestry Research (CIFOR)  
and  
FAO Forest Resources Division

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## Foreword

An ever-increasing human population drives an increasing demand for many different wood products, which can effectively be met through plantations. Although this has been recognized for over a century, progress in getting large areas into production has been far slower than projected. There are many reasons for the shortfall in plantation production, including a general lack of effort in actively engaging communities in plantations in a way that benefits small-scale producers, the wood products industry and ultimately the consumers of wood products.

An important means of expanding plantation production and benefiting small-scale producers is through corporate smallholder partnerships that establish agreements for industries to purchase wood produced by other parties, including but not limited to smallholders. While there are examples of successful corporate smallholder partnerships in the tropics, many attempts have been only partially successful or have failed entirely in producing significant quantities of wood in ways that benefit both producer and processor.

Those who have been involved over the last 100 years in trying to find ways to use forest resources more effectively for economic development have often encountered the reality of marketing constraints – either the lack of adequate markets or the presence of markets that do not allow small producers to benefit. For corporate-smallholder partnerships to provide both economic development opportunities and raw material for forest industries, renewed effort must be placed on understanding what makes them successful and what constrains their use.

In May 2002, FAO and CIFOR cosponsored a workshop in Bogor, Indonesia that is a small step in the direction of achieving that understanding. The workshop, and subsequent synthesis described in this document, attempted to bring together the perspectives of the private sector, government, non-governmental organizations and research institutions who are actively working on this important topic. The results of this workshop will certainly help in the identification and formulation of ways forward in equitable and environmentally sustainable planted forest management. The outputs speak for themselves, but it is clear that more needs to be done with regard to corporate smallholder partnerships if forestry development is truly to meet the multiple objectives of poverty alleviation and the production of fibre for expanding markets.

The UNFF Intersessional Experts Meeting on the Role of Planted Forests in Sustainable Forest Management, 25-27 March 2003, in Wellington, New Zealand noted a sharp increase in the global area of planted forest cover the last decade. Recent FAO statistics indicate that 5 percent of total forest cover is of this forest type, providing 35 percent of the world's wood supply. Promoting the multifaceted role of planted forests can significantly contribute to sustainable forest management. The same meeting, however, concluded that a coherent and stable policy environment was essential in promoting sustainable planted forest development. Effective stakeholder involvement in decision-making related to forest planning and implementation was also recognized as a key element of policy. The meeting also noted that society expectations of planted forests, and hence the principal objectives, change over time, and emphasized the need for adaptive management systems that are able to respond to changing social, environmental, economic and cultural expectations. The meeting recognized that small-scale growers are playing an increasingly important role in the establishment and management of planted forests, both in partnerships with other actors and independently. Enhancing the contribution of planted forests to the livelihoods of small-scale growers, by addressing constraints and facilitating support mechanisms has the potential to increase substantially levels of local interest in and support for planted forests.

The text of this UNFF Intersessional Experts Meeting further reiterates the relevance of the experiences collected in this document. We hope that the readers of this document will work with those represented at the Bogor workshop and others to take up the important lessons and challenges noted by the workshop participants.



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## Acronyms

ABARE	Australian Bureau of Agricultural and Resource Economics
ADB	Asian Development Bank
ANU	Australian National University
APEC	Asia-Pacific Economic Cooperation
C&I	criteria and indicators
CGI	Consultative Group on Indonesia
CIFOR	Center for International Forestry Research
CRCSPF	Cooperative Research Centre for Sustainable Production Forestry
CZI	Confederation of Zimbabwe Industries
DAI	digital aerial imagery
DENR	Department of Environment and Natural Resources
DFID	Department for International Development, UK
DWAF	Department of Water Affairs and Forestry
EMPORSIL	Empresa Portuguesa de Silvicultura, Ltda.
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
HTI	Hutan Tanaman Industri (Industrial Timber Plantation Concession)
ICRAF	World Agroforestry Centre/International Centre for Research in Agroforestry
IIED	International Institute for Environment and Development
IMF	International Monetary Fund
ITTO	International Tropical Timber Organization
IUCN	International Union for Conservation of Nature and Natural Resources
JICA	Japan International Cooperation Agency
LATIN	Lembaga Alam Tropika Indonesia
LIMA RDF	Lima Rural Development Foundation (South Africa)
MOA	Ministry of Agriculture
MOU	memorandum of understanding
NGO	non-governmental organization
NPV	net present value
NTFPs	non-timber forest products
ODI	Overseas Development Institute
OECF	Overseas Economic Cooperation Fund of Japan
PAR	participatory action research
PICOP	Paper Industries Corporation of the Philippines
PRA	participatory rural appraisal
RAPA	Regional Office for Asia and the Pacific
SEAN	Association of South East Asian Nations
SFM	sustainable forest management
SMME	small, medium and micro enterprise
SOPORCEL	Sociedade Portuguesa de Papel, S.A. (Portugal Pulp and Paper Manufacturer)
SPFM	sustainable plantation forestry management
WTO	World Trade Organization



## Executive summary

This initiative comes at a time when harvesting operations of natural forests are increasingly proscribed owing to conservation and environmental concerns and the greater recognition of the need to protect biodiversity and indigenous rights. Planted forests, either in blocks or as trees on farms will increasingly be the future production foci of commercial forest products. With the increase in population and the multiple demands for land, the forest industry is required to become more able to address the social, economic and environmental concerns of the communities adjacent to block plantations, and the contractors, forest industry workers and smallholders with whom they interface. This document goes some way in addressing this concern. While recognizing that the principal objective of any private sector investment is financial, the principles set forward in this document suggest a way forwards that facilitates:

- companies to negotiate lower risk partnerships with communities and smallholders, partnerships that are more sustainable for the period of the investment and beyond, and have a demonstrated and measurable impact on the social and economic well-being of their smaller and numerous partners;
- smallholder groups and communities, with the support of non-governmental organizations (NGOs), to negotiate better deals, with a greater degree of flexibility in terms of planting and harvesting rights, tree species, products and payments, which in turn enhances their livelihood alternatives.

This document contains the background materials, research papers and country papers from Indonesia and South Africa presented at a workshop jointly hosted by CIFOR and FAO in Bogor, Indonesia in May 2002. The workshop drew together participants from the private sector (corporates), NGOs, research and government representatives. Part I of the document provides the background to the meeting, the conceptual framework of joint learning that underpins the development of equitable partnerships, and the synthesis of the experiences of workshop participants, papers and workshop deliberations. The synthesis is summarized in a framework entitled: Principles on mutually beneficial partnerships between corporate and smallholder partners – relating partnerships to social, economic and environmental indicators.

These principles are linked to the criteria and indicators of planted forest management and, in particular, demonstrate the essential link between social, economic and environmental indicators and sustainable partnerships.

## Summary of guidelines for mutually beneficial partnerships

### **Policy**

Coherent intersectoral policies include support to planted forest development, land and crop tenure, management and market rights and the existence of environmental and social and cultural covenants to ensure positive contributions to landscape restoration. For companies and smallholders to use the policies and implement regulations these need to be simple, achievable, minimize bureaucracy, provide facilitating and enabling governance (all levels) and provide incentives if necessary.

### **Economic**

Financial viability is usually a prerequisite or driving force for sustainable partnerships; however, the need to forecast economic risk needs to be assessed. Partners maintain an equitable account of inputs and risks as the basis for setting up a benefit-sharing agreement. Market intelligence information, particularly regarding wood buying from smallholder tree growers and cost-efficiency management of small-scale operations, should be made available to the commercial partners to enhance transparency and accountability.

### **Sociocultural**

Meeting and recognizing essential social objectives in the agreement, securing the diverse nature of local livelihoods of tree growers and their partners, ensuring that equity is achieved and establishing strong institutional frameworks. Address different sociocultural characteristics in the formulation of partnership agreements and arrangements, using the comparative advantages of each partner.

## **Ecological**

Address the maintenance of ecological integrity, mainly to ensure the sustainability of essential environmental services. Partners jointly comply and commit to implementation of environmental covenants within management plans, joint identification of ecological parameters before project initiation, and meet the balance of social and ecological integrity to ensure that ecological risks are minimized.

## **Management**

Social learning approaches including negotiations in defining the agreement and management plan, mechanisms to enhance transparency and accountability, definition of services and service providers, compliance with codes of practice and the development of management guidelines in appropriately applicable and effective forms.

The Assessment Guidelines can be applied in the planning, implementation and monitoring phases of partnerships.

## **Conclusions**

The move to partnership schemes for industrial wood supply is now well established and growing rapidly in many parts of the world. While some of the privately owned plantation programmes are large, and borrow from the methods of agriculture monocultures, others are smaller, less intensive and more concerned about meeting multiple objectives.

Equitable partnerships with corporates function on the basis of empowering smallholders or communities in negotiation and management processes and provide economic returns based on the invested equity. The smallholders and corporates are business partners, and receive due returns to invest in either community or individual projects or activities as they decide. Partnerships are based on sound financial and business principles, but with the indicators of equitable social and environmental management criteria to provide a framework for returns to partners on a basis that is empowering and sustainable.

The assessment guidelines described in this document will enable and support planted forest schemes. The guidelines will enable stakeholders to address, in a substantive and transparent manner, negotiations towards economic, financial, social and environmental sustainability. The guidelines provide a framework for a process of joint action learning between smaller landowners, companies, research and extension agencies, NGOs and other development actors that lead us towards greater equity in negotiations and, as a consequence, greater opportunities for social and ecological sustainability.

## **Future activities and objectives**

The revised set of principles presented as a synthesis of the workshop is to be viewed as one contribution in the process towards a framework for equitable partnerships between corporate and smallholders in the forest sector. These principles, criteria and indicators require to be further tested and documented in real situations between corporate and smallholder partners. Other stakeholders such as third parties (NGOs), research and government agencies also have critical roles to play. Qualitative and measurable means of verification of the various indicators require to be jointly developed and tested by stakeholders. Further research on the financial returns to smallholders and economic and social benefits in the landscape are also envisioned.

Corporate partners have expressed their interest that, after further field testing, this framework could become an internationally recognized accreditation scheme for ascertaining the social equity and ecological sustainability of corporate smallholder partnerships and related social investment programmes.

Corporates, NGOs and smallholder partners are encouraged to try out these guidelines in their negotiations, management and monitoring processes. We would very much appreciate hearing of any such experiences in this regard.



# PART I

# TOWARDS EQUITABLE PARTNERSHIPS BETWEEN CORPORATE AND SMALLHOLDER PARTNERS

## WORKSHOP SYNTHESIS



# Chapter 1

## BACKGROUND

The predicted, reduced forest production of industrial roundwood from natural forests, owing to a combination of factors including changes in land use patterns, depletion of the resource or withdrawal of forest areas from production for the provision of environmental services, is well documented.

The potential production of intensively grown high-yielding planted forests is such that in theory the present global demand for raw material for pulp could be supplied from an area equivalent to only 1.5 percent of the world's closed forest area (IIED, 1996).

Demand for forest products will continue to grow as world population and incomes grow. However, projections of wood consumption are lower than in the early 1990s and there have been improvements in forest management, productivities and yields from harvesting and processing technologies, expansion in new planted forest areas, and recognition of the critical role of trees outside forests (FAO, 2002).

## Role of planted forests for industry

The average annual demand for industrial roundwood is projected to increase by 1 percent per year over the coming decade. These projections reflect an increasing trend in the consumption of pulpwood for reconstituted wood panels and paper. Pulpwood consumption is projected to increase from 700 million cubic metres in 1995 to around 1.33 billion cubic metres by 2045. Along with changes to the quantity and type of wood demanded, there are also changes to the regional demand patterns. Based on consumption projections to 2010, Asia is emerging as an important future market for wood products, driven by increasing economic development and population growth (Broadhead, 2002).

**Table 1.1. Predicted industrial roundwood supply from planted forests by region**

Region	2000 (%)	2020 (%)	2040 (%)
Africa	20	39	40
Asia	32	46	48
Europe and the former Soviet Union	46	53	55
North and Central America	22	29	31
Oceania	55	66	67
South America	63	65	66
Global	35	44	46

Source: Global Outlook for Plantations ABARE Research Report 99.9, 1999.

This level of industrial roundwood production from planted forests will require a significant increase in production area and/or gains in productivity.

The future expansion of planted forests and their role in supplying wood products will largely reflect the competitiveness of planted forest wood against other sources of wood and product substitutes, and the competitiveness of planted forests against agriculture, urban and other land uses. With prudent planning and management they provide renewable sources of wood and are energy efficient compared to product substitutes.

## Transition

Since the expansion of planted forest programs in the tropics in the 1970s, planners have increasingly adopted participatory approaches in planted forest programmes. Examples are widespread in smallholder plantings involving the rural poor (Arnold and Dewees, 1997) and multi-purpose planted forests for biodiversity, production and protection purposes (Kanowski, 1997). However, examples of industrial planted forests established as a result of multi-stakeholder dialogue are less prevalent (see Fikar, Chapter 9 and Mack, Chapter 14 of this book; Arnold, 1997). The necessity of multistakeholder negotiation and dialogue increases as fewer planted forests are established directly by the state on permanent public forest land and more is being established by the private sector in a range of land tenurial instruments (management contracts, leases, partnerships, outright ownership) with a range of partners.

Kanowski (1997) indicated that the sustainability of planted forests will be enhanced and the benefits of investments fully realized where their purpose and practice are embedded within the broader social and economic context. In the future, the key questions will not be whether there will be enough wood, but rather where it should come from, who will produce it, and how it should be produced (FAO, 2002) .

Kanowski (1997) indicated that the environmental and social impacts of planting schemes pose the greatest challenge to foresters in the new millennium. To date there has been no widely available guidelines or checklists to assist corporate and smallholder investors entering into partnerships for industrial roundwood production. The structure, content and deliberations of this joint CIFOR/FAO workshop were designed to produce such guidelines aimed at facilitating the transparency of negotiations and the development of mutually beneficial partnerships. The workshop brought together the expertise from key stakeholders including national, international companies, government, NGOs, extension and research agencies from South Africa and Indonesia.

## Studies commissioned

In 2000, FAO commissioned a report entitled "Global survey and analytical framework for forestry outgrower arrangements" led by Desmond and Race from the Faculty Department of the Australian National University. This was a global overview prepared from a postal survey and literature review. The overview identified the need for clear mechanisms for mutually beneficial partnerships between tree growers and private industry. In the interim between the publishing of that report and now:

IIED has conducted country case studies in several countries including South Africa, India, China and Indonesia, led by James Mayers and Sonya Vermeulen. A series of six detailed studies and around 60 examples of various types of partnerships were published in July 2002 under the title "Company-community forestry partnerships: from raw deals to mutual benefits".

CIFOR has conducted a series of comparative case studies between Indonesia and Philippines led by Ani Adiwinata Nawir. Publications are being prepared under the title, "Towards mutually beneficial partnership in outgrower schemes".

## How guidelines to assess mutually beneficial partnerships are located in other ongoing initiatives

The idea towards sustainable forest management (SFM) has encouraged massive initiatives to create sets of guidelines, criteria and indicators to ensure that sustainability objectives are achievable. For years, the focus of these tools has emphasized natural forests management and not plantation management (see Table 1.2). The issues of developing forestry plantation in the tropics have become controversial owing to unsustainably large-scale managed plantations and the rights of surrounding communities have been disrespected. There have been growing pressures towards transferring the greater benefits of large-scale plantations to these communities, especially in cases where these plantations have been developed by converting natural forests on which significant numbers of people depend for their livelihood.

In 1997, the International Tropical Timber Organization (ITTO) developed the guidelines for the establishment and sustainable management of planted tropical forests, which focus on large-scale management operations. In these ITTO guidelines, socio-economic considerations relating to the impacts of plantations on the communities were included in the feasibility assessment (p. 8), and more active involvement during the postestablishment management (p. 19). In 2000, CIFOR published the set of Criteria and Indicators (C&I) for Sustainable Plantation Forestry in Indonesia and India. Similar to ITTO Guidelines, the assessment process focuses at the level of Forest Management Unit. The CIFOR C&I set (2000) under the criteria entitled "Socio-economic performance of local community is enhanced" discusses the expectations for the plantations to provide greater contribution to the local communities, such as increasing the people's incomes and opportunities to work and be trained by the company, and to independently grow timber to supply the company with raw material (p. 21).

The two sets agree on the need to address socio-economic issues by more actively involving the local people/communities in economically more productive ways. Responding to various problems, mainly political and social, partnerships schemes (including outgrower schemes) between company and communities have been initiated. The need is first for an agreement and then to make it sustainable, feasible and effective. Many partnerships failed in the past owing to lack of transparency and accountability in the process of setting up the agreement. The key to sustaining partnerships in the long term is by ensuring mutually beneficial partnerships for both parties (company and community). The company or other parties who would like to initiate outgrower scheme partnerships need specific guidelines to ensure that companies invest in partnerships that will be socially and economically feasible in the long run. In fulfilling these needs, the Assessment Guidelines for Mutually Beneficial Partnerships were set up and provide the groundwork to be adjusted further. The CIFOR Assessment Guidelines of Mutually Beneficial Partnerships is the application of referenced sets that are mainly generic. These guidelines focus on the operational level, specifically on the forest management unit of small-scale plantations.

**Table 1.2. Focuses of assessment of initiatives on assessing forest practices**

Focuses of assessment	Initiatives on assessing forest practices
Natural forest management	Criteria and indicators in the ongoing international processes (established in 1995 by FAO and still ongoing) CIFOR Generic Template of Criteria and Indicators on Sustainable Forest Management for Natural Forests (1999). This focused on the Forest Management Unit (FMU)
Large-scale planted tropical forests/ plantation forestry at forest management unit (FMU)	ITTO Guidelines for the Establishment and Sustainable Management of Planted Tropical Forest (1997) CIFOR Criteria and Indicators for Sustainable Plantation Forestry in Indonesia (2000) <sup>a</sup> CIFOR Code of Practice (2001)
Assessment guidelines for mutually beneficial partnerships to develop small-scale plantations	Principles and analytical framework of FAO Global Survey and Analytical Framework for forestry out-grower arrangements (2000) CIFOR Assessment guidelines of partnerships in outgrower schemes (2000) <sup>b</sup>

Notes:

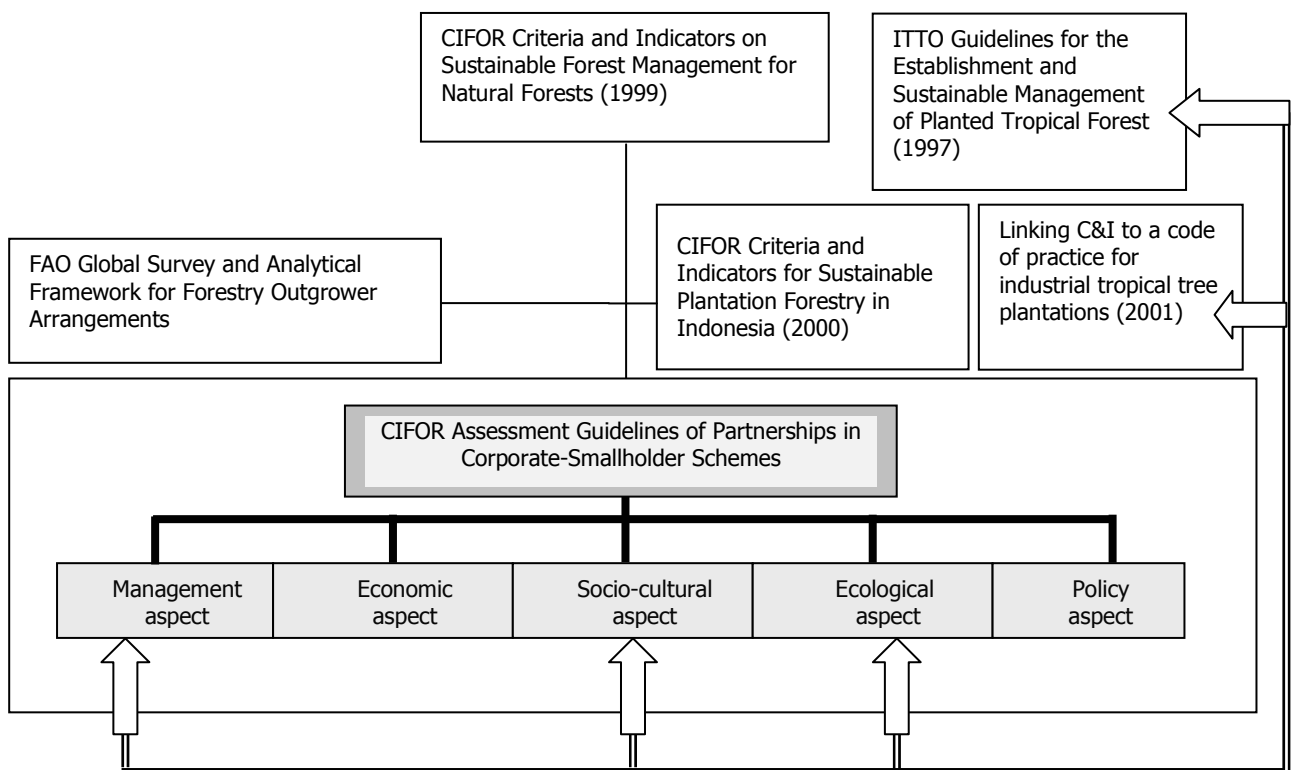
<sup>a</sup> CIFOR C&I for Sustainable Plantation Forestry was also developed for India.

<sup>b</sup> This set was used as the basic set to be discussed in the FAO/CIFOR meeting (May 2002).


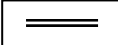
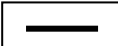
## Complementary links

Figure 1.1 shows how different sets of criteria and indicators are linked together. The sets of CIFOR Generic Template of Criteria and Indicators on Sustainable Forest Management for Natural Forests (1999), CIFOR Criteria and Indicators for Sustainable Plantation Forestry in Indonesia (2000) and FAO Global Survey and Analytical Framework for forestry outgrower arrangements (2000) provided the solid basis in defining the CIFOR assessment guidelines for mutually beneficial partnerships to be used to assess the outgrower schemes in Indonesia and the Philippines.

**Figure 1.1**  
**Links of initiatives on assessing forest practices and assessment guidelines of mutually beneficial partnerships in corporate-smallholder schemes**



Note:

-  : Solid basis to develop the Assessment Guidelines for Mutually Beneficial Partnerships
-  : The management, socio-cultural, ecological guidelines support the ITTO Guidelines for the Establishment and Sustainable Management of Planted Tropical Forest (1997). The ITTO Guidelines and Linking C&I to a code of practice for industrial tropical tree plantations are essential references to assess the technical requirements of establishing small-scale plantations.
-  : Assessment guidelines are composed of five aspects.

The assessment guidelines mostly focused on partnership arrangements. However, these should be integrated in line with the technical aspects of Sustainable Planted Forests/plantation forestry. In the Assessment Guidelines, establishing small-scale plantations in outgrower schemes should follow the appropriate code of practices and other technical requirements to minimize risks. The ITTO Guidelines and CIFOR's Code of Practice in Linking C&I to a code of practice for industrial tropical tree plantations (2001) could become reference tools. The CIFOR Assessment Guidelines for Mutually Beneficial Partnerships were designed by following the hierarchical systems of Principles, Criteria, Indicators and Verifiers, as used by the earlier CIFOR sets (1999, 2000) (refer to Annex 4). Verifiers were not discussed since the users should develop these on the basis of locally specific conditions and situations.

## Workshop rationale

In consultation with the proposed participating agencies, primarily the key institutions conducting research activities related to outgrower scheme issues, it was agreed that the time was appropriate to take this issue forwards and build on research already conducted by the various collaborating agencies. Immediate and logical action following from these various research initiatives would be to develop a joint proposal(s) for an action-learning programme based on guidelines for best practices drawn from various research initiatives. The proposed meeting between concerned agencies is a good opportunity to discuss collaborative research action agendas. Participants included representatives from research and extension agencies, private companies and non-governmental organizations (NGOs).

## Objectives of the workshop: agendas to move forwards

The following suggested meeting objectives were circulated to participants prior to the meeting:

A preliminary consensus among the parties based on the literature and case studies of participating organizations of the principles, criteria and indicators and verification for mutually beneficial partnerships, and assessment criteria to identify potential sites based on sociocultural, economic, institutional and biological suitability for facilitating the scheme. These sets of principles and criteria are likely to devolve to subsets according to particular land tenure regimes, the extent of participatory contractual negotiations, and products and market level, etc. It will not be feasible in a two-day meeting to complete the discussion on this issue. Indeed, owing to so much variation and case-specific situations, it is neither a realistic nor a desirable objective. However, broad agreements of criteria to be included should be reached if joint activities are to move forwards.

Joint development of programme and procedures for developing a draft version of best practices for mutually beneficial partnerships, and a Programme of Action Learning of testing those guidelines and tools in partnership with private companies, research and extension. The best practices guidelines aim to facilitate pluralistic extension services and third parties in consideration and development of such contracts. Best practice guidelines to be based on the case study literature, agreed criteria (Agenda item 1) and testing sites (Agenda item 3). (Guidelines to be accompanied by a training manual.)

Potential study site selections based on assessment criteria (Agenda item 1) for a proposed Programme of Action to test guidelines and tools (Agenda item 2) in partnership with private companies, research and extension agencies. Referring to the identified criteria (Agenda item 1), selection will be based on secondary data, and participants knowledge, to identify sites or countries where outgrower schemes possibly have the greatest potential for addressing sustainable forest management, national tree product market issues and outgrowers livelihoods. The assessment will be conducted according to a stratified ranking of key considerations. Selection will also include consideration of different subset of principles and criteria. Comparative advantages on geographical focuses of concerned participating agencies (FAO, IIED, ODI, CIFOR) will also be discussed.

Items 2 and 3 would form the basis of a project document to be further developed and jointly submitted for funding by interested participating agencies.

The workshop used the FAO-commissioned Månsson report (see Chapter 4, Månsson, 2002) as the framework for discussion. This report synthesizes the four major research inputs coming from FAO, CIFOR, IIED and Tyynelä, Otsamo, and Otsamo. Månsson's assessment of the research reports is broadly framed in the principles of sustainable plantation forest management and more particularly in the framework of mutually beneficial partnerships in outgrower schemes: principles, criteria & indicators developed by CIFOR.

During the meeting at CIFOR in Bogor, Indonesia, as reflected in the discussion during focus group sessions, one could identify that different groups (government, NGOs, corporates and research institutions) provided complementary perspectives and inputs to the Assessment Guidelines of the Mutually Beneficial Outgrower Schemes within the Sustainable Plantation Forestry Management (SPFM) framework. The applicability of the Guidelines was also considered. The inputs of participants were incorporated into the guidelines and this synthesis is presented in Chapter 2.

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## Chapter 2

# WORKSHOP SYNTHESIS:<sup>1</sup> REVISED SET OF PRINCIPLES ON MUTUALLY BENEFICIAL PARTNERSHIPS BETWEEN CORPORATE AND SMALLHOLDER PARTNERS

Relating partnerships to social, economic and environmental indicators

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## Rationale for a set of principles on mutually beneficial partnerships between corporate and smallholder partners

As Månsson synthesized in the background document to the meeting, CIFOR's recent research set out to analyse two questions concerning whether existing outgrower schemes are mutually beneficial:

By understanding the roles and expectations of concerned stakeholders, and by using a set of principles to measure the benefits of partnership, are the existing outgrower schemes in Indonesia mutually beneficial?

What can be learnt from these schemes and what are the key factors that ensure that they are mutually beneficial and likely to be viable in the long term?

The principles for mutually beneficial outgrower schemes are framed in the overall concept of sustainable forest plantation management (SFPM), and the various international processes of criteria and indicators. A more specific description on the links with initiatives on assessing forest practices and assessment guidelines of mutually beneficial partnerships in outgrower schemes can be found in the Introduction (Chapter 1). The assessment guidelines are designed to be used at the forest management unit level.

Underlying facts: The growing trend for outgrower schemes is an emerging strategy for developing planted forests with multiple objectives. Various research reports have noted that failures to sustain schemes in the long-term were due to a variety of factors including:

- lack of a clear reinvestment mechanism;
- imbalanced power in the negotiation process of the agreement;
- inequitable benefit-sharing agreement;
- little room for renegotiation under a long-term contract;

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<sup>1</sup> Workshop synthesis compiled by CIFOR and FAO.

- lack of mechanisms to enhance transparency and accountability among the concerned stakeholder groups and within the groups themselves;
- constraints in capacity-building within stakeholder groups;
- non-conducive government policy and regulation.

## Assessment guidelines on mutually beneficial partnerships

Assessment guidelines were originally developed as part of a CIFOR research project to evaluate externally the extent to which corporates and smallholder partnerships have become mutually beneficial. The guidelines presented in this chapter include contributions from all participants at the workshop. The wide use of the application of these assessment guidelines is envisioned. They can be used at three levels: start-up; implementation; monitoring and reassessment and evaluation at the end of each rotation (Chapter 7, Figure 7.2). The authors envision the use of the guidelines in the context of joint action learning (refer to Chapter 3). In this manner, the knowledge, and experience of each stakeholder (corporate, smallholder, research and extension agencies, and NGOs) is appreciated as having a particular role to play in the negotiation and implementation process. The primary stakeholders however are the corporate and smallholder investors. The secondary stakeholders (government, research and extension agencies, NGOs, CBOS) would provide facilitating factors (policy, laws and regulations), empowerment and negotiation support, or technical advisory services. The optimal combination of stakeholder roles will vary from country to country and partnership to partnership. Negotiation of the roles of secondary stakeholders is envisioned as part of the start up phase of any corporate – smallholder business venture. The values of the assessment guidelines are envisioned to be jointly defined by all participating stakeholders. The assessment guidelines, as presented, can provide a generic framework for different stages of the negotiations and implementation of equitable partnerships between corporate and smallholder partners, modified to meet locally specific conditions.

At the end of one rotation (the scheme contract could cover one to six rotations of tree or timber species), the set could be used as a jointly implemented reassessment and evaluation tool to improve the design of the scheme for the next contract term. Such an evaluation tool can assist in addressing the concerns of environmental and advocacy groups and in assuring ecological and social sustainability. Jointly implemented evaluations can be a learning experience for both the corporate and the smallholder partners.<sup>2</sup> They may assist in better understanding of community livelihoods and expectations, as well as the technical and delivery requirements of tree growing for specific markets. They may also assist both the company and the smallholders' partners to reassess the contract and re-negotiate points of agreement.

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<sup>2</sup> In some cases where land is communally owned, corporates may be engaging in partnerships on a community basis. In such cases specific community evaluation mechanisms, that address concerns of representativeness and transparency, will be required.

**Table 2.1. Application of assessment guidelines at different stages of partnerships**

STAGES	APPLICATION
Start-up: identifying prerequisite conditions and negotiation <sup>a</sup>	checklist to identify the feasible conditions for economic, management, socio-cultural, ecological, and policy <sup>d</sup> aspects guidelines to contribute towards developing the business plan at the start-up stage of a scheme
Implementation and Monitoring <sup>b</sup>	guidelines for monitoring of implementation towards ensuring long-term sustainability guidelines to assist in the re-negotiation process of entitlements of agreements <sup>c</sup>
Re-assessment and Evaluation <sup>c</sup>	as an evaluation tool to guide scheme improvement and expansion, and to redesign the scheme in preparation for the next rotation <sup>e</sup> tools to assist in the renegotiation process of entitlements at the end of rotation cycle

Notes:

a The start-up stage covers the processes of: assessing preconditions, feasibility assessment, setting up, agreeing on rights and duties, and preparing the management plan.

b Implementation and monitoring for one rotation under a long-term contract

c Long-term contracts based on concession leases are usually for a period of 43 to 45 years, or approximately equivalent to four or five rotations.

d Reassessment and evaluation could be implemented at the end of one rotation under a long-term contract.

e It is necessary to assess conducive policies for outgrower schemes from the national to the local levels. However, national level policy assessment is a one-time process.

The essential facilitating tools are the contract between smallholders and corporates, and the Memorandum of Understanding (MOU) between the parties of corporate, local government, NGOs and smallholders. These documents form the basis of transparent and accountable negotiation, contract development, implementation and monitoring.

## The applications of assessment guidelines of mutually beneficial partnerships by different stakeholder groups

The four stakeholder groups (private companies [corporate]; NGOs and/or tree grower associations; government; and research/extension agencies) potentially have different key roles in the entire process of start-up and implementation of equitable partnerships. However, these key roles are expected to be complementary for ensuring mutually beneficial partnership between corporates and smallholder schemes. This complementarity was demonstrated in the knowledge shared at the meeting:

NGOs may act as intermediaries in the negotiation process or be contracted by a company. For example, the LIMA Rural Development Foundation (South African) has a role as company representative (contracted by the company) in negotiating contractual arrangements that are beneficial to communities, tree growers and companies. On the other hand, Lembaga Alam Tropika Indonesia (LATIN), an Indonesian NGO, has more a role as facilitator in collaborative management among different parties, such as communities, local government and plantation companies.

From the perspective of the corporate sector, the set of principles, criteria and indicators will be useful to secure their investment, particularly in maximizing the social benefit, and minimizing environmental risks.

From the point of view of national and international research and development agencies and the corporate sector, the set can be used both as a framework for action research and as a guide for stakeholder facilitation.

The government's role in addressing these issues and creating a conducive policy for multistakeholder approaches are often still lacking. Government to be more proactive in setting the rules of the game (policy) with a specific identification of its roles, both under the conditions where the market provides stimulating incentives and when it fails. Acknowledging this expectation, the set will be useful for the government to identify focus areas where support is necessary.

Table 2.2 provides more detail on possible application of the set for different stakeholders.

**Table 2.2. Application of a framework for mutually beneficial partnerships between corporate and smallholder partners**

Stakeholder groups <sup>a</sup>	Guidelines
Corporate sector	To better plan their investment in developing the scheme To design a mutually beneficial partnership: on key components of stakeholder negotiation on how to work with the community To design and develop plans with the community To establish partnership formula for revenue sharing To anticipate and estimate risks caused by socio-economic aspects For conducting internal ongoing evaluation
NGO and tree growers' association (smallholder partners)	To be mediator/facilitator to ensure the scheme will not be disadvantage the tree growers For empowering tree growers
Government	To identify specific government roles in various stages of start-up/implementing partnership schemes To identify areas where they can provide support for effective start-up/implementation of the scheme To be mediator/facilitator in ensuring the scheme will be relevant for government strategic plans and advantageous for company and tree growers
National and International Research Institutions. Research and extension units of private companies	To develop the set of principles on mutually beneficial outgrower schemes based on pragmatic experiences of key stakeholders on the ground; being a partner in facilitating the application of the set by key stakeholders

<sup>a</sup> The stakeholder groups do not refer to a rigid division of key roles in the processes of start-up/implementation of corporate smallholder partnerships, synergistic and complementary roles according to the principles of participatory action research and social learning are expected.

## Revised set of principles on mutually beneficial partnerships between corporate and smallholder partners – relating partnerships to social, economic and environmental indicators

This chapter integrates the inputs from all participants. This has enriched and expanded the set of principles for all aspects of the partnerships guidelines: management, economic, sociocultural, ecological and policy. Participants' experiences had been mostly with management, hence, this aspect had more detailed inputs than others. However, this should not be seen to indicate that the management aspect of the guidelines is more important than the others. The main areas for improvement focused on indicators levels such as:

### **Policy aspects**

- ensured government's commitment in supporting the outgrower schemes;
- created transparency and broad understanding of government policy.

### **Economic aspects**

- anticipated and forecasted financial and economic risks;
- monitored and researched results for measuring economic impacts.

### **Social aspects**

- recognized and optimized social objectives to optimize in the adoption of equitable corporate and smallholder partnership schemes.

### **Ecological aspects**

- ensured mechanisms for ecological monitoring.

### **Management aspects**

- enhanced transparency and accountability mechanisms within the community and between partners;
- rules and guidance for good forestry plantation practices.
- The following set of charts incorporates the plenary brainstorming and group discussion outputs into the set of principles, criteria and indicators for mutually beneficial partnerships.

**Table 2.3. Revised set of principles on mutually beneficial partnerships between corporate and smallholder partners**

**POLICY ASPECTS**

<b>Principle 1: Policy and institutional frameworks are conducive to partnership and agreement within the framework of sustainable planted forest management</b>	
<b>Criteria</b>	<b>Indicators</b>
Intersectoral policies that are coherent with the policies on planted forest development	Conducive policies for planted forest development
	Other forestry policies that are coherent with forest plantation development policies
	Effective instruments for intersectoral coordination on land management with respect to plantation development
Conducive policy on land and crop tenure	Coherent intersectoral land tenure policies at the national and regional levels
	Coherent rules on land tenure between national and local communities
Precautionary policies	Regional policies on landscape management and fire mitigation
<b>Principle 2: Government's commitment in supporting the partnership schemes</b>	
<b>Criteria</b>	<b>Indicators</b>
Simplified bureaucratic processes/requirements	No policy disincentives to growing and harvesting
	Capacity, relevance and coordination of government departments
	Accessible Legislation and certification for smaller companies
	An enabling government policy for all stakeholders
	Conducive tax policy
Institutionalizing of the role of mediator/facilitator ("champion agency")	An established national forest industry forum
	Clarity of government roles between facilitator and regulator
Catering for different product development needs	Appropriate but not artificial government incentives (e.g. soft loans and tax breaks)
Supportive local and national government	No conflicting policy between central and local authorities
	Enforcement, not just policy statement
<b>Principle 3: Transparency and broad understanding of policy</b>	
<b>Criteria</b>	<b>Indicators</b>
Companies and communities that are better able to understand and utilize policy and other legal instruments	Wide information distribution on laws regulations and policies
	A common understanding by all parties to work together on the same policy

## ECONOMIC ASPECTS

<b>Principle 1: Long-term viability of economic objectives of key stakeholders are taken into account</b>	
<b>Criteria</b>	<b>Indicators</b>
The scheme maintains a commercial focus of key stakeholders' interest, and/or is commercially viable for key stakeholders	Increasing comparative advantages (both smallholders/tree growers and corporates gain fair and equitable benefits)
	Available markets for smallholder partners' planted timber
	Available markets for company partner's products (realistic choice of products and activities)
	Income and land use/mixed cropping diversity options available to bridge the waiting period between planting and timber harvesting (diversified income streams for farmers)
Economic risks are anticipated and forecasted	A certain proportion of revenues from the main wood crops is reinvested to sustain the planted forest and the partnership scheme (an effective reinvestment mechanism)
	Adequate definition and identification of community needs
	Adequate definition and identification of community costs, especially opportunity costs
	Contingency plans (diversifying products to reduce risks, species match site and market)
There is a measurement of economic improvement at micro and regional levels	Absolute clarity of growers on economic implications (risks shared not equally but equitably, both parties prepare to accept risks)
	Improvement of market standing by participating corporates
	Accessible markets by corporates and smallholder partners
	Community members' access to associated income-generation options (e.g. secondary processing and service industries)
There is a monitoring of economic benefits and research results by independent third parties	Benefit sharing that can change with changing inputs
	The possibility to renegotiate based on fair accounts of contributed inputs
	Accessible information on changes in estimation of possible returns to key partners
<b>Principle 2: Partnerships recognize different stakeholders' power, and create an operational negotiation/renegotiation mechanism</b>	
<b>Criteria</b>	<b>Indicators</b>
Fair accounts of inputs from both parties as the basis for setting up: benefit-sharing agreement, timber buying from smallholders/tree growers, and cost-efficiency management of small-scale harvesting and processing operations	A fair benefit-sharing agreement for equitable distribution of benefits
	A mechanism for economic power-sharing in negotiations
	Systems for determining economic shares within stakeholder groups
A fair valuation of stakeholders' inputs	The consideration of non-monetary inputs
	Well-recorded economics inputs by both parties with transparent financial records and information
	"sweat equity" contributed by communities and smallholder/tree growers, <sup>3</sup> considered as valid as "financial equity"
Transparent economic-related information available to all stakeholders or information that is circulated transparently	Accessible market information is accessible to all stakeholders
	Tree growers (both those organized on the basis of those producing form communal land, and individual smallholders) with sustainable access to and skills-training in interpreting market information

<sup>3</sup> Although it is envisioned that these contracts are more likely to be entered into between smallholders and corporates, there will be occasion where communities would wish to plant communal land under similarly negotiated agreements with the corporate sector.

## SOCIOCULTURAL ASPECTS

<b>Principle 1: The implementation of equitable partnerships satisfy social objectives of various key stakeholders</b>	
<b>Criteria</b>	<b>Indicators</b>
Various social objectives of key stakeholders met and recognized in the agreement to optimize the adoption of equitable partnerships	The acknowledgement in the management plan of wider livelihood objectives of tree growers partner and, if possible, the negotiation in the contract for support for community development
	Effective knowledge system established such that individuals within communities are empowered to incorporate their social needs in the negotiation process of agreements and management plans
	Long-term land status/rights that have been transparently settled before the establishment of the planted forest and included in the negotiation of the agreement and the management plan. Agreements should not entrench inequities in land tenure and access
	Local sociocultural needs of key stakeholders as part of the negotiation process (e.g. those relating to religion, the transfer of the rights of contracted timber to children, and respect of the traditional values of lands)
	Acknowledgement in the contractual discussions of the local ethics, cultural, customs and traditions (possible trade-offs)
	Monitoring of social objectives clearly indicated in the agreement and management plan
The diverse nature of local livelihoods of tree growers partner is secured and enhanced (buffered from risk)	Schemes provide direct benefits such as products, credit etc.; management plans may also take into account the wide range of livelihood options of a community and its farmers (e.g. on-farm tree species diversity)
<b>Principle 2: Equitable partnership schemes should recognize the difference in power of stakeholders and create an operational negotiation/renegotiation mechanism</b>	
<b>Criteria</b>	<b>Indicators</b>
Greater equity of power is achieved, if necessary, with support of third parties prior to negotiation processes	Conflict resolution clauses in contract and MOUs with third parties
	The possibility to re-negotiate the agreement at defined intervals
	Mechanisms to facilitate greater parity between negotiating parties
Strong institutional frameworks are devised and implemented	A special unit in the company to work with both the broader community and individual smallholders (i.e. where appropriate: robust/recognized representative structures at the community level; company staff could improve their skills and performance in smallholder and community-oriented extension services, that are backed up by career opportunities)
	Good functioning of grassroots organizations
	Institutional development in communities beyond the community and other stakeholders
	Fair organizational capacities of both parties
	Institutionalized collective bargaining
	Resources for capacity-building



## ECOLOGICAL ASPECTS

<b>Principle 1: There is a mechanism for ecological monitoring</b>	
<b>Criteria</b>	<b>Indicators</b>
Environmental management plan jointly compiled and implemented	Environmental accountability is enforced and ensured
	Sufficient knowledge and awareness among community members of misconduct in managing schemes' plantations
Ecological parameters jointly identified by stakeholders and met before initiation of project	Proper planning, risk analysis and monitoring to mitigate impacts
Balance between social and ecological integrity	Freedom for tree growers ( smallholder and community) to combine multiple land use practices
<b>Principle 2: Ecological integrity is maintained</b>	
<b>Criteria</b>	<b>Indicators</b>
The ecosystem function is maintained or enhanced	The adverse impacts of planted forest practices maintained within critical limits as defined by regional conservation objectives
	Rehabilitation of degraded lands
	Species diversity maintained or enhanced at the plot, landscape and regional levels (increasing landscape diversity)
Ecological risks are minimized	Plans for fire prevention
	Maintenance of water quantity and quality (downstream water use considered)
	There is a freedom of choice of tree planting by smallholders, however in the development of planted forests on communal lands, planting is focused on underutilized lands or degraded lands
	Environmental disturbance decreased or minimized (e.g. roads for harvesting and road routing discussed with communities as part of management plan to combine possible social and market benefits of roads)
	Positive and negative impacts on wildlife and plant biodiversity taken into account

## MANAGEMENT ASPECTS

<b>Principle 1: Fair cooperation is the approach used in the management of the partnerships</b>	
<b>Criteria</b>	<b>Indicators</b>
Clear agreement among key stakeholders developed through a participatory process	Participatory socialization process (common objectives of stakeholders reached through negotiation)
	Simple, effective and efficient contract mechanisms
	Agreement that is negotiated, documented and disseminated in a transparent manner
	Clear understanding and implementation of the duties in balance with rights as stated in the agreement document (terms of the agreement are respected, agreement negotiated and witnessed with formal and informal village/community leaders' clear rights and obligations)
A clear management plan is designed through a participatory process among key stakeholders	A management plan that is well understood by key stakeholders (clear prioritized objectives, responsibilities of stakeholders and implementation dates; better integrated planted forest management under partnership schemes in local development plans).
	more local adaptation of contracts and plans (reliance on autonomy of field staff; management's obligation to deliver on promises; ease of interpretation of management plan to both parties)
A management plan is being effectively implemented by ensuring the development of effective knowledge systems between stakeholders	Knowledge from implementing partners sought and incorporated into the management plan (including company Basic Operation Procedures and market information and indigenous knowledge that is recognized and incorporated into management plans – e.g. soil fertility indicators, pest control)
	Communities empowered to formulate their own expectations, requirements and demands prior to agreement negotiations - creation of equal platforms of negotiation (special unit in companies created to work with communities)
	Information on management plan that is accessible to all stakeholders
	Jointly developed technological and managerial innovations giving rise to new partnership arrangements
	Planted forests should be managed to meet market demands (not just to maximize wood biomass)
<b>Criteria</b>	<b>Indicators</b>
Mechanisms to ensure transparent and accountable application of agreement and management plan within the community and between partners	Well-documented project plan (implementation dates, responsibilities of stakeholders, and naming of project leader in each stakeholder group)
	Clear schedule of monitoring the application of the principles, criteria and indicators of sustainable plantation forest management
	Clear monitoring objectives of the management plan on every schedule
Mechanisms for accountability and transparency within the community	Agreement negotiated and witnessed by both formal and informal leaders of the community, including representatives of marginalized groups – women, ethnic minorities, the poor and the landless – (depending on the situation, landless people often have some type of land use rights)
	Wide dissemination of agreement and management plan through posters, radio and other conventional mass media in evidence
Mechanisms for accountability and transparency between stakeholders	Mechanisms for information distribution that are programmed and systematic (formalizing links with other key stakeholders such as local and national government and third parties by Memoranda of Understanding [MOU])
<b>Principle 2: Partnerships encourage sustainable management of planted forests</b>	
<b>Criteria</b>	<b>Indicators</b>
Rules and guidelines of good practice in establishing planted forests that are being adhered to in the partnership	Codes of practice of sustainable management of planted forests taken into account within the management plan
	The management plan is implemented following the codes of practice
	Available rules and guidance for good practice (both parties understand criteria and indicators of sustainable planted forest management, Silviculture Basic Operation Procedures as part of the contract, species matching site and available market germplasm)

## Chapter 3

# JOINT ACTION LEARNING: MULTIPLE STAKEHOLDER PLATFORMS FOR NEGOTIATION

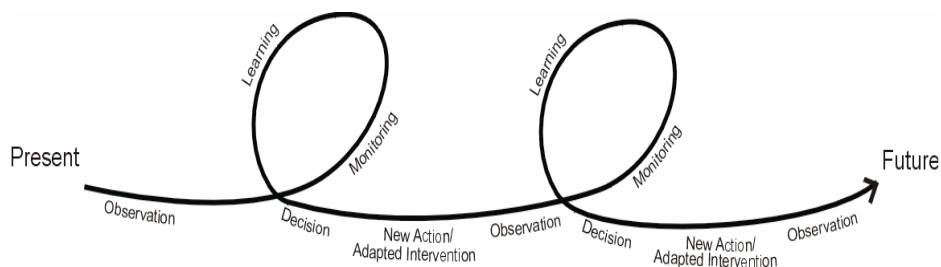
### A literature review<sup>4</sup>

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This is a literature review which reflects on the application of participatory action research, social learning, and multistakeholder platforms for negotiation in the development and application of assessment guidelines of mutually beneficial outgrower schemes.

It seemed counterproductive for our work to regard the research and the researched, the “experts” and the “clients” or “targets” as discrete, discordant or antagonistic poles. Rather we had to consider them both as real ... person[s] whose diverse views should be taken jointly into account (Borda, 2001).

**Figure 3.1 Participatory action research**



Participatory action research (PAR) was introduced to the participants by Kenneth MacDicken (Annex 3) as a possible way of testing the principles, criteria and indicators of mutually beneficial outgrower schemes. PAR was defined as research that has immediate application as well as strategic value. The approach is based on the principles of learning by doing, with experimentation that involves the following steps:

- Reflection
- Planning
- Action
- Observation
- Reflection

These steps can be seen above as interlinking in a series of learning loops.

The goal is to experiment with solutions to agreed-upon problems and to learn through a structured, iterative process in ways that can be communicated to others.

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<sup>4</sup> Synthesis of pertinent literature compiled by Christine Holding Anyonge.

PAR is defined by an empathetic attitude towards others, necessary for the achievement of progress and democracy (Borda, 2001). It also requires change in the ways of reporting findings so that they may be accessible to all stakeholders.

Bhatt and Tandon (2001) talk of PAR breaking the monopoly on knowledge by recognizing that ordinary people are both capable of expressing and are particular knowledgeable about their social realities. PAR thus enhances participation of the "less powerful". The authors continue:

"Sustainable use of forests can only be guaranteed by reactivating around issues that affect villagers' lives and thus provide a strong basis for the same."

Active participation of ordinary people in the research process is a form of education, which enhances their self-confidence and capacities to analyse their situations and develop solutions.

In summary, PAR can be defined as valuing people's knowledge, creating systematic opportunities for adult learning, and nurturing citizens' capacities to reach their full potential.

Heller (1989) talks of symmetric reciprocity, of mutual respect and appreciation among participants. She describes the resolution of this tension as another way of defining "authentic participation" as opposed to liberal manipulative versions, and of combining different forms of knowledge.

In assessing outgrower schemes, there are four key groups of stakeholders: private companies (corporate), NGOs and community representatives/farmer associations (smallholder), research and extension agencies, and government. For these stakeholders to engage in joint action research together, they should follow a model based on mutual respect and complementarity of each other's knowledge and the different forms that knowledge takes for each stakeholder. The experience and set of knowledge of each participant are equally valuable. Their knowledge combined is brought into action learning, the catalytic force needed to create change.

PAR, as cited above from Borda (2001), is conventionally an interaction between communities and researchers. Action research with outgrower schemes, however, involves many stakeholders, each with different types of experience, knowledge and levels of status and power. If action research is conducted in the context of outgrower schemes, it requires the involvement of multiple stakeholders. The author therefore prefers to use the term "joint action research" to imply the full recognition and mutual value and respect of knowledge of all stakeholders in the process of action research. This perspective is closely allied to those presented in the theories of social learning (Roling and Jiggins, 1998; Wollenberg *et al.*, 2001; Wollenberg, Anderson and Edmunds, 2001).

## Social learning and platforms of negotiation

CIFOR's report Social learning in community forests (Wollenberg *et al.*, 2001) provides some useful insights into how the concepts of social learning and platforms of negotiation are being considered and applied in social forestry. It defines joint or social learning as acknowledging that interest groups bring different knowledge (including values, capacities, perspectives, methods of learning, stores of historical experience) to the collaborative process. Joint or social learning also fosters perceptions of interdependence and mutual appreciation.

Buck, Wollenberg and Edmunds (2001) say that the terms "joint" and "social learning" are often used interchangeably. They recognize that social learning has been more frequently used in the literature, but note that joint learning may have provided a more intuitive meaning in community forest contexts. Maarleveld and Dangbegnon (1999) characterize social learning in natural resource management as a continuous dialogue and deliberation between social scientists, planners, managers and users to explore problems and their solutions. Communication and experimentation together enable adaptation among the relevant actors to adjust and improve management.

One of the prime aspects of social learning is the consideration of inequity among stakeholders in natural resource management discussions, and the importance of creating more equal platforms from which the stakeholders may negotiate. Equity of negotiation and mutual respect are thus prime facets of joint learning.

Daniels and Walker (1999: 42-48) describe mutual learning as a process for exchanging perspectives between clients and professional planners or managers to transform everyone's understanding of problem situations. Social learning acknowledges that interest groups bring different knowledge to the learning process, including knowledge in the form of values, capacities, perspectives, methods and stores of historical experience. An important dimension of social learning is therefore knowledge sharing, which emphasizes the diversity and complementary nature of different social groups' knowledge.

Social learning facilitates joint problem-solving by fostering perceptions of interdependence, trust and mutual appreciation. It shows actors that they can benefit from working together toward agreed-upon goals and generates confidence in further efforts at collaboration. Therefore, there is a communicative and relationship-building aspect of social learning that results in sharing knowledge and enhancing capacity for action.

These complementary perspectives paint a theoretical "way out" of the dilemmas that so often wind up in polarity and impasses: development versus conservation; industrial versus artisan; foreign versus local. The challenge is to focus on evolving knowledge systems, and to offer leadership in reconstructing these around current ecological, social and institutional imperatives (Wollenberg *et al.*, 2001).

Joint learning and collaboration threaten existing power structures. As research indicates, dominant organizations are likely to resist calls for shared learning until there are competing incentives (e.g. the environmental lobby and certification requirements) for them to change. With increasing emphasis on ecological and socially sustainable development, private companies in the natural resources arena are being driven to demonstrate socially responsible policies.

## Platforms for resource use negotiation

Roling and Jiggins (1998) refer to platforms of resource use negotiations where stakeholders can find unbiased "space" to meet. An important issue is how key stakeholders are represented in the platforms and how their representatives are held accountable (transparency and democracy within their stakeholder groups) to their constituencies. A mechanism for platforms to interact with conventional decision-making bodies is also required to ensure that platforms have legitimacy and efficacy.

The forests and its stakeholders could benefit substantially from scaling up shared learning to a point where decisions are made about the forest as landscape. However, scaling up has been seen to intensify the problems associated with representation and accountability, bridging the differences among knowledge systems, and addressing inequalities in political power.

## Learning styles: consensus and conflict

Conflict is not always disruptive, but can lead to innovation and important transformations. Still, social learning is more about consensus building among stakeholders based on the premise of mutual respect than about conflict resolution and polarity.

"The distinctive characteristic of social learning is that it is concerned simultaneously with how to bring interest groups together and which learning patterns to employ. This intersection of collaboration and learning is what makes it different from simple learning by one actor, or from collaboration that does not involve adaptations in the ways of working within and between stakeholder groups." (adapted from Buck, Wollenberg and Edmunds, 2001)

Facilitators require strong sensibilities about relationships among the interest groups and a repertory of multiple platforms and avenues of learning to meet the diverse learning styles and preferences of different interest groups. Multiple platforms and avenues are needed to be able to work with different types of stakeholders or groups of stakeholders.

Forests are sites of multiple, shifting and conflicting interests; their management is correspondingly complex. Participatory approaches to forest management are often optimistic about the possibility for achieving consensus among forest interest groups on management decisions. They also pay little attention to the risk of cooptation, manipulation and domination of weaker groups by stronger ones in the process of reaching agreements. Conflict management approaches, on the other hand, tend to focus on the most visible conflicts, and often only after they are manifested in the form of forest degradation, social violence or economic hardship. Wollenberg, Anderson and Edmunds (2001) indicate a need for new approaches to embrace conflicting interests at many levels, to coordinate actions before conflicts become crises in forest management, and to assure that management decision-making processes and outcomes are fair to the weakest forest interest groups.

At the forest management unit level, stakeholders focus on making incremental improvements in their practices based on carefully monitored experience. Stakeholders do not seek permanent solutions based on rational theories and idealized standards of good forest management. The focus of the assessment guidelines towards more equitable partnerships between corporate and smallholders in the forest sector (discussed in this book) is to assist in identifying the incremental changes required for sustainable mutually beneficial partnerships in production forestry.

Social learning suggests, then, that mutual respect and learning of all interest groups leads to the most effective action. There still needs to be a great deal of work in creating the conditions for social learning, particularly when there are vast differences in experience, knowledge, status and power.

## Transaction costs

These processes, however, incur significant transaction costs of human energy and material resources to identify all relevant forest interest groups, to develop platforms in which their interests can be communicated effectively, and to coordinate interests so that the legitimacy and autonomy of each group is respected. These costs are obviously higher than in simple forest management under the sole responsibility of the government.

Reports (Wollenberg, Anderson and Edmunds, 2001) show the growing evidence that additional investment is worth the effort. By actively identifying the conflicts that exist among interest groups, we can better anticipate and manage them. The workshop outputs indicate that not only do NGOs seek to increase the bargaining strength of farm foresters and communities, but private companies also want communities to negotiate more strongly, precisely for this reason. From the companies' perspective, if communities are more coherent in negotiating, then litigation and defaulting are less likely to occur in the future. Moreover, the results of disenfranchisement of certain members of the community (e.g. plantation arson, violent disputes, etc.) can be mitigated or minimized.

Further analysis of the costs and benefits of these approaches are still needed. Cost analysis could be followed up from this meeting. Clearly, previous forest management systems have incurred great costs for ecological and social systems. Social learning and joint action research with all stakeholders should lead to a more realistic, adaptive management that is ultimately more effective, efficient and equitable.

## Multiple stakeholders and joint learning

We have talked of Participatory Action Research, mutual respect of knowledge, values and capacities, joint and social learning. What were the particular characteristics of this meeting that reflected some of the learning characteristics that have been discussed in this chapter?

- Researchers are one of the groups of stakeholders, but not the leader.

- The corporate sector, in the form of national and international pulp and paper companies, demonstrated willing partnership in the action learning process of the workshop and subsequent proposed implementation.
- The process of action learning is framed in the principles of sustainable plantation forest management.

This unique combination above is considered from the following perspectives:

- Genuine reciprocity – an absence of paternalism from any stakeholder.
- The recognition by the private sector that involvement in the processes of multistakeholder dialogue and the assessment of principles and criteria sets them ahead of trends and imminent legislation.
- Participatory development and testing of the principles of mutually beneficial outgrower schemes that ensure valid verification of social and environmental variables will go a long way in addressing the concerns of environmental and advocacy lobby groups – and the global good.

Joint action research or joint action learning reflects the multistakeholder dimension and concepts of mutual respect that were the underlying principles of the meeting. This paradigm also reflects the process of negotiation required for equity and sustainability in outgrower contracts.

With particular reference to these paradigms in the context of private companies, Senge (2001) states that competition, which fuelled the industrial era, must now be tempered by cooperation. Without this balance, organizations of all kinds will be unable to survive the hyper competition of today's market place. While competition and competitiveness remain the mantra of traditional market advocates, the frenzy for optimal return on financial capital today threatens health and sustainability at all levels. Behind this approach lies a core premise - that Industrial Age institutions face extraordinary challenges to evolve, which are unlikely to be met in isolation. Collaboration and joint knowledge building are vital.

The underlying challenge for the activities developed at this meeting is to create better equals. By creating settings for collective reflection, people from different stakeholder constituencies will be able to understand and respect each other's perspectives.

## Joint action learning: a process towards more equitable corporate and smallholder partnerships

The challenge of sustainable development in the forestry sector, in balancing issues of social justice and environmental sustainability while meeting the ever-increasing demand for tree and forest products, is becoming increasingly paramount in all forest policy discussions. Principles, criteria and indicators of mutually beneficial corporate and smallholder schemes are guidelines that attempt to address these global concerns at a forest management unit level, while facilitating the provision of products for the local and national economy. The testing and development of the assessment guidelines towards more equitable partnerships based on the principles of joint learning could contribute towards addressing these concerns in this small, but growing component of the plantation forestry sector.

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## PART II

# FAO-COMMISSIONED BACKGROUND MATERIAL FOR THE WORKSHOP



## Chapter 4

# A REVIEW OF PRINCIPLES, CRITERIA AND INDICATORS OF BEST PRACTICE IN OUTGROWER SCHEMES

Malin Månsson

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## Summary

This report summarizes and discusses research experiences from four reports, by the Food and Agriculture Organization (FAO), the International Institute for Environment and Development (IIED), the Center for International Forestry Research (CIFOR) and Tyynelä, Otsamo and Otsamo.

They are all interested to some extent in the security of benefits for the outgrowers concurrent to maintaining economic and environmental sustainability.

The FAO report (FAO, 2000) provides a broad overview of forestry outgrower schemes around the world. We propose a set of principles and criteria by drawing on published literature and the results of this report.

The IIED report (Mayers and Vermeulen, 2002) examines outgrower schemes in five different countries that cover a range of forestry contexts within as wide a spectrum of different experiences and problems as possible. From case studies and experiences it identifies factors that encourage or prevent partnerships, and tackles the practical issue of how company-community relationships can go forward. Based on the lessons learned from the case studies, ways forward in the different stages of the process are identified and illustrated with examples.

The CIFOR report (Nawir and Calderon, 2001), on the other hand, starts from an already established set of principles, criteria and indicators for mutually beneficial partnerships to assess existing outgrower schemes in Indonesia and the Philippines.

In the report by Tyynelä, Otsamo and Otsamo (2002), changes and alternatives in farmers' livelihood planning were studied in an industrial forest plantation scheme in West Kalimantan, Indonesia. Financial analyses were done using cash flow techniques. Job opportunities, rice yields and returns on land were compared for varying production combinations at the household level.

The FAO, IIED and CIFOR reports are similar and complementary in their key issues, principles, and criteria that relate to building mutual beneficial partnerships.

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## Introduction

Globalization creates both opportunities and threats for communities and companies. In this context, partnerships are of considerable interest in the search for effective governance mechanisms. The goal of the planning meeting in Bogor is to develop best practice guidelines for forest outgrower partnerships, based on experiences and documents from FAO (FAO, 2000), IIED (Mayers and Vermeulen, 2002) CIFOR (Nawir and Calderon, 2001), and Tyynelä, Otsamo and Otsamo (2002).

For the meeting to proceed, a short overview document of the research and principal findings is required. This paper aims to summarize and compare experiences of each research project.

First, we will present a short overview of research objectives, methods and key research findings of each report.

The experiences of the reports will then be compared and discussed in an attempt to link them together. The discussion is based on the principles, criteria and indicators presented by CIFOR for assessing mutually beneficial partnerships in outgrower schemes.

## FAO Case study

### Aims and objectives

The FAO report (FAO, 2000) attempts to highlight the important issues and identify the key ingredients for mutually beneficial outgrower partnerships. The main aims of the report are to:

- assess the extent and main characteristics of forestry outgrower schemes globally; and
- develop an analytical framework to assist the comparative analysis and development of existing and future outgrower schemes.

### Methodology

A major component of this report was to survey forest industry staff who manage outgrower schemes. A postal questionnaire was developed to identify the location and extent of existing outgrower partnerships, and to identify the benefits and issues arising from them. A total of 86 questionnaires were sent to informants, the forest industry staff who manage outgrower schemes in 46 countries, particularly in non-industrialized countries in regions in Asia, Africa and South America. The response rate was 21 percent for the study's questionnaire that covered 17 schemes. Outgrower arrangements were identified in Brazil, Columbia, Ghana, India, Indonesia, New Zealand, Portugal, Solomon Islands, South Africa, Vanuatu and Zimbabwe.

An overview of the literature on outgrower schemes was undertaken to review the nature and context of current arrangements, and to identify the issues influencing the effectiveness of outgrower partnerships. A resource group of 12 people with knowledge and expertise relevant to the study of outgrower partnerships was formed to provide expert input.

## Results

### Types of arrangements

The arrangements between growers and processors may be characterized as:

- partnerships in which growers are largely responsible for production, with the company assurance/guarantee that it will purchase the product;

- partnerships in which the company is largely responsible for production, paying landholders market prices for their wood allocation;
- land lease agreements in which landholders are not greatly involved in the plantation management;
- land lease agreements with additional benefits for landholders.

### **Reported benefits of outgrower schemes**

Forest companies are often the initiators of outgrower schemes that allow them to access additional, more secure and sometimes cheaper raw materials. These were also the primary benefits reported from the majority of the surveyed companies.

Some companies identified the primary benefits as:

- an improved public image;
- outgrower plantations that are located close to the mill;
- possibly fewer environmental problems owing to the environmental risks being spread to many small plantations;
- increased community support by developing forestry that provides social and environmental benefits.

Most growers in the study perceived the additional income generated from wood sales as the primary benefit of outgrower schemes. Other important benefits for growers include:

- additional employment, both for the growers and the community;
- the diversification of farm production;
- production opportunity of using underutilized land.

### **Reported issues of concern for outgrower partners**

The main concerns highlighted by forestry companies include:

- the loss of the forestry resource as a result of changing land tenure;
- declining grower interest;
- competition from other land uses;
- increased environmental hazards.

Contractual price disputes and security on loans also concerned some companies.

Some companies identified external issues with the potential to threaten the schemes, including:

- the unpredictable direction of natural resource management policies;
- conflict with environmental organizations;
- an unstable local environment for business.

In general, growers are concerned with:

- market uncertainty, the viability of their company partner company, the environmental risks of production;
- whether production is being maximized;
- price and credit fluctuations.

High interest rates on loans dominate the concerns of growers participating in all of the outgrower schemes reported for Zimbabwe.

### **Successes of outgrower schemes**

According to the respondents to the questionnaire, outgrower schemes contributed to:

- expanding future supplies for industry;
- increasing the number and willingness of growers to participate in forestry;
- providing broad social and economic enrichment for the individuals and communities involved.

For example, reports regarding the scheme operated by Mondi Ltd, South Africa emphasized the assistance in building up the participating communities' self-reliance in South Africa. In addition to the benefits for growers, the scheme provided employment for local people in the transport of timber from the supply depots to the mill.

Mondi reported that the combination of optimal growing conditions, the close proximity of plantations to the mill, and good prices for wood provided growers with a good return on their investment. Accordingly, many landholders perceived forestry to be a better investment than agriculture. Mondi also noted that by paying greater attention to their management practices to ensure that high quality timber was produced, individual growers tended to receive greater benefits from the scheme than did community groups.

## Discussion and conclusions: towards an analytical framework

Based on information derived from the outgrower schemes reviewed in the study, key issues were identified as the contributors to the schemes' success. Success depends on the extent that:

- arrangements are appropriate (e.g. partners should have a reasonable likelihood of deriving benefits and contributing to the strengthening of the sociocultural and economic context of local communities);
- contributions (e.g. land tenure, business viability) and partnerships are secure;
- production and market risk are accurately calculated and shared;
- partners have the social and technical expertise to genuinely negotiate arrangements;
- partners are informed of realistic prospects and opportunities (e.g. flexibility of options);
- arrangements and forestry practices are consistent with sustainable forest management principles at the local and regional levels;
- arrangements contribute to wider community well-being.

### **Appropriate outgrower arrangements**

The outgrower arrangements offered by forestry companies vary within and among countries, as the schemes in this study illustrate. These include:

- land lease arrangements where the forestry company has the full responsibility of the entire forestry development process;
- land lease arrangements with some opportunity for the landholder to participate in the production process;
- arrangements where the forestry company and the landholder share the production and market responsibilities and risks, dividing the returns in proportion to the level of inputs;
- arrangements where the grower is fully responsible for production, with the company partner offering to purchase at the market price at harvest time.

### **Security of contributions and partnerships**

The importance of secure land tenure for the involvement of landholders in outgrower schemes has often been highlighted, but it is not the only requirement. The outgrower arrangement itself may be uncertain owing to its informality, the loss of business viability of either partner, change of company policy, closure/sale of the company, or other external circumstances. The negotiation process should therefore allow both partners to make an informed assessment about the security of each other's contributions and obligations. Also, contracts should clearly specify the circumstances under which outgrower arrangements can be nullified and the terms for compensation.

### **Sharing production and market risks**

In addition to prices paid by forestry companies at harvest, growers' returns depend on achieving optimal production yields. This in turn relies on adopting appropriate silviculture practices to optimize the growth of plantations and minimize the risk of environmental damage to the trees.

The nature and significance of market risks vary for partners, depending on the schemes themselves as well as on externalities. Forestry companies make the financial and technical investment and assume responsibility for the production process, while the grower receives a percentage of the returns from production according to the contract (e.g. lease arrangements). Growers have largely been concerned about whether:

- the leasing rate is fair;
- the methods used to calculate their return from market price or wood volume equivalent are fair;
- production and harvesting has been optimized in terms of silviculture and market prices;
- the land has maintained its physical potential to provide reliable production in the future (either from forestry or alternate land uses);
- there is a cost-efficient opportunity to change land use (i.e. out of forestry) during the contract period or after the contract expires (e.g. integrated agroforestry).

While it is difficult to provide generic guidelines, outgrower arrangements should aim to balance opportunities for flexible participation in terms of the extent of benefits and contractual security.

### **Negotiation arrangements**

Both partners need to be capable of negotiating outgrower arrangements in a genuine and fair manner. Capacity-building may involve developing expertise such as market knowledge and negotiating skills. An alternative is to use an affordable third party to actively negotiate on the behalf of a partner. Individual small-scale growers may possess little bargaining power, yet when combined with a large number of growers (e.g. through a growers' cooperative or union), they may be able to extract better deals in negotiations.

### **Awareness of realistic opportunities**

Uncertainties about whether benefits of outgrower schemes will be delivered in the long term can arise. An element of this uncertainty is due to the fluctuations in the forest industry, both at the local and the international level. However, growers are frequently disadvantaged by their lack of detailed and realistic information about what returns they can expect over the short and long term.

There is evidence that prices obtained by growers closely correspond to the level of market competition among buyers. Yet, growers should not naively rely on prospective industrial partners to provide an appraisal of the opportunities under outgrower schemes. Independent third parties could play a catalytic role by supporting the availability of accurate market assessments.

### **Sustainable forest management**

It is not clear how principles of sustainable forest management translate into local forestry practices. Growers and forestry companies may have different views as to what constitutes sustainable management. Both partners need to take responsibility for understanding the implications of forestry practices to be used in schemes. Clear agreement has to be reached. A third party could play an important role in making information available and negotiating on behalf of a partner to ensure that sustainable practices are employed.

### **Community support**

In large-scale forestry projects or where forestry has direct influence on the livelihoods of the wider community, managers of outgrower schemes need to be mindful of their extended obligations. The potential for public backlash against forestry development should not be underestimated. If outgrower schemes are widely perceived to be fair and beneficial for the participating growers and their associated communities, then there is the potential for wider and more enduring benefits to flow from forestry development.

## **An analytical framework**

Box 4.1 is an analytical framework which summarizes the major influences on the extent to which outgrower arrangements are fair and beneficial for each partner.

How the principles and criteria translate to any given local context will depend on the extent that:

- entering into outgrower arrangements outweighs the opportunity costs for both partners;
- partners are informed of the commercial prospects and wider implications;
- regional markets provide positive commercial returns for both partners;
- partners remain motivated to contribute to arrangements;
- the government is willing and capable of developing encouraging policies and procedures;
- community perceptions of outgrower schemes and potential partners are favourable;
- institutional support is available for providing market information and a fair negotiating context.

### **BOX 4.1. Framework for assessing forestry outgrower schemes**

#### **Principles**

Mutual acceptance of each partner's aims under the arrangement.

Fair negotiation process where all partners can make informed and free decisions, including allowance for a third party to negotiate on their behalf.

Realistic prospect of all partners being able to derive benefits proportional to their contributions and risks.

Long-term viability and commitment of partners to optimize the returns from the arrangement – in terms of commercial, sociocultural and environmental attributes.

#### **Criteria**

Positive local, sociocultural policy within an economic and environmental context for all the principles (see above) to develop.

Partners that are willing and capable of contributing to arrangements within the socio-economic and environmental parameters of their household/business over the contractual period – with opportunities for renegotiation or inherent flexibility within contracts (i.e. partners need to avoid high-risk arrangements).

Formalized arrangements (i.e. with legal status) with clear details of when and how: multiple benefits can be arranged (e.g. collection of non-timber forest products, grazing, intercropping); contracts can be nullified; and compensation would be forthcoming. It would also appear useful for a credible and independent third party to be nominated to arbitrate if disagreement arises.

Partners that have access to accurate, in-depth and independent information on likely short- and long-term prospects. There should be contingency scenarios if arrangements are nullified; current and likely long-term viability of prospective partners; and a likely long-term context for local forestry development (e.g. market trends – product volumes and competitiveness, necessary infrastructure, government policy, code of practices, local sustainable forest management (SFM) practices, landholder/grower participation, and wider community support).



# Case study from the international institute for environment and development (IIED)

## Aims and objectives

The report from the International Institute for Environment and Development (IIED) examines the factors which encourage or prevent partnerships, and tackles the practical issue of how company-community relationships can shift from “raw deals” to mutual gains. The aim of the report is to identify lessons about the driving forces for partnerships, the nature of the deals involved, their impacts and the ways in which they might be improved and replicated elsewhere. The examples cover a wide range of arrangements such as:

- farmer outgrower schemes to supplement company-grown fibre;
- community intercropping between company trees;
- local agreements concerning timber and tourism concessions;
- joint ventures where communities provide land and labour;
- plantation protection services;
- access and compensation agreements.

## Content and scope

The report includes detailed information about arrangements in six countries that cover a range of forestry and governance contexts. The South African case study provides the most detailed information, in particular on the impacts of outgrower schemes on the livelihoods of both participating growers and other local people. The Indian case study describes more short-lived outgrower arrangements and highlights how and why company-community deals grow, change or dissolve over time. The case study from Papua New Guinea presents a contrasting situation; logging in natural forests is the focus of company-community relations that have much potential, but have been highly strained to date. Other case studies present: lessons on social responsibility agreements in Ghana; capacity for change in long-term company-community relationships in Indonesia; and the implications of communities themselves becoming companies in Canada. The lessons presented in these case studies have the potential to be widely applied elsewhere.

## Results and conclusions

### **Impacts of company-community deals**

The authors state that there is no “perfect” deal and that perfection is clearly not needed to deliver significant returns. Some of the main positive impacts of company-community forestry deals are:

- clear economic benefits;
- enterprise diversification;
- the opening of doors to new opportunities;
- achievement of corporate goals;
- contribution to security of land rights;
- development of infrastructure;
- risk sharing;
- better job opportunities;
- positive environmental effects.

The kinds of problems encountered are:

- high transaction costs on both sides;
- misunderstandings between partners;
- perpetuation of low-wage labour and inequitable land distribution;
- negative environmental effects;
- exclusion of disadvantaged community members.

### **Making the first move**

Certain prerequisites must be in place to make the first move for a partnership. The most important of these are probably securing land tenure and enabling government policy. There is reluctance to make deals in uncertain policy environments with unpredictable partners and unclear market outlooks.

Experience shows that successful company-community partnerships have the following attributes at the start:

- adequate funding;
- a realistic assessment of outcomes;
- good processes to deal with communities;
- a reasonable level of organization within the community.

Factors working against company-community deals include:

- ineffective policy frameworks;
- poorly functioning markets;
- histories of conflict;
- weak institutional mechanisms within the company, community or government.

### **Sealing the deal: terms of engagement**

More equitable deals, with negotiated rather than unilaterally set terms, seem to work better. Developing equality in the partnership makes sense as a means of mitigating risk and defection. Recrimination and litigation are therefore far less likely if the terms of the partnership are fair and open to debate.

- Key principles to weave into the specific terms of a deal from the start are:
- A formal and realistic contract – legally valid but not over-complicated.
- Security of contributions – including land, finance and labour (from both sides).
- A shared understanding of prospects and opportunities, as well as costs and risks.
- Mechanisms for sharing decision-making and information.
- A joint work plan – including a clear demarcation of each other's rights, responsibilities and expected rewards within the overall management framework.
- Flexibility and space for negotiation – including specific terms for review and revision.
- Sustainable forest management practices – in economic, social and environmental terms.
- Extension and technical support – as a regular rather than one-off service.
- Procedures for conflict resolution – covering arbitration, defection, termination and resource allocation.
- Systems of accountability – to the community (especially regarding benefit-sharing), to local government and to civil society as a whole.
- Clear roles for third parties – such as government, community development organizations and financing agents, which draw on their services and comparative advantage.
- Integration with broader development plans – for the company, community, district and country.

## Deals maturing into partnerships

Based on the case studies, the report identifies some of the success factors that enable companies and communities to achieve better terms and returns in their partnerships (see Table 4.1).

## Recurring challenges and bright ideas

Company-community partnerships in forestry face a number of challenges:

High transaction costs are one of the major challenges. Companies have to interact with a large number of different individuals or groups, and communities have to run effective systems for group decision-making and for engaging successfully with the company partner. The report suggests a “loose-tight” model of management as the most practical solution, giving space for local or individual flexibility within an overall set of partnership principles.

**Table 4.1. Success factors in company-community partnerships**

COMPANIES	
SUCCESS FACTOR	EXAMPLES
Staying abreast of the market-business innovation, paying market prices	Several companies moved into paying market prices for fibre in countries as far away as India, Australia, Vanuatu, Guatemala, Portugal and Zimbabwe
Keeping ahead of legislation	Companies going beyond basic social responsibility agreements have a business head-start, e.g. in Ghana and Honduras
Allowing sufficient time and resources to develop good working relations	Long-term investment of staff time paid off for companies in South Africa and Canada
Being alert to broader economic, political and environmental change	Companies are setting up outgrowing schemes in Pacific nations in anticipation of plantations eclipsing natural forests
COMMUNITIES	
SUCCESS FACTOR	EXAMPLES
Pro-active planning to preempt the company in the design and organization of key aspects of partnerships	A village-level cooperative in Indonesia negotiated a tourism contract on its own terms
Business expertise and legal advice	South African outgrowers benefited from legal advice to improve the terms of their contracts
Formation of a registered company	Legal incorporation paid off for communities in Canada and Papua New Guinea
Action in second best environments, in spite of risks	Sometimes partnerships serve to secure uncertain land rights, e.g. in Nicaragua and Canada

Managing risks is a concern because of the long time spans that fibre production requires. Partnerships, like outgrower arrangements, may share risks but also generate new ones. Companies and communities need to maximize their options and seek support from outsiders, especially in terms of insurance and technical backstopping.

External policies and institutions can also present obstacles to partnerships. For example, corporate interests are sometimes able to influence policy in their favour. The report suggests that partners other than limited liability companies (e.g. cooperatives) should receive more attention and support.

Third parties also need more support and capacity-building to be effective mediators of company-community deals or to act as independent community development institutions. One agenda for these groups is to help shape governance around partnerships. This would empower community partners so that decision-making and benefit-sharing are extended to the poorest members of the local society.

## Recommendations

The report presents five major challenges to company-community partnerships and recommends some general ways to overcome them:

**Table 4.2. Challenges and recommendations for company-community partnerships**

CHALLENGES	RECOMMENDATIONS
Complexity and transaction costs	<p>Company field staff should be given greater budget control as long as they work within guidelines.</p> <p>Community members could form coalitions linked to local and national networks.</p> <p>Small alliances should be developed to reduce transaction costs.</p> <p>Where appropriate, communities should use existing systems of collective organization.</p> <p>Existing local agents could be used to make deals between companies and communities.</p>
Uncertainty and risks	<p>Schemes should be introduced in phases so that partners could learn from the process.</p> <p>Both sides should avoid becoming too dependent on a single commodity or single land use.</p> <p>Arrangements should try to earn early revenues from thinning trees, partial harvesting or intercropping.</p> <p>Governments should provide both incentives for stability and buffers, such as soft loans and tax breaks.</p> <p>Insurance companies should expand their services to include small fibre producers or producer associations.</p>
Single versus mixed production systems	<p>Both sides should consider forestry activities other than tree growing.</p> <p>Farmers should devote only part of their land, time and capital to partnership activities.</p> <p>Companies should maintain a diversity of raw material sources and remain open to the advantages of intercropping.</p>
Conflicts, mistakes and resource allocation	<p>Contracts should include conditions for arbitration and a named arbitrator.</p> <p>Companies should not overestimate positive outcomes at the start of a deal.</p> <p>Both sides should invest in developing good personal relationships.</p> <p>Where possible, partners should develop a culture of shared learning.</p> <p>Small claims courts should be used to settle disputes.</p>
Limits to corporate responsibility	<p>Effective legislation should be developed to cover investment rules, fiscal incentives and disclosure requirements, and to complement voluntary codes.</p> <p>Rules should be developed to handle innovative business structures.</p> <p>Partnerships should help to develop effective small- and medium-sized enterprises.</p> <p>Partnerships should be promoted on their own merits rather than according to company needs in demonstrating social responsibility.</p>

## CIFOR Case Study

### Aims and objectives

The CIFOR report aims to analyse whether existing outgrower schemes are mutually beneficial so that they will be sustainable in the long term. It does this by trying to answer the following research questions:

By understanding the roles and expectations of concerned stakeholders and using a set of principles to measure the benefits of partnership, are the existing outgrower schemes in Indonesia and the Philippines mutually beneficial?

What can be learned from these schemes, and what are the key factors to ensure that they are mutually beneficial and more likely to be viable in the long term?

### Content and scope

The report focuses on outgrower schemes in Indonesia and the Philippines that have been in existence for at least three years. Indonesia was chosen because private forest plantation companies initiated the schemes in response to rapid changes in the country's sociopolitical situation. Such changes have influenced forestry plantation industries to practise more socially oriented management in daily operational activities. The main reason for companies to initiate the plantation schemes is to secure company wood supplies. Recently, outgrower scheme initiatives have increasingly been perceived by private companies as one approach to move forward in timber plantation in Indonesia. The Philippines was chosen because of its long-term experience with various government-based comanagement programmes.

### Methodology

A set of principles, criteria and indicators was developed and used as an analytical framework to assess whether the existing outgrower schemes are mutually beneficial. Major stakeholders in the schemes were identified and interviewed. Information was then collected on the managerial and socio-economic aspects of the schemes. To complement this information, a cost-benefit analysis was used to evaluate the profitability of the arrangements. The net present value (NPV) per hectare was calculated for different arrangements and used as an indicator of the long-term viability of the outgrower schemes.

Information on the criteria and indicators used to evaluate each of these different aspects of the outgrower schemes is given below, with a brief discussion of some of the other points examined in the analysis.

#### **Principles, criteria and indicators used to examine the quality of forest management under the outgrower schemes**

The principles, criteria and indicators used to examine the quality of forest management under the outgrower schemes are shown in Table 4.3.

**Table 4.3. Principles, criteria and indicators for forest management**

<b>Principle 1: Fair cooperation is the approach used in the management of partnerships in outgrower schemes</b>	
<b>Criteria</b>	<b>Indicators</b>
A clear agreement among key stakeholders is developed through a participatory process	The participatory socialization process is in place
	Parties clearly understand and implement their duties in balance with their rights as stated in the agreement document
A clear management plan is designed through a participatory process among key stakeholders	The management plan is well understood by key stakeholders
	The management plan is effectively implemented by ensuring the dissemination of information on technical and financial aspects
<b>Principle 2: The implementation of outgrower schemes encourages responsible practices of sustainable plantation forestry management</b>	
<b>Criteria</b>	<b>Indicators</b>
Rules and guidelines of good practice in establishing plantation forestry are being adhered to in the partnership	The relevant rules and guidelines are taken into account within the management plan
	The management plan is implemented following agreed codes of practice

Although the agreement may be designed perfectly during the initial phase, problems can arise in keeping the agreement viable in the long term, which in turn affects the sustainability of the agreement and makes the overall partnership unpredictable.

The second principle highlights the need for the technical requirements of establishing plantations under partnership outgrower schemes to be consistent with good practice and codes of conduct that correspond to the overall concept of sustainable forest plantation management. This principle should be clearly spelled out in the management plan.

**Principles, criteria and indicators used to examine the economic sustainability of the outgrower schemes**

The principles, criteria and indicators used to examine the economic sustainability of the outgrower schemes are shown in Table 4.4. To complement the analysis under the first principle, cost-benefit analysis was also used to estimate the NPV per hectare of the different schemes.

**Table 4.4. Principles, criteria and indicators for economic sustainability**

<b>Principle 1: The outgrower schemes take into account the long-term viability of key stakeholders' economic objectives</b>	
<b>Criteria</b>	<b>Indicators</b>
The scheme maintains a commercial focus of key stakeholders' interest, and/or is commercially viable for key stakeholders	Comparative advantages increase
	Markets are available for tree-grower partners' planted timber
	Options to diversify income are available to bridge the waiting period between planting and timber harvesting
Economic risks are anticipated	A certain proportion of revenue from the main timber crops is reinvested to sustain the plantation and partnership scheme (i.e. there is an effective reinvestment mechanism in place)
<b>Principle 2: The share of benefits is based on the proportional inputs by each stakeholder</b>	
<b>Criteria</b>	<b>Indicators</b>
A mechanism for a fair economic relationship and power sharing	A fair benefit-sharing agreement
A fair valuation of stakeholders' inputs	All economic inputs are well recorded
	Transparent information is available to all stakeholders or information is circulated transparently

### Principles, criteria and indicators used to examine the sociocultural aspects of the outgrower schemes

Past experiences have shown that where tree growers negotiate with large-scale companies, limited knowledge and an imbalance of power have disadvantaged the tree growers. Thus, principles, criteria and indicators were developed to examine the sociocultural aspects of the outgrower schemes, as shown in Table 4.5.

**Table 4.5. Principles, criteria and indicators used to examine sociocultural aspects**

<b>Principle 1: The implementation of outgrower schemes satisfy social objectives of various key stakeholders</b>	
<b>Criteria</b>	<b>Indicators</b>
Various social objectives of key stakeholders must be recognized in the agreement and met in order to optimize the adoption of outgrower schemes	Long-term land status/rights have been transparently settled before the establishment of the forest plantation and are respected by key stakeholders
	Local sociocultural needs of key stakeholders are being considered and met whenever appropriate
<b>Principle 2: The outgrower schemes balance the differences among key stakeholders</b>	
<b>Criteria</b>	<b>Indicators</b>
A mechanism to balance the different powers of stakeholders	A conflict resolution mechanism
	The possibility to renegotiate the agreements

### Principles, criteria and indicators used to examine the ecological sustainability of the outgrower schemes

If mutually beneficial partnerships for establishing forest plantations are to be assessed under the framework of sustainable forest plantation management, it is necessary to address the maintenance of ecological integrity, mainly to ensure the sustainability of essential environmental services. The principles, criteria and indicators used to examine the ecological sustainability of the outgrower schemes are shown in Table 4.6.

**Table 4.6. Principles, criteria and indicators for ecological sustainability**

<b>Principle 1: Ecological integrity is maintained</b>	
<b>Criteria</b>	<b>Indicators</b>
The ecosystem function is maintained	The adverse impacts of plantation management practices are maintained within critical limits as defined by regional conservation objectives
Ecological risks are minimized	Species diversity is maintained at the plot, landscape or regional levels
	Plans for fire prevention
	Water quantity and quality are maintained
	The development of plantations is focused on degraded lands

### Principles, criteria and indicators used to examine the policy aspects of the outgrower schemes

Policy towards outgrower schemes is largely determined externally rather than within the schemes themselves. Thus, principles, criteria and indicators were developed to examine the policy aspects of the outgrower schemes, as shown in Table 4.7.

To ensure that the implementation of partnerships is mutually beneficial and based on agreements respected by all key stakeholders, the process requires positive government support (local and central) translated into conducive policy and institutional frameworks. Without these, partnerships can rarely be sustained in the long term.

However, to be able to adapt to socio-political conflicts, it is also important to ensure that the policy and institutional frameworks are flexible enough to anticipate and accommodate change. In Indonesia where outgrower schemes are relatively new initiatives, it was difficult to assess the effectiveness of policies designed to stimulate partnerships under outgrower schemes in plantation forests.

**Table 4.7. Principles, criteria and indicators used to examine policy aspects**

<b>Principle 1: Policy and institutional frameworks are conducive to partnership and agreement within the framework of sustainable forest plantation management</b>	
<b>Criteria</b>	<b>Indicator</b>
Intersectoral policies are coherent with the policies on forestry plantation development	Policies for forest plantation development
	Other forestry policies are coherent with policies on forest plantation development
	Effective instruments for intersectoral coordination on land management with respect to plantation development
Conducive policy on land tenure	Coherent intersectoral land tenure policies at the national and regional levels
	Coherent rules on land tenure between national and local communities
Precautionary policies	Regional policies on landscape management and fire mitigation

Ideally, the policy framework should be consistent with and complement the principles, criteria and indicators of the managerial, economic, social and ecological aspects of outgrower schemes. Precautionary policies are important but have seldom been incorporated as part of the overall policy framework for establishing plantation forests.

A comprehensive assessment of policy and institutional frameworks requires long-term observations. Because of time constraints, the research could only focus on a few aspects of policy as part of the analysis.

## Conclusions: What would it take to have a mutually beneficial outgrower scheme?

Based on the analysis of the case studies from Indonesia and the Philippines, a number of elements that might result in mutually beneficial outgrower schemes were identified and are listed below.

### Participation

Locally driven participatory approaches are vital for conducting the socialization programme, which entails designing the outgrower agreement and the forest management plan. In both the company-dominated process in Indonesia and the government-initiated process in the Philippines, participatory approaches were considered essential to consult, and get support from local communities. The Philippines' case study indicated that participatory approaches are possible, but may be time-consuming, costly, and have overdemanding partners. The analysis suggested that participatory approaches should nevertheless be used because these costs will be outweighed by social benefits.

Developing participation in the field is often difficult. The case studies showed difficulty in developing field participation because there are many different interpretations of participation among different levels of company staff, community members and government officers. To some extent, this also caused problems for top- to mid-level management to explain to field staff (who would be working with growers) how outgrower schemes should be implemented. This is particularly the case in bigger companies where lines of communication are more complex.

Participation can help growers understand the agreement and the forest management plan, and may make the outgrower scheme more effective. The case study from the Philippines showed how communities are involved in plan preparation and implementation under the Community-Based Forest Management Program. However, it was also noted that obtaining full commitment of key partners during implementation could be time-consuming and costly. In addition, it was difficult to specify the most effective management plan because companies have different reasons, motivations and objectives for initiating outgrower schemes.



## **Information**

Technical and financial information should be disseminated to participants systematically. In the Indonesian case studies, the companies usually controlled most of the information. In the Philippines' Community-Based Forest Management Program, the agreement and the plan are prepared in the local language where possible. However, the Department of Environment and Natural Resources has not been effective in disseminating market information to participants in the Community-Based Forest Management Program or the Industrial Forest Management Program. It is important to have good mechanisms in place to disseminate information. This is particularly true in the case of market information. In the Philippines' case studies, the lack of market information and poor marketing were important factors that led to the failure of the schemes.

Outgrowers schemes should learn from the failure of other schemes. The best way to ensure that outgrower schemes will be mutually beneficial is to learn from the experiences of other schemes.

## **Management processes**

Responsible forest practices should be encouraged in outgrower schemes. The report recommends responsible forest practice, that is, using labour-intensive operations, because they minimize the ecological impacts of plantation development in outgrower schemes and may be more efficient. For example, in Indonesia the forest plantations in the outgrower schemes are scattered, using labour-intensive operations is more efficient. In the Philippines labour-intensive operations are also more efficient than other operations, such as mechanical logging, because the harvested trees are small. For both Indonesia and the Philippines, labour-intensive operations also present an opportunity to provide employment for tree growers and other members of local communities.

Transparent processes are important to clarify long-term land status or rights, even if land tenure or land title remains unclear. The presence of communities with land claims is a big problem for companies with outgrower schemes. In the Philippines, areas in the Community-Based Forest Management Program and the Industrial Forest Management Program are state-owned, but there are usually people who claim rights to the land (e.g. migrants or indigenous people). Indeed, in the Philippines, forest companies are finding it increasingly difficult to gain and maintain access to lands suitable for large-scale tree plantation development because indigenous people or local communities have claims to most of the land. Despite the fact that local communities have their own system of settling land claims, outgrower schemes have provided an alternative and more productive mechanism to resolve land claim problems in both countries.

Local sociocultural needs should be identified and integrated into outgrower schemes. In Indonesia the companies have tried to accommodate the needs of local people by using various approaches. Unfortunately, these approaches were often not based on a proper assessment of community needs. In the Philippines, the Community-Based Forest Management Program allows people's organizations to take up other livelihood activities in addition to managing the timber plantations.

The people's organizations are able to choose different productive activities based on their needs and the capability of the land for growing different kinds of crops or special types of trees. In addition, the Industrial Forest Management Program allows local communities to plant agroforestry crops, and indigenous peoples to continue hunting and gathering. The report concludes that long-term sustainability of plantation forestry is related more to social issues than to those of management or environment.

Common ground rules for conflict resolution and renegotiation mechanisms should be identified and agreed together by concerned stakeholders. Conflict resolution and renegotiation mechanisms that are defined together will have a greater chance of being respected by all parties, especially in terms of any sanctions that might be applied if things go wrong.

## **Economics**

Outgrower schemes will be more successful if they are commercially viable for all of the major stakeholders. In the Indonesian case studies, long-term feasibility of the outgrower schemes is influenced by the fact that the companies have their own processing plants and grow wood for the local market (see Box 4.2). In the Philippines, the schemes were less successful because they were poorly linked to the market and much of the planting was not commercially viable.

Economic risks are clearly identified and explained to partners. There might be future conflict if tree growers' expectations of revenues are not met. Company outgrower schemes in Indonesia have not seriously calculated the potential economic risks of these schemes. Tree growers in the Philippines are unaware of these risks because they have always assumed that there is a good market for wood due to the fact that the country is a large importer of wood products.

A fair benefit-sharing agreement should be developed on the basis of a fair valuation of stakeholders' inputs. In the Indonesian case studies, the company largely determined the benefit-sharing agreement based on the value of the company's financial inputs. Growers were not given a fair share of benefits and their input was not taken into account when their benefits were estimated. In the Philippines, the government took a significant share of the lumber produced by people's organizations (based on their gross sales), which stopped them from cooperating.

**BOX 4.2 Factors that led to the commercial viability of the outgrower schemes examined in the Indonesian case studies**

The company has a processing plant (integrated plantation and processing industry), which is an important way to secure the market for timber produced in small-scale plantations.

The long-term viability of the schemes depends on the revenues from first harvests and if the tree growers consider these revenues to be profitable.

For certain species (e.g. *Alstonia*), the company must be able to offer a competitive price due to increasing uses for other purposes (e.g. alternative material for moulding) and the growth and availability of competing markets in which other buyers often offer a better price.

Competition for other uses of the land is low (i.e. low opportunity cost of the land).

There is an abundance of underutilized (idle) land with secure and clear land ownership in the area.

There are positive supports from provincial and local government authorities.

## Report based on work conducted by PT Finnantara Intiga, West Kalimantan

The Tyynelä, Otsamao and Otsamo report is based on research conducted by PT Finnantara Intiga. It examines the changes in farmers' livelihoods in an industrial forest plantation scheme in West Kalimantan, Indonesia from 1950 to 1998. The changes in the structure of livelihoods were assessed using participatory rural appraisal (PRA) techniques. The villagers' opinions on the forest plantation scheme were surveyed, and in two case-study villages, the profitability of four land-use scenarios was compared.

As indicated in the report, the companies of PT Finnantara Intiga require local knowledge and an awareness of production alternatives available to outgrowers in order to respect traditional production alternatives and to achieve contractual arrangements that complement rather than replace outgrowers' existing production systems.

## Background

Large-scale development of industrial forest plantations with fast-growing trees, especially on degraded lands, has been deemed essential for tropical forestry in the twenty-first century. Such plantations can supply large volumes of wood of uniform quality over a short time period and decrease the pressure on remaining natural forests. Most of the forest plantations in Indonesia have been established in natural forests that have been harvested unsustainably. In addition to the negative environmental impacts and the associated loss of biodiversity, plantation forests in Indonesia (as well as in several other tropical countries) have been widely criticized for their alleged social defects, such as the displacement of local and indigenous communities.

In West Kalimantan, the development of forest plantations challenges the dominance of the *dayak* agricultural systems. For centuries, the livelihoods of *dayaks* have been based on swidden agriculture, including upland and wetland rice production, and fallow management with tree crop gardens (usually forest and rubber gardens). This resource management system was once sustainable but is now facing serious problems connected to land scarcity, which result in a shortening of fallow periods, rapid soil degradation and modification of the vegetation. Recent factors accelerating these land pressures are the regional economic and political development strategies that have favoured large-scale forest and estate crop plantations.

Since 1996, an Indonesian-Finnish joint venture, PT Finnantara Intiga, has planted some 23,000 ha of fast-growing trees for industrial purposes. The company uses only degraded forestlands for plantation establishment. The present aim is to establish a forest plantation of 30,000-40,000 ha. The company leases the land from the villagers and promises a package of long-term benefits for the community. This package include job opportunities and a share of the plantation revenues, improved infrastructure, development of agroforestry systems and the provision of planting stock of improved rubber tree varieties and local tree species selected by the farmers.

## Aims and objectives

The report examines an industrial tree plantation scheme in West Kalimantan, whose objective is to link intensive industrial pulpwood production together with the existing native ecosystems and land-use patterns. The goal is to maximize the use of available land for both forest plantations and local agriculture by replacing part of the swidden fallows with forest plantations, while avoiding drastic disruptions of local, traditional agricultural systems.

The five main purposes of the report are:

- to clarify changes in livelihood structures over the last 50 years;
- to study the financial profitability of each of the main land-use types;
- to study the effects of forest plantations on households' economy;
- to compare the reasons for varying job perspectives in the forest plantations for wealthy versus poor households;
- to examine the attitudes of villagers toward the plantation scheme.

## Methodology: data collection and analysis

### **Changes in livelihood structure and opinions on the plantation scheme**

Different data collection methods were combined. The participatory rural appraisal techniques used were scoring, resource mapping and transect walks. The fieldwork started in July 1998 when the changes in livelihood structure between 1950 and 1998 were summarized by the villagers in Tokang Sekayam. Villagers were asked to compare how important different land-use activities and traditions had been in certain periods in the past and in the present. Resource mapping of crop and land use was then carried out in the same village. In each village, 10-20 villagers participated in interviews and group discussions. Villagers' opinions on the forest plantation scheme were solicited in 32 villages.

Wealth ranking was used to investigate socio-economics at the village level and the distribution of job opportunities at the forest plantations. Villagers were also asked to specify how certain resources of a household – such as access to land, money, the labour force, other agricultural input resources, kinship relationships, skills and education – affect their socio-economic situation in the village and their chances for jobs in the plantations.

## **Financial profitability calculations**

Interviews concerning land-use distribution, constraints, inputs, yields, costs and revenues related to these land uses were carried out in five villages inside the forest plantation scheme. The current mean area of each land-use type per household was also investigated.

Financial profitability analyses were done and converted into land expectation values for an infinite series of rotations.

In two case-study villages, the profitability of the following four land-use scenarios at the household level are briefly mentioned below:

- current land use;
- maximized area of forest plantations;
- agroforestry alternative with upland rice and forest plantations;
- self-supporting land-use distribution without forest plantations in villages.

Financial analyses were done using conventional cash flow techniques. Job opportunities, rice yields and returns on land were compared at the household level.

## **Results and conclusions**

The livelihood structure of a *dayak* village in West Kalimantan has altered a great deal during the last 50 years in response to a variety of environmental and socio-economic changes. The self-supporting livelihood strategies based on swidden agriculture and forest resources converted to more market-oriented strategies and more intensive land-use systems. The arrival of the forest plantation scheme in 1996 has been only one contributory factor to this process of change. In many more densely populated villages, more intensive land-use options are already being practised.

The loosening of traditions has clearly reduced the power of customary laws (*adat-law*) and sanctions. Private rights have become increasingly important owing to households' dependence on outside markets, which has led to increased land disputes.

The results clearly show that households' net revenues were much higher in the land-use scenarios that included planted forests than in those where plantation activities were excluded. The results also showed that although the plantations may increase income at the village level, they may not necessarily improve the standard of living of all households where there is inequality in obtaining employment. An interesting schema comparing the access and benefits of plantations granted to elites and to poorer households from plantation development is presented. The forest plantations have not totally replaced traditional land-use systems; there is no economic reason for the villagers to expand the plantation area if that would mean a decrease in the area of profitable pepper plantations or rubber gardens. Comparisons of alternative land-use scenarios showed that production systems based on a combination of forest plantations, agroforestry cultivation and some local traditional land-use systems provided the best livelihood option for households.

The results of the report suggest that well implemented industrial forest plantations have positive impacts on rural livelihoods. Integration of forest plantations into the local traditional livelihoods is possible if sufficient areas are left outside the plantation activities to decrease the villagers' risks and reliance on the company. The report also highlights the need to recognize that communities are not homogenous entities, either in the formulation of contracts or in benefits accruing from plantation schemes. Benefits from industrial plantation development are granted differently to village elites than to the majority of the village population.

## **Discussion**

The report draws an important conclusion: the plantation scheme did not change the village livelihood structure as much as might have been expected. Here, plantation schemes complemented existing trends rather than replaced traditional livelihood systems, which was the case in the past. It is necessary for the plantation company to provide a creative combination of incentives for villagers to encourage a balance of local traditions, environment management and enhancement of relationships with participating households.

Even a small increase of current wages paid by the company would make forest plantations more profitable for households since more than 90 percent of their net revenues come from the forest plantation. The report suggests that speculating and calculating sensitivity analyses from the changes in wages, royalties and land rents would be interesting in many ways, but it would require more information on risks and uncertainties. In addition to actual incomes from plantations, there were several other important issues in the forest plantation scheme that local people felt were important. Deeper understanding of these issues as well as sensitivity analyses concerning local people's views on financial risks and uncertainties of forest plantations should be further studied.

The Tyynelä, Otsamo and Otsamo report criticizes this case study on the grounds that the effects of forest plantations for local peoples' livelihood structures were not examined more widely. It mentions that livelihood comprises the capabilities, assets (including both material and social resources) and activities required for the means of living. The livelihood framework identifies five core asset categories or types of capital (i.e. human, social, natural, physical and financial capital) upon which livelihoods are built. Although many important economic and social impacts of forest plantations were clarified in this case study, it could still not give definitive statements on the forest plantations' total effects on local livelihoods. Valuation of industrial forest plantations according to all five categories of livelihood capital is urgently required in further studies.

## Discussion

### **Summary of aims and scope**

The FAO report provides a broad overview of forestry outgrower schemes around the world. It covers 17 schemes, which makes its results more generic. It draws on published literature and the results of its report, making preliminary suggestions of principles and criteria.

IIED has selected outgrower schemes in five different countries that cover a range of forestry contexts. It attempts to cover as wide a spectrum of different experiences and problems as possible. From the case studies/experiences, it identifies factors that encourage or prevent partnerships, and tackle the practical issue of how company-community relationships can go forward. Based on the lessons learned and ways forward in the different stages of the process, raw deals to mutual gains are identified and illustrated with examples.

By contrast, CIFOR starts from principles already established for mutually beneficial partnerships to assess existing outgrower scheme initiatives in Indonesia and the Philippines. Suggestions are given in specific cases.

In Tyynelä, Otsamo and Otsamo, alternatives in farmers' livelihoods are studied by comparing four land-use scenarios using cash flow techniques, job opportunities, rice yields and returns on land. This report is more narrow and detailed than the other two; it examines one industrial plantation scheme in one region, and focuses on a few of the aspects mentioned by CIFOR. However, Tyynelä, Otsamo and Otsamo demonstrate how industrial forest plantation schemes can be combined with farmers' other production alternatives.

### **Comparing and linking the studies together**

IIED formulates key principles to weave into the specific terms of a deal from the start, and identifies success factors and prerequisites to make it work. FAO and CIFOR have developed principles and criteria for assessing mutually beneficial outgrower schemes in forestry. Based on the principles and criteria, the CIFOR's report identifies indicators for assessing mutually beneficial outgrower schemes. FAO, IIED and CIFOR formulate and structure these principles and criteria in different ways. IIED presents its lessons learned according to the process of building partnerships, while CIFOR divides principles, criteria and indicators into five aspects: management, economics, socioculture, ecology and policy. While also presenting criteria and indicators, IIED's lessons learned and principles are more generic than CIFOR's. Yet, on the other hand, IIED also presents concrete examples on ways forward. FAO's report, which gives a broader overview of outgrower schemes, does not give concrete examples on ways forward; the key issues identified that contribute to the success of schemes are similar and at the same level as IIED's. The framework for assessing forestry outgrower schemes in the FAO report is more abstract than CIFOR's.

FAO, CIFOR and IIED generally discuss very similar aspects of community-company partnership/outgrower schemes. They all focus strongly on the partnership, the community-company relation and how to get the contract or deal right. The principles and ideas that FAO, CIFOR and IIED find important for mutually beneficial partnerships are similar and overlapping. The key principles presented by IIED are not divided into criteria and indicators, as with CIFOR's report, nor explained in detail. This is also generally the case with the issues, principles and criteria presented in the FAO report. Accordingly, it may be difficult to understand what the principles actually stand for and therefore compare them.

It should be noted that unlike FAO and CIFOR, IIED does not develop a framework for assessing outgrower schemes.

The Tynnelä, Otsamo and Otsamo report does not propose principles, criteria or indicators, or give any general recommendations or lessons learned. The suggestions for improvements in the plantation schemes given by the community members and some lessons derived from the results of their report will be compared with CIFOR's and IIED's.

The structure of this discussion is based on CIFOR's theoretical framework of principles, criteria and indicators (see Annex 4).

### **Management aspects**

CIFOR stresses fair cooperation and the development of partnership through a participatory process, and talks about mutual acceptance. FAO also stresses the need for partners' acceptance of each other's aims, as well as a fair negotiation process. Its principles and criteria also state that the agreement has to be clear and well understood by all parties. IIED also remarks that "more equitable deals, in which terms are negotiated rather than set unilaterally, do seem to work better. Working with a more equal partner makes sense as a means of mitigating risk – defection, recrimination and litigation are far less likely if terms are fair and open to debate." (IIED Report, p. 10). IIED also comments that shared understanding, i.e. of prospects and opportunities, is important for a deal. Further, it also mentions that a joint work plan with clear rights, responsibilities, and expected rewards within an overall management framework should be developed.

### **CIFOR's Management principles, criteria and indicators for mutually beneficial partnerships**

<b>Principle 1: Fair cooperation is the approach that should be used in the management of the partnership in outgrower schemes</b>	
<b>Criteria</b>	<b>Indicators</b>
A clear agreement among key stakeholders is developed through a participatory process	A participatory socialization process
	A clear understanding and implementation of the duties in balance with participants' rights as stated in the agreement document
A clear management plan is designed through a participatory process among key stakeholders	A management plan that is well understood by key stakeholders
	An effectively implemented management plan that ensures the dissemination of information on technical and financial aspects

Tynnelä, Otsamo and Otsamo point out different accessibility to benefits derived from different members in a community, for the elite and for the majority of the villagers. Participatory negotiation in contract development is not enough. Industrial plantation companies should differentiate between the elite, who often negotiate contracts on behalf of the community, and the majority of the village population. They should develop negotiation mechanisms that facilitate greater inclusivity in decision-making and implementation of plantation plans, and the consequent spread of benefits deriving from industrial forest plantations through a greater proportion of the community.

IIED states that a mechanism for sharing decision-making and information should be included in the deal. CIFOR also stresses the need for a mechanism for sharing information, but not decision making. One can assume, however, that the need for a decision-making mechanism is included in their concept of a clear agreement and management plan. IIED also recommends that extension and technical support, as a regular rather than one-off service, should be included into the specific terms of a deal. CIFOR mentions something similar in indicator 2(b). FAO states the need for access to accurate information, as well as ensuring the capacity of partners to contribute to arrangements.



CIFOR's indicators 1(b) and 2(b) stress the need for a system to implement what has been agreed upon by both parties. This is to achieve what IIED formulates in one key principle, that is, security of contributions from both sides. FAO formulates this in a principle stating the need for long-term viability and commitment of partners to optimize the returns from the arrangement.

In Tyynelä, Otsamo, and Otsamo, 47 percent of the community members in the case study based on the areas of PT Finnantara Intiga think that better communication between company and people is needed.

It can be concluded that the FAO, IIED and CIFOR reports generally stress that the deal has to be fair and equitable, and developed through negotiations. It must also be clear, well understood and accepted by all parties in order to ensure implementation of what they have both agreed upon. Management of partnerships in outgrower schemes was not an objective of the Tyynelä, Otsamo, and Otsamo report, however.

<b>Principle 2: The implementation of outgrower schemes encourages responsible practices of sustainable plantation forestry management</b>	
<b>Criteria</b>	<b>Indicators</b>
Rules and guidelines of good practice in establishing plantation forestry must be adhered to in the partnership	The relevant rules and guidelines taken into account within the management plan
	Implementation of the management plan following the codes of practice

The second principle seems to be included in IIED's report, that sustainable forest management practices in economic, social and environmental terms have to be included into the specific terms of a deal. Sustainable forest management is identified by FAO as one of the key issues that contribute to the success of schemes.

### **Economic aspects**

IIED discusses "sustainable forest management practices in economic terms, etc". While this is vague, it could be understood that the deal should be long-term economic viable. FAO stresses the need for long-term viability of partners to optimize the returns from the arrangements in terms of commercial attributes.

IIED discusses the importance of managing risks and uncertainty. FAO also recommends that production and market risks should be accurately and realistically calculated and shared.

The Tyynelä, Otsamo, and Otsamo report examines the financial profitability of each of the main land-use types by calculating the land expectation value, and the effect of forest plantation on households' economy. However, the economic viability of the industrial plantation as a key stakeholder is not an objective, nor is it discussed.

One can conclude that all four reports stress the importance of the plantation schemes' economic viability.

<b>Principle 1: The outgrower schemes take into account the long-term viability of key stakeholders' economic objectives</b>	
<b>Criteria</b>	<b>Indicators</b>
The scheme maintains a commercial focus of key stakeholders' interest, and/or the scheme is commercially viable for key stakeholders	Increased comparative advantages
	Available markets for tree-grower partners' planted timber
	Available income diversity options to bridge the waiting period between planting and timber harvesting
Economic risks are anticipated	A certain proportion of revenues from the main timber crops that is reinvested to sustain the plantation and partnership scheme (an effective reinvestment mechanism)

<b>Principle 2: The share of benefits is based on the proportional inputs by each stakeholder</b>	
<b>Criteria</b>	<b>Indicators</b>
A mechanism for a fair economic relationship and economic power-sharing	A fair benefit-sharing agreement.
A fair valuation of stakeholders' inputs	Economic inputs that are all well recorded
	transparent information that is available to all stakeholders or information is circulated transparently

Both CIFOR and IIED stress that a system or mechanism for benefit-sharing is important to include in the deal, but IIED does not mention that it should be based on the proportional inputs by each stakeholder. The FAO report does not explicitly mention the need for a benefit-sharing mechanism, but it does mention the importance for all partners to derive benefits in proportion to their contributions and risks. FAO, like CIFOR, stresses the need for accurate, in-depth and independent information.

Both IIED and FAO stress the importance of third parties. One agenda for these parties would be to help shape governance around partnerships to empower community partners. In this way, decision-making and benefit-sharing would be extended to the poorest people.

Tyynelä, Otsamo, and Otsamo's report calculates household benefits of the plantation schemes in its case study, and concludes that even a small increase of the current wages paid by the company would make forest plantations more profitable for households.

### **Sociocultural aspects**

The CIFOR report states that outgrower schemes should meet not only the commercial objectives of the company partner, but also sociocultural objectives, which are mainly in the best interests of local tree growers. In order to achieve these objectives, long-term rights should be legally clarified prior to the contractual agreement and respected by key stakeholders. IIED's report states that secure land tenure is a prerequisite that has to be in place before making the first move towards a deal, and one of its key principles mentions security of contributions from both sides. FAO's report also mentions security of contributions (e.g. land tenure) as a key issue for a successful outgrower arrangement. IIED's report stresses another key principle, systems for accountability to the community, to local government and more widely, to civil society.

<b>Principle 1: The implementation of outgrower schemes satisfy social objectives of various key stakeholders</b>	
<b>Criteria</b>	<b>Indicators</b>
Various social objectives of key stakeholders must be recognized in the agreement and met in order to optimize the adoption of outgrower schemes	Long-term land status/rights that have been transparently settled prior to the establishment of the forest plantation and are respected by key stakeholders
	Local sociocultural needs of key stakeholders that are taken into account and met whenever appropriate

This may be compared to CIFOR's view that companies should also meet sociocultural objectives. It is difficult to sort out the views on these issues in the FAO report. It identifies the importance of a positive, local, sociocultural, policy, economic and environmental context for all the principles to be met; this is very vague. FAO also concludes that schemes are more successful if arrangements contribute to wider community well-being. In rural areas of developing countries, plantation companies may be the only source of financing the communities' social objectives. More specifics are required in future studies on meeting the social objectives of participating households.

Many villagers in the Tyynelä, Otsamo, and Otsamo report suggest a more intensive social approach, development of community facilities and the realization of given promises, etc. These suggestions are in line with the aforementioned principles and ideas of CIFOR and IIED. The objective of the plantation scheme in the Tyynelä, Otsamo, and Otsamo report is to link intensive industrial pulpwood production with the existing native ecosystems and land-use patterns. Their report concludes that integration of forest plantations into the local traditional livelihood is possible if sufficient land areas are left outside the plantation activities and extensive participation of local population is ensured.

It seems that the CIFOR, IIED, Tyynelä, Otsamo, and Otsamo, and probably FAO reports all have the same standpoint, but the latter's presentation on these aspects is less developed than in the others.



<b>Principle 2: The outgrower schemes balance the differences among key stakeholders</b>	
<b>Criteria</b>	<b>Indicator</b>
There is a mechanism to balance the different powers of stakeholders	Conflict resolution mechanism
	The possibility to renegotiate the agreements

IIED highlights the same issues and details. The FAO report recommends a "fair negotiation process where all partners can make informed and free decisions – including allowance for a third party to negotiate on their behalf (p. ii). The FAO report does not mention the possibility of renegotiation.

The villagers in their study recommend flexibility in incentives and a system to solve internal problems, which the Tynnelä, Otsamo, and Otsamo report ignores.

### Ecological aspects

IIED mentions sustainable forest management practices in environmental terms, but does not discuss ecological aspects further. The FAO report concludes that one key issue contributing to the success of schemes is that the extent arrangements and forestry practices are consistent with sustainable forest management principles at the local and regional level. Ecological aspects are not discussed further. Tynnelä, Otsamo, and Otsamo's report compares four different land-use scenarios that do have different ecological impacts. However, it does not adequately elaborate upon these impacts in its analyses.

It would appear that ecological principles, criteria and indicators within the areas of mutually beneficial partnerships are the least researched aspects to date.

<b>Principle 1: Ecological integrity is maintained</b>	
<b>Criteria</b>	<b>Indicators</b>
The ecosystem function is maintained	Maintenance within critical limits, as defined by regional conservation objectives, of the adverse impacts of plantation management practices
Ecological risks are minimized	Maintenance of species diversity at plot, landscape or regional levels
	Plans for fire prevention
	Maintenance of water quantity and quality
	The development of plantations focused on degraded lands

<b>Principle 1: Policy and institutional frameworks are conducive to partnership and agreement within the framework of sustainable forestry plantation management</b>	
<b>Criteria</b>	<b>Indicator</b>
Intersectoral policies are coherent with the policies on forestry plantation development	Policies for forestry plantation development
	Other forestry policies that are coherent with policies on forestry plantation development.
	Effective instruments for intersectoral coordination on land management, mainly for plantation development
Conducive policy on land tenure exists	Coherent intersectoral land tenure policies at the national and regional levels
	Coherent rules on land tenure for national and local communities
Precautionary policies exist	Regional policies on landscape management of fires mitigation

## **Policy aspects**

CIFOR notes that to ensure that the implementation of partnerships is mutually beneficial, positive government must be translated into conducive policy and institutional frameworks. IIED draws the same conclusions. It identifies enabling government policy and secure land tenure as possibly the most important prerequisite to be put into place to launch a deal. FAO identifies some issues that affect the extent that the principles and criteria translate to any given local context, including encouraging policies and supporting mechanisms from the government. It also mentions institutional support as a promoting factor.

FAO, IIED and CIFOR all stress the importance of the same overall issue. Unlike CIFOR, however, FAO and IIED have not developed their ideas in detail.

## **Conclusions**

The key issues, principles, criteria, etc. that have been identified as important for a mutually beneficial partnership in the reports of FAO, IIED, and CIFOR are similar and complementary. The reports focus on similar issues contributing to the success of partnerships between farm foresters and private companies. CIFOR has developed their principles, criteria and indicators for assessing mutual beneficial partnership in more detail than FAO and IIED.

Tyynelä, Otsamo and Otsamo's report focuses on microlevel issues associated with the decision-making of the outgrowers' production. It compares farmers' involvement in industrial plantation schemes among other production options, and shows that a combination of forest plantations, agroforestry cultivation and local traditional land use is likely to be the best choice for households. The report also suggests that communities should not be viewed as homogeneous entities. Finally, it effectively contributes to the dialogue on the interaction of industrial plantations in rural communities.

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## Chapter 5

# FOREST PRODUCTS TRADE AND POLICY IN RELATION TO OUTGROWER SCHEMES

Jeremy Broadhead

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## Overview of future trends in forest products trade and markets

This section provides an overview of global forest product markets, focusing on the Asia-Pacific region. Five product groups are discussed:<sup>5</sup>

- **Industrial roundwood:** Roundwood is used in the production of other goods, comprising (i) saw logs and veneer logs (ii) pulpwood and (iii) other industrial roundwood, excluding wood fuel. It is measured in cubic metres, excluding bark.
- **Sawnwood:** Wood is produced from domestic roundwood by sawing, with the exception of wooden flooring, which is measured in cubic metres solid volume.
- **Wood-based panels:** These include veneer, plywood and several types of board manufactured from wood particles or fibre. They are reported in cubic metres solid volume.
- **Wood pulp:** This is measured in metric tonnes.
- **Paper and paperboard:** They are measured in metric tonnes.

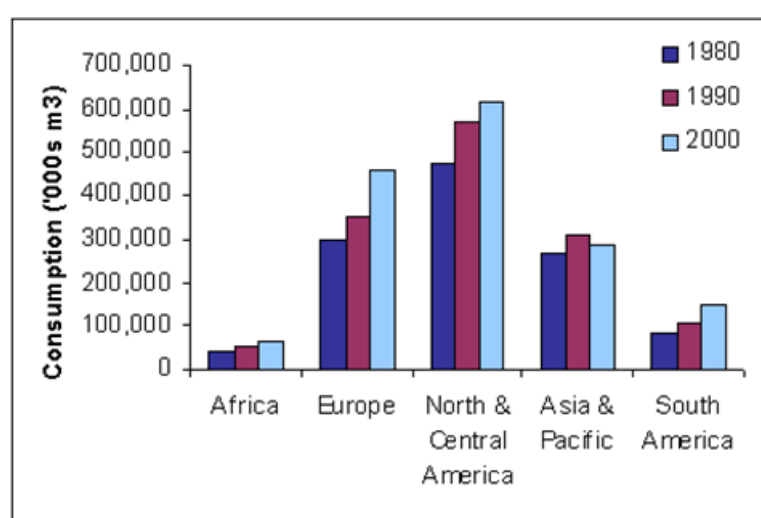
The reasons for which these groups were selected are that (i) they cover all the major marketed forest products; (ii) national level statistics and information are widely available from FAO and the International Tropical Timber Organization (ITTO); and (iii) they include the products with the greatest potential for outgrower schemes, i.e. those associated with large capital-intensive manufacturers to whom secure resource supplies and thus contractual supply agreements are attractive (William Hyde, personal communication, 2002).

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<sup>5</sup> All data used in this paper are derived from FAO databases.

**Note on available forecasts**

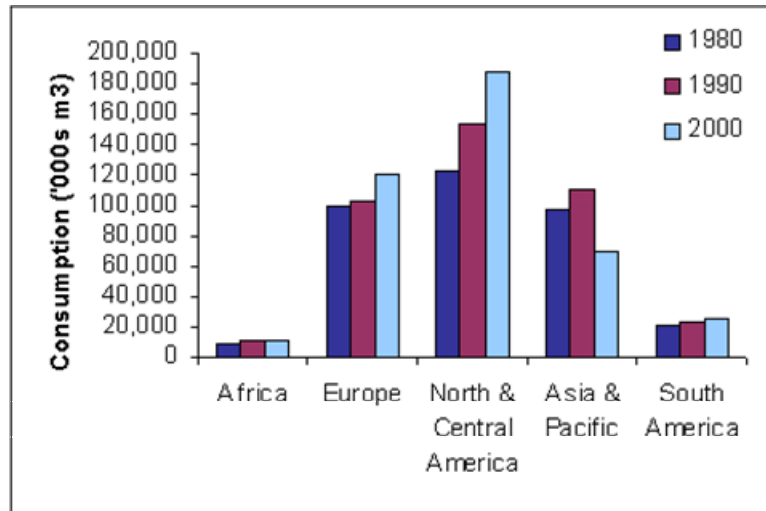
Comparison of trade and consumption forecasts from the Global Forest Products Model (Shushuai, Tomberlin and Buongiorno, 1998) and the Asia-Pacific Forest Products Model (Zhang, Buongiorno and Zhu, 1997) with actual trends, shows that the predictions made before the Asian economic crisis are misleading in many cases. Therefore, the analysis here relies on actual changes in volumes over two periods, 1980-1990 and 1990-2000, together with qualitative information from more recent literature. At the country level, qualitative information was more heavily relied upon because reported figures often show dubious trends (e.g. negative apparent consumption) and in several cases, there is well-substantiated proof of underreporting, often as a result of illegal activity.

**Figure 5.1 Industrial roundwood consumption 1980-2000**

Global consumption of industrial roundwood increased at an average annual rate of 1.6 percent between 1980 and 1990. It then decreased at 0.6 percent per year between 1990 and 2000 (Appendix 1). The reduction was due to the Asian recession, as can be seen in Figure 5.1, and also a dramatic fall in production in the USSR/former USSR.<sup>6</sup> FAO (1998) estimates that between 1994 and 2010 the average annual rate of consumption growth in the Asia-Pacific region will double that between 1980 and 1994, with Japan, China, Malaysia, Indonesia and India expected to remain the region's main consumers. Although these growth rates have been tempered by the Asian recession, as Figure 5.1 shows, expectations remain that future demand growth will be strong. Trade in the Asia-Pacific region decreased between 1980 and 1997 as a result of increased domestic processing and log-export bans, although there has been some recovery since 1998.

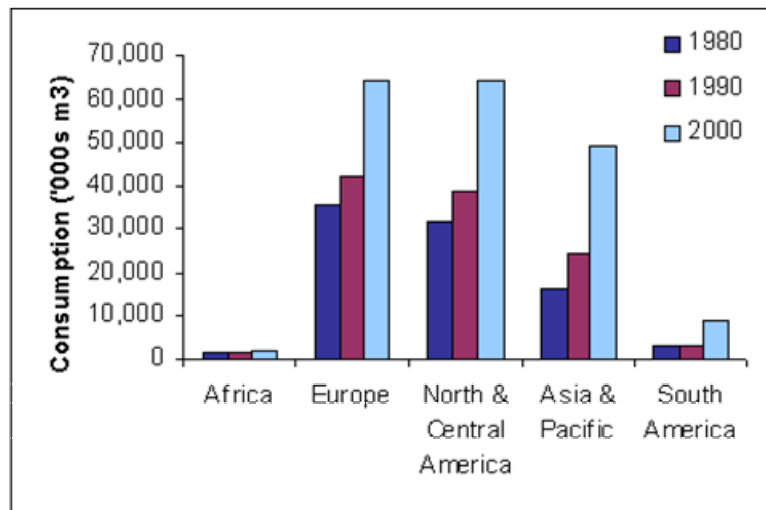
<sup>6</sup> Figures used exclude the USSR before 1992 in all but the world total; after 1992, constituent countries are included in either Europe or Asia. This caused a 21 percent consumption jump in Europe between 1990 and 1992, but no significant change in Asia. Prior to 1992, the USSR consumed 18-19 percent of the world's industrial roundwood. This proportion subsequently declined rapidly, due both to changes in reporting and a fall in production. The 1990-2000 fall in global consumption can largely be ascribed to this decline. If the USSR/former USSR is excluded, the average annual rates of global consumption growth are 1.8 percent for 1980-1990 and 0.4 percent for 1990-2000.

**Figure 5.2 Sawnwood consumption 1980-2000**

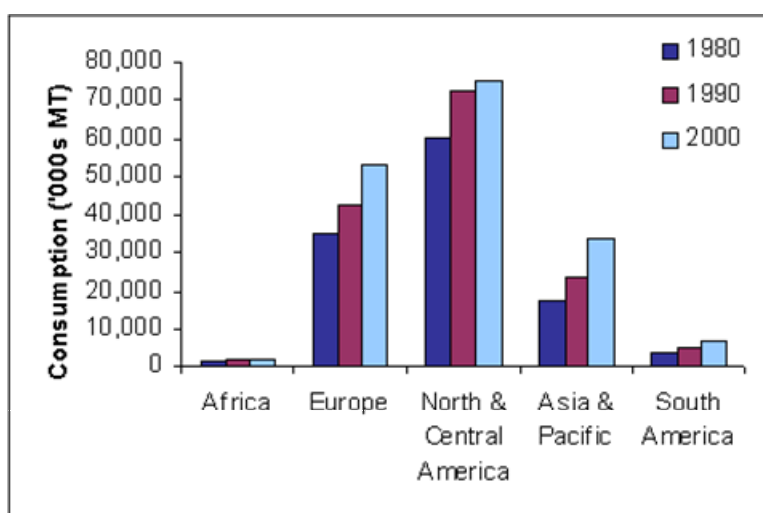


Global sawnwood consumption has remained stable over the last 20 years but fell rapidly in Asia and the Pacific after 1995. The lack of growth in consumption is due in part to the decreasing supply of large saw logs and rapid substitution, particularly by reconstituted panels and plywood (FAO, 1998). Trade has been increasing rapidly across the world with the exception of the Asia-Pacific region where exports declined from 1989 to 1999. The average annual consumption growth rate of 1.5 percent between 1980 and 1990 reversed to a decline of 4.6 percent per year between 1990 and 2000, whereas trade increased markedly (Appendix 1). FAO's 1998 outlook for the Asia Pacific region predicts relative stagnation of sawn timber consumption due to increased product substitution, scarcity of large logs and the preference in Southeast Asian developing countries for concrete apartments. Japan, China, India, Indonesia, Malaysia and the Republic of Korea are expected to remain the largest consumers (FAO, 1998; ITTO, 1997).

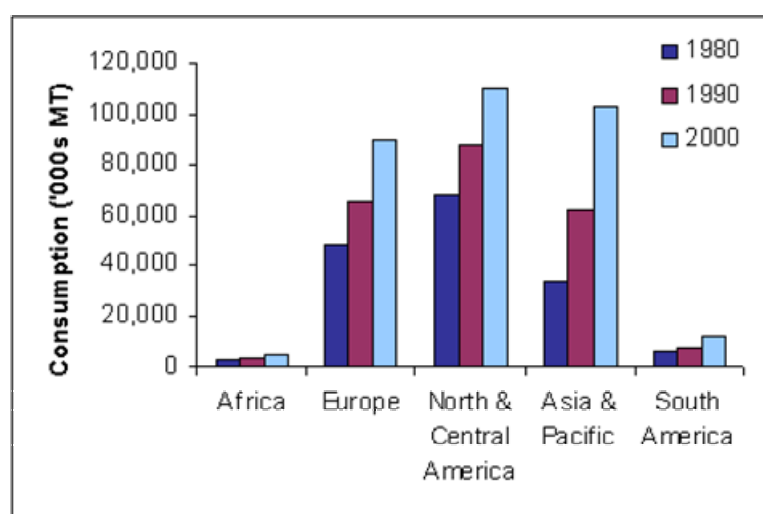
**Figure 5.3 Wood-based panel consumption 1980-2000**



On a global level, wood-based panel consumption increased rapidly between 1990 and 2000 compared to the previous decade (Appendix 1). Worldwide imports and exports also increased rapidly between 1980 and 2000, although rates fell between 1990 and 2000 in the Asia Pacific region. Predictions and actual figures to date indicate that consumption of wood-based panels will expand quickly over the coming years. FAO (1998) estimated that in the Asia-Pacific region, wood-based panel consumption will increase at an average annual rate of 2.4 percent between 1994 and 2010. In the coming years the plywood share is expected to decline owing to the diminishing supply of large peeler logs and substitution by other board types.

**Figure 5.4 Wood pulp consumption 1980-2000**

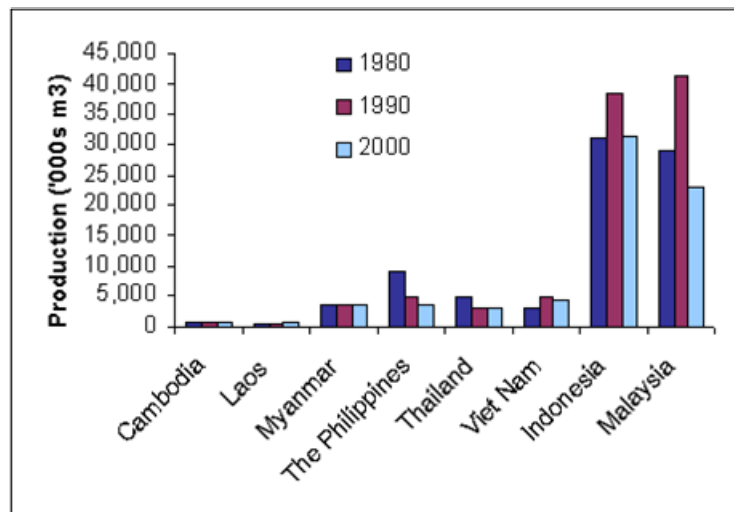
The rate of increase in global wood pulp consumption slowed down over the 1990-2000 period (1.0 percent average annual increase) in comparison with the previous decade (2.2 percent). All world regions, except North and Central America, showed a rapidly increasing consumption, especially South America, and Asia and the Pacific (Appendix 1). Trade is also increasing rapidly in all regions except Africa where imports have stagnated. Exports in the Asia Pacific region showed particularly steep increases between 1994 and 2000 from a low starting point. Consumption growth in the Asia-Pacific region seems set to be well above the FAO (1998) predicted average annual growth of 1.1 percent between 2000 and 2010.

**Figure 5.5 Paper and paperboard consumption 1980-2000**

Global consumption of paper and paperboard increased steadily between 1980 and 2000 at an average annual rate of 3.3 percent. In the Asia-Pacific region growth rates were much higher (5.7 percent) as shown in Figure 5.5. The most dramatic changes in trade were the huge increases in both imports and exports in the Asia-Pacific region between the late 1980s and 2000. There has also been massive expansion in paper and paperboard production, with increases in North Asia and Southeast Asia of 230 and 400 percent, respectively. Overall, pulp and paper capacity in the region is projected to increase by more than one third by 2010 with very large current investments in Indonesia and China, which is expected to be the major producer in the region (FAO, 1998). FAO's estimates suggest that consumption of paper and paperboard in the Asia-Pacific region will grow at an average annual rate of 3 percent to 2010, mostly due to increases in China, but also in Japan, the Republic of Korea, Indonesia, India, Thailand and Malaysia. With respect to trade, it is expected that although the Asia-Pacific region will be a significant net importer by 2010, increased capacity will lead to a reduction in imports and a slight increase in exports.

## Supply and trade of forest products in the Asia-Pacific region and Southeast Asia

**Figure 5.6 Industrial roundwood production in Southeast Asian countries, 1980-2000**  
(Source: FAO)



Although abundant, wood and fibre supplies in the Asia-Pacific region vary significantly, both sub-regionally and within countries. In Southeast Asia, log production from natural forest is close to its maximum, especially in countries with large wood-processing industries, such as Malaysia and Indonesia, where exported products are increasingly being diverted to domestic consumers. India, Thailand, the Philippines and China also face difficulties in meeting demands, and several countries, including Myanmar, Lao People's Democratic Republic, Cambodia and Viet Nam, have become a focus for future supplies (FAO, 1998; ITTO, 1997). The situation in Southeast Asia is well demonstrated in Figure 5.6. However, as supplies from natural forests have declined, there has been a shift towards plantation-grown wood in Asia, which contains around half of the world's plantation forest. The majority (77 percent) is concentrated in China, India and Japan, with most of the balance in Indonesia, the Democratic People's Republic of Korea, the Republic of Korea, and Viet Nam (Brown, 1997). Although much of the growing stock is presently below harvestable age, the proportion of industrial roundwood supplied from plantations is expected to increase from 32 to 46 percent of total production between 2000 and 2020 (ABARE-Jaakko, 1999).

ITTO's forecasts indicate that demand for forest products will continue to rise in the Asia-Pacific region as economies continue to grow. Although dependent on future restrictions to supply and export logs from major producing countries, falling log supply is not expected to constrain forestry sector development (ITTO, 1997). In contrast, developments will largely be determined by the substitution rates and the supply of conifer logs into the region; as a result, future price rises seem unlikely. At the global level, FAO (1998) predicts that prices of industrial roundwood prices will remain stable, while prices of sawnwood and plywood are expected to increase slightly, and those of the other wood-based panels, paper and paperboard will change little or decrease slightly. During 1999-2000 the only increases in log prices were for teak (ITTO, 2000).

With respect to trade, tariff and non-tariff barriers have consistently been greater in developing than developed country markets. However, tariffs will continue to decline in the Asia-Pacific region as a result of negotiations led by the Association of South East Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC) and the World Trade Organization (WTO). The effect of reduced barriers will depend on the competitive and comparative abilities of the nations involved. Although trade will be stimulated, development prospects for emerging economies may be dampened in the absence of measures protecting against strong competition (Barbier, 1996; Brown, 1997).

The main features of the forest products outlook predicted by FAO (1998) and ITTO (1997, 2000) are as follows:

- Demand in the Asia-Pacific region for all forest products will increase significantly due to population growth and anticipated strong economic performance.
- For the Asia-Pacific region, the supply-demand balance to 2010 will change little from the present level of shortfall, with the exception of large logs.
- Supply from Russia and demand from China and India have potentially substantial effects. It is likely that China's demands will soar.
- Shortages in the supply of large logs in the Asia-Pacific region will lead to an increased emphasis on fibre, increased consumption of reconstituted panels and a reduced use of sawnwood and plywood.
- Increased processing in timber producing countries will result from market forces, emphasizing export of value-added products and log export bans/constraints.
- Increasing dependence on trade to meet growth in demands for forest products is predicted in the Asia-Pacific region where wood production is unlikely to increase markedly.
- Huge demands for paper could emerge, particularly if economic growth accelerates in India and China.
- Price increases for most timber products are unlikely.

## Market trends and policy: country profiles

### Cambodia

#### **Forest product market trends**

There is great difficulty at present in accessing reliable forest product information for Cambodia. Carle (1998) stated that without immediate intervention log supply to the forestry sector would be in severe jeopardy within five years. Furthermore, following the Asian economic crisis, costs of veneer and sawn timber production in Cambodia exceeded international market prices and as a result some operations were suspended pending price recovery.

Policy influencing outgrower schemes:

- Reports suggest that Cambodia is not adhering to its log export ban (Hong-Narith, 1997; Carle, 1998).
- The administrative system for forest industries' exports is complex and disruptive compared to illegal systems and systems involving facilitation payments (Carle, 1998).
- The major barriers to the expansion of the Cambodian logging and processing sectors are lack of infrastructure and institutional capacity, and a political and economic environment that discourages investment (ITTO, 1997).



## China

### **Forest product market trends**

Domestic demand for wood products in China is projected to increase rapidly with economic growth. Recent restrictions on logging in natural forest combined with growing demand has led to increased imports of all wood-based products. In particular, log imports have soared, with Malaysia, Gabon, Papua New Guinea and the Russian Federation as the main suppliers. The scarcity has resulted in reduced sawnwood production that is expected to cause increased consumption of wood-based panels as substitutes (ABARE, 2002). The current heavy investment in paper production will place further demands on wood fibre. It is expected that supplies will be derived from an increase in imports of logs, woodchips and wood pulp, as well as from the extensive areas of planned and recently established plantations (FAO, 1998; ABARE, 2002; Kunshan *et al.*, 1997). Predictions show that very large stocks of agricultural tree crops and trees outside of forests will also contribute to increases in wood product output (FAO 1998; ITTO, 2000).

Policy influencing outgrower schemes:

- In 1984 a policy stating that "the tree belongs to he who planted it, and the jointly planted trees belong to the collective" was implemented prior to the launch of several joint forestry initiatives (Kunshan *et al.*, 1997).
- China is investing heavily in plantations both directly and through subsidies. Incentives include low-interest loans, fifty-year leases on land and tax-free income from thinnings. The Government also allows private forestry on public land (ABARE, 2002). However, private investment in plantation establishment is constrained by insecure tenure, high taxation, unfavourable natural and geographical locations and shortages of finance, labour and cost/benefit information (Xu, 2002).
- The current harvesting quota system limits the attractiveness of acquiring forest use rights since farmers are limited in their ability to reap rewards from adopting more productive forestry techniques. Even if they improve productivity and shorten required forestry rotations, they may not be allowed to harvest their trees (Xiaoyi, 1995 cited in Xu, 2002).
- Logging bans covering large areas of China have created uncertainty for smallholder investors in planted resources; the implications for future investment and marketing have not been evaluated (J. Carle, personal communication, 2002).
- To encourage forest product export the Chinese Government's policies include establishing export-oriented production and processing bases and providing a range of incentives to organizations that support these bases (Kunshan *et al.*, 1997).
- In order to raise domestic wood and fibre supply, China aims to reduce exports of all logs and sawnwood to zero (Kunshan *et al.*, 1997).
- Five new paper mills were to come on line in 1998, and 32 new projects were announced, each with a capacity exceeding 100,000 metric tonnes (FAO, 1998).

## India

### **Forest product market trends**

India is facing a scarcity of wood, which has caused price rises of 9 to 13.5 percent per annum since 1982, compared with 7-8 percent for wheat and rice. The paper industry in particular is plagued by raw material shortage in the face of continually increasing demand. The supply of timber from natural forests has also declined drastically. However, there has been a major shift to plantation-grown wood, and it is expected that future demands will be met (Ahmed, 1997; FAO, 1998). At present, imports of forest raw materials, promoted by industrial and trade liberalization, are filling the lack. Farm forestry is also playing an important role and it is estimated that approximately 40 percent forest products are supplied from outside forest areas. In particular, poplar, a plywood raw material, has shown good economic returns to the farmers, and its trees may also be extracted early to produce reconstituted wood or fibreboard (Ahmed, 1997; see also Pande 2002 for a synopsis of outgrower schemes).

### Policy influencing outgrower schemes

- Under the 1981 Rural Development and Rural Employment Guarantee Programmes, State-run schemes were formulated to support marginal and small farmers. Tree planting incentives include subsidies, exemption from sales tax and direct planting on small farms and marginal lands (Pande, 2002).
- Policy changes in 1988 greatly reduced wood supply to industries from government forests. The new policy states that as far as possible, the forest-based industry should work with individual suppliers supported with credit, technical advice and final harvesting and transport services. The policy also recommended that the subsidized supply of raw materials to forest-based industries should cease; however, past commitments are still being honoured (Pande, 2002; Ahmed, 1997).
- Under the 1999 National Forestry Action Programme the annual afforestation/rehabilitation of two million hectares are planned, 10 percent of which should be "farm forestry". However, the financial resources available are far below the requirements (Pande, 2002).
- Supplies of government-subsidised seedlings, although declining, are hampering Farm forestry by discouraging private nurseries, which could supply better planting material (Ahmed, 1997; Pande 2002).
- In most Indian states, farmers can only harvest and transport wood products after a long and cumbersome process to obtain permits. However, in the states of Haryana and Punjab there is no such regulation, and other states have exempted agroforestry species (Ahmed, 1997).
- Import policy for wood and wood products has been liberalised since the mid-1990s. Yet, there is a ban on timber export and restrictions on interstate movement of high quality wood (Ahmed, 1997).

## Indonesia

### **Forest product market trends**

Indonesia's harvests from natural forests are at or above the sustained yield limit, and timber supply from clearing of conversion forests is scheduled to decline markedly by 2010 (FAO 1998; ITTO, 1997). Wood-based industries have experienced log shortages since the 1990s when the production of sawnwood stagnated due to favouring of plywood, a priority product for export. Presently, few sawmills have processing equipment suitable for small logs, but increasing scarcity of larger timber has heightened interest in conversion. Indeed, the prospect of smaller logs has made the manufacture of plywood substitutes more attractive (ITTO, 1997). Log consumption is likely to continue to increase in the future, since substitution by non-wood products is limited (ITTO, 2000). Consumption increases will be facilitated by opening of trade and Indonesia has been considering log imports from Viet Nam, Myanmar and the Solomon Islands to offset declining domestic supplies (ITTO, 1997; Ministry of Forestry, Indonesia, 1998).

Policy influencing outgrower schemes:

- In October 2001 the Indonesian Government imposed a log export ban (Pribadi, 2002). The export of sawnwood is also subject to substantial tariffs (ITTO, 1997).
- The Government plans to decrease production from natural forests by 2 percent per year, and increase reliance on plantations. Developing fast-growing plantations, predominantly of teak, pine, mahogany and agathis, is thus being encouraged (Hammond, 1997).
- There are no plans for the further expansion of the wood industry capacity; on the contrary, the existing capacity will be reduced to match sustainable raw material supply (ITTO, 2000).
- Indonesia has proposed huge investments in paper mills, announcing capacity increases totalling nearly 5.9 million tonnes (FAO, 1998).

## Japan

### **Forest product market trends**

Japan has been the world's dominant importer of forest products for decades, mostly in industrial roundwood. Its imports provide about three quarters of total world consumption. This high dependency on imports is not expected to change drastically in the next few decades. Although demand for timber is expected to continue, a drop in housing starts has dampened demand (FAO, 1998; Forestry Agency, Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan, 1998). Demand for timber for wood panels is anticipated to continue increasing, but with greater consumption of coniferous plywood, medium density fibreboard and particle board. In contrast, it is anticipated that tropical hardwood timber consumption for plywood will decrease due to falling volumes from supplying countries in the region (Forestry Agency, MAFF, Japan, 1998). Demand for pulpwood has continued to grow along with the demand for paper and paperboard; it is anticipated that these trends will continue in line with economic growth. (Forestry Agency, MAFF, Japan, 1998)

Policy influencing outgrower schemes:

- Japan's influence on wood products markets is through its considerable leverage on trade in the Asia-Pacific region. Accordingly, changes in trade barriers, domestic harvesting levels and the competitiveness of suppliers are likely to have the greatest effects on markets for wood products. Japan's reduction of import tariffs during the Uruguay Round discussions were greatest with respect to wood-based panels. A temporary zero tariff on all imports of woodpulp and newsprint was also agreed upon although no long-term commitment to this was made (Brown, 1997).

## Lao People's Democratic Republic

### Forest product market trends

In Lao People's Democratic Republic, the main wood-based industry is sawmilling. (There are no pulp and paper mills.) However, owing to log shortages, the utilization rate of the installed wood processing capacity is only around 50 percent. The most important export products are sawnwood, logs, stumps and knobs, parquet and plywood. Downstream processing is predominantly limited to parquet production for export and furniture manufacture for the domestic market. The low efficiency of wood processing has reduced the competitiveness of wood products in foreign markets and sustainable utilization of natural forest resources precludes the expansion of exports. However, growth in the forest plantation sector will improve supply, especially with respect to pulpwood and wood chips for export to Thailand (Kingsada, 1998; Sanonty, 2002). At present, Lao PDR is practically self-sufficient in logs and forest products, although some special panel products like medium-density fibreboard are imported in small quantities. Increasing demand for forest products and for higher quality products will be met by imports if they cannot be produced domestically (Kingsada, 1998).

Policy influencing outgrower schemes:

- The Department of Forestry's "Vision 2020" made allocation of land to rural families and enterprises to encourage plantation development a priority (Sanonty, 2000).
- In principle, there is a log export ban but logs, mainly pine (*Pinus merkusii*), are still being exported (Kingsada, 1998).
- The Lao Government has determined that forestry plantation will be concentrated in the hands of many small farmers rather than a few large companies. Large-scale forest plantation establishment by foreign companies in joint ventures with Lao enterprises will also be promoted. These ventures will establish their own plantations but they will also contract farmers to plant trees on their own land (Kingsada, 1998).
- Based on The First National Conference on Forestry in 1989, a loan scheme for commercial tree plantations has been initiated, a Compensatory Plantation Fund has been established and log sale procedures have been streamlined. An incentive scheme for promoting tree planting by farmers is also being prepared (Sanonty, 2002).

## Malaysia

### Forest product market trends

Production of forest products is declining due to previous over-cutting and the subsequent lack of accessible merchantable forest. Projected sustainable supply of logs from Malaysia's permanent forest estate and plantations is expected to fall short of primary processing capacity by 1.5-2 times (Forestry Department Headquarters, Malaysia, 1997). Imports of hardwood logs are expected to grow up to 2010 and Malaysia's dominance of non-coniferous sawnwood exports in the Asia-Pacific region is expected to weaken owing to harvest cutbacks and diversion of logs to veneer and plywood mills (ITTO, 1997; FAO, 1998). In contrast to logs and sawn timber, exports of downstream products such as plywood, veneer, mouldings and furniture have been increasing rapidly due to focusing on value-added activities. The furniture subsector is rapidly becoming a major foreign exchange earner for Malaysia, fuelled mostly by domestically-produced rubberwood. However, competition for rubberwood from other wood-based subsectors has caused the price to escalate in recent years (Forestry Department Headquarters, Malaysia, 1997). Paper products, which in 1994 comprised 83 percent of total forest product imports, dominate Malaysian forest product imports. This is due to there being only one pulp and paper mill in Malaysia; however, two more pulp and paper mills are planned and should reduce Malaysia's dependence on imports (Brown, 1997; Forestry Department Headquarters, Malaysia, 1997).

Policy influencing outgrower schemes:

- A ban on round log exports from peninsular Malaysia and a partial ban in Sabah have been established since 1995 (Forestry Dept. HQ, Malaysia, 1997).
- Through various policies, the Government aims to make Malaysia a major global producer of high value added wood-based products, specifically furniture and joinery/mouldings (Forestry Dept. HQ, Malaysia, 1997; ITTO, 2000).

## Myanmar

### Forest product market trends

At present, although only teak and a few hardwood species are commercially harvested, other hardwoods and bamboo resources are expected to be further utilized as a result of market liberalization (Myanmar Forest Department, 1997). Myanmar's imports of forestry products are almost non-existent except for a small quantity of paper products. Export earnings of the forestry sector in 1994-1995, on the other hand, comprised 32 percent of the national total, with teak and hardwood timbers being by far the most important products. In spite of the large number of wood processing facilities, including furniture and mouldings factories, the export of value-added products from Myanmar is limited by the low standards in the quality of products (Myanmar Forest Department, 1997). ITTO (1997) pointed out Myanmar's opportunity in expanding log exports in the short term while the major regional suppliers in Southeast Asia reduce exports. However, this opportunity may be foregone owing to existing barriers to the expansion of logging and processing. Such barriers include a lack of infrastructure and institutional capacity combined with political and economic environments that discourage investment (ITTO, 1997).

Policy influencing outgrower schemes:

- Log export is gradually being reduced to promote downstream processing, yet because of a lack of infrastructure and appropriate technology, a complete ban on log export may be slow in coming. Logging and log export by the private sector have been banned owing to indiscriminate cutting and the failure to follow procedures (Myanmar Forestry Department, 1997).
- The Forestry Department promotes the private sector and forest-based industries as well as the liberalization of trade and tariff policies (Myanmar Forestry Department, 1997).

## The Philippines

### Forest product market trends

The Philippines has departed from its previous role as a net exporter of traditional forest products such as logs, lumber, plywood and veneer. It has now become an active importer of all products except pulp, as a result of the dramatic decline in domestic timber supply (Forest Management Bureau, Department of Environment and Natural Resources [DENR], Manila, 1997; FAO, 1998). In contrast, the export value of wood-based manufactured articles increased by 2.5 times between 1984 and 1994, and the export of wood-based furniture has expanded enormously (FAO, 1998). It is possible that the increase of log export bans in countries that provide imports may interrupt supply to the wood-based industries. However, having recognized this, the Government has accepted that supplies will increasingly have to come from plantations (Hammond, 1997).

Policy influencing outgrower schemes:

- Log and lumber export bans were imposed in 1986 and 1989, respectively (Forest Management Bureau, Department of Environment and Natural Resources [DENR], Manila, 1997). The issue of imposing a total logging ban against selective logging is currently under review (Catindig, 2002).
- The Government of the Philippines provides incentives for investment in plantations, including exemptions from a number of different taxes, such as import and export taxes and duties (Forest Management Bureau, DENR, Manila, 1997).
- Corporate sector involvement in establishing industrial plantations is encouraged through land leases granted at minimal rates. In addition, investment costs can be written off as expenses, and plantation produce can be exported in raw or processed form, unlike that from natural forests (Hammond, 1997).

## Thailand

### **Forest product market trends**

Since the 1989 logging ban and the consequent reduction in log supply, sawmills have relied on imported wood. Although this trade is expected to continue, sawmills are also using plantation wood, including rubberwood and eucalyptus (ITTO, 2000). Thailand is a net importer of logs, sawnwood and panels, but exports large quantities of wood-based furniture, especially rubberwood (FAO, 1998). The manufacture of rubberwood furniture is the fastest growing sub-sector within the furniture industry. Growth of the rubberwood furniture industry is expected to continue due to an abundance of the raw material, increasing the scarcity of other raw materials, growing international demand and Government support (Sutthisrisinn and Noochdumrong, 1998). The Thai paper and paperboard industries have also expanded rapidly, almost doubling their capacity between 1985 and 1998 (Sutthisrisinn and Noochdumrong, 1998).

Policy influencing outgrower schemes:

- A ban on logging in natural forests has been in force since 1989.
- The 1992 Reafforestation Act exempted investors from paying royalties on plantation-grown teak and *Dipterocarpus alatus*. No reference is made to other economically important plantation species (Jintanugool, 2002; Mahannop, 2002).
- Through the Private Reforestation Extension Project (1994-2005), the Thai Government provides plantation establishment subsidy for five years to all classes of farmers (Mahannop, 2002; Jintanugool 2002).
- A review of the present investment climate for forest plantations has shown that the policy, and legal and land tenure conditions are not supportive, and in some cases repress plantation establishment (Sutthisrisinn and Noochdumrong, 1998).

## Viet Nam

### **Forest product market trends**

Value-added manufacturing is partly driven by the current shrinkage of forested area which has led the Government of Viet Nam to limit both timber extraction from natural forests and the export of roundwood and semi-processed timber. An apparent benefit of the policy is that despite a rapid decrease in annual roundwood removals, export earnings from forest products have rebounded with earnings from the rapid increase of cabinet work (FAO, 1998). According to ITTO (1997), Viet Nam has an opportunity to expand log exports in the short term as the major exporters curtail their trade. However, it is also reported that although Viet Nam has considerable potential for increasing log supply from natural forests, infrastructure and institutional capacity are lacking, and political and economic environments discourage investment.

Policy influencing outgrower schemes:

- The Vietnamese Government plans to eventually ban wood and timber extraction from natural forests and is strongly emphasizing forest plantation, protection, regeneration and restoration (Van, 1997).
- Low-interest loans are available to farmers for plantation establishment and plantation products are subject to a land use tax of only 4 percent (products from natural forests can be taxed at 15-40 percent; Van, 1997).
- A plan to reafforest 5 million ha between 1998 and 2010 has been approved; incentives include low-interest credit for forest plantation and tax holidays (Hoai and Dien, 2000).

## Concluding remarks

As wood product prices are not generally expected to increase, products from outgrower schemes will either have to compete with supplies from existing sources, as well as those from current plantation programmes, or focus on niche or local markets. Given that supply contracts are likely to be more attractive to large, capital-intensive industries, the greatest opportunity for outgrowers may be to seek contracts with pulp and paper mills. As statistics on wood supply at the sub-national level are generally not available, the best way to gauge supply prospects is likely through sector publications (e.g. Jaakko Pöyry Consulting, 1997) or contact with the mill operators themselves.

Prospective outgrowers will also have to work within existing policy environments, which vary greatly between countries. Log export bans and timber price controls are likely to work against outgrowers by pushing down national wood products prices, thus making it difficult for outgrowers to compete. Subsidies and incentives aimed at large plantation developments are likely to have the same effect. Accordingly, the best indicator of potential for outgrower schemes, in addition to policy appraisal, is the presence of smallholder plantations, such as in the Philippines, Lao People's Democratic Republic, India and Thailand (FAO, 1998).





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## Forest Products Consumption and Trade Statistics (Source: FAO)

### INDUSTRIAL ROUNDWOOD

	Quantity in 2000 (m3)	global total in 2000 (%)	Average annual % change	
			1980-1990	1990-2000
<b>Consumption</b>				
Africa	63,655	4	1.7	1.9
Europe	457,198	29	1.6	2.7
North & Central America	615,953	39	1.9	0.7
Asia & Pacific	286,933	18	1.3	-0.7
South America	150,904	9	2.4	3.5
World	1,589,018	100	1.6	-0.6
<b>Imports</b>				
Africa	930	0.8	-10.4	13.4
Europe	64,405	55.1	-1.5	7.8
North & Central America	6,581	5.6	-9.3	13.0
Asia & Pacific	42,856	36.7	-0.7	-1.3
South America	150	0.1	-12.4	19.2
World	116,822	100.0	-1.4	3.5
<b>Exports</b>				
Africa	6,102	5.3	-3.9	3.9
Europe	71,144	62.2	-0.1	14.2
North & Central America	14,971	13.1	2.3	-4.2
Asia & Pacific	19,755	17.3	-3.9	-1.8
South America	2,199	1.9	10.0	-3.0
World	114,344	100.0	-1.1	3.2

### SAWNWOOD

	Quantity in 2000 (m3)	global total in 2000 (%)	Average annual % change	
			1980-1990	1980-1990
<b>Consumption</b>				
Africa	10,499	2	0.6	0.1
Europe	119,773	28	0.3	1.5
North & Central America	187,981	45	2.2	2.1
Asia & Pacific	69,377	16	1.5	-4.6
South America	25,454	6	1.2	0.8
World	421,932	100	1.2	-1.8
<b>Imports</b>				
Africa	4,708	3.7	0.9	3.1
Europe	48,462	37.6	0.9	2.5
North & Central America	51,375	39.8	2.1	4.7
Asia & Pacific	19,829	15.4	6.1	3.3
South America	460	0.4	-12.1	1.4
World	128,952	100.0	1.6	3.5
<b>Exports</b>				
Africa	1,875	1.5	4.2	3.4
Europe	56,223	43.9	-0.9	9.2
North & Central America	57,053	44.6	2.9	1.9
Asia & Pacific	7,627	6.0	1.4	-0.1
South America	4,585	3.6	-1.6	7.7
World	127,974	100.0	1.1	3.7

### WOOD-BASED PANELS

	Quantity in 2000 (m3)	global total in 2000 (%)	Average annual % change	
			1980-1990	1990-2000
<b>Consumption</b>				
Africa	2,138	1	-1.7	4.0
Europe	64,072	33	1.7	4.4
North & Central America	64,090	33	1.9	5.2
Asia & Pacific	49,000	25	4.0	7.3
South America	9,128	5	0.3	10.5
World	193,891	100	2.1	4.6
<b>Imports</b>				
Africa	779	1.3	-5.8	10.2
Europe	22,271	36.8	3.8	4.4
North & Central America	17,324	28.6	6.9	12.9
Asia & Pacific	16,818	27.8	25.3	6.9
South America	487	0.8	-12.4	22.9
World	60,524	100.0	6.8	7.2
<b>Exports</b>				
Africa	699	1.3	2.8	4.8
Europe	23,218	41.5	2.7	8.5
North & Central America	13,577	24.3	9.1	9.2
Asia & Pacific	15,496	27.7	12.8	3.0
South America	2,653	4.7	4.2	12.0
World	55,889	100.0	6.5	6.2

### WOOD PULP

	Quantity in 2000 (MT)	global total in 2000 (%)	Average annual % change	
			1980-1990	1990-2000
<b>Consumption</b>				
Africa	1,888	1	5.7	-0.3
Europe	52,810	31	2.0	2.2
North & Central America	75,310	44	1.9	0.4
Asia & Pacific	33,580	20	3.1	3.8
South America	6,825	4	2.9	3.9
World	171,220	100	2.2	1.0
<b>Imports</b>				
Africa	283	0.8	-2.6	1.4
Europe	17,200	45.6	1.4	2.6
North & Central America	7,442	19.7	2.0	4.0
Asia & Pacific	11,345	30.1	4.4	6.7
South America	820	2.2	-2.0	8.1
World	37,737	100.0	2.1	4.1
<b>Exports</b>				
Africa	1,082	2.9	-1.0	6.5
Europe	11,232	29.7	1.0	3.6
North & Central America	17,807	47.1	2.2	3.0
Asia & Pacific	2,485	6.6	3.6	11.1
South America	5,086	13.4	2.8	11.4
World	37,836	100.0	1.6	4.3

**PAPER AND PAPERBOARD**

	Quantity in 2000 (MT)	global total in 2000 (%)	Average annual % change	
			1980-1990	1990-2000
<b>Consumption</b>				
Africa	4,363	1	4.4	1.4
Europe	90,040	28	3.1	3.3
North & Central America	109,980	34	2.6	2.3
Asia & Pacific	102,441	32	6.4	5.0
South America	11,461	4	1.8	4.1
World	323,958	100	3.6	3.0
<b>Imports</b>				
Africa	2,071	2.1	2.9	5.3
Europe	47,646	48.4	6.2	4.8
North & Central America	23,423	23.8	3.7	5.5
Asia & Pacific	18,289	18.6	6.6	9.0
South America	2,993	3.0	-0.9	10.8
World	98,453	100.0	5.1	5.9
<b>Exports</b>				
Africa	623	0.6	-2.3	17.3
Europe	57,527	58.9	5.9	6.0
North & Central America	25,103	25.7	2.3	3.8
Asia & Pacific	12,527	12.8	9.0	13.1
South America	1,472	1.5	12.5	3.0
World	97,635	100.0	4.7	5.8





## PART III

# RESEARCH CONTRIBUTIONS



## Chapter 6

# GLOBAL SURVEY AND ANALYTICAL FRAMEWORK FOR FORESTRY OUTGROWER ARRANGEMENTS (FAO)<sup>7</sup>

Helen Desmond and Digby Race

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## Summary

Outgrower schemes are an emerging feature of forestry development in many countries, yet the socio-economic value of such schemes is still to be fully assessed. The main aims of this study were to assess the extent and main characteristics of forestry outgrower schemes globally, with an emphasis on developing countries, and develop an analytical framework to assist the comparative analysis and development of existing and future outgrower schemes.

This study provides a broad overview of forestry outgrower schemes in operation around the world. A major component of the study was to survey forest industry staff who manager outgrower schemes, with a response rate of 21 percent received for the study's questionnaire – covering 17 schemes. Given the limitations of the study, it is not presented as a comprehensive review of all forestry outgrower schemes in operation.

Based on the information derived from the outgrower schemes reviewed by this study, the key issues that contribute to the success of schemes include the extent:

- arrangements are appropriate (e.g. partners should have a reasonable likelihood of deriving benefits, contribute to the strengthening of the sociocultural and economic context of local communities);
- contributions (e.g. land tenure, business viability) and partnerships are secure;
- production and market risks are accurately calculated and shared;
- partners have the social and technical expertise to genuinely negotiate arrangements;
- partners are informed of realistic prospects and opportunities (e.g. flexibility of options);
- arrangements and forestry practices are consistent with sustainable forest management principles – at the local and regional levels; and
- arrangements contribute to wider community well-being.

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Drawing on published literature and the results of this study, a set of principles and criteria or an analytical framework has been developed as a tool for assessing the implications of forestry outgrower schemes. This framework outlines the characteristics that appear to have a major influence on the extent outgrower arrangements are fair and beneficial for each partner (or potential partner).

## Framework for assessing forestry outgrower schemes

### Principles

- Mutual acceptance of each partner's aims under the arrangement;
- Fair negotiation process where all partners can make informed and free decisions – including allowance for a third party to negotiate on their behalf;
- Realistic prospect of all partners being able to derive benefits proportional to their contributions and risks; and
- Long-term viability and commitment of partners to optimize the returns from the arrangement – in terms of commercial, sociocultural and environmental attributes.

### Criteria

- Positive local sociocultural, policy, economic and environmental context for all the principles (noted above) to develop;
- Partners have a willingness and capacity to contribute to arrangements within the socio-economic and environmental parameters of their household/business over the contractual period – with opportunities for renegotiation or inherent flexibility within contracts (e.g.. partners need to avoid high risk arrangements);
- Arrangements are formalized (e.g. have legal status) with clear details of when and how multiple benefits can be arranged (e.g. collection of NTFPs, grazing, intercropping), contracts can be nullified, and compensation would be forthcoming. It would also appear useful for a credible and independent third party to be nominated to arbitrate if disagreement arises;
- Partners have access to accurate, in-depth and independent information on the:
  - i. likely short- and long-term prospects – with contingency scenarios explored if arrangements are nullified;
  - ii. current and likely long-term viability of prospective partners; and
  - iii. likely long-term context for local forestry development (e.g. market trends – product volumes and competitiveness, necessary infrastructure, government policy, code of practices, local SFM practices, landholder/grower participation, wider community support).

How these principles and criteria translate to any given local context will vary depending on the extent:

- entering into outgrower arrangements out-weighs the opportunity costs for both partners;
- partners are informed of the commercial prospects and wider implications;
- regional markets provide positive commercial returns for both partners;
- partners remain motivated to contribute to arrangements – reflecting the importance of schemes to the viability of the household/business;
- government has a willingness and capacity to develop encouraging policies and procedures;
- community perceptions of outgrower schemes and potential partners are favourable; and
- institutional support is available for providing market information and a fair negotiating context.

# Introduction

## Background to the study

While forest activity to supply household needs – subsistence forestry – accounts for much of the forestry undertaken throughout the world, commercial forestry provides important benefits to household, regional and national economies. An important aspect of commercial forestry is the trade between those supplying forest products (or providing access to land/forests) and those processing for end uses. The trade relationship between suppliers (e.g. growers) and processors often plays an important role in determining the nature and extent of benefits derived from commercial forestry, and the distribution of these benefits.

Those interested in forestry development – whether in industrialized or non-industrialized countries – are becoming increasingly aware that positive partnerships between forest companies and growers can provide a means of encouraging forest management which is environmentally sustainable, cost-efficient and equitable.

Forest company-grower partnerships can take many forms. For example, existing partnerships may be informal or formal (e.g. contracts), occur between forestry companies and growers, who may be individuals, groups or communities, be short-term or long-term, and offer simple financial returns or multiple benefits to growers. Sometimes, partnerships involve more than two parties in the negotiation phase, as often NGOs, government and market agents may influence arrangements on behalf of growers. While some small-scale growers have developed commercial forestry ventures independently of industry and government assistance, most choose to link with industry before harvesting.

Forestry outgrower schemes describe one type of partnership emerging between growers and processing companies, as the companies with inadequate forest holdings or access to public forests seek to secure additional supplies to meet the increasing global demand for wood products. Under outgrower partnerships, growers allocate land and other resources to the production and management of trees (sometimes other forest products) for a processing company, with the company providing a guaranteed market. The varying responsibilities of each partner are defined by contract.

The incentives for forest processors to develop outgrower schemes include: increased supply of wood resource, access to productive land, resource security without the need to purchase land, diversification of supply, and increased cooperation with local communities. For growers, the reasons to join outgrowers schemes include: an alternate and additional source of income, guaranteed market for products, reduced market risk and, in some cases, financial support.

However, existing outgrower arrangements vary considerably in their ability to be mutually beneficial, achieve sustainable forest management, and meet the social, technical or economic goals of the partners. Not all outgrower partnerships are viewed as successful and poor grower-industry links are regularly identified as one of the major constraints to forestry development throughout the world.

If outgrower schemes are to achieve their full potential, an understanding of how partnerships differ, under what circumstances they occur, and what the critical ingredients are for mutually beneficial partnerships, have emerged as important research questions.

A workshop held at the International Institute for Environment and Development (IIED), in London during April 1999, brought together knowledge of, and initiated further discussions on, outgrower partnerships between forest companies and growers worldwide. Following the workshop, FAO commissioned a global survey and analysis of forestry outgrower schemes to:

- assess the extent and location of outgrower schemes worldwide; and
- identify key parameters for successful outgrowers schemes to provide guidance to forestry developers, decision makers and participants in such schemes.

The results of this study will be important for informing FAO's Global Forest Resources Assessment 2000 report, a reporting process conducted every 10 years. This study is also a part of a continuing collective effort to improve understanding of outgrower schemes.

Research into various aspects of forest company-grower partnerships throughout the world is being undertaken by a range of institutions (e.g. Arnold, 1997; Curtis and Race, 1998; Mayers, 2000). Several research projects are also known to be investigating forest company-community partnerships (e.g. Instruments for Sustainable Private Sector Forestry: 1998-2000 by IIED; regional case studies documented by the Rural Development Forestry Network by Overseas Development Institute [ODI]; Optimising Industry-Grower Partnerships for Farm Forestry by ANU Forestry-Cooperative Research Centre for Sustainable Production Forestry [CRCSPF]).

However, information on the many forest company-grower partnerships that occur, and an assessment of their relative success, is difficult to obtain. While some issues are more relevant to either industrialized or non-industrialized countries, there are many issues common to both. This study attempts to highlight the issues raised in the limited literature available and to present additional case studies of other outgrower partnerships to contribute to identifying the key ingredients for mutually beneficial outgrower partnerships.

## Context: setting the scene

### Definition of outgrower partnerships

A literature review reveals that numerous strategies have developed for trading wood between growers and the processing industry. For example, some companies obtain their supplies through trading intermediaries (i.e. market agents) and do not have a direct relationship with growers, while other companies lease land (i.e. rent) under contract from landholders for growing trees, or contract farmers to grow trees (Mayers, 2000). Growers have also developed market strategies, such as establishing cooperatives or employing their own market agents, to improve the commercial returns from forestry.

For the purpose of this study, an outgrower arrangement is defined as a contractual partnership between growers/landholders and a processing company for the production of commercial forest products. Outgrower partnerships vary considerably in the extent inputs, costs, risks and benefits are shared between growers/landholders and companies. Partnerships may be short or long-term (e.g. 40 years), and may offer growers only financial benefits or a wider range of benefits. Also, growers may act individually or as a group in partnership with a company, and use private or communal land/forests. The nature of individual outgrower partnerships (e.g. responsibilities, contributions, returns) tend to be detailed in formal contracts.

According to the above definition, outgrower partnerships may include arrangements described in the literature as joint ventures and contract tree farming. Differences between each of these arrangements largely occur in relation to responsibility for silviculture, resource ownership and control, and the financial remuneration to growers. In conventional outgrower schemes, the landholder is contractually responsible for the silviculture and the supply of forest products (often timber) to the company at harvest. Under the contract, the company may provide inputs and/or technical support to the grower, and guarantees a market for the product. A number of outgrower schemes occurring in Ghana, India, South Africa and Thailand have been described in the literature (Mayers, 2000).

In Australia and New Zealand, outgrower partnerships are usually referred to as joint ventures, with there being three broad types of arrangements – “lease” joint ventures, “cropshare” joint ventures, and “market” joint ventures (see Box 1) (Curtis and Race, 1998). These arrangements require a contractual agreement between the landowner and the forest processing company (sometimes a government forestry enterprise), identifying the inputs and responsibilities of each partner for the establishment, management and harvesting of trees, or for the management and harvesting of an existing forest.

In New Zealand, joint ventures which share the financial returns following harvest are more common than “lease” joint ventures as in Australia (New Zealand Ministry of Forestry, 1994). In Australia and New Zealand, the industry partner may only guarantee market price at harvest or have an agreed return indexed to inflation. Also, not all industry investors are “end-product” processing companies – some industry investors “on-sell” or simply trade in raw or unprocessed forest products (e.g. woodchips) (Curtis and Race, 1998).

### BOX 6.1 Forest company-grower joint ventures in Australia

**Lease joint ventures** are agreements in which the landowner receives regular (usually annual) payments from the industrial partner for essentially leasing their land for commercial forestry.

**Cropshare joint ventures** are agreements between the landowner and investors – who may be forest processing companies, which identify the responsibilities of each partner for inputs and allocation of returns throughout the life of the treecrop. The returns from the harvest are determined from the market price at harvest.

**Market joint ventures** guarantee a sale for the grower, usually based on market price at the time of harvest. The grower is required to offer the industry partner the first option of purchase, however if a better price can be found, the grower may sell to another purchaser.

*Source:* Curtis and Race, 1998.

## Why outgrower partnerships are emerging

Recent reviews of the global changes in forestry provide a valuable understanding of the context in which forest company-grower partnerships are emerging (FAO, 1999; Higman *et al.*, 1999; IIED, 1999). The important issues include:

- Increasing attention to ensure forest management is balancing social, economic and environmental objectives. Various instruments are being developed (e.g. product certification for markets, legally binding targets) at the national and international levels. However, the effectiveness of such instruments in promoting sustainable forest management (SFM) is largely yet to be determined;
- While there was a decrease in the total area of the world's forests between 1990 and 1995 by about 1.6 percent, there was an increase of 8.8 million hectares in industrialized countries (mainly from forest growth on abandoned agricultural land). Some form of outgrower partnership is likely to be important if industry is to gain access to this new area of forest;
- Increasing privatization of forests and/or forest services (including processing capital), making the private sector increasingly dominant in forestry. Typically, the private sector is investing in fibre production from high-yielding forests in plantations in subtropical and temperate regions (farm forestry is expected to play a growing role in supplying wood products). The biggest industrial investor in these forests is often the large-scale corporations. Reflecting this trend, the survey results that 60 percent of the major wood pulp companies who responded to the survey source some of their fibre from independent, non-government growers (e.g. through outgrower schemes, joint ventures) (IIED, 1999). Also, large multinational corporations (i.e. global organization) are increasingly dominating the private sector owing to their growing value of trade in forest products;
- Increasing number of mechanisms for the devolution of forestry decision-making and management to local communities or user groups. However, there appears to have been little analysis of the abilities of local communities to negotiate fair deals with the increasingly dominant private sector. This remains an important issue for understanding the benefits of outgrower partnerships; and
- Communities need a combination of timber and non-timber forest products and additional forest services (e.g. water catchments, recreation, wildlife habitat). Given the increasing role of the private sector in controlling forest access and management (as private forest owners, concession holders to public forests), there is a continuing tension between community (public) and private sector expectations over how forests should be managed. This tension is also contributing to increasing attention to how private land is managed, and its impact on community needs.

## Benefits of outgrower partnerships

As industrial forest companies are often the initiators of outgrower partnerships, the benefits for these companies from such arrangements appear to be significant. Outgrower partnerships allow the company to access additional, more secure, and/or cheaper supplies of forest products. These partnerships also allow companies to diversify the sources of their raw materials, which often makes good business sense (Arnold, 1997; Curtis and Race, 1998; Mayers, 2000). In assessing the cost of operations, companies will consider, in addition to the direct costs of tree growing, the indirect costs and financial risks incurred through land purchase and the otherwise employment of large labour teams – much of which can be avoided through outgrower partnerships (Arnold, 1997). Companies can also receive sociocultural or sociopolitical benefits by involving local communities in partnership in forestry development, as a more supportive community context for industrial forestry is likely to be fostered.

For growers/landholders, a range of potential benefits through outgrower partnerships have been noted. In a review of outgrower schemes in Brazil, India and the Philippines (Higman *et al.*, 1999), it was noted that farmers have been able to secure land tenure and increase the clarity over rights to trees being grown, gain access to financial support or sources of income while trees mature, receive higher net returns from trees than from traditional land uses, secure markets for wood, and have a good means of participating with the company and an ability to appeal to third parties. Such schemes have also enabled growers to generate an income from underutilized land (Mayers, 2000). While land tenure issues are not a major concern in Australia, the remaining benefits identified above correspond with benefits Australian growers/landholders have gained through forestry outgrower partnerships (Curtis and Race, 1998).

The varying nature of some outgrower partnerships and the benefits they offer is illustrated in the case studies summarized in Box 6.2. While some companies offer growers a guaranteed market for their products – either at fixed/indexed or market prices – other companies promote partnerships with the additional benefit of a percentage share of the forest product (e.g. timber) at harvest. Other arrangements have additional benefits that offer employment, or contribute to community development (e.g. funds for school or health facilities) or agricultural improvements (e.g. fodder for livestock).

- On a world scale, outgrower partnerships can be a mechanism for addressing several important issues for sustainable timber production (Race, 1999), which include:
- bringing degraded land/forests back into beneficial production;
- focusing on integrating forestry objectives of different partners over the medium to long term; and
- recognizing that the long-term investment and discounting inherent with forestry are a common problem for small-scale growers and farmers, with company-grower partnerships offering a viable cost-sharing option particularly suitable for forestry.



### BOX 6.2 Examples of outgrower partnerships

#### Swiss Lumber Company, Ghana

The Swiss Lumber company has a sawmill in Ghana but lacks access to forest areas to obtain an adequate wood supply. While the company has developed plantations on its own land they will be insufficient to meet the capacity of its sawmill. Consequently, it has developed strategies to attract outgrowers to produce indigenous trees on land which was degraded and producing marginal agricultural yields.

Joint ventures are offered to landholders. Farmers receive a lump sum down payment upon joining the venture, an agreed percentage of the timber at harvest, an annual land rent, and first option on the weeding contract for the plantation as a means of creating employment for participating farmers. In return, landholders agree to give the company first option on the purchase their share of the timber at the prevailing market prices.

*Source:* Higman *et al.*, 1999.

#### PICOP, Philippines

The Paper Industries Corporation of the Philippines (PICOP) developed an outgrower scheme for local landholders in order to seek additional plantation resources to partially supply pulpwood, as their "concession" forests were becoming depleted. The company was also motivated by the opportunity it would provide to strengthen their relationship with local communities through the sharing of benefits.

In 1986, PICOP began to encourage farmers to grow *Albizia falcataria* on eight-year rotations on marginal lands for pulpwood. Under the outgrower scheme, they agreed to provide farmers with planting stock and technical advice, and assured a market for the product at a guaranteed minimum price. The company also developed the necessary road infrastructure and a strong extension service. In return, the growers agreed to give PICOP first right of refusal of the trees, after which they could sell to other buyers.

*Source:* Arnold, 1997.

#### Sappi and Mondi companies, South Africa

These companies, which own large pulp and paper mills in the KwaZulu-Natal region have large forest plantation holdings. The interest in obtaining wood products from landholders, arising from problems the companies face in acquiring land or retaining land, with the companies encouraging landholders to produce wood commercially on a small scale.

One scheme for small-scale landholders developed for Sappi and Mondi was initiated in mid-1980. Under this scheme growers established plantations of 1.2 ha on average. Under the contract, growers received subsidized inputs, loans against the final harvest, and extension advice. In return, they agreed to sell their wood to the company. The companies have also been encouraging block plantings on communal land in areas adjacent to their mills where there are existing outgrower schemes.

*Source:* Arnold (1997).

## Who do they benefit?

Much of the literature notes that the potential benefits of outgrower partnerships may only flow to growers/landholders under specific circumstances – indicating that assumptions about the extent of the benefits flowing from outgrower partnerships should be avoided. Yet Mayers (2000) indicated that growers perceive potential benefits from outgrower partnerships when:

- underutilized land that is not required for food production becomes available;
- land tenure and tree rights are secure;
- net returns that are higher than alternatives are anticipated;
- cash flow is reliable through a regular income or assured sales;
- technical and financial support is available; and
- means of participation with the partner is clear.

It should be noted that resource security for growers may exist under land tenure arrangements other than private ownership (e.g. long-term leasehold or community ownership) (Arnold, 1997). Higman *et al.* (1999) indicated that outgrower schemes may even assist small-scale landholders to establish land ownership, as occurred in the PICOP scheme in the Philippines (Arnold, 1997). However, Kato (1996) notes the limitation of the PICOP outgrower scheme, as the scheme is largely irrelevant for those who are landless – essentially the very poor. Arnold (1997) found that the landholders benefiting from the PICOP outgrower arrangement are those who had settled on land classified as alienable and disposable (i.e. so could be purchased/leased for private use), had farms of about 11 ha (i.e. sufficient land to dedicate to long-term ventures), and were growing subsistence crops or other intensive management systems that created underutilized land. Typically, these farmers were producing low-input crops, had grazing livestock or were undertaking other extensive farming.

The schemes run by Sappi and Mondi pulp and paper companies in Zululand, South Africa, for small-scale landholders were found to be useful to farmers with other sources of income or where labour did not need to be diverted from existing activities (Arnold, 1997). Typically, farmers need a regular alternate source of income to avoid cash flow difficulties between tree harvests and, therefore, to avoid dependence on loans. Outgrower arrangements that cause farmers to displace food crops with forestry can jeopardize food security and force households to generate higher incomes to purchase food – all which can expose households to greater socio-economic risk. Arnold's (1997) study of the experiences of outgrower schemes in the Philippines and South Africa led him to conclude that outgrower schemes were appropriate for farmers under certain conditions. In summary, outgrower partnerships require consideration of how farmers can make use of the gains in wood production, against the loss in agricultural production.

It should also be assessed whether the production seasons of forest products and agriculture are complementary, such as with minimal competition for farm labour (Mayers, 2000). Mayers (2000) suggested that some farming and forestry systems can be counter-seasonal in temperate regions, enabling farm forestry activities. In contrast, these activities typically overlap in tropical regions (Hardcastle, 1999, cited in Mayers, 2000), although exceptions are known to occur.

Clearly, outgrower partnerships will not suit all forest growers and companies, yet clarification of the circumstances under which prospective partners will benefit appears warranted.

## Outgrower partnerships: issues and concerns

### Competing land uses

A concern of forestry outgrower schemes, especially in non-industrialized countries, is that tree growing can replace crop production, thereby reducing the staple food production of communities. In the KwaZulu region of South Africa, land shortage was the main reason many farmers decided not to join the outgrower schemes.

Following this response, the companies agreed to focus their schemes on land of low agricultural potential. Although some farmers ultimately planted trees on arable land, displacement of food production in this situation was negligible (Arnold, 1997).

In areas with widespread industrial forestry, some concern has arisen over excessive water use by trees, particularly where water is a critical constraint on farming. The issue of forestry reducing the water availability for agriculture – at farm and catchment levels, can be positive or negative, depending upon natural resource management objectives.

Some farmers involved in the PICOP outgrower scheme in the Philippines were found to move in and out of tree growing. The main reason for the movement was that farmers had also planted trees on land suitable for cropping, and after harvesting the trees and obtaining a substantial payment they returned the land to crop production (Arnold, 1997).

In Australia, broadacre farmers tend to be willing to convert farmland of 10 ha or greater to commercial forestry if reliable market assessments indicate farm forestry is viable compared to the alternate land uses. In this situation, there are often reservations about whether the assessments are reliable given the lack of experience and in-depth market appraisals of farm forestry (Curtis and Race, 1998). However, outgrower arrangements that provide some returns prior to final harvest (e.g. land lease schemes) have proved to be the most popular (Curtis and Race, 1998).

## **Production methods**

In most outgrower partnerships the company partner recommends, and sometimes controls, production methods to ensure optimal productivity of plantations. However, it has been reported that sometimes the recommendations have been too complex, labour intensive, and costly for growers. As a result, many farmers participating in the PICOP scheme opted to hire contractors to conduct the operations, or modified them (Arnold, 1997). In such cases, farmers' profits were reduced owing to the higher production costs or when modified schedules were followed, farmers were able to reduce their costs of tree growing (Kato, 1996). For example, some farmers had minimized the level of maintenance, relied on natural regeneration rather than purchasing seedlings, and planted trees in woodlots at one time rather than staggered times of planting. However, such changes to recommended practices usually has productivity tradeoffs – either in lower yields or inferior quality. In turn, this will affect the financial returns to growers and would be likely to alter the profitability of outgrower schemes for growers and/or companies.

Providing growers with sound technical advice on forestry practices is advantageous to companies as it is likely to produce the quality and yields required. The provision of appropriate extension and technical support to growers can be important for the success of outgrower schemes. Mayers (2000) noted some of the more successful schemes have established nurseries to provide growers with high quality seedlings.

In the KwaZulu outgrower schemes, farmers' involvement in production varied. Farmers had the option to allow the company to manage the operations or hire contractors to carry out the work – yet this sometimes resulted in poor production (Arnold, 1997). Based on observations of other schemes, Arnold (1997) believed that farmers should be closely involved in production operations themselves, and rely less heavily on the company, to achieve improved productivity and increase profits by reducing contract labour costs.

## **Access to financial loans**

The availability of financial loans is often important for growers' participation in outgrower arrangements, particularly to cover the costs of establishment and early maintenance of plantations, but also to bridge finances until the trees were sold. However, loans may not always be necessary and can be an additional risk in forestry ventures – sometimes adversely affecting the profitability of schemes for growers. The availability of credit from partner companies may lead some farmers to employ labour unnecessarily, as was observed in the KwaZulu schemes (Arnold, 1997), reducing the profits from tree growing. Consequently, Arnold (1997) suggested that the company partner who provides a service to the farmers should not be a source of loans for participants.

Arnold (1997) reported that while some farmers were willing to participate in the PICOP schemes, they were ineligible for, or unwilling to pursue loans owing to the difficult administrative procedures. Although many of the farmers planting small areas did not require loans to cover labour and other costs.

## **Competitive markets**

Where competitive markets for forest products occur, outgrower partnerships are more likely to be balanced (Race, 1999). A competitive market is likely to result in satisfactory market prices for growers. Although in some outgrower partnerships the processing company guarantees a market, growers can sell to other buyers offering better prices. For example, PICOP found growers in the schemes sold wood to other buyers offering better prices, while some growers for Sappi and Mondi, required by contract to sell their product to the companies, also sold to other buyers offering higher prices. Some growers had sold to other forestry companies to avoid repaying the loan (Arnold, 1997).

To avoid loss of supplies from outgrower schemes to other buyers, typically a company will choose to match the current market price and develop a positive relationship with growers. The development of positive relations may involve meeting farmers information needs, providing greater market share of the profits, or it may involve providing broader agricultural and community benefits. In response to the lesser security of wood supply from outgrower schemes in competitive markets, companies have also reduced dependence on outgrowers by developing alternative strategies for obtaining its wood requirements (Arnold, 1997; Curtis and Race, 1998). Some companies have withdrawn their outgrower schemes altogether (Shingi, 1997).

Competitive markets also reduce the reliance of growers on companies – particularly during times when they may be unable to fulfil their contractual commitment to purchase. Examples have been reported that the processing company has reduced its purchases from outgrowers when demand has decreased or supply requirements have changed (Arnold, 1997; Curtis and Race, 1998; Mayers, 2000).

Together with more competitive markets, Arnold (1997) suggested better representation of growers in the negotiation process and more flexible partnerships that offer growers a share of the value of the processed products under outgrower schemes would contribute to more attractive prices for growers.

However, where competitive markets are lacking, companies can tend to be uninterested in initiating outgrower schemes, as in the Australian experience (Curtis and Race, 1998). Even where outgrower arrangements occur, uncompetitive markets will make it difficult to calculate prices on which to base negotiations. Curtis and Race (1998) suggested that a fundamental task of forestry development, and farm forestry in particular, will be to encourage competitive markets at a local scale to develop. They identify some scope for developing long-term supply arrangements that allow costs and prices to be reviewed at regular intervals as a means of encouraging fair outgrower arrangements. They also indicated that investment by government may be needed to improve access (e.g. increase market information, transport infrastructure) to more competitive markets.

Variability in the market place is largely inherent in the commercial forestry sector. Both companies and growers are susceptible to periods of market instability over the contract period if insufficient financial flexibility has been incorporated into partnership arrangements. However, poor forecasting of changes in market demand on the part of companies has also resulted in failure of partnerships, particularly in the pulp and paper industry (Mayers, 2000).

### **Negotiating arrangements**

Generally, the outgrower arrangements offered by forest companies are limited. Some company staff believe offering flexible arrangements, such as involving individual negotiations with numerous growers, can be too time consuming and expensive to manage (Curtis and Race, 1998). In the same study, the authors also found that companies were more willing to negotiate with those growers in close proximity to mills, or with a desirable wood supply. However, in regions where supplies from small-scale growers are less critical for companies, growers typically have to accept or reject the schemes offered. In these circumstances, unequal partnerships can develop (Mayers, 2000) and have limited grower participation (Arnold, 1997). Even where forestry companies are willing to negotiate with growers, the companies' greater knowledge of markets and the general inexperience of growers places growers in a poor negotiating position.

In the KwaZulu schemes, the growers' lack of negotiating power resulted in many signing contracts which they do not fully understand or with unrealistic expectations of the likely returns. The South African schemes have drawn criticism owing to the lack of balance of the risks and returns for growers and the companies in the arrangements (Arnold, 1997).

To enhance growers' capacity to negotiate more balanced and equitable partnerships, growers could benefit from employing a third party to negotiate on their behalf (Arnold 1997; Mayers 2000). However, Mayers (2000) also noted that growers who gain experience and proficiency in negotiation with forestry companies by renegotiating contracts periodically, may have less need for such an organization. Under these circumstances, outgrower partnerships are most likely to be balanced (Mayers, 2000).

In Australia, small-scale growers generally feel they are ill equipped to negotiate with the industry and doubt the fairness of current arrangements. To make a more significant investment in forestry, many growers believe they would be better placed if they joined a marketing cooperative or operated independently of a company – seeking to contact potential buyers at the time of harvest (Race and Curtis, 1999). However, the study found that in regions where poor market structures occur, small-scale growers best opportunity to negotiate with companies may be prior to tree establishment. At this time, farmers have greater negotiating power and have the opportunity to redirect their household resources.

### **Scope of partnership**

Typically, outgrower schemes offer technical support to growers to facilitate the production of the optimal volume and quality of wood (Arnold, 1997; Curtis and Race, 1998; Vuokko and Otsamo, 1998; Shingi, 1997). However, reviews of existing outgrower schemes indicate that the most successful schemes offer growers broad arrangements which provide technical support and advice needed by growers to overcome a range of socio-economic and environmental issues (Curtis and Race, 1998; Mayers, 2000), or which assist communities in achieving wider socio-economic aims (Mayers, 2000).

The joint venture project run by ENSO and Inhutani in West Kalimantan, Indonesia, provide a range of community benefits to participating villages, including improved infrastructure, improved rubber trees for private plantations, support in developing agricultural practices, and employment opportunities (Vuokko and Otsamo, 1998).

Mayers (2000) noted that outgrower partnership with community groups present greater challenges for companies, such as helping communities to build their internal capacity to resolve internal disputes when they arise. The successful outgrower scheme involving a village community has been reported in West Kalimantan, Indonesia (Vuokko and Otsamo, 1998). Although the company needed to overcome initial uncertainty about the venture, the uptake of the scheme by villagers has led to broad support for the company's interests.

## Study methodology

A literature review of outgrower schemes was undertaken to review the nature and context of current arrangements, and to identify the issues influencing the effectiveness of outgrower partnerships. An annotated bibliography of relevant literature was also prepared (refer to Appendix 2).

A Resource Group of 12 people with knowledge and expertise relevant to the study of outgrower partnerships was formed to provide expert input into the study (refer to Appendix 1). They were invited to contribute their knowledge of outgrower schemes, or of literature discussing outgrower schemes to this study.

A questionnaire was developed to identify the location and extent of existing outgrower partnerships, and to identify the benefits and issues arising from these partnerships. A total of 86 questionnaires was sent to informants in 46 countries, particularly non-industrialized countries in the Asian, African and South American regions (refer to Appendix 1). Attempts to send another 24 surveys to people in various countries proved unsuccessful (e.g. poor communication capacity of recipient organizations).

The guidance of many people working in the forestry industry worldwide was sought to identify people and organizations who may have knowledge of outgrower schemes to whom questionnaires should be sent. About 25percent of the questionnaires were sent to targeted companies, individuals or organizations identified in this way. The remaining questionnaires were sent to heads of forestry departments and non-government organizations identified from lists provided by the Resource Group and other people.

The questionnaire achieved a response rate of 21 percent, covering 17 schemes. Twelve respondents provided detailed information structured around the questionnaire. One respondent was able to provide details of six outgrower schemes of which he was aware. In all, respondents provided information on outgrower partnerships in Brazil, Colombia, Ghana, India, Indonesia, New Zealand, Portugal, Solomon Islands, South Africa, Vanuatu and Zimbabwe.

A further six respondents indicated that, to their knowledge, outgrower schemes were not in operation in the countries concerned. These countries were Cameroon, Germany, Japan, Nepal, Peru and Sweden.

In addition, nine people responded indicating their inability to complete the questionnaire and so provided further contacts of people or companies who should be contacted. A questionnaire was sent to those identified and their number is included in the total respondents.

## Limitations of the study

The undirected nature of a large proportion of the questionnaire's mailing had, as expected, a much lower response rate than the targeted mailing. Most mailing occurred during late October to early November 1999, with responses received up until late May 2000.

While every attempt was made to contact the key people via email, fax and/or letter, telecommunication capacity varies considerably around the world, preventing 24 questionnaires from being delivered. In other cases, communication with key people was delayed for reasons beyond the control of this study (e.g. people on leave). Also, as expected the questionnaire was not necessarily to best survey tool for all potential respondents. First, the questionnaire was written in English, which may have inadvertently discouraged respondents proficient in other languages.

Furthermore, given the nature of the study, the questionnaire was sent to individuals, organizations or companies who could be contacted via email, fax or letter. As such, it was unlikely that many growers would be contacted, leaving companies to be the primary source of information for the study. Consequently, the results of the questionnaire could be expected to more accurately reveal issues from a company's perspective, rather than from a grower's. Oral communication with some localized fieldwork is likely to be a better means of obtaining growers' perspectives, and so warrants consideration as an additional phase in the study of outgrower arrangements

## Results

In this study, outgrower arrangements were identified in Brazil, Colombia, Ghana, India, Indonesia, New Zealand, Portugal, Solomon Islands, South Africa, Vanuatu and Zimbabwe. A profile of these outgrower partnerships is provided in Box 6.3. Information was generally provided by forestry companies, a marketing partner, and a forestry consultant assisting with the schemes in Zimbabwe.

The majority of schemes were initiated in the 1990s. The outgrower schemes were primarily initiated by the forestry companies with a view to gaining access to additional wood resources, largely for production of pulpwood, but also for sawlogs, wattle bark and poles. One forestry company reported it had initiated a scheme primarily for improving its public image.

While most forestry companies have formed partnerships with individual growers, some companies have formed partnerships with community groups, cooperatives, or whole villages as in four schemes.

Additional reasons for companies to initiate schemes include:

- providing growers with genetically improved material for higher productivity and profitability;
- allowing more flexibility in the use of its own land;
- involving more investors in the forestry business;
- encouraging reforestation activity in the country;
- consolidating forestry in districts where it is already established;
- encouraging neighbouring landowners to become involved in and supportive of forestry;
- avoiding conflict with local people arising from wood production on land to which they have traditional user rights.

Although most schemes were initiated by the forestry processing companies, five schemes were initiated by community groups or individual growers. Communities initiated schemes to access capital to develop underutilized land for subsequent income generation, while growers were similarly motivated to generate income from outgrower schemes to achieve socio-economic goals of their households.

### Scale of schemes

The scale of the outgrower schemes reported in this study varies considerably – in terms of planned scale of planting, the volume of wood supplied to processing companies, and the number of growers involved (refer to Table 6.1).

Generally, agreements to supply pulpwood comprise the largest proportion of outgrower partnerships, with an area greater than 20,000 ha planned in four of the outgrower schemes: the Aracruz Celulose Timber Partner Program in Brazil; SOPORCEL's EMPORSIL Scheme in Portugal; Stora Enso Inhutani III PT Finnantara Intiga Scheme in West Kalimantan, Indonesia; and the Tasman Forest Industries' Leasehold Maori Land Scheme in New Zealand. Two smaller schemes for pulpwood production plan to establish areas of 8,000 ha (Mondi Khulanathi scheme in South Africa) and 2,200 ha (PS Zimbabwe schemes in Zimbabwe).

No area was reported for Smurfit Cartón de Colombia in Colombia and ITC Bhadrachalam Paperboards in India. However, under these schemes 3,860 ha and 3,210 ha have already been established. Furthermore, ITC Bhadrachalam Paperboards anticipates the annual establishment of between 1,500 and 2,000 ha per year in future.



During the implementation of these schemes, two companies have reviewed their expected plantation area. Owing to the enthusiasm of growers, Aracruz Celulose recently increased the area planned in the Timber Partner program from 28,000 ha to 60,000 ha, and have recently expanded the scheme to include sawlog production. In contrast, Stora Enso Inhutani III decreased their total planned area from 100,000 ha to 30,000 ha in response to the current political instability perceived in Indonesia.

The percentage supply of pulpwood anticipated from these schemes differs between forestry companies (Table 6.1). They range between supplying the total annual resource, for example in the PT Finnantara Intiga and ITC Bhadrachalam Paperboards schemes, to being of strategic value, as for the Mondi processing company. As a result of Aracruz Celulose increasing their projections for plantings, the future significance of the annual wood volume supplied from this scheme is expected to increase from 13 to 17 percent.

The schemes initiated for the supply of sawlogs have been planned on a smaller scale. The outgrower schemes run by Kolombangara Forest Products in the Solomon Islands, and the Swiss Lumber Company

in Ghana, have assisted growers to establish 200 ha and 150 ha woodlots, with plans to expand the area by 30 ha and 25 ha per year, respectively. Melcoffee Sawmill in Vanuatu aims to assist growers to plant between 400 ha and 500 ha in total. Currently 100 ha have been established.

The remaining two schemes, Border Timbers and the Phezu Komkhono Wattle Bark Loan schemes, aim to establish an area of 2,000 ha. These schemes were initiated for the production of poles and wattle bark, respectively.

The number of growers involved in the schemes presented, and the typical area of land they allocate for tree planting is also variable (Table 6.1). The number of outgrower partners in the schemes reported in this study show considerable variation, ranging from one to 2,000. The typical area planted by outgrower partners is also equally varied. In seven of the outgrower schemes, growers have planted between one and 10 ha, suggesting that these schemes are popular for small-scale tree growers.

**Table 6.1. Summary of outgrower schemes reported in FAO survey**

Company and Outgrower scheme	Year scheme started	Primary product/s	Total area planned (ha)	Importance of product to company	Area planted (ha)	Number of growers	Typical area planted by growers (ha)
Aracruz Celulose – Brazil: Timber Partner Program	1990	pulpwood, sawlogs	60,000	13% supply/yr to 17% in future	20,000	1,989	10
Border Timbers – Zimbabwe: Outgrower Scheme	1996	poles	2,000	60% of supply/year	450	65	3-4
ITC Bhadrachalam Paperboards Ltd – India: clonal eucalypt plantation scheme	1989	pulpwood poles	1,500-2,000 ha/year	will meet total pulpwood needs	3,210	1,375	1.5
Kolombangara Forest Product – Solomon Islands: Kolombangara forestry outgrower scheme	1989	sawlogs	30 ha/year	not significant yet	200	100	1-2
Melcoffee Sawmill – Vanuatu: MSL Extension Forestry Scheme	1996	sawlogs	400-500	-	100	50	1-2
Mondi Ltd – South Africa: Khulanathi Scheme	1994	pulpwood	8,000	strategic value	5,900	2,854	2
PS Zimboard – Zimbabwe: Fallscroft Estate Scheme	1997	pulpwood	60	2,100 m3/year	40	1	
PS Zimboard – Zimbabwe: Himalaya Cooperative Scheme	1999	pulpwood	500	-	nil	cooperative (22 people)	
PS Zimboard – Zimbabwe: Kaerezi Estate Scheme	1997	pulpwood	1,000	60% eucalypt pulpwood	600	1	
PS Zimboard – Zimbabwe: Manicaland Development Association Scheme	1998	pulpwood	300	10,500 m3/year	100	1	
PS Zimboard – Zimbabwe: Nyafarm Development Cooperative Scheme	1999	pulpwood	300	17 000 m3/year	nil	cooperative (20 people)	
Smurfit Cartón de Colombia – Colombia: Third Part Reforestation Programs	1986	pulpwood	undefined	maintaining area needed	3,860	56	69
SOPORCEL – Portugal: EMPORSIL Scheme	1990	pulpwood	30,000	10% annual supply	10,000	-	20-40
South Africa Wattle Industry – South Africa: Phezu Komkhono Scheme	1995	wattle bark	2,000	5% of supply	436	430	1
Stora Enso, Inhutani III – West Kalimantan: PT Finnantara Intiga Scheme	1994	pulpwood	30,000	all fibre for mill	22,000	100 villages	200
Swiss Lumber Company – Ghana: Outgrower Scheme	1991	sawlogs	25 ha/year	public relations	150	25	4-10
Tasman Forest Industries – New Zealand: Leasehold Maori Land Scheme	1993	pulpwood	20,000	1/3 of plantation estate	11,000	27 groups	200

## Nature of the arrangements between partners

The arrangements between growers and processors (or cooperative) may be characterized as:

- partnerships in which growers are largely responsible for production, with company assurance/guarantee they will purchase the product;
- partnerships in which the company is largely responsible for production, paying landholders market prices for their wood allocation;
- land lease agreements in which landholders have little involvement in plantation management;
- land lease agreements with additional benefits for landholders.



### **Partnerships with growers largely responsible for production**

In outgrower schemes where the growers are primarily responsible for production, forestry processing companies usually guarantee to purchase the wood at harvest. The extent of further support from the companies varies. The returns to growers also differ. It should be noted that while arrangements are typically detailed in a contract, the schemes run by Kolombangara Forest Products and Melcoffee Sawmill have no contractual basis.

Growers are responsible for the production of trees in the schemes operated by PS Zimboard in Zimbabwe, Kolombangara Forest Products in the Solomon Islands, Melcoffee Sawmill in Vanuatu, Mondi in South Africa, the South African Wattle Growers Union, and Aracruz Cellulose in Brazil. While growers in the Border Timbers scheme may be responsible for production, the flexibility of the arrangement allows the company to share this responsibility under the grower's terms.

Thereafter a number of differences are evident. Unlike most schemes, PS Zimboard does not provide inputs for plantation establishment, although it offers growers technical advice. In the remaining schemes growers are provided with seedlings, typically at cost, and technical support. The South African Wattle Growers Union, Mondi, and Aracruz Cellulose schemes provide additional inputs. As well as seedlings and technical assistance, the South African Wattle Growers Union provides growers with fencing, site preparation, fertilizers and insurance. The Aracruz Cellulose scheme provides seedlings, fertilizer and ant killer, if required, free of charge provided growers sell the wood to the company. The company also covers any insurances or taxes arising from the agreement. In the event the grower sells to another company, default arrangements for payment are specified in the contract.

Growers also benefit from the above schemes by retaining low-grade material (e.g. prunings, thinnings) for their own use. In the Aracruz Cellulose scheme, growers retain an additional 3 percent of wood volume for their own use and receive native seedlings free of charge. In the scheme run by the South African Wattle Growers Union, in addition to receiving market prices for the wattle bark, growers retain all the wood for their own use or may sell it as pulpwood.

Some forestry companies do not offer finance to their growers – these are Kolombangara Forest Products in the Solomon Islands, Melcoffee Sawmill in Vanuatu, and ITC Bhadrachalam Paperboards Ltd. in India. Melcoffee Sawmills indicated that growers did not require loans, as the company covered the cost of establishment. Two schemes in Zimbabwe offer growers loans at 15 percent interest, while Mondi offers growers loans at 10 percent interest, and the South African Wattle Growers Union offers loans at 8 percent to cover the costs of inputs. However, the Aracruz scheme offers growers finance to meet the operational costs of plantation establishment and maintenance, to be repaid in the equivalent value of wood at the time of harvest.

### **Partnerships with companies largely responsible for production**

Under two outgrower schemes, the company partner is responsible for tree production, undertaking all the establishment, management and harvesting. These schemes are Smurfit Cartón de Colombia in Colombia, and SOPORCEL in Portugal.

Growers in partnership with Smurfit Cartón de Colombia, as landholders, are responsible for continuing to pay land taxes. They are also required to contribute to the construction of any secondary roads required for harvesting. Under the EMPORSIL outgrower scheme, landholders may negotiate to contribute labour and machinery.

The contract arrangements between the growers and processors specify the percentage of wood volume growers retain at harvest. The company agrees to purchase the wood at the market price at harvest. Under the EMPORSIL scheme, the grower's percentage will vary according to the extent of their involvement. Under this scheme landowners may also retain hunting and other rights to the area planted. Also growers retain the entire earnings from the second and third rotations under both the EMPORSIL (Portugal) and Third Part Reforestation Programs (Colombia) schemes.

### **Land lease agreements with minimal involvement from growers**

The Tasman Forest Industries have entered into land lease agreements with Maori groups to develop plantations over two rotations. This arrangement was preferred the landholders compared to a joint management option. The company pays an agreed annual rent for the contractual period. Landholders have some joint responsibility for animal control in the plantation area, and maintain their rights to hunt and graze sheep amongst the trees.

## **Land lease agreements with additional benefits for growers**

Two schemes reviewed in this study – PT Finnantara Intiga operated by Stora Enso Inhutani III in Indonesia and the Swiss Lumber Company in Ghana, comply with this category. Under these schemes the forestry companies, in addition to paying landholders an annual rent for the land under plantation, offer growers employment opportunities and a percentage of the wood volume produced which they guarantee to purchase at market prices. Under the Swiss Lumber Company scheme, growers are employed to carry out maintenance work. In some cases the growers are not necessarily the landholders, with the allocation of 50 percent of the wood volume shared between them. Under the PT Finnantara Intiga scheme, villagers are employed to carry out work in the plantation while the company maintains responsibility for plantation activities. The landholders comprise villagers, who own 10 percent of the plantation. Both companies provide inputs, with the Swiss Lumber Company providing the seedlings and equipment for plantation establishment and the Stora Enso Inhutani III providing the necessary inputs.

In addition to plantation activities, Stora Enso Inhutani III provides the villages involved in the outgrower scheme with seedlings of multipurpose species and improved rubber clones. They have also allocated resources for community development, primarily through the provision of infrastructure and skills to improve permanent agriculture. Both the company and the Indonesian Ministry of Forestry fund the scheme.

## **Contract period**

The contractual period that land is committed to growing trees differs according to rotation length, and the number of rotations agreed under the contract. For example, growers in the EMPORSIL scheme have committed their land to tree growing for three rotations, or 36 years, in order to receive the benefits of the third rotation. In other schemes, the rotation lengths vary from 7 to 15 years for hardwood and softwood pulp. Outgrowers in the Border Timbers scheme in Zimbabwe have committed their land to pole plantations for 10 to 12 years.

However, it is uncertain whether the period for which the land is committed for plantations is specified in the contract. ITC Bhadrachalam Paperboards reported that growers have often harvested trees before the end of the anticipated rotation, suggesting the term of commitment of land to plantations may not always be specified in terms of a set number of years but rather crop cycles.

## **Role of other organizations**

Other organizations or institutions may facilitate outgrower schemes. However, in this study the role of a third party was limited to:

- Government agencies providing tax relief to those investing in reforestation, including schemes run by Smurfit Cartón de Colombia;
- Financial institutions providing loans for plantation development through Tasman Forest Industries;
- Confederation of Zimbabwe Industries (CZI) providing training and establishing business links between forestry companies and growers in three outgrower schemes operated by PS Zimboard: Kaerezi Estate, Nyafarm Development Company, and Manicaland Development Association.

It was reported that Aracruz Cellulose envisages a role for cooperatives to represent farmers in their outgrower schemes in the future.

### **BOX 6.3 Profiles of outgrower schemes reported in FAO survey**

#### **Aracruz Cellulose, Brazil: Timber partner program**

Aracruz Cellulose has operated an outgrower scheme for pulpwood production since 1990. The company initiated the scheme to increase supply of wood fibre. Restrictions imposed after protests against companies owning large tracts of land had prevented the company from expanding their own plantations. The popularity of the scheme has encouraged the company to expand it to include the production of sawlogs.

The company offers growers three contract options varying in the extent of company inputs and the grower's need for financial assistance. They offer technical assistance and seedlings in all schemes. Growers may also receive fertilizer, ant killer and interest free loans, if desired. If the grower sells the wood to the company, the seedlings, fertilizer and ant killer are provided at no cost. Insurance and taxes arising from the agreement are paid by the company. Under contract, the company retains an agreed percentage of wood in payment for technical assistance and any financial assistance. For the remaining wood, the grower receives market price or better for the wood.

The growers are responsible for planting the seedlings, maintaining the plantation, harvesting the trees within six to eight years, and transporting the logs to the company's nearest depot. If the grower sells to another purchaser, they must pay back the company expenses plus 10-20 percent for defaulting on the contract.

In addition to receiving market price for the wood volume sold to the company, growers retain 3 percent of wood for their own use and receive free seedlings of native species for planting.

Growers are planting *Eucalyptus grandis* and *E. urophylla* in woodlots which are harvested at six to eight years and 12 to 14 years for pulpwood and sawlogs, respectively. To date, 20,000 ha of the originally planned 28,000 ha have been established under the scheme. The growers' enthusiasm has resulted in the company increasing the planned area of plantation under this scheme to 60,000 ha. Almost 2,000 growers are involved in the scheme currently, each typically planting a 10 ha woodlot.

#### **Border Timbers, Zimbabwe**

Border Timbers has operated an outgrower scheme in Manicaland, Zimbabwe, since 1996 for the production of poles from eucalypt woodlots on a 10- to 12-year rotation. The company initiated the scheme to allow it greater flexibility in production from its own land, and aims to achieve a plantation area of 2,000 ha under the scheme, providing about 60 percent of its pole requirements. Currently the scheme involves 65 growers who have planted a total of 450 ha.

Under the outgrower scheme, Border Timbers offers growers some flexibility in production. The grower determines the production tasks they wish to accept responsibility for (with advice from the company), with the company accepting responsibility for the remaining tasks. Thus, the agreement may involve the company managing plantation activities partially or entirely. The financial arrangements vary accordingly. Border Timbers offers growers loans at 15 percent interest. The company guarantees to purchase the product at harvest at market prices.

#### **ITC Bhadrachalam Paperboards Ltd., India: Clonal Eucalypt plantation scheme**

ITC Bhadrachalam Paperboards has run an outgrower scheme in Andhra Pradesh, India, for the production of eucalypt pulpwood and poles for the past 10 years. Unable to gain commitment for pulpwood supply from the State government, the company initiated the scheme to ensure supply of pulpwood, and to improve the productivity and profitability of pulpwood plantations by ensuring genetically improved material is used. Research, development and distribution of high-yielding *Eucalyptus tereticornis* clones commenced in 1989.

The company provides growers with the genetically improved "Bhadrachalam" *E. tereticornis* seedlings, technical support and enters into buy-back agreements, in which they offer to buy the wood at market price. The grower is responsible for planting and managing the plantation. They must also arrange the finance, if required, to purchase seedlings and maintain the plantation. Those who establish an integrated agroforestry system obtain crops in the first year. Growers also retain small timber and fuelwood after the trees are harvested.

Under this agreement the grower is not bound to sell the wood to the company. However, the company envisages that its efforts in working with growers and improving productivity of plantations will enable it to buy the bulk of the wood at market prices.

Currently there are 1,357 growers participating in this outgrower scheme, planting the genetically improved *E. tereticornis* in woodlots or agroforestry systems. The area of plantations are typically about 1.5 ha. The total area planted under this scheme is about 3,210 ha. The company anticipates an additional 1,500 farmers will join the scheme each year, increasing the total plantation area by between 1,500 and 2,000 ha annually.

#### **Kolombangara Forest Products Ltd, Solomon Islands: Kolombangara Forestry Scheme**

The company commenced the outgrower scheme in 1989 to produce additional sawlogs for their mill. Through this initiative, the company aimed to promote sustainable forest plantation management in the Solomon Islands, and to engender good relations with surrounding communities. The scheme is implemented on Kolombangara Island, in the Solomon Islands.

Under this scheme, the company will purchase logs from growers. The company provides seedlings and silvicultural advice. The growers are responsible for the establishment and management of plantations. No finance is offered by the company. These arrangements have no contractual basis and so there is no formal commitment from the growers to sell wood to the sawmill.

The growers retain residual wood for their own use. Those who have adopted agroforestry systems also benefit from fruit and vegetables produced on the land as well as timber.

Currently there are 100 growers participating in the scheme, who have planted 1-2 ha in woodlots or agroforestry systems. The species planted are *Eucalyptus deglupta*, *Gmelina arborea* and *Tectona grandis*. About 200 ha have been planted, with the company encouraging expansion of this area by 30 ha per year. It is expected that the growers will harvest the trees after about 16 years.

#### **Melcoffee Sawmill, Vanuatu: MSL Extension Forestry**

In 1996, Melcoffee Sawmill commenced a scheme with local growers at East Coast Santo to produce sawlogs for markets in Asia, Noumea and Australia. The scheme was initiated by the company to gain access to an expanded resource for the future while helping landholders to retain their economic independence.

The sawmill provides growers with seedlings, as well as management and technical support to help plant and maintain the trees. At harvest, the company pays market price for the timber. The growers are responsible for the establishment and maintenance of trees, and are allowed to retain the low-grade timber from the trees for their own use.

About 50 growers are involved in the scheme, planting 1-2 ha each of *Endospermum medullosum* in woodlots and agroforestry systems. About 100 ha of the planned 400-500 ha have been planted so far, with the trees expected to be harvested after 15-20 years.

#### **Mondi Ltd, South Africa: Khulanathi scheme**

The company Mondi Ltd has been operating an outgrower scheme in the KwaZulu-Natal region with landholders since 1990, when their demand for pulpwood increased following the construction of their pulp mill. The company developed the scheme in order to access suitable land, much of which was tribal land, for forestry in the vicinity of the mill.

The company provides growers with inputs, including cloned seedlings, fertilizer and herbicides. It also employs an extension forester in each district to provide assistance to growers in plantation establishment and maintenance, and advice on harvesting and transport. The company also offers finance to establish woodlots at 10 percent interest, payable at harvest. It pays the market price for the timber at the time of harvest.

Growers have tended to establish woodlots on their underutilized land. They are responsible for plantation maintenance on their as well for delivering their timber to the company depot, which is located close to the

communities to allow growers to use their existing vehicles. Growers receive the mill price for the wood less any costs to the company for transport and loading. Growers retain the low-grade timber for their own use (e.g. fuelwood, fencing).

Under this scheme 2,854 growers have planted about 5,900 ha with eucalypts, with most planting a 2 ha woodlot. Production commenced in 1994 and the trees are harvested after four to six years. Growers provide the company with between 100,000 and 150,000 tonnes per year. The company aims to increase the plantation area to about 8,000 ha.

### **PS Zimboard Products, Zimbabwe**

PS Zimboard Products in Zimbabwe operate five outgrower schemes, which commenced between 1997 and 1999. Two schemes were initiated by the company to obtain additional supplies of wood for their pulp mill, as eucalypt pulpwood is expected to be in short supply in the future. The remaining three schemes were initiated by landholders wanting to generate income for agricultural or community development. From one scheme alone the company aims to obtain 60 percent of its annual eucalypt wood supply.

The schemes are run by Project Committees – comprising representatives of growers and the company.

The company encourages plantations of *Eucalyptus grandis*, *E. saligna* and *E. regnans* in woodlots managed on seven-year rotations. The company offers growers technical advice and support, and guarantees to purchase the wood at market price. The company also provides loans for working capital at 15 percent interest to growers. The growers purchase seedlings from a commercial nursery, and are responsible for the establishment and maintenance of plantations. They also retain the low-grade residual wood.

In three schemes, there is just a single grower, planting 300 ha, 40 ha and 600 ha each. Cooperatives are involved in the remaining two schemes, comprised of 20 and 22 growers, and have established 300 ha and 500 ha plantations, respectively.

### **Smurfit Cartón de Colombia, Colombia: Third Part Reforestation Programs**

Smurfit Cartón de Colombia, situated in the Andean Colombia region, has been operating a scheme for the production of pulpwood since 1986. The scheme was initiated by the company to increase access to land adjacent to its own holdings, increase the future supply of wood, consolidate the forestry activity in neighbouring districts, support initiatives from its neighbouring landholders, involve more investors in forestry, and encourage widespread reforestation within the country.

Long-term contracts are sought with landholders, with the company undertaking all the establishment, maintenance and construction of secondary roads for harvesting. They will replace the plantation if damage occurs. Growers are responsible for paying the land taxes, and constructing the primary roads needed for harvesting. The contract details the percentage of wood volume allocated to the grower and the company, with the grower able to receive market price for their percentage rather than the wood.

The security of each partner's investment is protected under the contract. If the company decides to withdraw from the contract it must leave the plantation to the grower. If the grower decides to withdraw from the contract, they must return the company's investment plus an additional 30 percent. If grower decides to sell the land, they must ensure the purchaser agrees to fulfil the contract.

Under this scheme, woodlots of hardwood (*Eucalyptus grandis*) and softwoods (*Pinus oocarpa*, *P. khesya* and *P. tecumumani*) covering 3,860 ha have been established. A total of 56 growers is involved, with each typically planting about 69 ha. The eucalypt and pine plantations are managed in rotations of 15 and 8 years, respectively. Through the scheme, the company aims to access the wood needed to supply 10 percent of its future hardwood and softwood requirements.

### **SOPORCEL, Portugal: EMPORSIL scheme**

Since 1990, the Lisbon-based company SOPORCEL has operated an outgrower scheme through its subsidiary company EMPORSIL for the production of pulpwood. SOPORCEL established EMPORSIL to manage their own plantations and to offer partnerships to landholders to access additional wood supplies.

Under this outgrower scheme, EMPORSIL undertakes plantation establishment and maintenance with funds supplied by SOPORCEL, and guarantees the success of the plantation. The grower provides the necessary land, and may provide labour and machinery if they wish. Proportional to their input, the grower retains a percentage of roundwood production, which SOPORCEL agrees to purchase at market price at the time of harvest. Contracts last through to the harvest of the third rotation. Contract arrangements may allow growers to retain hunting and other rights to the land placed under plantation.

Under this scheme, 10,000 ha of a planned 30,000 ha have been planted to date with *Eucalyptus globulus* for pulpwood. Typically, growers plant woodlots of 20-40 ha in area, which are managed on 12-year rotations.

#### **South Africa Wattle Growers' Union, South Africa: Phezu Komkhono Wattle Bark Loan Scheme**

The South African Wattle Growers Union, a marketing cooperative, sells wattle bark on behalf of growers to domestic South African markets. This scheme was initiated in 1995 in the KwaZulu Natal region, after a tribal chief approached the union for financial assistance for individual community members to grow wattle. Under the scheme, growers supply about 5 percent of the industry's demand.

The cooperative provides fencing materials, seeds or seedlings, fertilizer and arranges insurance for growers. They also provide an extension service and assist with plantation establishment. The cooperative also offers loans for plantation establishment at 8 percent interest, which is paid from the returns from sales.

The growers are responsible plantation establishment, maintenance, fire protection and harvesting – usually after nine years of growth. They receive market price for the wattle bark from the Union. They retain the timber for their own use, primarily for construction and firewood, or to sell on the open pulpwood market.

Since the scheme commenced, 430 growers are participating by planting *Acacia mearnsii* woodlots of about 1 ha. The scheme aims to plant about 2,000 ha in total. In addition to the wattle bark, growers have produced about 8,000 tonnes of poles and 7,000 tonnes of pulpwood from the plantations.

#### **Stora Enso Inhutani III, West Kalimantan, Indonesia: PT Finnantara Intiga scheme**

The PT Finnantara Intiga outgrower scheme, run jointly by a Finnish and Indonesian company, Stora Enso Inhutani III, has been developed to produce pulpwood, which commenced in 1994. The scheme was initiated to avoid conflict with local people when land, owned by the government with local people holding traditional user rights, was allocated to timber production under the Timber Estate Program of the Indonesian Government.

The villagers contribute village land, with many local people employed under the scheme. The company provides all other inputs, including the seedlings and is responsible for maintaining, harvesting and replanting of plantations. At harvest, the village retains 10 percent of the plantation, which they sell to the company at the market price. The company also provides villagers with seedlings of local multipurpose trees and improved rubber tree clones, and has allocated resources for community development – particularly in support of agriculture.

Under this scheme, villagers are planting *Acacia mangim*, *A. crassicarpa* and *Eucalyptus pellita* on grassland and in bushland. The system of planting is dependent on original vegetation, topography and soil factors. The company has a target of establishing 30,000 ha to supply 10 percent of its requirements, with 22,000 ha already established. About 100 villages are currently participating, each planting about 200 ha.

#### **Swiss Lumber Company, Ghana: Swiss Lumber Company scheme**

The Swiss Lumber Company operates an outgrower scheme in Manso-Amenfi, Ghana, for sawlog production. The scheme began in 1991, primarily as a public relations project by the company.

Under this scheme, the company pays the landholder – who may or may not be the grower, an annual rent for the land. It supplies growers with seedlings and equipment for plantation establishment. The company also employs growers to complete plantation maintenance. At harvest the grower and landholder receive 50 percent of the wood and the company the other 50 percent. The company has the first right to buy the grower's/landholder's 50 percent at market prices. The growers are allowed to keep the low-grade residual wood.

The company provides seedlings of *Terminalia*, *Metroxylon*, *Entandofragma*, *Milicicea* and *Ceiba* species. As



agroforestry is not possible, owing to the poor productivity of the soil from past use, and erosion is of concern, the company encourages contour planting along degraded hill slopes. At present, 25 growers are involved, and have planted 4-10 ha each. The company aims to plant between 20 and 25 ha per year, with about 150 ha currently planted.

**Tasman Forest Industries, New Zealand: Leasehold Maori Land**

Tasman Forest Industries have been running a land lease scheme on Maori land since 1993, for the production of pulpwood. About a third of the company's plantation estate is located on Maori land. The scheme was initiated by the company to access additional wood fibre for their pulp mill.

The company leases land from Maori groups and manages the development and maintenance of the trees. The period of the lease allows the company to develop plantations for two treecrop rotations. The landholders retain hunting rights and may graze sheep under the plantation if desired. The management of vermin control is undertaken jointly.

To date, 27 owners are involved in the scheme, each leasing about 200 ha to the company. Under this scheme eucalypt (*Eucalyptus nitens*, *E. fastigata* and *E. globulus*) woodlots have been planted over 11,000 ha, with harvest expected after 11 years. The company plans to develop about 20,000 ha of plantations under this scheme.

## Reported benefits of schemes to outgrower partners

The benefits of schemes derived by forestry companies and growers were reported and are summarized in Table 6.2 below. With the exception of one forestry company, the access to additional resources at competitive prices was considered the primary benefit reported. Under these schemes, companies' production costs are typically lowered by avoiding investment in land and labour costs. One forestry company, which initiated an outgrower scheme as a public relations exercise, saw an improved public image as the primary benefit. Another three forestry companies identified the primary benefits as: outgrower plantations being in close proximity to the mill; spreading the risk of environmental damage across numerous plantations; and increased community support by developing forestry that provides social and environmental benefits. The majority of growers perceived the additional income generated from wood sales as the primary benefit of outgrower schemes, as noted in Table 6.2. Other important benefits for growers included additional employment for themselves and the community, the diversification of farm production, and the production opportunity by using underutilized land.

**Table 6.2. Benefits of forestry outgrower schemes reported in FAO survey**

Benefits of outgrower schemes	Number of responses	
For forestry companies	Greater resource base at competitive prices	XXXXXXXXXXXX
	Public image	XXX
	Geographic proximity	X
	Geographic spread of risk	X
	Social and environmental benefits	X
For growers	Diversification of farm production	XXXXXX
	Employment	XXXXX
	Production from underutilized or idle land	XX
	Income	XXXXXXXXXXXX
	Improved plantation productivity, profitability	X
	Access to investment capital	X
	Developing business skills	X
	Improved infrastructure	X
	Agricultural development assistance	X

Note: X = 1 response, XXXXX = 5 responses.

## Issues of concern for outgrower partners

The issues of concern for forestry companies and growers participating in the outgrower schemes reviewed are presented in Table 6.3. Readers are reminded that the growers' issues were identified by the company partners in this study, with the exception of the schemes in Zimbabwe, which were reported by a forestry consultant. A number of issues were reported by more than respondent, with discussion of the issues presented in the sections below.

The main issues of concern highlighted by forestry companies include the loss of the forestry resource as a result of changing land tenure, declining grower interest, competition from other land uses, and increased environmental hazards. Contractual price disputes and security on loans had also concerned some companies. However, some companies also identified external issues with the potential to threaten the viability of schemes, or hinder planning and investment. These included concerns about the unpredictable direction of natural resource management policies, conflict with environmental organizations and an unstable local environment for business.

In general, growers' concerns also stem from uncertainty of markets, viability of their company partner company, environmental risks of production, whether production was being maximized, and price and credit fluctuations. As indicated in Table 6.3, the high interest rates on loans dominate the concerns of growers participating in all of outgrower schemes reported for Zimbabwe.



**Table 6.3. Issues of concern reported in FAO survey**

Benefits of outgrower schemes	Number of responses	
For forestry companies	Land redistribution, sale	XX
	Conflict with environmental organizations	XX
	Uncertainty of growers commitment to agreement	XX
	Price negotiations	XX
	Environmental risks	XX
	Competition from other companies	XX
	Timber theft	XX
	Profitability of harvesting scattered plantations	XX
	Growers harvesting prematurely	X
	Loss of community support	X
	Growers defaulting on loans	X
	Stability of natural resource management policies	X
	Availability of land	X
Business atmosphere	X	
For growers	High interest rate on loan	XXXXX
	Dissatisfaction with prices	XX
	Reliability of market	XX
	Partners fulfilling contract	XX
	Environmental risk	XX
	Lack of finance	X
	Level of production	X
	Changes in natural resource management policies	X
	Loss of land productivity	X
	Maintaining good relationships with neighbours	X

Note: X = 1 response, XXXXX = 5 responses

### Forest company issues

Some forestry companies expressed uncertainty about the security of supply under outgrower schemes. The potential loss of supplies through compulsory government land redistribution or sale, and in one scheme, a change in political leadership which disfavours outgrower schemes concerned PS Zimboard, in Zimbabwe. One of three schemes affected by land redistribution proposals in Zimbabwe, the Himalaya Cooperative, has since successfully secured title to the land. Smurfit Cartón de Colombia in Colombia also consider the potential sale of plantation land to an uncommitted landholder to be a concern. Further, conflict between landholders and growers in the scheme run by the Swiss Lumber Company, arising from discrepancies between the traditional and government systems of allocation of land was identified as a potential threat to the long-term viability of the scheme.

While the above schemes are concerned about the possible loss of land under schemes, Stora Enso Inhutani III operating in Indonesia is concerned about the limited land available for future plantations and the increasing competition for land by the oil palm industry.

The full dependency of the company on outgrower partnerships for wood supply makes land access a critical issue.

Both Stora Enso Inhutani III and ITC Bhadrachalam Paperboards (India) are concerned about the profitability of harvesting scattered plantations. ITC Bhadrachalam Paperboards indicated that the plantations developed under the scheme were dispersed and typically 1.5 ha in area, increasing the cost of harvesting and transport operations.

A lack of grower commitment to schemes has created uncertainty for some company partners. Kolombangara Forest Product and Melcoffee Sawmill are concerned that growers may identify other buyers at harvest time. Partnerships in these schemes are not bound by contract, heightening this uncertainty. Another company, Tasman Forest Industries believes the commitment of Maori groups to their contractual arrangements is unpredictable, as compared to contracts with public companies. Under the Mondi scheme in South Africa, a respondent indicated that other companies were persuading growers to sell wood early "... at unrealistic prices and uneconomic volumes", which disrupted contractual arrangements. Mondi was also concerned about the theft of timber, particularly in regions of high unemployment and people were in close proximity to the plantations. This situation had already resulted in a considerable loss of supply.

Concern over environmental damage to plantations caused by fires, insects, animals or disease was raised by Smurfit Cartón de Colombia in Colombia and Border Timbers in Zimbabwe. Although unlike Smurfit Cartón de Colombia, Border Timbers does not bear the production risk in the scheme. However, Border Timbers has additional concerns with its high dependency on the scheme for supplies (60 percent of its pole requirements) and the capacity of growers to repay their loans from the company. The South African Wattle Growers' Union, who run the Phezu Komkhono outgrower scheme, also indicated their concern about growers defaulting on loans they provided, particularly as plantations were often grown on community land with the loans unable to be secured through land ownership.

Issues relating to prices were raised by two companies. Melcoffee Sawmill in Vanuatu does not have a formal contractual arrangement with growers participating in the scheme, and is consequently concerned that royalties may not be successfully negotiated at the time of harvest. The Aracruz Cellulose scheme, which has been operating over a longer period, has experience of disputes about the purchase price with some growers, who mostly signed contracts between 1990 and 1994. During this high inflation period, prices were adjusted according to an official index, which no longer exists. Currently, market price determines the price offered, with dissatisfaction expressed by some growers that Aracruz Cellulose, who dominate the market, were keeping prices low. Following negotiations, the dispute has largely been resolved by the company lowering the growers level of debt, effectively increasing their profit margin.

In the past landholders in the EMPORSIL scheme in Portugal, were also dissatisfied with the manner in which the company calculated their percentage wood allocation from the plantation. There were two issues raised which the company has tried to address. First, EMPORSIL is paid in wood volume for its services, and the company has found it difficult determine an agreed value for its services. Second, after deducting a percentage amount in payment for EMPORSIL services, the company formerly calculated the percentage wood volume to be retained by the growers based on the estimated harvested volume and its monetary value. However, after the growers expressed dissatisfaction, the company now determines the percentage wood volume to be retained by growers from the actual volume harvested.

Disputes over outgrower schemes with independent environmental organizations have affected the Aracruz Cellulose and Tasman Forest Industries schemes. Tasman Forest Industries reported that environmental groups are trying to dissuade Maori groups from entering into land lease agreements for plantation establishment on land with native vegetation. Aracruz Cellulose is faced with a dispute with an environmental NGO about the scheme's environmental impacts, with a judicial inquiry appointed to arbitrate. This action has delayed the scheme's development and may have implications for the future of the scheme.

### **Growers' issues**

Typically, the growers' issues reported through this study's questionnaire correspond to those for forestry companies (Table 6.3). Growers are concerned about security in terms of future markets, the long-term viability of the company partner, and the company's ability to meet its obligations under the terms of contract. For the 100 villages involved in the Stora Enso Inhutani III scheme, this would mean losing a major business partner from which widespread benefits are generated.

Growers in partnership with Kolombangara Forest Products in the Solomon Islands, and PS Zimboard and Border Timbers in Zimbabwe, have raised concerns about the lack of financial assistance available to them. It appears that this has limited grower involvement in the outgrower schemes. Kolombangara Forest Products believes there is a role for government to provide loans to prospective growers, while growers in the schemes operated by PS Zimboard and Border Timbers have expressed concern at the high interest rates (15 percent) for loans offered by the companies.

The reliability of the market was reported as a concern for growers in the Mondi scheme in South Africa, where growers are exposed to fluctuating market demand for products. The company is subsequently investing considerable time in communication and negotiations with growers.

Some partners in the EMPOSIL scheme in Portugal are concerned that the company is not providing adequate silvicultural information to growers. There appears a willingness by some growers to play a greater role in forest management to improve yields and profits. However, currently the scheme only allows a very limited management role for landholders.

Alternatively, growers participating in the Smurfit Cartón de Colombia scheme have expressed concerns that forestry may reduce the productive potential of their land and subsequently diminish their good relations with neighbouring landholders.

Environmental hazards resulting in damage to plantations have implications for growers who carry the production risk and rely on high-interest loans. Growers in three schemes operating in Zimbabwe have needed to replant owing to damage from fire, insects and vermin. These ecological risks were identified as the biggest problem for these schemes. The need to replace poor quality seedlings also slowed production.

Growers in the Phezu Komkhono scheme managed by the South African Wattle Growers' Union may face restrictions on future plantations owing to changes to legislation to restrict water use. The company views the lack of education from government about proposed changes to legislation as a major concern.

## Successes of outgrower schemes

Respondents to the questionnaire reported the success of outgrower schemes included:

- expanding future supplies for industry;
- increasing the number and willingness of growers to participate in forestry; and
- providing broad social and economic enrichment for the individuals and communities involved.

For example, reports about the scheme operated by Mondi in South Africa emphasized the contribution to building self-reliance of participating communities. Beyond the benefits for growers, the scheme provided employment for local people to transport the timber from the supply depots to the mill. Also, the Swiss Lumber Company reported it had had won several "best practice" awards for its management of the outgrower scheme.

### **Ingredients for success**

Mondi reported that the combination of optimal growing conditions, close proximity of plantations to the mill, and good prices for wood allowed growers to make a good return on their investment. As such, many landholders perceived forestry to be a better investment than agriculture. Mondi also noted that individual growers tended to receive greater benefits from the scheme as compared to community groups, owing to their greater attention to their management practices to ensure high quality timber was produced. This supports the view of the South African Wattle Growers' Union, which reported that individual ownership has a positive correlation with successful outgrower schemes.

## Discussion: towards an analytical framework

### Key issues

Generally, the issues raised by respondents to the questionnaire in this study reflect the issues discussed in the literature. Worldwide, there is a diverse range of outgrower schemes with a corresponding complexity of issues. As such, the nature and extent of benefits of outgrower schemes should not be assumed. A summary of the key issues that appear to determine fair and beneficial outgrower schemes is provided below. These issues were further developed into a set of principles and criteria, or an analytical framework (refer to Box 6.4, below).

Based on the information derived from the outgrower schemes reviewed by this study, the key issues that contribute to the success of schemes include the extent:

- arrangements are appropriate (e.g. partners should have a reasonable likelihood of deriving benefits, contribute to the strengthening of the sociocultural and economic context of local communities);
- contributions (e.g. land tenure, business viability) and partnerships are secure;
- production and market risks are accurately calculated and shared;
- partners have the social and technical expertise to genuinely negotiate arrangements;
- partners are informed of realistic prospects and opportunities (e.g. flexibility of options);
- arrangements and forestry practices are consistent with sustainable forest management principles – at the local and regional levels;
- arrangements contribute to wider community well-being.

#### **Appropriate outgrower arrangements**

The outgrower arrangements offered by forestry companies vary within, and between, countries, with those schemes reported in this study illustrating such variation. These include:

- land lease arrangements where the forestry company has full responsibility for the whole forestry development process;
- land lease arrangements with some opportunity for the landholder to participate in the production process;
- arrangements where the forestry company and landholder share the production and market responsibilities and risks – with returns divided proportionally according to the level of inputs; and
- arrangements where the landholder/grower has full responsibility for production, with the company partner offering to purchase at market price at time of harvest.

While the terms of agreement in some schemes may be fixed, others offer considerable flexibility in the extent of grower involvement – with growers able to determine their labour and investment contributions. Many forestry outgrower schemes have begun only recently, with several having undergone or still undergoing adaptation (e.g. Aracruz Cellulose scheme in Brazil is expanding to include pulpwood and sawlog production).

#### **Security of contributions and partnerships**

The importance of secure land tenure for the involvement of landholders in outgrower schemes has been highlighted in the literature (e.g. Arnold, 1997; Higman *et al.*, 1999; Mayers, 2000), yet security of land tenure is not the only requirement.

The outgrower arrangement itself may be uncertain owing to being an informal agreement (e.g. as in Solomon Islands and Vanuatu), loss of business viability of either partner, change of company policy, closure/sale of company, or externalities. Externalities can include changes in government policy (e.g. compulsory land redistribution), fluctuations in the value of the local currency, or changes in markets (e.g. loss of local markets due to shifts in global market demand/supply).

The uncertainty arising from compulsory land redistribution was reported for three outgrower schemes in this study, with secure land tenure viewed as a necessary prerequisite for entering into an outgrower scheme. However, land ownership is not the only tenurial arrangement affording security, with there examples of growers who have established plantations on community-owned land and land under long-term leases.

The negotiation process should allow both partners to make an informed assessment about the security of the other partner's contributions and obligations. Also, contracts should clearly specify the circumstances under which outgrower arrangements can be nullified and the terms for compensation.

### **Sharing production and market risks**

In addition to prices paid by forestry companies at harvest, growers' returns are dependent on achieving optimal production yields. This in turn relies on adopting appropriate silvicultural practices to optimize growth of plantations and minimize the risk of environmental damage to the trees.

As discussed above, the nature and significance of market risks vary for partners – for both companies and growers, depending on the schemes themselves, as well as externalities. Where forestry companies make the financial and technical investment and assume responsibility for the production process, with the grower receiving an agreed percentage of the returns from production agreed to under contract (e.g. lease arrangements), growers have largely been concerned about whether:

- the leasing rate is fair;
- methods used to calculate their return from market price or wood volume equivalent are fair;
- production and harvesting has been optimized in terms of silviculture and market prices;
- land has maintained its physical potential to provide reliable production in future (either from forestry or alternate land uses);
- there is a cost-efficient opportunity to change land use (i.e. out of forestry) when the contract expires or concurrently (e.g. integrated agroforestry).

Under some outgrower schemes (i.e. where growers share responsibility for production), forestry companies provide technical assistance and advice to lower the risks for growers. However, the provision of such assistance can also increase the costs of production for growers (Arnold, 1997). Alternatively, from a company perspective, participation by inexperienced growers can greatly increase the risks of poor production. The outgrower schemes operated by PS Zimboard in Zimbabwe offer growers technical and business assistance through a third party, with individual growers purchasing inputs or advice as required.

While it is difficult to provide generic guidelines, outgrower arrangements should aim to balance opportunities for flexible participation with contractual security.

### **Negotiation of arrangements**

Both partners need to have the capacity to genuinely negotiate outgrower arrangements that are beneficial and fair. Capacity building may involve developing expertise (i.e. market knowledge, negotiating skills) or providing an affordable alternative, such as a third party to actively negotiate on the behalf of a partner. For example, an individual small-scale grower may possess little bargaining power, yet when combined with a large number of growers (e.g. through a growers' cooperative, shared contracting of a market broker) may be able to extract a better deal in negotiations.

This study revealed that landholders/growers are often in a weak position to negotiate with large industrial forest companies owing to their lack of market knowledge (e.g. fair prices, long-term market trends), and if companies only offer a standard contract. In some instances, forestry companies can prefer to negotiate with a single representative organization (e.g. growers' cooperative), rather than incur the higher costs and time delays when negotiating with numerous individual growers (Curtis and Race, 1998). However, the extent to which a partner can negotiate a better arrangement largely reflects the willingness of both partners to participate in an outgrower scheme, which in turn is strongly influenced by the nature of local markets (i.e. favouring landholders/growers or processors).

### **Awareness of realistic opportunities**

Despite the apparent multiple benefits of outgrower schemes for growers and forestry companies, there can be considerable uncertainty about whether these benefits will be delivered in the long term (some schemes can be binding for 30-40 years). An element of this uncertainty is due to the inherent fluctuations in the forestry industry – both at the local and international levels.

However, growers are frequently disadvantaged by their lack of detailed and realistic information about what returns they can expect over the short and long term. There is evidence that prices received by growers closely correspond to the level of market competition among buyers. Yet landholders/growers should not naively rely on prospective industrial partners to provide an appraisal of the opportunities under outgrower schemes. Third parties (e.g. NGOs, government) wishing to encourage sound forestry development could play a catalytic role by supporting the availability of accurate market assessments.

Some respondents to the questionnaire reported that growers have been able to renegotiate prices or their percentage wood allocation with companies to more accurately reflect market prospects (e.g. Aracruz Cellulose in Brazil, SOPORCEL in Portugal).

### **Sustainable forest management**

While the principles of sustainable forest management (SFM) may be well known, how SFM should translate into local forestry practices is far from clear. This is further complicated under outgrower schemes when landholders/growers and forestry companies have different views as to what constitutes SFM. As with increasing market knowledge, both partners need to take responsibility for understanding the implications of forestry practices used under schemes, with subsequent negotiation to ensure clear agreement is reached. While not reported as such by respondents in this study, third parties could play an important role in making information available and negotiating on behalf of a partner to ensure SFM practices are employed.

### **Community support**

In large-scale forestry projects or where forestry is directly important to the livelihoods of the wider community, managers of outgrower schemes will need to be mindful of their implied obligations to the wider community. Merely arguing that outgrower schemes are exclusively a contract between individual landholders/growers and the forestry company may fail to prevent a wider community backlash if it is perceived that public benefits are being diminished. The potential for public backlash against forestry development should not be underestimated, as in the past it has led to dramatic changes in government policy, time delays for legal appeals, decline in reputation of companies, damage to growers' and companies' property, and decline in community interest in future participation in outgrower schemes. Of further complication is that communities may become divided in their support of forestry, with it difficult to clearly identify opinion leaders and their issues of concern.

Alternatively, if outgrower schemes are widely perceived to be fair and beneficial for the participating individual partners and their associated communities, then there is the potential for wider and more enduring benefits to flow from forestry development than simply producing wood fibre. Some companies will even absorb the higher costs of operating, or poorer quality timber from, an outgrower scheme compared with investing in their own industrial plantations owing to the positive community support it can attract.

## An analytical framework

Drawing on published literature and the results of this study, a set of principles and criteria or an analytical framework has been developed as a tool for assessing the implications of forestry outgrower schemes (Box 6.4). This framework outlines the characteristics that appear to have a major influence on the extent outgrower arrangements are fair and beneficial for each partner (or potential partner). It may also be of value to organizations considering the establishment of, or support for, an outgrower scheme.

Positively, many governments have demonstrated a capacity to create the necessary conditions for beneficial forestry outgrower schemes to emerge. However, it is likely that on-going support will be required to ensure the expected benefits are delivered over the long-term to all parties involved (directly or indirectly) with outgrower schemes (e.g. role for government, non-government organizations, civil society groups, market intermediaries), particularly when there is little incentive or commitment of either partner to contribute fairly to arrangements.

### **BOX 6.4 Framework for assessing forestry outgrower schemes**

#### **Principles**

Mutual acceptance of each partner's aims under the arrangement;

Fair negotiation process where all partners can make informed and free decisions – including allowance for a third party to negotiate on their behalf;

Realistic prospect of all partners being able to derive benefits proportional to their contributions and risks; and

Long-term viability and commitment of partners to optimize the returns from the arrangement in terms of commercial, sociocultural and environmental attributes.

#### **Criteria**

Positive local sociocultural, policy, economic and environmental context for all the principles (noted above) to develop;

Partners have a willingness and capacity to contribute to arrangements within the socio-economic and environmental parameters of their household/business over the contractual period – with opportunities for renegotiation or inherent flexibility within contracts (i.e. partners need to avoid high risk arrangements);

Arrangements are formalized (i.e. have legal status) with clear details of when and how multiple benefits can be arranged (e.g. collection of NTFPs, grazing, intercropping), contracts can be nullified, and compensation would be forthcoming. It would also appear useful for a credible and independent third party to be nominated to arbitrate if disagreement arises;

Partners have access to accurate, in-depth and independent information on the:

- likely short- and long-term prospects – with contingency scenarios explored if arrangements are nullified;
- current and likely long-term viability of prospective partners; and
- likely long-term context for local forestry development (e.g. market trends – product volumes and competitiveness, necessary infrastructure, government policy, code of practices, local SFM practices, landholder/grower participation, wider community support).



How these principles and criteria translate to any given local context will vary depending on the extent:

- entering into outgrower arrangements outweighs the opportunity costs for both partners;
- partners are informed of the commercial prospects and wider implications;
- regional markets provide positive commercial returns for both partners;
- partners remain motivated to contribute to arrangements – reflecting the importance of schemes to the viability of the household/business;
- government has a willingness and capacity to develop encouraging policies and procedures;
- community perceptions of outgrower schemes and potential partners are favourable;
- institutional support is available for providing market information and a fair negotiating context.

## Conclusions

Outgrower schemes are an emerging feature of forestry development in many countries, yet the socio-economic value of such schemes is still to be fully assessed. Furthermore, there is little available literature to suggest the criteria for assessing the viability and fairness of forestry outgrower schemes.

The main aims of this study were to assess the extent and main characteristics of forestry outgrower schemes globally, with an emphasis on developing countries, and develop an analytical framework to assist the comparative analysis and development of existing and future outgrower schemes.

This study provides a broad overview of forestry outgrower schemes in operation around the world. A major component of the study was to survey forest industry staff who manage outgrower schemes. A response rate of 21 percent was received to the study's questionnaire. Given the limitations of the study, it cannot claim to be a comprehensive review of all forestry outgrower schemes in operation. While the study's initial aim was to undertake a comprehensive review, on reflection it appears this aim was overly optimistic given the level of funding for the study. Nevertheless, it has revealed many important aspects of outgrower arrangements that need to be considered when assessing strategies for forestry development. This report also includes an annotated bibliography of literature relevant to understanding forestry outgrower schemes.

The study's Resource Group was a valuable component to the study, and provided a mechanism for ongoing dialogue between the researchers and experienced people located around the world. A mid-term report of the study was submitted to the project's advisory team at FAO in December 1999, with constructive feedback received.

## Recommendations

Consideration should be given to expanding the study to include feedback from growers participating in outgrower schemes (e.g. via fieldwork) and translating the study's questionnaire and reports into additional languages (e.g. French, Spanish). A continuing effort to refine and build upon the current outgrower contact list should also be considered.

A fieldwork component would allow the information reported in the study's questionnaires to be verified from other perspectives (e.g. growers, NGOs). Few questionnaire respondents reported the participation of a third party in schemes – either NGOs, governments, banks, donors or commissioned brokers/agents, suggesting that third parties have not played a significant role in the outgrower arrangements reported or third parties do not play a role that is valued by forestry companies (i.e. majority of respondents). This is an area that should be explored in future research, as the role of a third party has emerged as an important element of our analytical framework.

In summary, we recommend that FAO give consideration to a subsequent stage of the project which has an emphasis on fieldwork in order to:

- gain in-depth understanding of the growers' perspective;



- identify the nature and extent of the role (or potential role) of third parties;
- verify results received via the mailed questionnaire;
- conduct multiperspective workshops to refine the analytical framework; and
- fully document fair and beneficial outgrower arrangements (particularly those that reveal important lessons that can be transferred to other countries or contexts) that are widely viewed as exemplars to replicate.

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## Appendix 2

### Annotated bibliography

**Arnold, M. 1997. Trees as outgrower crops for forest industries; experiences from the Philippines and South Africa. Rural Development Forestry Network Paper 22a. London, UK, Overseas Development Institute.**

Drawing on a number of studies, Arnold presents two long running outgrower schemes in the Philippines and South Africa, operating since 1968, and the mid-1980s, respectively. In the Agroforestry Tree Farming program of the Paper Industries Corporation of the Philippines (PICOP), and three outgrower programmes in KwaZulu-Natal landholders are growing wood for forestry processing companies, with the companies providing an assured market, and a variety of support services to growers. He outlines how the schemes originated and have developed, and analyses the schemes' impacts on outgrowers and their livelihoods.

He finds outgrower schemes to be appropriate for forest processing companies when wood is supplied at a lower cost than alternatives would provide, and with a measure of security. The appropriateness of the schemes for growers may be when growers obtain reliable income from other sources, when the land used is not required for food production, when tree growing provides a stable source of income in terms of the price of products, an assured market, and access to technical advice and inputs exists. Land security is important also, although land title may not be essential for this. Finally, outgrower schemes may not be appropriate for people with very little or no land, and hence may not reach the very poor unless different arrangements, providing them with land for tree growing without detriment to food production, are reached.

Problems arise from the terms of agreements between growers and companies in relation to the freedom to sell to other buyers, price for product, the availability of credit, and extension and support. Arnold perceives these problems to arise from a broader institutional issue, that is need to achieve balanced and equitable relationships between growers and companies. He believes growers associations, empowered and trained to negotiate for growers and to provide many of the services required but which are currently only available from the company, need to be formed. He suggests the forestry outgrower schemes may learn much from the agricultural industry, which has a long history of working within these relationships.

**Curtis, A. & Race, D. 1998. Links between farm forestry growers and the wood processing industry: lessons from the Green Triangle, Tasmania and Western Australia. RIRDC Publication No. 98/41.**

This report outlines the nature of the links between small-scale tree growers and the forest industry in these three important farm forestry regions in Australia, namely joint ventures, cooperatives and on-farm processing. The study found that from the growers' viewpoint, current linking arrangements can be improved. Of primary concern to farmers was the uncertainty about the economic viability of farm forestry, long-term market prospects and reliable market information, their capacity to negotiate with the industry, fair returns from joint ventures, market structures, the benefits of farm forestry for land and water degradation, and concern about tax arrangements. The findings pointed to a need to develop competitive regional markets, to make available reliable information about the industry, for industry to demonstrate its willingness to offer fair prices and hence a reasonable share in profits for growers.

In addition, the industry also needed to demonstrate a long-term commitment to farm forestry in regions, either through the development of processing infrastructure or funding of field staff. Finally growers needed to develop the capacity to negotiate appropriate, or choose from a range of grower industry arrangements.

**Higman, S., Bass, S., Judd, N., Mayers, J. & Nussbaum, R. 1999. The sustainable forestry handbook. London, UK, Earthscan.**

In this book issues concerning the sustainable forestry development are raised. Outgrower schemes are perceived to have potential to contribute to sustainable forest development. Based on the review of outgrower schemes in Brazil, India and the Philippines a range of benefits to growers and companies are identified. Outgrower schemes are seen to make good business sense, and increase the potential social benefit from forest management, and hence enhance support for forest managers, including companies, and the support from others, including communities. A case study of the Swiss Lumber Company scheme is presented.

**Makarabhirom, P. & Mochida, H. 1999. A study on contract tree farming in Thailand. Reprinted from Bulletin of Tsukuba University Forests No. 15.**

This document outlines the historical development of contract tree farming. It provides a general description of contract elements. The incentive for processing companies to enter contract arrangements with tree growers is the assurance of a continuous supply of wood from small-scale tree planting. Case studies of contract tree farming are described in relation to the contractual arrangements, the company objectives, farmers' perspectives, and problems and prospects.

The study found that farmers would enter contract tree farming agreements where they experienced poor production or labour shortages. Issues raised by growers were the lack of financial assistance with cost of inputs (fertilizer particularly), poor extension, the discouragement from the company of the diversification of farm production, and the high production risk carried. The author perceived the lack of incentive for farmer initiative in managing trees appropriately to be of particular concern.

**Mayers, J. 2000. Company-community forestry partnerships: a growing phenomenon. Unasylva, 200: 33-41. Rome, FAO.**

A range of formal and informal partnerships between private sector companies and communities are emerging as the importance of forest farms for the production of forest goods and services increases. In his discussion, communities may encompass farmers and individuals as well as community groups and cooperatives. To gain an understanding of the arrangements needed to establish equitable partnerships, James Mayers examines a range of existing company – community relationships, including outgrower schemes, and discusses the advantages and disadvantages of these for growing trees outside forests. He outlines some considerations for the development of good partnerships for the secure delivery of forest goods and services.

Outgrower schemes, one of the main formal partnership arrangements, vary. While, in some schemes, growers control production with the company paying the market price on delivery, in other schemes companies may have considerable control over production, or may incorporate fixed prices for products.

Sappi, an international pulp and paper company in South Africa, has run outgrower schemes with farmers since the 1980s. The company obtains trees from about 260 white farmers and 8,000 black farmers covering about 88,000 ha in KwaZulu-Natal. Under this scheme, the company provides farmers with marketing and production services, including free expertise, silvicultural training and seedlings. The purchasing agreement is also laid out in the contract. The farmers grow trees on their own, receiving advance payments from the company to assist them in meeting costs which are then deducted from market price paid at harvest. The earning from trees compares favourably to alternative land uses.

A review of the literature available on company-community partnership arrangements in Brazil, India, Philippines, South Africa, and Australia (Arnold, 1997; Clarke, Magagula & von Maltitz, 1997; Curtis & Race, 1998; Roberts & Dubois, 1996) enabled the following lessons for good partnerships to be learned: risk sharing between partners needs to be appropriate to the local context; arrangements need to cover potential fluctuations in market and hence price; growers need to improve their bargaining power to create strong, equitable partnerships; partnerships may have a negative impact on some community members; secure partnerships may require broader cooperation; extension and technical support is crucial; dealing with communities present greater challenges for companies; and the roles of government needs to be clarified and developed.

**Race, D. 1999. Forest company – community partnerships: ingredients for success. Discussion Paper based on a meeting held at the International Institute for Environment and Development (IIED), London, UK on 9 April 1999.**

In this paper the context in which forest company-community partnerships have developed is outlined after a review of the literature. The paper focuses on outgrower schemes and joint venture, while acknowledging self-processing, market intermediaries and grower cooperatives as additional strategies that have developed in the forest industry if contractual partnerships are not preferred. The benefits of partnerships as well as some disadvantages for growers and the industry have also been highlighted. It identifies the following key issues for the formation of effective partnerships; the need for competitive markets, for flexible contractual arrangements, for reliable assessment of long term market stability, and clarity of roles of third parties involved in, or supporting, such partnerships. In summary, four key ingredients were identified for effective partnerships.

**Roberts, S. & Dubois, O. 1996. The role of social/farm forestry schemes in supplying fibre to the pulp and paper industry. Towards a sustainable paper cycle. Substudy Series 6. London, UK, International Institute for Environment and Development.**

In this report social forestry schemes supplying wood fibre to the pulp and paper industry are reviewed in Brazil, India and the Philippines to identify why the schemes were initiated, how they are implemented and the perceived success of the schemes for different stakeholders.

The terms and conditions of the social forestry schemes vary considerably. The findings indicate that social forestry schemes do have a role in providing wood fibre to the industry. However, industry and growers have not always found the schemes to be successful. In addition to the need for stakeholders to be involved the negotiations for defining terms and conditions and designing the scheme, the success of such schemes is also dependent the following features for growers to become involved: security of land tenure, access to credit prior to harvest, higher returns than alternative land uses, and secure markets for wood. The main issues of concern for growers identified were the choice they have of the species they plant, their rights to determine when the trees are harvested and to whom they are sold, and the price paid for the trees.

**Shingi, P. 1997. Production and marketing of poplars in India: a case study. Ahmedabad, India, Centre for Management in Agriculture, Indian Institute of Management.**

The case study of WIMCO (Western India Match Company), a processing company manufacturing matches in India, was undertaken to understand the factors leading to the development of farmer-industry linkages for the commercial production of wood. To access additional wood resources for production, his company promoted poplar plantations on farmland. The study covers the poplar production from agroforestry systems in three northern Indian states.

The study finds that after motivating a large number of farmers to plant poplar a joint scheme involving WIMCO farmers and the National Bank for Agriculture and Rural development was initiated in 1983. Farmers were offered loans, and also saplings, technical support and guaranteed market by the company. Difficulties with the schemes varied between the regions. However, growers were not bound to sell trees to the company. Insecurity of supply became a major issue for the company as growers sold to other buyers, defaulting on loans. Consequently, the company altered their strategy, focussing instead on the production of saplings for sale to growers.

**Vuokko R. & Otsamo, A. 1998. Social and technical considerations in establishing large-scale *Acacia* plantations on grassland and bushland in West Kalimantan, Indonesia. In Turnbull *et al.* Recent developments in *acacia* planting. ACIAR Proceedings No. 82. Canberra, Australia.**

In this paper technical paper plantation establishment of *Acacia mangim*, *A. crassicaarpa* and *Eucalyptus pellita* in West Kalimantan, Indonesia under a joint venture between a Finnish and two Indonesian companies is presented. The venture is working closely with communities to secure their participation in the venture as holders of traditional user rights. The arrangements under the joint venture are described, and include employment, a range of community and agricultural development benefits, in addition to ownership of a percentage of the plantation area, with the company guaranteeing to purchase wood at current stumpage rates. The effectiveness of the joint venture is demonstrated through the take up by villages, which is proceeding without difficulty. At this time the joint venture was operating in 50 villages and plantations covered 15,000 ha.

