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FORESTRY OUT-GROWER SCHEMES: A GLOBAL VIEW

Based on the work of

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Please note: The views expressed in this paper are those of the authors, and do not necessarily reflect the views of ANU Forestry, the FAO or people consulted during the course of the earlier research. In addition, that research relied on the good faith of respondents to the questionnaire to provide fair and accurate information on specific out-grower schemes. The authors were unable to verify all of the information collected via the

questionnaire and so, caution readers that alternate views may be held by others involved in the out-grower schemes mentioned in the paper by Desmond and Race (2000).

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1. INTRODUCTION

Forestry development, whether in industrialised or non-industrialised countries often occurs because of positive partnerships between forest companies and growers. These can be designed to encourage forest management that is environmentally sustainable, cost-efficient and equitable.

While forest company-grower partnerships can take many forms the focus in this report is on forestry out-grower schemes. Here companies with inadequate forest holdings or access to public forests, seek to secure additional supplies to meet their demand for raw material. Under out-grower partnerships, growers allocate land and other resources to the production and management of trees and 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 out-grower schemes include increased supply of wood resource, access to productive land, resource security without the need to purchase land, diversification of supply, and increased co-operation with local communities. For growers, the advantages include an alternate and additional source of income, a guaranteed market for products, reduced market risks and, in some cases, financial support for enterprise development.

Existing out-grower 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 out-grower 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. This paper attempts to highlight the important issues and to identify the key ingredients for mutually beneficial out-grower partnerships.

This paper draws on much of a recent research project undertaken by the Department of Forestry, Australian National University in collaboration FAO (Desmond and Race 2000). The research undertook a global survey and analysis of forestry out-grower schemes to:

- assess the extent and location of out-grower schemes world-wide; and
- identify key parameters for successful out-growers schemes to provide guidance to forestry developers, decision makers and participants in such schemes.

It also builds upon earlier studies (eg. Arnold 1997; Curtis and Race 1998; Mayers 1999), although some of this work is in a preliminary stage.

2. OVERVIEW OF EXPERIENCES

2.1 *Definition of out-grower schemes*

Numerous strategies have developed for trading wood between growers and the processing industry. For example, some companies obtain their supplies through trading intermediaries (ie. market agents) and do not have a direct relationship with growers, while other companies lease land under contract from landholders for growing trees, or contract farmers to grow trees

(Mayers 1999). Growers have also developed market strategies, such as establishing co-operatives or employing their own market agents, to improve commercial returns from forestry.

We define an out-grower scheme as a contractual partnership between growers or landholders and a company for the production of commercial forest products. Out-grower schemes or partnerships vary considerably in the extent to which inputs, costs, risks and benefits are shared between growers/landholders and companies. Partnerships may be short or long-term (eg. 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. Out-grower schemes are usually prescribed in formal contracts.

Within this definition out-grower schemes may include joint ventures and contract tree farming. Differences between these arrangements are largely in responsibility for silviculture, resource ownership and control, and the financial remuneration to growers. In conventional out-grower schemes the landholder is contractually responsible for the silviculture and the supply of the product, usually roundwood, to the company at harvest. Under the contract, the company may provide inputs or technical support to the grower, and guarantees a market for the product.

In Australia and New Zealand, out-grower partnerships are usually referred to as joint ventures, with there being three broad types of arrangements – ‘lease’ joint ventures, ‘crop-share’ joint ventures, and ‘market’ joint ventures (Curtis and Race 1998). In New Zealand, joint ventures that share the financial returns following harvest are more common than the ‘lease’ joint ventures common in Australia. ‘Lease’ joint ventures account for about 70% of current plantation expansion of 50-60,000 hectares per year in Australia (Race 2000). Not all industry investors are ‘end-product’ processing companies – some industry investors ‘on-sell’ or simply trade in raw or unprocessed forest products such as woodchips (Curtis and Race 1998).

2.2 *Types of arrangements*

Generally, forestry out-grower arrangements between growers (or co-operatives) and processors may be characterised as:

- partnerships in which growers are largely responsible for production, with company assurance or 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; and
- land lease agreements with additional benefits for landholders.

2.3 *Benefits of out-grower schemes*

Industrial forest companies are often the initiators of out-grower schemes, with schemes allowing the company to access additional, more secure, or perhaps cheaper raw materials

(Arnold 1997; Curtis and Race 1998; Mayers 1999; Desmond and Race 2000). However, some companies with out-grower schemes have expressed concern about uncertainty of supply from out-grower schemes, sometimes as a result of government policies or a declining interest by growers (Desmond and Race 2000).

Companies often consider the indirect savings and financial risks incurred through land purchase and the employing large labour teams, as an important benefit (Arnold 1997; Desmond and Race 2000). However, the scattered nature of the resource can increase harvesting costs and this is occasionally an issue for companies (Desmond and Race 2000). Companies can also receive socio-cultural or socio-political benefits by schemes fostering a supportive community for industrial forestry (Desmond and Race 2000).

Growers or landholders receive a range of potential benefits through out-grower partnerships. In Brazil, India and the Philippines some 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;
- have a good means of participating with the company; and
- appeal to third parties (Higman *et al.* 1999).

In the schemes surveyed by Desmond and Race (2000) (refer to Table 1), the primary benefit to growers was identified as additional income and, to a lesser extent, diversification and employment. Such schemes have also enabled growers to generate an income from under-utilised land (Mayers 1999; Desmond and Race 2000).

The varying nature of some out-grower partnerships and the benefits they offer is illustrated in the case studies summarised in Table 1. 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 produce (eg. timber) at harvest. Other arrangements offer employment, or contribute to community development (eg. funds for school or health facilities) or agricultural improvements (eg. fodder for livestock).

On a world scale, out-grower 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
- offering a cost-sharing option particularly suitable for forestry as a long-term investment.

The general assumption that benefits always flow from out-grower schemes should be avoided. Mayers (1999) indicated that growers perceive potential benefits from out-grower schemes when:

- under-utilised land that is not required for food production becomes available;
- land tenure and tree rights are secure;
- net returns from schemes are higher than from alternative enterprises;
- cash flow is reliable through a regular income or assured sales;
- technical and financial support is available; and

- means of negotiation and participation with the partner is clear.

Resource security for growers may also exist with long-term leasehold or community ownership as well as with private ownership (Arnold 1997). Sometimes, as has occurred in the Philippines, out-grower schemes may assist some people to establish land ownership or leases, provided they were not the very poor (Higman *et al.* 1999; Arnold 1997; Kato 1996).

Out-grower partnerships require consideration of how farmers can make use of the gains in wood production, against the loss in agricultural production. The schemes run by Sappi and Mondi pulp and paper companies in South Africa 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 so as to avoid dependence on loans. Out-grower arrangements that cause farmers to displace food crops with forestry can jeopardise food security and force households to generate higher incomes to purchase food – all which can expose households to greater socio-economic risk.

Clearly, out-grower partnerships will not suit all forest growers and companies.

Table 1: Summary of selected out-grower schemes in twelve countries surveyed in 1999

Company and Out-grower 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 ⁻¹ to 17% in future	20,000	1,989	10
Border Timbers – Zimbabwe: Outgrower Scheme	1996	poles	2,000	60% supply yr ⁻¹	450	65	3-4
ITC Bhadrachalam Paperboards Ltd – India: clonal eucalypt plantation scheme	1989	pulpwood poles	1,500-2,000 ha yr ⁻¹	will meet total pulpwood needs	3,210	1,375	1.5
Kolombangara Forest Product – Solomon Islands: Kolombangara forestry out-grower scheme	1989	sawlogs	30 ha yr ⁻¹	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 m ³ yr ⁻¹	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 m ³ year ⁻¹	100	1	
PS Zimboard – Zimbabwe: Nyafarm Development Cooperative Scheme	1999	pulpwood	300	17,000 m ³ year ⁻¹	nil	Cooperative (20 people)	
Smurfit Cartón de Columbia – Columbia: 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: Out-grower Scheme	1991	sawlogs	25 ha year ⁻¹	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

Source: *Desmond and Race (2000)*.

2.4 Issues influencing out-grower schemes

2.4.1 Competing land uses

A concern of forestry out-grower schemes in non-industrialised countries is that tree growing can displace crop and livestock production, thereby reducing the staple food production. In the KwaZulu region of South Africa, land shortage was the main reason many farmers decided not to join the out-grower 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). Some farmers involved in the PICOP out-grower scheme in the Philippines were found to move in and out of tree growing particularly where they had planted trees on land suitable for cropping. After harvesting the trees they obtain a substantial payment to return the land to crop production (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 Phezu Komkhomo scheme with wattles in South Africa faces this issue (Desmond and Race 2000). However, the issue of forestry reducing the water availability for agriculture at the farm or catchment level can be positive or negative, depending upon natural resource management objectives.

2.4.2 Production methods

In most out-grower 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 due to the higher production costs or when modified schedules were followed, farmers' level of production was reduced (Kato 1996). For example, some farmers had minimised 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 have productivity tradeoffs – either in lower yields or inferior quality. In turn, this will affect the financial returns to growers and could be expected to alter the profitability of out-grower 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 out-grower schemes. Mayers (1999) noted some of the more successful schemes have established nurseries to provide growers with high quality seedlings.

In the KwaZulu out-grower schemes in South Africa, 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 and contractors to improve productivity and increase the profitability of schemes.

2.4.3 Access to financial loans

The availability of financial loans is often important for growers' participation in out-grower schemes. They usually cover the costs of establishment and early maintenance of plantations, but may also bridge finances until the trees are sold. However, loans may not always be necessary and can be an additional risk in long-term forestry ventures. The availability of credit from partner companies may lead some farmers to employ labour unnecessarily, as was observed in the KwaZulu schemes, reducing the profits from tree growing (Arnold 1997). Consequently, it was suggested that the company offering out-grower schemes to 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 due to the difficult administrative procedures. A lack of loans has been a problem in the Solomon Islands and very high interest rates a grower concern in Zimbabwe (Desmond and Race 2000). Also, defaulting on loans was reported as a concern for Border Timbers in Zimbabwe and the South African Wattle Growers' Union (Desmond and Race 2000).

2.4.4 Competitive markets

Where competitive markets for forest products occur, out-grower schemes are more likely to provide fair prices to both partners (Race 1999). In some out-grower schemes the processing company may guarantee a market, yet growers can sell to another buyer offering a better price – with competitive markets causing some uncertainty in demand/supply.

To avoid loss of supplies from out-grower 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. However, the determination of prices may lead to disputes and a loss of supply security (Desmond and Race 2000). In response to a decline in supply security from out-grower schemes, some companies have reduced their dependence on out-growers by developing alternative strategies for obtaining wood requirements (Arnold 1997; Curtis and Race 1998). Furthermore, some companies have completely withdrawn their out-grower schemes due to supply insecurity (Shingi 1997).

Fluctuating markets can also reduce the security for growers in schemes – particularly during times when companies may be unable to fulfil their contractual commitment to purchase. Examples have been reported where processing companies have reduced its purchases from out-growers when demand has decreased or supply requirements have changed (Arnold 1997; Curtis and Race 1998; Mayers 1999).

However, where competitive markets are lacking, companies tend to be uninterested in initiating out-grower schemes, as in the Australian experience (Curtis and Race 1998). Even where out-grower schemes 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, would 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 equitable out-grower arrangements. They also indicated that investment by government might be needed to improve access (eg. 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 and growers has also resulted in failure of partnerships, particularly in the pulp and paper industry (Mayers 1999).

2.4.5 Negotiating arrangements

Generally, the out-grower schemes offered by forest companies are limited. Some companies 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). However, companies were more willing to negotiate with those growers in close proximity to mills, or with a desirable wood supply. Where supplies from small-scale growers are less valuable for companies, growers typically have to accept or reject the schemes offered. In these circumstances, unequal partnerships can develop and limit opportunities for landholders to participate in tree growing (Arnold 1997; Mayers 1999). Even where forestry companies are willing to negotiate with growers, the companies' greater knowledge of markets and the general inexperience of growers can often place growers in a poor negotiating position (Race 2000).

To enhance growers' capacity to negotiate more balanced and equitable partnerships, growers could benefit from employing a third party or join a cooperative to negotiate on their behalf (Arnold 1997; Curtis and Race 1998; Mayers 1999). In regions where poor market structures occur, small-scale growers' best opportunity to negotiate with companies might be prior to tree establishment. At this time, farmers have greater negotiating power and have the opportunity to redirect their household resources to other investments (Race and Curtis 1999). Growers who gain experience and proficiency in negotiating with forestry companies may have less need for the services of a third party and in such cases, out-grower arrangements are most likely to be balanced (Mayers 1999).

2.4.6 Scope of partnership

Typically, out-grower schemes offer technical support to growers to facilitate the production of the optimal volume and quality of wood (Arnold 1997; Shingi 1997; Curtis and Race 1998; Vuokko and Otsamo 1998). However, 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 1999), or which assist communities in achieving wider socio-economic aims (Mayers 1999). For example, the scheme operated by ENSO and Inhutani in Indonesia provides a range of community benefits to participating villages, including improved infrastructure, genetically-improved rubber trees for private plantations, support for agricultural development, and employment opportunities (Vuokko and Otsamo 1998).

Although Mayers (1999) noted that out-grower schemes with community groups often present greater challenges for companies, such as helping communities in complex

strategies to build their social capacity to resolve internal disputes when they arise. In one out-grower scheme with a village community in West Kalimantan, Indonesia, although the company needed to overcome initial uncertainty by local people about the forestry venture, the uptake of the scheme by villagers has led to broad support for the company's interests (Vuokko and Otsamo 1998).

2.4.7 Other issues

Some companies consider external issues have 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 organisations and unstable local economies for business.

Environmental or ecological risks are sometimes of concern. Damage to plantations caused by fires, insects, animals or disease was a concern of Smurfit Cartón de Columbia in Columbia and Border Timbers in Zimbabwe (Desmond and Race 2000). Growers in three schemes operating in Zimbabwe have needed to replant due to damage from fire, insects and vermin. These ecological risks were identified as the biggest problem for these schemes as the growers carried the production risk and rely on high-interest loans (Desmond and Race 2000). Growers participating in the Smurfit Cartón de Columbia scheme have expressed concerns that forestry may reduce the productive potential of their land and subsequently diminish their good relations with neighbouring landholders (Desmond and Race 2000).

2.5 *Success from out-grower schemes*

Respondents to a questionnaire by Desmond and Race (2000) who surveyed 17 schemes (summarised in Table 1) reported that some out-grower schemes had been successful in:

- 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 emphasised the contribution to building self-reliance of participating communities (Desmond and Race 2000). 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 out-grower scheme.

2.5.1 Ingredients for success

With Mondi in South Africa 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 (Desmond and Race 2000). As such, many landholders perceived forestry to be a better investment than agriculture. Individual growers tended to receive greater benefits from the scheme as compared to community groups, due to their greater attention to their management practices to ensure high quality timber was produced.

The South African Wattle Growers' Union has also found that individual ownership has a positive correlation with successful out-grower schemes.

3. DISCUSSION: TOWARDS AN ANALYTICAL FRAMEWORK

3.1 Key issues

Worldwide, there is a diverse range of forestry out-grower schemes giving rise to an array of complex issues. As such, the nature and extent of benefits from out-grower schemes should not be assumed.

Based on Desmond and Race (2000), the key issues that contribute to the success of schemes include the extent that:

- arrangements are appropriate for the local context (eg. partners should have a reasonable likelihood of deriving benefits, contribute to the strengthening of the socio-cultural and economic context of local communities);
- contributions (eg. 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 alternate opportunities;
- arrangements and forestry practices are consistent with the principles of sustainable forest management at the local and regional levels; and
- arrangements contribute to wider community well-being.

3.1.1 Locally appropriate out-grower arrangements

The out-grower arrangements offered by forestry companies vary within, and between, countries. Broadly, these include:

- 'land lease' arrangements where the forestry company has full responsibility for the whole forestry development process;
- arrangements with some scope 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 the 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 out-grower schemes have begun only recently and are being adapted to the local situation.

3.1.2 Security of contributions and partnerships

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

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

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 out-grower arrangements can be nullified, and the terms and mechanisms for compensation.

3.1.3 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 minimizing the risk of environmental damage to the trees.

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 growers receiving an agreed percentage of the returns from production agreed to under contract (eg. 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); and
- there is a cost-efficient opportunity to change land use when the contract expires or concurrently, as with integrated agroforestry.

While it is difficult to provide generic guidelines, out-grower arrangements should aim to balance opportunities for flexible participation with the extent of benefits and contractual security.

3.1.4 Negotiation of arrangements

Both partners need to have the capacity to genuinely negotiate out-grower arrangements that are beneficial and fair. 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. An individual small-scale grower may possess little bargaining power, yet when combined with a large number of growers (eg. through a growers' co-operative, shared contracting of a market broker) they may be able to extract a better deal in negotiations.

3.1.5 Awareness of realistic opportunities

Despite the apparent multiple benefits of out-grower 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 as long as 30-40 years. An element of this uncertainty is due to the inherent fluctuations in the forest 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 amongst buyers. Yet growers should not naively rely on prospective industrial partners to provide an appraisal of the opportunities under their out-grower schemes. Independent third parties could play a catalytic role by supporting the availability of accurate market assessments.

3.1.6 Sustainable forest management

While the principles of sustainable forest management may be well known, how this translates into local forestry practices is far from clear. This is further complicated under out-grower schemes when growers and forestry companies can have different views as to what constitutes sustainable management. As with increasing market knowledge, both partners need to take responsibility for understanding the implications of forestry practices to be used in schemes, with subsequent negotiation to ensure clear agreement is reached. Again, a third party could play an important role in making information available and negotiating on behalf of a partner to ensure sustainable practices are employed.

3.1.7 Community support

In large-scale forestry projects or where forestry is directly important to the livelihoods of the wider community, managers of out-grower schemes need to be mindful of their obligations to the wider community. Merely arguing that out-grower schemes are exclusively a contract between particular growers and the 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. 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 out-grower schemes. A further complication is that communities may become divided in their support for forestry. Sometimes it is difficult to clearly identify opinion leaders and their concerns.

Alternatively, if out-grower 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. Some companies will even absorb the higher costs of operating or poor quality timber from an out-grower scheme compared to investing in their own industrial plantations, if it attracts positive community support.

4. CONCLUSIONS

Box 1 is an analytical framework that summarises the characteristics having a major influence on the extent to which out-grower arrangements are fair and beneficial for each partner.

Many governments have demonstrated a capacity to create the necessary conditions for beneficial forestry out-grower 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 out-grower schemes. There appears a role here for governments, non-government organisations, civil society groups and market intermediaries.

How the principles and criteria in Box 1 translate to any given local context will vary depending on the extent:

- entering into out-grower 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 or business);
- government has a willingness and capacity to develop encouraging policies and supporting mechanisms;
- community perceptions of out-grower schemes and potential partners are favourable;
- and institutional support is available for establishing a fair negotiating context.

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BOX 1: FRAMEWORK FOR ASSESSING FORESTRY OUT-GROWER 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 optimise the returns from the arrangement in terms of commercial, socio-cultural and environmental attributes.

Criteria

- Positive local socio-cultural, policy, economic and environmental context for all the principles to be met;
- Partners have a willingness and capacity to contribute to arrangements within the socio-economic and environmental parameters of their household or business over the contractual period;
- Arrangements have legal contracts with clear details of when and how multiple benefits can be arranged (such as grazing, inter-cropping), 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:
 1. likely short- and long-term prospects with contingency scenarios explored if arrangements are nullified;
 2. current and likely long-term viability of prospective partners; and
 3. likely long-term context for local forestry development (eg. market trends in terms of product volumes and competitiveness, necessary infrastructure, government policy, code of practice, local sustainable management practices, landholder or grower participation, wider community support).

Source: Desmond and Race (2000).

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