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**OUTGROWER TIMBER SCHEMES IN KWAZULU-
NATAL: DO THEY BUILD SUSTAINABLE
LIVELIHOODS AND WHAT INTERVENTIONS
SHOULD BE MADE?**

**A contribution to the IIED-CSIR coordinated project:
Instruments for Sustainable Private Sector Forestry
(Report 2)**

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TABLE OF CONTENTS

LIST OF ACRONYMS	4
1. INTRODUCTION	8
1.1 Overview of Contract Farming	8
1.2 Overview of the Sustainable Rural Livelihoods (SRL) approach	10
1.3 Structure of this report	11
2. THE TIMBER INDUSTRY IN KWAZULU-NATAL.....	12
2.1 Background.....	12
2.1.1 History of the pulp industry in KwaZulu-Natal.....	12
2.1.2 History of the wattle industry.....	12
2.1.3 History of NCT Forestry Co-operative Limited.....	13
2.2 Timber outgrower schemes (contract farming) in KwaZulu-Natal: history and organizational structure.....	13
2.2.1 SAPPI "Project Grow" small grower scheme	13
2.2.2 SAPPI "Project Grow" administered by Lima.....	14
2.2.3 Mondi "Khulanathi" small grower scheme.....	14
2.2.4 Extent of the timber outgrower schemes	16
2.2.5 The effects of oversupply on the world market on expansion of the outgrower schemes.....	17
2.3 Other models of company – community partnerships in the timber industry: history and organizational structure.....	17
2.3.1 SAWGU " <i>Phezukhomkhono</i> " small grower support scheme.....	17
2.3.2 NCT Forestry Co-operative Limited support for small growers	19
2.4 Government legislation affecting the expansion of small grower schemes.....	20
2.5 Summary (the timber industry in KwaZulu-Natal).....	20
3. MOTIVATIONS OF GROWERS TO ENTER CONTRACTS	22
3.1 Introduction	22
3.2 The history of independent small scale timber growers	22
3.2.1 A case study of independent growers – Mbonambi and Sokhulu.....	22
3.3 Incentives and disincentives for joining the schemes (household level)	25
3.3.1 Grower and non-grower characteristics	27
3.4 Incentives and disincentives at the community level.....	28
3.5 Summary (reasons for joining)	28
4. HOW THE CONTRACTS WORK	30
4.1 Introduction	30
4.2 Overview of how the contracts work (Project Grow and Khulanathi contracts).....	30
4.3 Development of the SAPPI Grow / Lima contract	31
4.4 Development of the Khulanathi contract.....	31
4.5 Analysis of the terms of contract	32
4.5.1 Differences between Project Grow and Khulanathi contracts	32
4.5.2 Contributions by grower associations	33
4.5.3 Distribution of risk.....	33
4.5.4 Comparison with the SAWGU contract.....	34
4.6 Summary (how the contracts work)	35
5. WHAT IS THE ECONOMIC IMPACT OF GROWING TREES FOR THE OUTGROWER.....	36
5.1 Introduction	36
5.2 Contribution to overall household income	36
5.2.1 Factors accounting for success or failure in timber growing.....	38
5.2.2 Comparison with independent growers	40
5.3 Competition for household resources.....	40
5.3.1 Competition with food crops for arable land and labour	40
5.3.2 Effects on water resources	41
5.3.3 Effects on fuel sources.....	41
5.4 Opportunity costs on other land uses and livelihood activities	41
5.5 Summary (economic impacts at the household level).....	42

6.	THE WIDER ECONOMIC IMPACT OF THE SCHEMES IN THE COMMUNITY	43
6.1	Introduction	43
6.2	Development of small-scale contractors.....	43
6.2.1	Planting contractors	43
6.2.2	Chainsaw operators	44
6.2.3	Transport contractors.....	45
6.3	Development of infrastructure	47
6.4	Provision of rural credit.....	47
6.5	Comparison with areas administered by Lima Rural Development Foundation	48
6.6	Summary (wider economic impact)	48
7.	WHAT IS THE DEVELOPMENT IMPACT AT THE COMMUNITY LEVEL	49
7.1	Introduction	49
7.2	Conflict in the community.....	49
7.2.1	Recorded cases early in the schemes.....	49
7.2.2	Conflict over state forests	50
7.2.3	Resolution of conflict.....	50
7.3	Land demand and the development of an elite class	51
7.4	Alternate structures of ownership – comparison with NCT co-operatives.....	52
7.4.1	Grower co-operatives.....	52
7.4.2	Contractor cooperatives.....	53
7.5	Gender relations	54
7.5.1	Women and land ownership.....	55
7.5.2	Contribution to household livelihood	55
7.5.3	Decision to join the schemes	56
7.5.4	Decisions over earnings.....	57
7.5.5	Prior knowledge of costs and benefits	57
7.5.6	Changes in labour responsibilities	57
7.6	Summary (wider development impact)	58
8.	INSTITUTIONAL SUPPORT FOR OUTGROWERS – LESSONS LEARNT AND ALTERNATE STRUCTURES	59
8.1	Introduction	59
8.2	Experiences of SAPPI and Mondi	59
8.2.1	SAPPI Project Grow.....	59
8.2.2	Experiences of Mondi Khulanathi	60
8.3	The NCT alternative.....	60
8.3.1	Increasing net profit through better production support (yields)	60
8.3.2	Increasing net profit through reducing harvest and transport costs.....	61
8.3.3	Increasing price and availability of market.....	61
8.4	Summary (learning experiences and alternative institutional support).....	61
9.	CONCLUSIONS.....	62
9.1	The vulnerability context of small-grower livelihoods	62
9.2	The extent to which schemes build assets required for livelihoods	63
9.3	Transforming structures and processes	66
9.3.1	Representation in small-grower associations	66
9.3.2	Membership in large commercial growers associations	67
9.3.3	Alternatives models for small – grower empowerment	67
9.4	Interventions	68
9.4.1	Key interventions.....	68
9.4.2	Policy interventions	68
9.4.3	Best practice principles	69
9.4.4	Community – corporate relationships	70
9.5	Conclusion	70
10.	REFERENCES	71
	ANNEXURE 1: LOAN ADVANCES PAID FOR VARIOUS OPERATIONS	74

LIST OF ACRONYMS

AFRA	Association for Rural Advancement
ANC	African National Congress
BBQ	Basic Bark Quota
CLC	Community Law Centre
CTC	Central Timber Cooperative
DLA	Department of Land Affairs
DFID	UK Department for International Development
DWAF	Department of Water Affairs and Forestry
FAF	Financial Aid Fund
FOA	Forest Owners Association
INR	Institute of Natural Resources
KDAF	KwaZulu Department of Agriculture and Forestry
Lima	Lima Rural Development Foundation
MAI	Mean Annual Increase
NCT	NCT Forestry Cooperative Limited
NTE	Natal Tanning Extract
RDP	Reconstruction and Development Programme
SAAPAWU	South African Allied Paper Workers Union
SABT	South African Bantu Trust
SADT	South African Development Trust
SAFCOL	South African Forestry Company
SAPPI	South African Pulp and Paper Industries
SASA	South African Sugar Association
SATGA	South African Timber Growers Association
SAWGU	South African Wattle Growers Union
UCL	Union Cooperative Limited
UNDP	United Nations Development Programme
WBI	Wattle Bark Industry

While the schemes do contribute to household income they are not able to take households out of poverty. The vulnerability of livelihoods can be aggravated community conflict and tensions in gender relations around the schemes.

The outgrower – company partnerships do significantly build on the asset base (natural, social human and physical) of rural livelihoods but a number of problems (shown below in italics) exist:

Natural Capital

- They assist households to acquire new land under sale agreements of state assets;
Community partnerships with former state forests may be threatened by problems around ownership, responsibility and distribution of benefits. The schemes have struggled with these issues with block plantings in the past;
- They provide a means of securing land rights within the communal tenure system;
By requiring signatures from Tribal Authorities, the schemes may entrench Tribal Authority power, occasionally to the detriment of grower interests;
- Water resources are protected (under the DWAF permit system)
DWAF administration of the permit system has been slow to the detriment of growers and contractors;
- Households appear to set aside sufficient arable land for food crops;
There are no overarching land use policies in place to ensure that arable land is used to its highest potential;
- While taking up significant areas previously under grazing, households are increasing substituting trees for cattle as a form of savings;
Use of grazing land has caused conflict between growers and non-growers;

Social Capital

- Loan advances allow very poor households to join as members;
Highly marginalized households (without land) cannot join the schemes;
- The schemes build capacity of growers associations;
Associations are weak and cannot negotiate for better terms of contract;

Human Capital

- Skills are transferred on site (silvicultural) and in informal training days (business skills);
Business skills training has been informal and ad hoc;
- The schemes enable families to allocate labour effectively between wage and farm employment;
There are a number of ways in which women are exploited in the schemes, gender sensitive policies are not in place;
- Loan advances enable labour deficient households to hire contracted labour;
Hired labour and contractors may receive extremely poor wages and may operate under unsafe and harsh conditions;
- Contractors are given support in terms of informal training and links to growers;
Without further wood processing opportunities the schemes do not provide much capacity for spin-off opportunities;

Physical Capital

- Infrastructure (some access roads, input supply depots, weigh bridges) has been developed in some rural areas through the schemes;
Trees may have been planted in marginal areas, companies have been unsuccessful in acquiring government funding for access roads;

Financial Capital

- The schemes provide a significant percentage of rural credit in the areas where they operate;
Farmers are unable to negotiate the terms of contract (size of loans and prices);
- Trees are seen a form of household savings and informal collateral agreements do exist;
Many farmers fell early to escape interest accumulation or to meet emergencies, and informal collateral agreements between community members tend to be exploitative;
- The schemes provide secure markets;
It is not in the companies interest to provide highest prices possible and growers are excluded from owning shares in the most profitable sector (processing);.

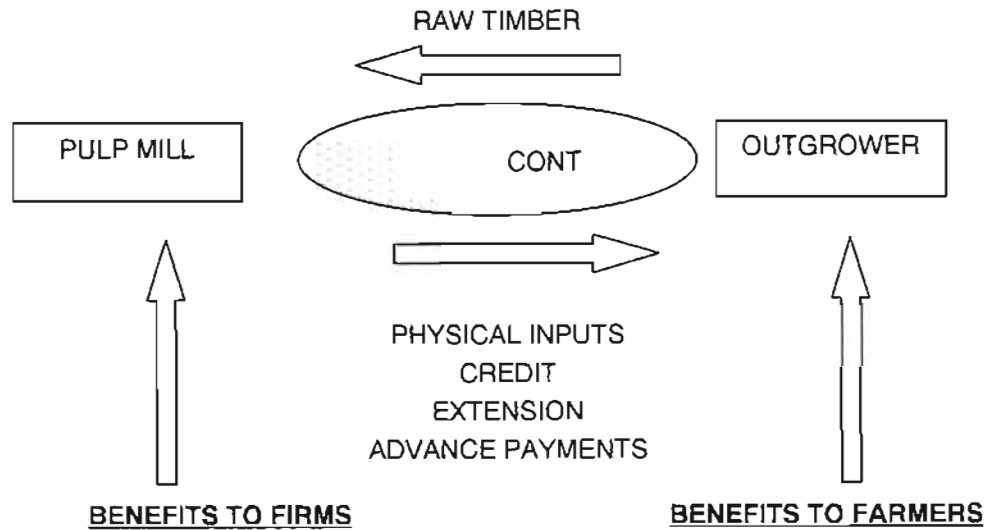
The key interventions proposed are that growers are given representation on the executive bodies that control **structures** and **processes** of the forestry industry, and have power to lobby for favourable government policies.

- Political empowerment is unlikely to occur unless if grower associations progress beyond their administrative function (conflict resolution and communication), and are incorporated into national forest owners' associations and gain real representative status. Opportunity now exists for representation in the proposed merger of SATGA and FOA. However, to take advantage of this event, ongoing capacity building of grower organizations is needed. Umbrella bodies, which would represent local associations, need to be created. These could possibly incorporate the SAWGU associations would cut across SAPPI, Mondi and NCT structures.
- Economic empowerment is unlikely to occur unless growers are given a greater stake in the profits from their timber. Profits are made in processing rather than production and there is evidence that wood prices are suppressed by the monopoly that pulp companies hold on the market (*Section 2.1.1*). Share ownership along the lines of SAWGU ownership in tannin extract plants is a way of addressing this situation (*Section 2.1.2*). Another method is to use a method of **revenue sharing** in determining the price formulae for timber. By this method the profit is distributed in an agreed proportion between producers and processor. The strengths of this system are that both risks and benefits are shared between producers and processor, and that allegations of unfairness which are common with all the other systems can be avoided.

Other recommendations relate to government policy (better administration of water permits, development of comparative advantages in crop production, and tenure laws) and best practice principles (site suitability, sharing of production data, business skills training, factoring in land rental to reduce interest charges etc.) to protect and build the capital assets of small-grower livelihoods.

The highly structured contracts under which grower operate may give way in the future to models of community-corporate relations that are more responsive to wider development issues. For example, Lima, contracted to administer the SAPPI Grow scheme, is able to provide a wider range of development services than the timber companies. Similarly, rural finance agents may be able to offer other credit services. Grower and contractor co-operatives, such as those promoted by NCT, may provide a better vehicle for communication, skills transfer and mutual support than grower associations.

The mechanisms of the KwaZulu-Natal timber contract farming system are illustrated below:



- The firms are assured of volume through their mills.
 - Contracts allow a degree of control over production quality and quantity while providing access to free land.
 - Responsibility of labour management is delegated to the farmer.
 - Cheap forms of labour, which are not usually accessible (family labour), may be utilized.
 - The system may present a progressive image of the firm and contribute to the formation of alliances with grassroots political bases who may defend the firms interests.
 - The system permits the maximization of economies of scale at each stage of the production process and enables the firm to draw on specialized expertise of sub-contractors.
- Farmers benefit from access to an assured market.
 - The firm may open channels to international markets that are usually inaccessible to peasant farmers.
 - Timely and appropriate physical inputs are supplied with specialized extension.
 - The system provides access to credit.
 - Crops may sometimes be used as collateral for long term loans.
 - Spin-off employment opportunities are often created in the local communities (Williams & Karen, 1985; Glover & Kusterer, 1989).

Critics of contract farming have argued that problems outweigh supposed benefits, and that these problems are inherent in this model of rural development:

- cash crops may divert household resources (labour, land) from staple foods with an inevitable reduction in nutrition (Lele, 1975);
- schemes may promote inappropriate technologies and environmentally unstable farming systems (Feder, 1977);
- peasant farmers are rarely able to negotiate the terms of contract (loan sizes, produce prices) since they are seldom collectively organized;
- schemes may make use of child labour (Clapp, 1988);
- schemes transfer the major investment burden and risks of weather, insects, disease, and fluctuating market prices to the farmer (Levin, 1988);

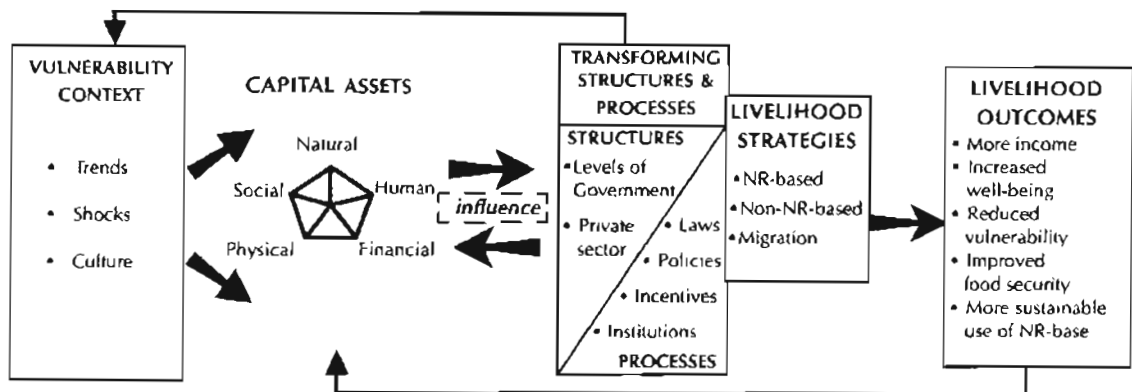
- agribusiness tends to control the most profitable sector - the processing marketing of agricultural commodities - while restricting the out-grower to the production process (Neocosmos & Testerink, 1985);
- agribusiness often maintains a tight control over supplies and markets as a deliberate strategy to enforce the terms of the contract. The result is that out-growers are bound into a long term dependency on the firm (Clapp, 1988);
- where firms are too interventionist, spin-off employment opportunities to small scale contractors (tractor owners, transporters) are stifled (McIntosh & Vaughan, 1998);
- the gender structure of rural economies may cause severe constraints on out-grower schemes by affecting the control of producers over their labour. Conflicts may arise over who bears the cost of production in terms of additional labour, and who shares in the benefits of this production (Sharp and Spiegel, 1990);
- outgrowing may facilitate theft from agribusiness core estates since the source of raw materials becomes uncertain;

The debate between proponents and critics of contract farming can result in an *impasse* for those attempting to evaluate or implement the small-grower timber schemes in KwaZulu-Natal. However, the above costs and benefits can be usefully assessed using a Sustainable Rural Livelihoods approach.

1.2 Overview of the Sustainable Rural Livelihoods (SRL) approach

The Sustainable Rural Livelihoods approach to rural development has recently been made popular by international development agencies such as the UK Department for International Development (DFID), Oxfam, CARE and the United Nations Development Programme (UNDP). The approach uses the following definition of a livelihood.

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Carney, 1998 after Chambers & Conway, 1992).



The asset base upon which small-growers build their livelihoods include:

- land, other natural resources (natural capital);
- membership in the schemes, access to community groups (networks, associations, local government) (social capital)
- silvicultural, agricultural and business skills, family and hired labour, access to contractors (human capital)
- infrastructure (access roads, depots, weigh bridges, communications, equipment) (physical capital)
- rural credit, household income and savings, markets (financial capital).

Simply put, the SRL approach can be used to evaluate the small grower timber schemes by assessing:

- the extent to which they build assets required for livelihoods;
- the vulnerability of those assets to withstand trends and shocks; and
- the extent to which schemes enable small-growers to transform the structures and processes governing access and value of those assets

1.3 Structure of this report

Section 2 begins with an overview of the Timber Industry in KwaZulu-Natal. The history and organizational structure of the two major outgrower schemes (SAPPI and Mondi) are described. References are made to NCT and SAWGU small grower support for broad comparative purposes. An attempt is made to analyze the motivations for company involvement in the schemes.

Section 3 deals with the incentives and disincentives at household and community level for growers to enter the schemes. These motivations help describe the vulnerability context in which livelihoods operate.

Section 4 describes the contract, which lies at the heart of the community – corporate relationship. The terms of contract indicate the level of control that growers have over the structures and processes of the relationship, and the distribution of risk between the grower and the companies.

Section 5 and 6 describe how the schemes build on or deplete capital assets at the household and community level.

Section 7 describes how the schemes constitute a source both of conflict and collective action in the wider community (social capital).

Section 8 describes some of the lessons learnt by companies and the alternative choices presented to growers by NCT.

Section 9 analyses the findings within the Sustainable Livelihoods Framework and some interventions are proposed.

2. THE TIMBER INDUSTRY IN KWAZULU-NATAL

2.1 Background

2.1.1 History of the pulp industry in KwaZulu-Natal

In 1936, the South African mining house, Union Corporation (which later merged with General Mining to form Gencor) set up SAPPi as a public company to erect and manage a pulp mill near Johannesburg. In 1951 a mill was built on the Tugela River at Mandini and the production of pulp in KwaZulu-Natal began in 1954. In 1988, SAPPi purchased the SAICCOR Mill at Umkomaas on the KwaZulu-Natal south coast. (Hocking, 1987).

In 1966, another mining house, Anglo American Corporation of South Africa, set up a paper mill (Mondi Paper). Mondi approached SAPPi to subcontract news sheet production and this marked the beginning of an uneasy relationship with the Anglo American Group (Hocking, 1987). In response to a tremendous worldwide demand for soluble pulp in the 1980s, the Mondi kraft mill at Richards Bay was built in 1984. The mill produces 45 000 tons of pulp and linerboard per annum. This volume requires some 4 000 tons a day or 73 000 hectares of plantation dedicated to the mill (assuming 20 MAI per hectare).

SAPPi bought its first farm in the Ixopo district in 1950. By 1958 SAPPi owned 50 000 hectares of timber and about 20% of pulpwood came from its own holdings. From 1986 to 1990 and following in SAPPi's footsteps, Mondi purchased more than 25 000 hectares of land (Cellier, 1994). Much of this land was previously under sugar and some tension arose between the two industries. The Director of South African Cane Growers pointed out that it was difficult to reconcile the high prices paid by the companies for land under sugar with the comparatively low value of timber unless the mills were suppressing the true value of timber. Converting from sugar to timber resulted in a 70% loss in employment. In addition, by not passing on a share of profits made in processing to the primary producer, the mills were able to buy up many private timber farms. 'We do not believe that any government can tolerate a situation which is leading to monopoly concentration of land holdings in so few hands and thus leading to rural unemployment, depopulation and degradation' (Hudson, 1990).

In the 1990s, the Timber Industry began a policy of contracting out forestry operations. There is evidence that this has led to further unemployment and a deterioration in the conditions of employment for forestry workers.

Sale of state owned forests began in 1999. It appears that Mondi has been successful in acquiring some of the former Safcol plantations ('A-Grade' forests) north of the Tugela river. Many of these border on communal areas where the small grower schemes operate. In 2000 former KwaZulu state plantations ('B-Grade' forests) will be presented for bids. The first of these is a 30 000 ha plantation located at Manzengwenya in Maputaland. Bids will be assessed on the strength of community corporate partnerships, and partnerships with Black contractors.

2.1.2 History of the wattle industry

The first trial sowings of Black Wattle (*Acacia mearnsii*) in South Africa were conducted in 1864. By 1908 about 59 500 hectares were planted to wattle in Natal (Sherry, 1947). By 2000, the area under Black Wattle was about 130 000 hectares - mainly grown in the cool mist belt from south east Mpumalanga through northern KwaZulu-Natal and the Natal Midlands into southern KwaZulu-Natal (www.forestrysa.co.za).

The main application for wattle bark extract is the production of vegetable tanned leather and certain industrial adhesives known for low formaldehyde emissions. Wattle timber has a high basic density and a pulping yield. These qualities make it an excellent pulping species and there is an unmet demand for wattle timber at the dissolving pulp mills located at Umkomaas, Mandini and Richards Bay. About 56% of total production of timber is exported in chip and log form, mainly to Japan and Scandinavian countries where it is one of the preferred hardwood species for Kraft pulping. Other uses include charcoal, building, fencing and firewood (www.forestrysa.co.za).

The Wattle Industry is a partnership between Growers represented by SAWGU and manufacturers represented by SAWEMA. Most growers are also members of the cooperatives responsible for processing the wattle bark and are thus able to benefit from downstream processing. These are the Natal Tanning Extract (NTE) who own an extraction factory in Hermansberg and the Union Co-operative Limited (UCL) with a factory in Dalton.

The bulk of wattle timber produced by SAWGU members, is sold through the Central Timber Co-operative and its major shareholder NCT Forestry Co-operative Limited.

2.1.3 History of NCT Forestry Co-operative Limited

The Natal Co-operative Timber Company (NCT), later to be called (NCT Forestry Co-operative Limited) was registered in February 1949. Its main function was to find a market for wattle timber. Initially, members of NCT held 8000 hectares, mainly of wattle. By 2000, members owned more than 200 000 hectares of soft and hardwoods. In 1963 the introduction of wattle bark quotas increased the need of utilizing the timber. Several shipments of timber were made to Italy over the following two years and two pack mills were established by NCT at Kranskop and Dalton to market mining timber (Farrow & Ferguson, 1999).

In the late sixties a rift involving timber pricing had developed in the South African Timber Growers Association (SATGA). It was claimed that the large processors used their position as major producers to keep the wood price low (Arnold, 1994; cited in Vaughan, 1996)¹. The chairman of SATGA, had declared that in the future, private growers would have to protect and promote their interests through their respective co-operatives. This led the formation of the Central Timber Cooperative (CTC) which was registered in 1970. By 1990, NCT was one of two remaining shareholders in CTC.

In 1970, CTC initiated negotiations with a Japanese buyer (Sumitomo Shoji Kaisha Corporation) to supply 250 000 tons of wattle chips per year for a period of ten years. In 1979 the wood chip plant was moved to Richards Bay. NCT meanwhile, also continued to export wattle timber on an ad hoc basis until The favourable supply contract for hardwoods then reduced the need for log exports by NCT.

2.2 Timber outgrower schemes (contract farming) in KwaZulu-Natal: history and organizational structure

2.2.1 SAPPI "Project Grow" small grower scheme

In the early 1950's, SAPPI had begun to issue free seedlings to its employees to plant around their homesteads in adjacent tribal areas as windbreaks and shelter for their livestock. The SAPPI approach was driven by welfarist and environmental concerns. However, by 1964 significant tonnage's began to be realized from these woodlots (Zingle,

¹ The export of wood chips rather than dissolved pulp has raised some concern since benefits are lost in foreign exchange revenue, jobs and fixed investment (Joffe et al., 1995; cited in Vaughan, 1996).

2000). As the extent and value of the woodlots increased the importance of a more formalized partnership became evident to both SAPPI and the growers.

Formal support of commercial woodlots in KwaZulu was initiated in 1983 by SAPPI in their areas surrounding their pulp mill at Mandini. The SAPPI "Project Grow" began, and remains today, as a social responsibility programme. Promotion was low-key, relying mainly on word of mouth between growers and their neighbours. (*Pers. comm.* Van Loggerenberg, 2000)

2.2.2 SAPPI "Project Grow" administered by Lima

Lima Rural Development Foundation was set up in 1989 as a non-government contract extension service. Its first contract was to administer the SAPPI Grow scheme south of Durban to provide timber to the newly acquired SAAICOR Pulp Mill at Umkomaas. The terms of contract for the grower do not differ from the Zululand based scheme. As SAPPI was unsure of the response of potential growers, Lima was appointed on a time basis for the first three years. Thereafter, the contract was on a commission basis for area planted and area serviced. Since 1997 Lima was contracted to harvest woodlots and the organization is paid a commission on tonnage delivered to the mill. (*Pers. comm.* Stewart, 2000)

2.2.3 Mondi "Khulanathi" small grower scheme

The Mondi scheme grew out of two independent initiatives. The first was a project which was started by the Institute of Natural Resources (INR) affiliated to the University of Natal, with loan finance from the Natal Tanning Extract (NTE) in the Biyela area 60 km inland from Richards Bay. The INR had defined itself as a catalyst for development rather than a development agent, and had become involved in the Biyela area out of an interest in development systems research. "The land use plan they had developed focused on optimal land use and not necessarily the stepwise meeting of basic needs" (Friedman, 1991). They proposed commercial eucalypt on the steeper slopes in the area because of the appropriate soil and rainfall, proximity of a market, and potential for job creation and spin-off industries. "Moreover, in line with INR philosophy, it would be an ideal project to get the private forestry sector involved in rural development" (Friedman, 1991).

In 1982/83 season three small areas (total of 6 hectares) of communal land for plantation units were set aside by the Tribal Authority to demonstrate the concept of afforestation. Despite general suspicions among growers as to NTE's motives, the scheme had 102 members and had planted 165 hectares by 1989. In 1990, NTE was consolidated with Mondi and the Biyela growers were incorporated into Khulanathi scheme.

Concurrent to the INR/NTE Biyela scheme, Mondi initiated their "Khulanathi" ("grow with us") scheme at Mfekayi in 1988. Khulanathi "was conceived by Mondi as a commercial venture which would yield additional tons of timber for its Richards Bay pulp mill at a reasonable price to the mill ... Mondi Forests designed and implemented its Khulanathi programme without consultation with the farmers, for its own commercial objectives" (Cellier, 1994: 3, 6). Mondi foresters felt that their job was to promote trees growing and that human and other developments would occur as spin-offs (Vaughan, 1996: 41).

However, while Mondi still considers Khulanathi to be a primarily business venture, the company has taken some care to promote and consult with grower associations. They appointed a social forester onto Khulanathi staff in 1991 and committed themselves to recommendations made from his doctoral thesis on the programme. In 1992 they commissioned studies by the INR at Mbazwana on environmental and social issues and by the Community Law Centre (CLC) on the development of the small grower contract (Moran, 1992).

Box 2.1 Development of the Khulanathi scheme

“Mondi completed their Richards Bay pulp mill in 1985, this created a strong demand locally for additional pulpwood. There were no more suitable commercial farms that could be bought for forestry purposes. There were substantial areas of good forestry land in the local tribal areas close to Richards Bay. Many of the local tribes’ people were familiar with forestry mainly through employment in the industry and some had embarked on their own small-scale forest initiatives mostly with little success. Mondi had the technical forestry expertise and the idea of a commercial woodlot scheme was developed as a strategy to develop this potential. The overhead costs such as administration, management and extension is carried by the company while the operational costs are financed by means of interest (10% simple) bearing loans advanced for work undertaken by the grower which was recoverable against the final crop. These loans are secured by means of a formal agreement. As the woodlots mature a series of timber depots were developed in each tribal area to provide a local market to buy the timber produced. The overhead cost of the scheme is now covered by the margin on the timber traded”. *Overall Khulanathi Manager Mr. H Kewley*

2.2.4 Extent of the timber outgrower schemes

Table 2.1 Extent of the timber contract schemes

Variable as at January 2000	Khulanathi (Mondi)	Project Grow (Sappi)	Project Grow (Lima)
Mill supplied	Richards Bay	Mandini	Umkomaas
Location of growers	Coastal areas from Richards Bay to Mozambique border, Nkandla and Nongoma	Inland areas around Mandini. Coastal areas from Richards Bay to Mozambique border	Coastal and inland areas south of Umkomaas mill
Year started	1988	1983	1989
Number of growers	2854	3134	4000
Average plot size (ha)	1.5	2.7	0.8
Total area under scheme (ha)	5904	9031	2996
Volumes harvested in 1999 (t / p.a)	40 000	39 000	17 000
% throughput in mills from small growers	3.2%	3%	1.5%
Development targets:			
• Capacity for new growth (ha/yr)	800	1300	400
• Location of future expansion	Maputaland	Maputaland	South Coast

Notes on Table 2.1:

- Average plot size is significantly higher (6.25 hectares) in the Maputaland area which lies directly south of the Mozambique border.
- Over the last ten years, Project Grow members have delivered 138 900 tons to the SAPPi mill at Mandini . This includes logs from timber exchange agreements (Mondi softwoods in Mpumalanga are taken to the Ngodweni Mill in exchange for SAPPi hardwood from Maputaland taken to Richards Bay Mill). SAPPi believes their program will bottom out at a sustainable harvest of 100 000 tons per year.
- Mondi does not keep records of tons delivered by Khulanathi members. Over the last four years, procurement from all small-scale growers has averaged 107 887t/yr. ranging from 82 720 t/yr. in 1999 to 137 441 t/yr. in 1997. The Mondi Woodlots Manager estimates that approximately 40% of this timber are sourced from Khulanathi members and the remainder from independent growers or from Project Grow (Maputaland) members under timber exchange agreements.
- Maputaland has high forestry potential (25t MAI), but is ecologically sensitive. The former KwaZulu government approved plans to develop 5000 hectares of forestry south of Lake Sibayi in locations identified by an Environmental Impact Assessment. This study, commissioned by Mondi, indicated suitable areas for eucalyptus away from rivers, wetlands and indigenous plants used for boat making, crafts and wine-making (Raffia and Lala palm). However, Mondi now fears that their activities in the area will clash with the objectives of the Lubombo SDI which focus on tourism potential of Maputaland. New plantings in the area have been temporary stopped despite many requests from local farmers including a deputation from a prominent local politician.

2.2.5 The effects of oversupply on the world market on expansion of the outgrower schemes

Recent oversupply on the world market for pulp and paper has forced the pulp mills to reduce and regulate intake from both commercial and small growers via means of a monthly quota system. The situation tests the extent of the companies' real commitment to development objectives. SAPPI claims to have postponed harvest of 30 000 hectares of their own timber in 1999 to allow small grower deliveries but Mondi has not given preference to Khulanathi members.

Independent growers have been severely affected. Since September 1999, SAPPI has not accepted non-registered timber into their mills. In Mondi's case, quotas for local depots are allocated through the grower committees, with preference given to Khulanathi members. Mondi's attempts to develop these associations have met with partial success. Certain areas operate equitably. In other areas the system is manipulated by Tribal Authorities or powerful local individuals for their own political or economic advantage.

The quota system has forced independent growers to join the schemes. However, requirements are merely that plots are registered and that certain varieties of eucalyptus are not acceptable. Growers are not required to take inputs from the companies, though there is certainly confusion around this point (Box 6.2).

2.3 Other models of company – community partnerships in the timber industry: history and organizational structure

2.3.1 SAWGU “*Phezukhomkhono*” small grower support scheme

A significant number of small-scale wattle growers were producing bark and timber by 1967 (Table 2.2). These growers were assisted technically and allocated bark quotas through the KwaZulu Department of Agriculture and Forestry. In 1993, growers' associations set up by the KZDAF approached SAWGU for financial support. Subsequent meetings led formal inclusion of small growers² in the SAWGU constitution and to a support scheme called *Phezukhomkhono*. The scheme is similar in some respects to the SAPPI and Mondi schemes³, but differs significantly in terms of the institutional representation given to growers. Small growers provide about 5% of total annual harvest but occupy 15% representation in the controlling bodies of the Union (General and Executive Committees). They also form part of any SAWGU representation in the Wattle Bark Industry's (WBI) structure. SAWGU has facilitated Small Grower ownership rights in two of the tannin extract factories (Union Co-op Ltd. and NTE Co-op Ltd.) affiliated to SAWGU. With capacity building provided by SAWGU, the outgrowers have created their own representative grower committees falling under an umbrella committee, which administers their concerns.

By 1999, some 600 growers had joined *Phezukhomkhono* and the total registered small-growers had risen from 1964 in 1992 to 2801 (Table 2.1) (Feely, 2000, *pers. comm.*).

SAWGU estimates that their registered members now own about 90% of all small wattle plantations in KwaZulu-Natal. The remaining 10% of trees are planted too far from the mills or in woodlots that are too badly maintained to be of commercial value.

² The SAWGU constitution defines small growers as those who are “not continuously involved in planting, maintaining and harvesting wattle trees on an annual sustainable basis; and do not have more than 10 hectares of wattle trees” (SAWGU Constitution, 1993).

³ It was designed together with wattle growers by the Services Manager of SAWGU, Mr. John Feely who initiated SAPPI “Grow” in 1983

Table 2.1 SAWGU small – growers

	1967	1992	1997
Area of managed woodlots (hectares)	1 675	3 595	4 760
Number of small growers	915	1 964	2 801
Annual production of bark (tons)	1 675	3 595	4 760
Annual production of timber (tons)	8 375	18 000	24 000

Box 2.2 Development of the SAWGU support scheme

Small grower activity grew as a result of employees of wattle growers in the KwaZulu Midlands practicing on their own lands what they had experienced in their employment. This took place chiefly in the magisterial districts of Melmoth, Nkandla, Maphumulo, Ndwedwe and Umlazi. The main objective was producing poles and lathes for the local building market, and firewood. Wattle bark became an attractive cash generator. They were supported technically and administratively by the former Forestry Department, and subsequently the KwaZulu Department of Forestry and Agriculture (KDAF). This included liaison with the Wattle Bark Industry (WBI) to secure an allocation of Bark Quota to supply to Bark Mills at Hermansburg, Dalton and Pietermaritzburg.

In those early years, there was no outlet for wattle pulpwood. Some of the individuals began operating as contractors, to harvest and transport this bark of their own and other woodlot owners. The WBI had limited resources in terms of developing this activity, as from the 1960's the Basic Bark Quota (BBQ) system was designed to downsize the whole industry. This was because leather footwear was being replaced by alternative materials. The WBI capacity to interact with many individuals was not available and from the late 70's and early 80's, KDAF performed the function not only of organizing quotas, but also of distributing payments for bark, via local magistrates' offices.

From the mid 80's, SAWGU started to become aware that the woodlot activity was not an informal haphazard operation. It was certainly sustainable. Woodlot competitions and field days were held to promote improved silvicultural practice. The KwaZulu Government importantly established committees of local wattle growers in the early 1990's, usually based on tribal wards. These became the bases on which SAWGU subsequently established its small grower structure. In 1993 SAWGU amended its Constitution to accommodate small grower representation and participation in all structures...

In 1992 SAWGU undertook the first complete survey of all individual woodlots using official orthophotos to establish individual ownership, area, age and silvicultural status. The tenant of individual ownership is important. In KZN Tribal areas, if an Inkosi or Tribal Authority allocates a piece of land to an individual, that is virtually a permanent arrangement, albeit no formal Title Agreement is generated ... It is on this base that the local schemes of cane growers and timber growers have been established.

In 1993 a group of Small Growers approached SAWGU, requesting financial assistance for planting wattle woodlots. The WBI initiated its Woodlot Planting Assistance Scheme, later named by the growers Phezukhomkhono (PK). (This is the Zulu name of the "Piet My Vrou" bird whose Zulu bird call in early summer is saying "wake up and get busy"). PK commenced in 1994 when SAWGU appointed a Small Growers Extension Forester who besides managing PK, handles all liaison with Small Growers previously carried out by KDAF... SAWGU has recently facilitated for their Small Growers to become full members of the two Extract Manufacturing Co-ops (Union Co-op Ltd. and NTE Co-op Ltd.) so they now enjoy the benefits of full participation in the growing and processing of bark. *John Feely, Services Manager SAWGU, February 2000*

2.3.2 NCT Forestry Co-operative Limited support for small growers

Box 2.3 The NCT philosophy

NCT starts with the grower, we look at his needs and don't try to lock him into a market. We try to create as many markets as possible, then let the grower choose... It is in our interest to find the best prices for our members whereas it is in their [the outgrower schemes] interest to find the lowest" (Keyworth, 2000, *pers. comm.*).

NCT markets timber to a variety of outlets. In the Zululand area approximately 80% of timber goes to the CTC wood-chip factory at Richards Bay and most of the remainder to Silvacel.

From the early 1970's NCT provided informal support to wattle growers by purchasing their timber at various depots in the KwaZulu – Natal Midlands through an arrangement with SAWGU. In 1998 NCT appointed a social forester to begin to formalize relations with small growers through a share holding scheme.

A-Class shareholders consists of growers who:

- have bought shares in NCT at a price of R200;
- have demonstrated commitment to the relationship through a two-year probation period in which time they have consistently delivered timber and attended meetings.

A-Class members are given preferential allocations, monthly commitment bonuses (R7/t for eucalypt and R30/t for wattle) and representative rights in NCT shareholder meetings. There are fifty registered small growers and contractors in this group. The largest three growers among the A-class members have forests of 161 ha (wattle -Vryheid), 120 ha (eucalypt and wattle - Greytown), and 102 ha (Eucalypt – Mbonambi). Apart from individual members there are also 2 grower and 18 contractor co-operatives with A-Class membership.

NCT has supported the development of grower co-operatives through assisting members to construct small depots. In this way growers can bulk up harvests to reduce long haulage costs and provide a sustainable supply. In the Mbonambi area, a co-operative of 101 eucalypt growers has been established. Many members of the co-operative began growing trees in 1960's. Their woodlots average 12 hectares in size, and include a Tribal Authority forest of 46 hectares. One member is already an individual Class-A member. At Nkandla, NCT has helped wattle growers set up a grower / harvester cooperative of 18 members who own small woodlots and a labour force of 52 (mostly youth). The co-operative has started a depot, which enables transportation to Richards Bay (see *Box 7.3*).

General membership is given to other suppliers. The membership form merely expresses willingness to sell timber through NCT. There are no contractual agreements between the two parties and they may experience difficulties in getting allocations during times of oversupply (Addo *et al.*, 2000). However, allocation requests are computerized and as far as possible booked in advance for these members. They receive a regular newsletter in Zulu and may attend field training days. Some small-grower members have volunteered to do extension in other areas. There is a loan facility of R100 000 for all members. NCT estimates there are about 1200 members (600 in Zululand) in this category.

NCT has also encouraged small-scale contractors to combine efforts in order to sustain supplies from small-grower woodlots. Preliminary allocation requests (mainly from contractors who service the general members) for the year 2000 are: 100 000t (wattle), 80 000t (eucalypt) and 2000t pine.

2.4 Government legislation affecting the expansion of small grower schemes

Under DWAF regulations small woodlots (less than 10 ha) did not require planting permits. In the past there was a “gentlemen’s agreement to regulate distances of plantings from streams and wetlands but foresters reported difficulties in their attempts to persuade growers to observe these practices. However, since the Forestry Act of 1997, small-growers also require permission to plant (though under less rigorous guidelines). SAPPI and SAWGU have been able to negotiate community permits for certain areas, based on details of the catchments, existing afforestation and the potential for new plantings. However, expansion in 1999 was severely curtailed by the need for these permits. In 1999, for example, Khulanathi planted only 100 hectares (about 12% of the previous years achievement) due to difficulties in getting water permits. DWAF eventually inspected and approved Khulanathi small grower sites in November 1999 after a year - long wait.

Box 2.4 Reaction to administration of the DWAF permits

“We also believe that development cannot be *carte blanche* but the water legislation have been built around a first world scenario. We have been waiting since November 1997 for permits to be approved. Some of it is because of ignorance on our side, but when we bring documents, they ask for more. This appears to be stalling tactics on the side of DWAF. Things are improving. We applied for five community based permits and have been granted two” (SAPPI Forester, 2000).

“The application of various legislation requirements, in particular of Water Affairs, Environmental Affairs and Agriculture is very confusing and not conducive to rural development”. (The SAWGU Services Manager, 2000)

Draft plans for water-use licenses, further threaten to curtail small-grower development. “The playing field is flat but there are no goal posts anymore!” (Mondi Forester, 2000).

2.5 Summary (the timber industry in KwaZulu-Natal)

In summary, SAPPI initiated their scheme as a social responsibility programme⁴, Mondi as a business venture (Sections 2.2.2 & 2.2.3) and both companies claim that their motivations have not changed over time. This primary difference in aim is evident in some of the features of their respective schemes. These are discussed in the next section (Section 3).

In both cases the schemes offer benefits to the timber companies in terms of classic contract farming theory (Section 1.1).

- The primary benefit is to enable access to land close to the pulp mills. This land falls under communal tenure and was previously inaccessible to purchase or lease agreements. The need for this land should be seen in the light of the

⁴ The extension of SAPPI's programme to the South Coast formed anchor funding for Lima to set itself up as a contract based extension and rural development agent.

worldwide demand for soluble pulp in the 1980s, combined with tensions with the Sugar Industry over land in KwaZulu-Natal (*Section 2.1.1*). Furthermore, most communally owned areas along the coast have a very high (25-30 MAI) potential for forestry;

- Costs of administering the schemes are probably higher than those incurred in commercial plantations but these costs (at least in Mondi's case) are covered by an unspecified margin over the timber traded (*Box 2.2*). It is therefore possible that considerable savings are made over company owned commercial plantations where land rental must be paid.
- The outgrower system permits maximization of economies of scale and should be seen within the broader objectives of timber companies to contract out forestry operations (*Section 2.1.1*);
- The schemes do present a progressive image of the companies and may provide some political benefits to the two companies⁵.

By comparison, SAWGU and NCT initiatives were a response to the 1994 Government of National Unity Reconstruction and Development Programme (RDP) and aimed to integrate small-scale farmers into their respective organizations. The programs have formalized relationships that grew out of the apartheid era by providing small farmers with representation at executive levels. Benefits to companies are probably more political than economic, yet small growers do contribute significant volumes (about 5%) of wattle bark and timber.

5

It may be pointed out that Mondi started its outgrower scheme in earnest just before watershed political reforms occurred in South Africa. While this timing is coincidental to Mondi's business objectives, potential political benefits were probably not lost on senior level management. The Mondi Social Forester articulated this point in his thesis: "South Africa is undergoing a process of transformation and profit motivated private companies are being challenged about the role they will play in the new South Africa. Not the least are those industries such as forestry, which are largely land based. As the Pan African Congress' Peter Mayende states 'land is the substance and symbol of ... national self determination'" (Cellier, 1994:6).

3. MOTIVATIONS OF GROWERS TO ENTER CONTRACTS

3.1 Introduction

Small growers coexist with non-growers in many coastal regions of KwaZulu-Natal. There are also a few cases where communities have entered into contracts with timber companies via Tribal Authorities. Aspirations of non-growers, independent growers, contracted individuals and Tribal Authorities may be different. These differences are at times a potential source of conflict (Section 7.2) and contribute toward an understanding of the **vulnerability context** of small grower livelihoods.

3.2 The history of independent small scale timber growers

In most of the coastal areas which are near to commercial eucalypt forests, households started growing trees in an informal way, by taking seedlings from under the mature trees and replanting them around their own homes. These trees were used for firewood, building, fencing, shade and other domestic purposes, and occasionally sold to neighbours or inhabitants of nearby thornveld areas who sought the straight eucalypt trunks for building their homes.

Box 3.1 First trees planted

"In 1933 a white man came our area to plant gum trees around the dip tank. The reason was to support the soil where the cattle had worn the grass away. People took seedlings from under these trees and brought them to their own homes. That is how forests started in our area. We used to sell to each other or to the *Hlanzani* (Tugela thornveld) people who do not have straight trees for building. Before these trees were planted we used to use cattle dung for our fires." (*Project Grow grower, Khangelani area near Mandini*).

Further inland, communal woodlots of wattle and gum were planted in many areas through government initiatives for conservation purposes⁶. In Sokhulu, Mtunzini and Mbazwana large tracts of eucalypt were planted in tribal areas under the auspices of the South African Bantu Trust (SABT). From 1972 the KwaZulu Department of Agriculture and Forestry (KZDAF) also assisted in distribution of subsidized eucalypt seedlings and technical advice from nine extension staff, operating out of a number of nurseries located in tribal areas. Initial community gum plantations proved problematic as no one took responsibility for the trees. By 1982 the KZDAF preferred to promote smaller privately owned woodlots and they encouraged growers to join the SAPPI small grower scheme when it commenced in 1983. The KZDAF also assisted SAWGU in administration of small wattle growers for some time (Hughes, 2000, *pers. comm.*)

Workers in these and other commercial forests planted trees on their own land allocations, using techniques learnt in their jobs. Along the coastal areas, initial contacts with commercial markets for eucalyptus were probably made in the mid-1960's via felling and transport contractors who were looking to fill procurement quotas (Box 3.4).

3.2.1 A case study of independent growers – Mbonambi and Sokhulu

At Mbonambi which is now one of the most densely planted areas, woodlot production was given an unexpected boost. According to oral reports of local growers, in 1959, the forestry company Waterton attempted to convince the government that eucalyptus trees were necessary in the area in order to stabilize the coastal dunes. Other growers believe

6 The first recorded government initiated woodlot for use by black homesteads was established in 1893 near King Williams Town. Driven primarily by environmental concerns, these type of woodlots continued to be promoted by state and parastatal organizations along the eastern seaboard of South Africa. Their functions were to provide firewood and building materials for small towns, or to provide an alternative source of wood near indigenous forests (Gandar, 1994).

that the government simply wanted the land for its own plantations⁷. Under threat of forced removal, local inhabitants responded in an ingenious way. They argued that if they planted trees themselves, there was no reason for them to move. Apparently the government relented and the KZDAF supplied the necessary seedlings. A number of people did leave the area. Those who stayed to plant acquired large holdings. By the early 1960's these farmers were selling their trees to contractors who felled and transported to a nearby weighbridge at Penicuik. Accounts of pioneer growers suggest that they were surprised at the magnitude of profits that could be earned from trees.

By the mid 1960s, at Sokhulu just north of Mbonambi, plantings were strongly encouraged by the local Tribal Authority which also feared that Timber companies would take land that was not utilized. As far as the author is aware, this is the only area where a Tribal Authority played a significant role in promoting trees independently of the SAPPI and Mondi schemes.

Box 3.2 History of first plantings - Sokhulu

"I started growing trees when I was still a youngster more than thirty years ago. At that time the Inkosi gave land to anyone who wanted to plant trees. He did not want the Timber Companies to see any open space when they flew over in their aeroplanes."
(Project Grow grower, Sokhulu area)

7 Verbal accounts differ as to the motives of the government. The Surplus People Project reports that Reserve Four (Mbonambi and Sokhulu) north of Richards Bay was threatened with removal in terms of the 1975 consolidation plan for KwaZulu. The land was descheduled and excised from KwaZulu and its status under the Group Areas Act had been proclaimed white. Reasons appeared to be "its proximity to the growth point of Richards Bay, its general situation along a coastline regarded by government and the military as strategically sensitive, and its favourable agricultural prospects" (AFRA, 1983)

Box 3.3 Case study of an independent grower at Mbonambi

Mrs M... moved to the Mbonambi area in 1949 to get married. In 1955 people living in her area were threatened by government officials with forced removal allegedly to stabilize dune encroachment from the nearby Richards Bay coastline. "This was just a trick to move us as we knew nothing about this beach sand or of planting trees". The M... family gained permission from the Tribal Authority to contest the removal and eventually an agreement was reached that community members could stay if they planted trees in the area. "After some time we received a box with a Pietermaritzburg registration. It was just a small-small. It was delivered by the whites that came here before. When we opened it there were the seeds but we didn't know how to plant them". Many neighbours then left but her husband planted more than 50 hectares to trees after being given seed for gum and pine. Most of this land was previously grazing land. Under tribal law this land was then allocated to his household. The family was taught to plant trees by a local farmer who had previously on white farms. By the early 60s it was time to harvest the trees but no-one knew where to take them. The only mill at that time was the SAPPI mill at Mandini. They approached a forester at Eteza Station who was working for Waterton Forests and he agreed to help them. They were surprised to find their trees were valuable. At that time they were paid R8 per load. In the 1970's the Sokhulu magistrate advised people to plant more trees to reclaim the swampy areas. They continued living in the area with no problems until the local Induna died and was replaced by his son. The son had been living in Swaziland and did not know the history of the area. He was apparently jealous of the large land holding that the M. family had. Even so, problems only started after Mr M... died in 1981. Mrs M... believes that the Induna has caused problems for many families but particularly those who are headed by women. He gave away a lot of her land although she still have about 35 hectares. In the early 90s her family was accused of supporting the ANC. This was not true, in fact she had been a strong member of the IFP for 8 years. It was purely an excuse to try to drive her family from the area. In 1993 both her two sons were killed in the violence that swept through the area. Her husband's brother fled to Mandini where he was working, and is still living there today although she looks after a 5 hectare forest for him. She also had to leave and was helped to return through certain lawyers. Subsequently it was found that these lawyers were commissioned by the ANC but she was not aware of that. The Induna has subsequently attacked her himself but his gun did not fire. This year he set fire to her pine plantation (about 2 hectares). She has taken alternative measures to protect herself (*muti*) but is scared to be alone now. All that is left of her family are her two daughters and seven grand children.

Mrs M... is now a pensioner. Her daughters are unemployed and receive no maintenance income. Her husband's brother sometimes helps out with cash. They plant about two hectares of madumbes in the swamp close to their house together with some vegetables and a half a hectare of maize. Some income is gained from sale of madumbes but most of the money comes from trees. The family does all operations (planting, weeding, felling, stacking and marking) unless their chainsaw is broken. In that case they hire a contractor to fell at R200 per truckload. If they provide their own petrol and oil he charges R150 per load. They pay R260 per truck (10 tonne) to Mbonambi weigh-bridge. The trees were initially registered as Mr M... but after his death she took ownership. She now takes all decisions over the trees. Money is used for household expenses only. Two chainsaws were bought some time ago. Although she could probably afford to now buy a second hand tractor it would not help as she has no one to drive it. She also buys other peoples forests from time to time and takes charge of transporting them to the depot.

She is considering joining one of the small grower schemes because there are rumours that the local weigh bridge will stop taking non-contracted timber. She first approached Mondi although people say that the loan repayments are very high because of the interest. However, it is rumoured that the Mondi foresters at the weigh bridge are encouraging people to join the SAPPI schemes because they are tired of people defaulting on their loans. The Induna also refused to sign the permit necessary for her to join the scheme. She has therefore approached SAPPI to join as a member.

Recently the area has been heavily planted to trees and the community have noticed that the pans have dried up. The result has been that many livestock have died from lack of water and grazing. (*Independent grower, Mbonambi*)

3.3 Incentives and disincentives for joining the schemes (household level)

Quantitative studies of small grower timber schemes suggest the following reasons why new timber growers join the schemes (Cairns, 1993; Cellier, 1994; Othusitse, 1997):

Major incentive (80% - 90% of respondents)

- to obtain cash income at harvest - trees seen as a form of savings (some respondents mentioned that trees are better than cattle in this regard)

Minor incentives (up to 5% of respondents)

- To obtain the annual payments
- To obtain fuel and sell wood to neighbours.
- To secure their rights over unutilized land.
- Ease of management compared with food crops.
- Reliability of yield.
- Persuaded by an extension officer or neighbours.
- Land was not suitable for other crops.

Although reason for growing trees to secure tenure - is a minor incentive in terms of frequency (estimated by Cellier at 5% of respondents), it has a major impact of the livelihoods of the relevant households. Under the communal system of land tenure, a field remains allotted to its original user unless it is unutilized for a considerable period of time. A household's right to unutilized land may become weakened when the male household head dies. This must be understood in the context of the strongly patriarchal settlement patterns that exist in KwaZulu. The husband's family may lay claim on unutilized land. In these situations, the schemes are godsend for widows, harassed on the one hand by unsympathetic indunas who wish to reallocate their land, and on the other unable to find household resources to plant every year or maintain more intensive perennial crops such as sugar (see also *Box 5.1*).

Box 3.4 First Project Grow member at Ingodweni

Mrs M... 's husband was interested in planting trees ever since he worked on a farm in Vryheid. He started picking up seedlings and planting around the home long before the SAPPI scheme, but in a very haphazard way. He died in 1973. The SAPPI forester introduced the scheme at a Tribal Authority meeting and Mrs. M. introduced herself to him at a school meeting. She joined to try to earn money for her family, they had no other source of income. The SAPPI forester's main point was they should not use land where they plant food. They should use steep areas only. Mrs. M... was the first to plant in the Ingodweni area. She started an association of six other women. They had to get forms signed by the Inkosi and he agreed but stressed they must only plant on their own property. Their association boomed. Only women were allowed to join because they do not trust men with money. Her first planting was 25 000 plants and the second was 37 000 plants (about 3 hectares in all). They believe that many contractors are dishonest. Truck drivers are generally suspected of off-loading small-grower timber on the way to the depot. The association planned to get their own transport for their timber, but violence in 1993 disturbed their plans. Mrs. M... 's house was burnt down in 1996 along with six others. This may have been because of jealousy (she has bought all her furniture, a stove and a fridge from profits), but there is a long faction fight in the area. Her son has battled to get a job. "I bought him a chain saw and he is harvesting for people right now". (*1st Project Grow grower in Ingodweni area*)

The quantitative studies found that disincentives were (in order of importance):

Major disincentive (80% to 90% of respondents)

- small landholdings

Minor disincentives (up to 5 % of respondents)

- people wanted to see the real profits from trees before they committed themselves;
- the long growing cycle;
- fear of cattle damage;
- preference for other crops (sugar, vegetables, fruit trees)
- lack of household labour (too busy with other crops or too old to plant);
- fear of jealousy among neighbours;
- concern for what would happen to the market if the timber companies no longer needed trees;
- suspicion of timber companies motives (stealing land);
- concern about the inability to change once trees are established.

Box 3.5 Non-grower at Esikhaweni

Mrs M. came to Esikhaweni in 1990 from Matubatuba to live with her husband. He was born in Esikhaweni. They have a small piece of land where they plant maize and madumbes. Mrs. M. works with a group of five other ladies to plant and weed other peoples' forests. They have no land to plant trees themselves. Her husband is no longer working. He used to work for Unitrans. He now fells woodlots. He charges R50 to make a truck load (10 ton). He does not own a chainsaw yet. The forest owners provide the equipment. (*non-grower and part time contractor, Esikhaweni area*)

Interviews with previously independent growers who have recently joined the schemes indicated four reasons for joining. These are (in order of importance):

- Quota allocations favour members of the schemes. Independent growers have now joined in an attempt to get a market for their timber.
- The schemes provide access to better inputs including improved varieties of eucalyptus that they are unable to get elsewhere.
- Certain varieties of eucalyptus (*E. maculata*, *E. paniculata*) that were given out by the KDAF are no longer accepted at the mills. Independent growers join to get acceptable varieties.
- They were now old and needed to employ others to do the work. The contractors that Mondi provided enabled them to continue maintaining their woodlots.

Box 3.6 Former independent grower who joined Khulanathi

"I used to grow my own trees. We joined the scheme when we were told that our trees break the machines in the mills. We cannot harvest at any time now because we don't know when this place will open. It happens that it opens for about a week or more. It depends on how many tons Mondi needs." (*Khulanathi grower, Sokhulu area*)

3.3.1 Grower and non-grower characteristics

A factor analysis of growers' characteristics among 62 growers from all schemes and 30 non-growers, suggested two broad categories of households who were likely to join the schemes (Cairns, 1993). The first group had large land holdings. This group also tended to be wealthy in traditional ways, having large land holdings with the land and labour resources to produce cash crops such as cotton or sugar in the coastal areas. They usually had relatively larger cattle herds and were likely to have resided for a long time in the area. However, the family normally had no formal source of cash income and there was a large ratio of unemployed adults at home. The household head might have been involved in some local business and he was usually not a pensioner.

The second group of participants were mainly pensioners. Their characteristics included long residence in the area but smaller land holdings than the first group. The head was unlikely to be formally employed or to own a local business but was more likely to be a member of the Tribal Authority.

Non-growers characteristics were correlated most strongly with small land holdings, Other characteristics included a recent move into the area, with non-local formal employment of the household head.

Table 3.1 shows the breakdown of livelihood sources of respondents for this report. Although the number of respondents was very small (40 interviews), the table does indicate that households from all vulnerability classes are able to join the schemes. (Note that the definition of vulnerability in this case does not include the *size of land holding* which does have an effect on entry). There appears to be no particular leaning toward marginal or vulnerable households among growers. On the other hand, weeding and firebreak contractors and chainsaw operators appear to come from highly vulnerable households, while the transport contractors interviewed all had formal wage earners in their households. All households interviewed grew food crops.

Table 3.1 Sources of livelihoods of respondents

Type of livelihood source*	Marginal	Vulnerable sources		Semi vulnerable	Reliable sources
	Agriculture or non-farm petty commodity	Unreliable remittance +agric	Pension or state welfare + agric	Two or more vulnerable sources + agric	Wage labour or reliable remittance
Contracted growers	4	3	5	1	5
Non-contracted growers	0	1	1	1	1
Weeding and firebreak	2	0	0	0	0
Chainsaw contractors	3	0	1	0	0
Transport contractors	0	0	0	0	3
Percentage total	34%	14%	24%	7%	28%

- **Notes on Table 3.1:** These vulnerability classes have been taken from May's 1998 study of livelihoods in KwaZulu-Natal. Where there is a mix of sources of income or where the main income is derived from formal wage employment (25% of households in KwaZulu-Natal), livelihoods are less vulnerable. However, many households rely solely on welfare payments (7%) or unreliable remittances (12%) for income. Even more vulnerable are those who have no access to formal sector opportunities, or state welfare and rely solely on agriculture and non-farm petty commodity production (about 1%).

3.4 Incentives and disincentives at the community level

In a few cases, communities have entered into contracts with timber companies via block plantings owned by Tribal Authorities. These are only possible in areas of relatively low population density, where large tracts of grazing land have not been allocated to specific households.

The major incentives to the community are:

- the possibility of large scale earnings which could be used for development projects;
- job creation in isolated areas;
- the economies of scale in establishment and maintenance of a large plantation.

However, Mondi has found block plantings to be problematic in the past. Major disincentives are (see also *Section 7.2.1*):

- lack of organisational capacity - no one takes responsibility of ownership, in regard to protecting the forest from fire and stock, weeding and maintenance, and communities are unsure how will benefits be disbursed;
- the opportunity cost to surrounding pastoralists in relinquishing large tracts of grazing land to forestry;
- the opportunity cost to youth in relinquishing land for future households.

Box 3.7 History of a block planting controlled by a Tribal Authority

In 1990, Inkosi ... planted 155 hectares to eucalyptus under the Khulanathi scheme. The forest was registered in the name of his Tribal Authority. In 1993 a fire swept through the area but the trees coppiced and recovered well. According to the Mondi forester, people in the area were never interested in weeding or fire protection. In 1999 'A..' contractors from Vryheid approached the Inkosi and offered R250 000 for the trees. The Inkosi maintains that Mondi was informed of the sale but the forester had lost interest in the trees since the fire. Mondi denies having been notified. 'A..' contractors deposited R70 000 into the T/A account and then harvested the trees. Nothing further has been paid. Mondi took a decision to write off the R200 000 loan on the forest. A conservative estimate of the standing value of the forest at time of harvest is R2.1 million. (*Account by Tribal Authority Member and Mondi Forester*)

3.5 Summary (reasons for joining)

The presence of independent growers since the early 1960s, in areas of high potential, close to the mills indicates that small growers can operate with little or no financial or technical support from timber companies. Independent growers join the schemes to secure markets under the quota system, rather than to get loans and inputs. This is significant because it indicates that small grower production would not necessarily collapse if the schemes were withdrawn.

New growers join the schemes to obtain cash at harvest. Trees are thus seen as a form of savings for some bulk expense (building, education, pension supplement). A small number of new growers (possibly 5%) join as a means of securing tenure. This is particularly important for widows whose rights to land become insecure after the death of their husbands.

The schemes appear to have allowed entry by a wider range of vulnerability classes. Even very marginal households can join because advance payments do allow labour deficient and very poor households to use small scale planting and weeding contractors. The exception is those households who do not have sufficient land holdings. These may be youth who have moved away from their parents small-holdings or newcomers to an area. The schemes may have a highly detrimental effect on these households since they effectively lock up previously unutilized land for an indefinite time.

4. HOW THE CONTRACTS WORK

4.1 Introduction

The contract lies at the heart of the grower – company partnership. The terms of contract determine:

- the power relations between grower and company – which affects the growers' ability to transform the **structures and processes** governing access to livelihood **assets** (*Section 1.2*); and
- the distribution of risk - which affects the **vulnerability context** of household livelihoods.

4.2 Overview of how the contracts work (Project Grow and Khulanathi contracts)

The following steps describe how growers join and participate in the SAPPI and Mondi schemes (Cellier, 1994; Boake & van Loggerenberg, 2000, *pers. comm.*):

- A potential grower approaches an extension forester to request to join. The forester accompanies the farmer to see if the site is suitable in terms of general geographic location, soil, rainfall, slope and size of land, and conservation status of vegetation to be disturbed. Initially, Mondi set a lower limit of 1000 spots (tree plantings) which means the site must be at least 0,6 hectares. By 1992, Mondi had lowered this figure to 500 spots;
- Each farmer must have the approval of the local Induna and the Inkosi before any work can take place. This is mainly to ensure that farmers do not plant on land allocated to other households. The local government Agricultural Officer is also notified;
- Application is then made to DWAF for permission to plant. Blanket community permits based on quaternary catchment information have recently been approved;
- The forester then explains the operations that need to be done on each particular site and the correct timing for each operation. A contract is then signed by the grower and the company;
- The contract makes provision for an advance to be paid by the company to the grower after he or she successfully completes each operation (these operations and the accompanying tariffs are shown in Appendix 2). In the Mondi scheme the grower is free to keep this money, hire local people to do the work, or have the company arrange for a local contractor. SAPPI discourages the use of planting contractors;
- Normally, growers only carry out a subset of operations, which includes marking, ploughing, pitting, planting, fertilizing, weeding and fire protection. Certain fertilizer applications (such as Agrofert) are very expensive and only rarely applied in troublesome areas;
- The money paid out to the grower for each operation is essentially a loan advanced against the value of the final product. SAPPI provides interest free loans, Mondi charges 10% simple interest. Amounts advanced are deducted from the final payment, made out to the grower at the time of harvest. The companies provide extension free of charge and fertilizer and other chemicals at bulk cost price. SAPPI provides free seedlings. Mondi promotes the use of clones. These are considerably more expensive, but Mondi believes that the cost is justified through the growth rates that can be achieved. Mondi subsidizes the cost of clones by about R170 per 1000 trees;
- It is also possible for the grower to take an additional annual advance against the final value of the crop.

4.3 Development of the SAPPI Grow / Lima contract

The SAPPI Grow contract was developed in 1982 by Mr. John Feely (now of SAWGU), drawing from individuals' experiences in the Cane Growers Association and the Financial Aid Fund (FAF). SAPPI also approached a retired magistrate living in Eshowe (Mr. Niels Otte) who was known and trusted by the rural community to review the contract and promote the scheme. Timber was not a widely known crop and there were no small grower associations that could comment on the terms. A pressing issue was to overcome the cash flow problem during the 6-8 year growing period and to this end, the contract introduced the element of maintenance payments and firebreak protection. Advance payments were loosely based on a land rental price⁸ (Feely, 2000, *pers. comm.*).

The most significant change in the terms of contract was the introduction of a clause giving SAPPI rights to the first coppice. This was to protect the firm's investment in the case of fire damage – to enable recovery of the loan from the coppice crop (van Loggerenberg, 2000, *pers. comm.*).

SAPPI has made some enquiry's regarding life and fire insurance's on their loans. They have also approached the minister of forestry for assistance with insurance, equipment, vehicles and watchtowers in Project Grow areas. They are awaiting his reply.

4.4 Development of the Khulanathi contract

The Khulanathi contract evolved from a prototype contract between the Nata! Tanning Extract (NTE) and small growers in the Biyela area in a project set up by the Institute of Natural Resources (INR). The main policy making body of the project was the Steering Committee, consisting of (all men) from NTE, INR and the KwaZulu Department of Agriculture and Forestry (KDAF). The project proposal was put to a mass meeting attended by aspirant growers and the Biyela Tribal Authority. The broad framework for the contract was discussed at Steering Committee level and thereafter NTE's lawyers formalized it. The Zulu version was translated from English legalese and was not adequately understood by growers (Friedman, 1991).

The contract came under the scrutiny of the INR and the CLC which were both affiliated to the University of Natal. The CLC and other observers, raised criticism that the contract was drawn up by lawyers who were hired by the company to protect its best interests and that growers had no say in determining the terms of contract (Cellier, 1994: 40). Some specific issues raised by outside observers and growers were:

- Mondi retained first rights to coppice. This clause was disturbing since produce from woodlots then remained legally under control of the mills for more than 20 years, preventing recirculation of raw materials within the community and the possible development of local employment opportunities (Cairns, 1993: 49);
- there was no clause to cover inheritance rights over woodlots (Cellier, 1994: 40);
- advance payments did not adequately cover the cost of hired labour in cases where households were unable to maintain their own forests (Cairns, 1993: 36).

Mondi did not agree with some of the CLC findings, in particular that a negotiated contract was the basis for a working relationship based on trust. They argued that growers were not sufficiently organized to propose a new contract but that their grower committees could provide a forum to discuss changes in the contract. However, the

8 While payments were based on land rental rates, SAPPI always discouraged the concept of rental among growers and the scheme does not promote the services of contractors (particularly large scale) in planting and maintenance

clause on retaining rights to coppice was removed and a clause on inheritance was included following a study by the CLC that was commissioned by Mondi. Instead of allocating more money to operations, Mondi now trains and brokers small-scale local contractors to carry out certain operations at reasonable prices, where family labour is insufficient.

4.5 Analysis of the terms of contract

4.5.1 Differences between Project Grow and Khulanathi contracts

Differing company motives have manifested in certain features of the contracts.

Table 4.1 Differences between Project Grow and Khulanathi

Feature	SAPPI Project Grow	Mondi Khulanathi	Implications
Stated company motive for involvement	Social responsibility	Business venture	Project Grow tends to be more <i>laissez faire</i> , Khulanathi more interventionist (via small contractors)
Interest	Interest is not charged on loans.	Simple interest is charged on the loans at 10% per annum.	Interest buildup leads to alarm among Khulanathi growers. In consequence some growers fell early to repay loans.
Input level	Inputs are applied at low levels. Seedlings are provided free of charge. Growers are encouraged to use more marginal lands for trees, leaving arable lands for subsistence crops	Mondi promotes higher levels of inputs, especially in the high potential coastal areas. Mondi prefers to distribute higher yielding clones (which are purchased by the grower at a subsidized rate). Intensive land preparation and higher levels of fertilizer are recommended. Growers are encouraged to use best sites – chosen to maximize mean annual increase (MAI)	Khulanathi growers should achieve higher yields (records are not available). If maintenance operations are not carried out properly, yields may not be realized, resulting in lower overall net profits. There is a higher opportunity cost for growing trees among Khulanathi – high potential lands are used and household food security may suffer.
Marketing	The scheme has largely been promoted by word of mouth among grower communities	The schemes have been aggressively marketed through Tribal Authority meetings and extension officers	Suspicious of Mondi motives have been evident in areas where the schemes are new. Khulanathi membership has increased at a higher rate

While SAPPI keeps detailed computer records of grower yields, Mondi does not. It would be in growers interests if comprehensive analysis of the distribution of gross profits, under varying input intensity, site characteristics and distances from mills could be made

using data from both companies. This would determine the viability of recommendations, such as the practice of promoting trees on best sites.

4.5.2 Contributions by grower associations

Both SAPPI and Mondi have set up grower associations in the areas where they operate. They function mainly to facilitate administration of the schemes (co-ordinate meetings and training days). In some cases they may distribute advance payment cheques and recently they have assisted companies to allocate the small-growers' quota among members and non-members.

These groups operate independently in their geographical regions:

- they are not organized under an umbrella association either within or across schemes and;
- they are not integrated with commercial associations such as SATGA.

As yet the associations groups have not been powerful enough to negotiate for better terms of contract.

4.5.3 Distribution of risk

Contract farming theory indicates that while most of the risk of production is delegated to out-growers, and the risk of marketing to the firm, each may share in the other through the terms of contract. Important variables are the size of loans, ways taken to protect the harvest, action against defaulters, budget for overhead costs of the schemes, and guarantees of purchase (price and proportion of harvest).

The size of the loan indicates the company's willingness to retain a portion of the production risk. The company can lose this money in two ways:

- when a grower is unable to recover the value of the loan from harvest. Normally this occurs under unforeseen circumstances (death of owner), natural production hazards (drought) or when the crop is inadequately protected (in the case of trees, damage is usually caused by fire or stock rather than disease).
- when a grower deliberately defaults on repayment.

On average SAPPI and Mondi appear to advance similar amounts at about R3000 per hectare over the growing period. These advances represent about 16% of the expected gross value of the trees at harvest (using the SAPPI expected MAI of 22t/ha/yr).

Protecting the harvest. It is in the company's interest to manipulate the proportions of the advances to ensure that adequate attention is paid to firebreaks and weeding. **Annexure 1** shows the relative payments per hectare to reduce fire risk. There appears to be no significant difference between the two schemes. Neither company offers life or fire insurance to growers.

Action against defaulters. Neither SAPPI or Mondi have taken action against defaulters because of the legal costs of recovering small amounts of money and the damage to the image of their schemes. They have relied instead on two mechanisms to recover their loans:

- they have a relative monopoly of markets in the region. The only contender is the CTC chipping plant at Richards Bay which has historically sets the price for timber in the region (*Section 2.1.3*). Small growers can access CTC by arranging their own small-scale transport contractors. However, SAPPI and Mondi have

recently concentrated extension efforts on organizing cheap and efficient transport to their mills (Section 6.2.3) which may outweigh the price advantage at CTC.

- companies rely on perceived benefits to growers to remain in the schemes after harvesting.

Where ownership of forests is not clearly defined (either because of inter-household gender issues, or on block plantings "owned" by Tribal Authorities), these mechanisms do not always work. A significant defaulter has been a case of a Tribal Authority that refused to pay back R200 000 in loan advances after selling their forest to independent contractors. The contractors paid out less than the value of the loan itself (Box 3.7).

Overall, defaulting on loans, either because of crop failure or deliberate non-payment has been small, at about 5%.

Guarantees of purchase. Contract farming theory indicates that firms usually take on the risk of marketing by setting purchase prices and purchase volumes in the contract. In the case of SAPPI and Mondi, the firms appeared to have defaulted on this responsibility.

- *Purchase Prices* - SAPPI specifies that the grower will be paid the price at the "local market price" at the time of felling for the type and quality of the timber delivered. Since the local market price referred to is the Mandini mill price, there is no risk for the firm attached to this clause (unless growers were to contest the definition of the word "local"). The Mondi contract specifies that all timber must be sold by the grower to the Mondi mill and that the mill will purchase at the ruling pulpwood prices.
- *Purchase volumes* - Both contracts imply that the mills will purchase all the timber delivered, but the terms do not obligate the mills to do so.

4.5.4 Comparison with the SAWGU contract

SAWGU was fortunate to have relatively well established grower associations at the onset of their small-grower support programme. Their contract has some unique elements that emerged from the negotiation process which function to protect the financial and labour investments of both growers and the Union. These were:

- up to two thirds of the total advance payments may be drawn to purchase barbed wire for fencing the woodlots against cattle (poles and labour costs must be provided by the grower);
- since wattle thinnings provide some income, no interim payments are made beyond the first year and there is a clause to allow for the early repayment of the loan from deductions from income earned in older woodlots (this clause was introduced by growers who were alarmed at interest build up on loans);
- there is provision for group life and fire insurance for growers.

Growers also requested assistance in securing title deeds for their woodlots to further protect their investments. To date SAWGU has been unsuccessful in cutting through the legal issues around land ownership in communal areas.

Apart from these features, and the fact that interest is charged at 8% (simple) on loans, the contract does not differ much from Project Grow⁹. Like SAPPI, SAWGU also prefers not to intervene heavily in operations and loans are usually not given to households who cannot do the work themselves.

⁹

The SAWGU small growers' manager Mr. John Feely also developed the SAPPI contract.

4.6 Summary (how the contracts work)

With small growers still producing less than 5% of the pulp mills' throughput, and with grower associations as yet, isolated from each other and from commercial grower structures, it is evident that the balance of power is heavily in favour of the companies. This balance is at times regulated by the companies themselves (for example, Mondi commissioned the CLC to comment on their contract) but this does not guarantee favourable terms for small growers.

It appears that the companies do take on some of the risks of production since they do not act against defaulters. Mondi probably takes slightly more risk than SAPPI because they encourage higher levels of inputs and advance larger loans per hectare. The terms do not appear to obligate the companies to purchase the timber.

Growers risks may be measured in terms of the opportunity costs of their land and labour. The SAWGU comparison shows that where terms have been negotiated with strong associations, growers place great emphasis on protecting their investments (fencing, fire and life insurance), and prefer to reduce the burden of interest on loans as soon as possible.

5. WHAT IS THE ECONOMIC IMPACT OF GROWING TREES FOR THE OUTGROWER

5.1 Introduction

Rural livelihoods in rural KwaZulu-Natal are derived from a number of sources. Microstudies indicate that state pensions provide as much as 50% of household incomes with migrants' remittances providing the providing most (20%) of the remainder. Agriculture only contributes about 16% and informal employment and home industries about 13% of household income. Local employment or businesses provide a very small source (0.5%). (Ardington, 1995).

The above figures are misleading if taken to describe an "average" household. In practice "households choose between and combine these activities into a strategy through which they hope to generate an adequate income" (May, 1998).

An attempt is made in this section to answer two questions:

- what contributions do the outgrower schemes make to overall household income? - the question is important because it indicates whether the schemes are significant in reducing **vulnerability** of grower livelihoods;
- how do schemes compete for household resources? - the question attempts to analyze some of the opportunity costs of the schemes and how they contribute to or deplete land and labour available to households. These resources constitute some of the **human and natural capital assets** with which households build their livelihoods.

5.2 Contribution to overall household income

Income and expenditure studies in KwaZulu indicate that the majority of rural households have an expenditure of less than R12000 per annum. Using a 'poverty line' of R750 per month, about 44% of rural households have livelihood strategies that are insufficient to prevent household members living in poverty (May, 1988). Micro-studies which include income from subsistence agriculture (maize, vegetables, poultry) indicate that average household incomes may be higher, in the region of R18 000 to R29 000 per annum (Ardington, 1995).

The Mondi Woodlots Manager believes that average net profit is about R8 912 per hectare over 6-8 years (Table 5.1) but net profits of over R16 000 per hectare are possible (see *Box 4.1*). As average woodlot sizes are 0.8 hectares (Lima), 1,5 hectares (Mondi), and 2,7 hectares (SAPPI), that average net profits could range from R7 000 to R24 000 per grower. The commercial woodlots could thus contribute R1100 to R4 000 per annum or 12% to 45% of annual household income taken at the 'poverty line'.

It must be noted that most households do not have access to significantly larger portions of land for trees. Thus while the schemes do contribute to household income, they do not take households out of poverty. "Contract farming generates an elite in a very flat pyramid. Whether it is in fact a path of development which will allow commercializing producers to emerge – that is to establish themselves as commercial producers – depends on whether it breaks free from its present narrow constraints" (Marcus, Undated: 27).

Box 5.1 Khulanathi 'Grower of the Year 1996'

The Z... family has lived in the Port Durnford area for many years. In 1992 two brothers of Mrs. Z... planted woodlots under the Khulanathi scheme. She then told her husband about the scheme. Her husband was working in Pinetown (near Durban). He went to see the forester at Esikhaweni who explained the terms of contract. It was easy for them to understand the system because they had grown sugar cane for many years. Since their family lived close to the indigenous coastal forests of Mtunzini their sugar was constantly damaged by wild pigs so they decided to try trees. In 1993 her husband planted 2.1 hectares. A local tractor was hired from a sugar farmer by Mondi to prepare the soil (R2000 to plough and disk for 2 hectares). The husband originally employed his wife, 3 daughters and neighbour's wife to weed the woodlot and paid them R10 per day to work in the land. His daughters later refused to work, since they wanted to be paid directly by Mondi, but his wife and neighbour continued. In 1996 they were awarded Khulanathi Best Grower of the region for the quality of their woodlot and firebreaks.

In 1994 her husband died. The family has still not received pension from his employee because his ID book did not match his name and surname. She is still negotiating with the Department of Home Affairs to issue a new ID from her husband's old reference book (*dompas*). In the mean time his bank account has been frozen.

After her husband's death the forest was registered in her name. She feared that her husband's family would take back a portion of her land. In order to strengthen her claim on the land she planted two new woodlots of 0,8 hectare each in 1997. She used Mondi contractors for everything. The contractors consisted of 10 women who worked for 2 weeks.

The first forest (2.1 hectares) was harvested in 1999. The total income from the forest was R52 483 (Mondi records) from 40 truck loads (372 tons). The Mondi loan repayment was R5185 and the contractor cost was about R15 600 to fell and take the load to the Esikhaweni depot (R42/t to fell, stack, mark, and transport about 15 km). She was paid R141 per tonne at the weighbridge. She therefore cleared R32 000 as profit.

She had no such expectation. The largest sum of money she had ever seen was a gift of R500 from her husband. She had been expecting about R1000 from the trees. She is using the money for household maintenance. She has 1 hectare of sugar from which is obtained 1 trailer load per year (poor soil, wild pigs). They also grow some maize and fruit trees. The family has no other income until the husband's death certificate and pension is sorted out. (*Khulanathi grower, Port Durnford*)

Table 5.1 Average financial benefit from woodlots (pers. comm. Boake, 2000)

Assumptions			
Yield (SAPPI average)	133 ton/ha	Indirect Costs	
Local depot price	R140/t	Tractor water	R418
Harvest & short haulage	R45/t	Clones	R450
		Fertilizer	<u>R144</u>
Establishment costs 1 st yr			R1012
Direct Costs		Maintenance costs 2 nd yr	
Ploughing	R562	Hoe rows	R81
Mark Pit	R22	Advance	R73
Planting	R53	Fire protection	<u>R55</u>
Blanking	R43		R209
Manual water	R33	Maintenance costs 3-5 th yr	
Weeding (x2)	R81	Fire protection	R55
Advance	R74	Advance	<u>R73</u>
Fertilizing	R36		R128
Fire protection	<u>R55</u>	Interest over 6 years	
	R959	10% p.a. (simple)	R1415
Calculation of net profit			Per Hectare
Gross profit (Yield x Depot price)			R18 620
Less average costs incurred			
Establishment costs (direct and indirect)			R1971
2 nd year costs			R209
3 rd – 5 th year costs			R128
Interest			R1415
Harvest & Short haulage (Contractor costs x 108t)			R5985
Net profit			R8912

5.2.1 Factors accounting for success or failure in timber growing

In 1992, a study of 30 households that had harvested trees at Port Durnford and Mandini areas showed a median net profit per hectare of R2124 for the entire growing cycle. However certain farmers had achieved profits of up to R10 000/hectare had been achieved (Cairns, 1993).

Profits were not as high as expected because:

- schemes have been promoted too far from the mills in certain areas;
- trees were often planted on inaccessible land and promises regarding provisions of access roads to the woodlots by the companies, have been broken;
- expectations of profitability were unreasonably high where foresters themselves were ill informed;
- poor site preparation, fire, drought and livestock damage reduced yields;
- private contractors often charged excessive fees to fell and harvest;
- many farmers felled early due to desperate need of cash – felling one year too early may result in more than a 50% decrease in profits.

A comparison of farmers showed that good management resulted in a significant (100%) increase profitability. Management factors were increasing site preparation and weeding, good fire and stock protection, using cheap transport and felling at the recommended time.

Net profits measured among the first Project Grow members to harvest in 1992 were considerably less than incomes now reported by the companies and observed in case studies for this report. Timber companies now pay particular attention to arranging long haulage transportation for growers at reasonable rates. Short haulage costs on the other hand may have increased as more marginal woodlots are harvested. Recent estimates of the distribution of income show higher proportional harvest / short haulage costs and lower long haulage costs. Net profit is proportionately lower but higher in real terms as overall yield is considerably higher (Figure 5.2). Where management is good, yields are comparable to those achieved in corporate plantations.

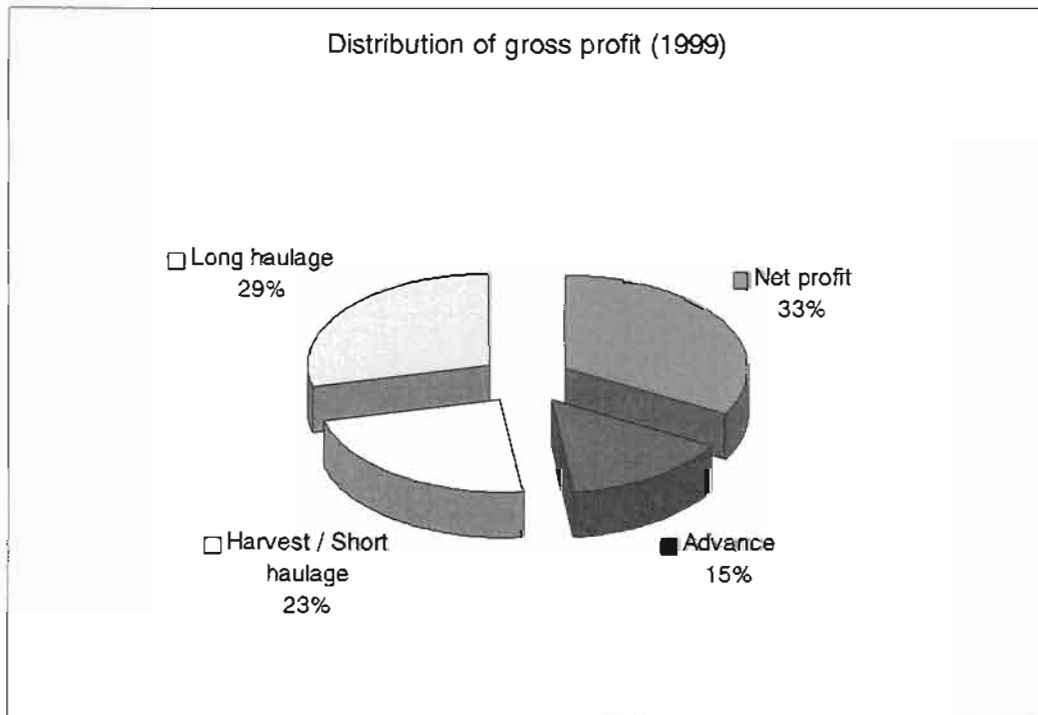


Figure 5.2 Distribution of gross profit (SAPPI GROW, 1999) (van Loggerenberg, *pers. comm.*)

However, where contractors operate outside the normal channels, growers are still inevitably cheated (*Box 3.1*)¹⁰ and net profits are reduced by excessive charges.

The practice of felling early remains a major reason for low net incomes from timber. Woodlots double in value in the last two years of growth, yet many households continue to fell at four or five years. Case studies indicate that this practice occurs when cash is needed for some urgent and unforeseen household expense. A number of Khulanathi growers also reported that they became alarmed at the escalating loan (Mondi charges 10% simple interest on advances). They felled early in order to be free of the loan.

¹⁰ SAWGU has also indicated concern over unscrupulous contractors who pay a fraction of the standing value of wattle in the Nkandla area.

The recent case studies reveal that in certain inland areas there is much anxiety over woodlots that were planted on inaccessible slopes. Access roads have never been built, and some growers have taken the decision to wait and hope that a solution will be found, rather than pay heavy labour costs to extract their timber.

5.2.2 Comparison with independent growers

The author is not aware of any studies on income among independent growers. The following points did emerge from interviews:

- Independent growers tend to have larger plantations, more land was available in the 1960s when most independents started growing trees. It follows that total contributions to household incomes from trees are probably higher among independents than among outgrowers.
- The species used by independents are slower growing than modern clones now propagated, fertilizer weeding inputs may also be lower. Yields are probably considerably lower than those achieved among outgrowers.
- This does not necessarily mean that net profits are lower because input costs are significantly reduced and independent growers often market timber at higher prices via NCT.
- Independents tend to harvest timber when cash is needed, trees may be too young or too old at harvest, however their usefulness does tend to be maximized in this manner.

5.3 Competition for household resources

5.3.1 Competition with food crops for arable land and labour

Studies elsewhere in Africa find that cash crops divert household resources (land, labour, finances) away from food crops (Lele, 1975). Cairns' (1993 :45) study of 80 growers concluded that in the context of the timber schemes this concern "appears at present to be unfounded. Most houses (77%) plant less than 50% of the total land allocation to trees leaving the remainder for food crops. Trees are normally planted on lands previously used for grazing (60% of the area under trees). Where other crops have been replaced, there were normally rational reasons for doing so". These reasons included: unsuitable soils for food crops, soil erosion on steep slopes, frequent stock damage, susceptibility to drought or very poor yields on land previously planted to food crops. However, the study concluded "since 54% of households want to expand their woodlots, diminishing food supplies may become a problem in the future."

Ojwang's study seven years later, also concluded "the initial expectation was that contract farming had replaced other agricultural activities but the findings do not confirm this... Most respondents did not regard timber production as interfering with food production or that there was significant competition for land between the two" (Ojwang, 1999: 63, 64). Ojwang's study and interviews for this report confirmed that in the densely planted areas of Sokhulu, Mbonambi, and Port Durnford, women continue to plant sweet potatoes, *madumbes* and other vegetables in communal gardens near to rivers or swamps. In the inland areas, land around the homestead is still allocated to maize and vegetables.

This apparent contradiction of other outgrower studies is probably due to the nature of the cash crop. It is well documented in social forestry theory that trees serve to diversify the subsistence farming system in a rational manner. In this case, eucalyptus may be planted over an extended period during the rainy season, they require weeding for only two years after planting or coppicing and they regenerate after harvest. Furthermore, firebreaks normally require maintenance during periods of low agricultural activity. They

provide a viable option for households with little labour capacity, or for households to allocate labour with a comparative disadvantage in wage employment (less educated, mothers with young children), to forestry.

5.3.2 Effects on water resources

Rural households normally draw water from streams or boreholes. Case studies to determine effects of afforestation runoff and ground water, showed the following effects on hydrology (Lorentz & Schultze, 1992; Kienzle & Schultze, 1992):

- There would be significant effects of afforestation on runoff in small stream catchments (case study at Ngodweni) especially in areas where stream flow is already highly variable. Stream flow could dry up entirely in the critical dry winter months under different levels of afforestation and catchment characteristics. Problems could be overcome with the construction of a small earth dam.
- Fifty percent afforestation in the coastal areas (case study at Mfekayi) would lower the general water table by two to five metres. Within the plantations themselves, water table would be lowered by 8 metres with an effect on boreholes within 150 metres.

5.3.3 Effects on fuel sources

Unlike social forestry programmes, the commercial woodlots do not serve a multiple resource function. Eucalyptus is not an effective fuel source and the growers are discouraged by the contract from using their trees for firewood. In the Ndundulu area for example, shortage of fuel was actually worsened by the outgrower scheme because the cultivation of trees narrows the natural resource base (Macdonald and Vaughan, 1995). Although the companies do provide free seedlings for firewood but there appears to be a general reluctance among households to use commercial woodlots for fuel purposes. It is estimated that about one third of households who are members of the schemes gather firewood from distant sources (Cairns, 1993). This situation has contributed in part to a description of the plantation development areas as "a lack of firewood in a sea of trees" (Carrere and Lohmann, 1996 cited in Karumbidza, 2000).

5.4 Opportunity costs on other land uses and livelihood activities

While it appears that households do not replace food crops or cash crops with trees unless there are rational reasons for doing so, trees have been planted on arable lands that have the potential for the production of other, possibly more profitable crops. This is particularly disturbing considering the prohibitive costs of destumping once saplings are established in the soil.

The question of potential high value crops is still academic for two reasons:

- Without appropriate overarching policies and support, there are no reasonable cash crop alternatives for small-scale farmers apart from the small grower sugar schemes.
- It is unclear how high value cash crops perform against timber in the light of complex allocations of household resources in small farm systems. Results from one such land-use study indicate that timber is a particularly efficient crop for small-scale farmers in the way it uses domestic resources and substitutes

contractor services for lumpy machinery costs¹¹. (This comparison also did not factor in further economic advantages of institutional support and input supply implicit in the contract farming schemes).

5.5 Summary (economic impacts at the household level)

The schemes appear able to contribute under average management, from 9% to 33% of the income needed for a household to remain above the abject 'poverty line' (R750 per month). However, the schemes cannot alone take households out of poverty because access to land in communal areas is limited. Thus, even if production risks are not taken into account, the livelihoods of outgrower households remain vulnerable.

Management practices (site preparation, weeding, fire and stock protection, felling at the correct time) have been shown to vary considerably among growers, significantly affecting yields and net profits. Growers fell too early in order to obtain cash when needed for urgent situations or when they become alarmed at the build up of interest. Company assistance in arranging contractors at reasonable rates significantly improves net profits. There may be a number of small-growers who have been encouraged to plant in areas with insufficient access roads and now face high costs for short haulage.

As yet, the schemes do not appear to compete with food crops for household resources (land or labour) because trees are generally planted on land unsuitable for food crops and at operations are carried out at times in the year when agricultural activities are minimal. This situation may change as households increase the area under trees.

While outgrower timber has not replaced existing food and cash crops, the schemes do pose an opportunity cost for *potential* high-value cash crops, considering in particular the costs of destumping. This cost is presently academic - overarching policies and support for crops with comparative advantages are not yet in place in KwaZulu-Natal, and comparative advantages of crops are difficult to assess in small farm systems.

Labour demands may be increased as local water sources are depleted and women must walk further each day to fetch water. Contrary to what might be expected, the schemes do not significantly improve fuel wood availability.

11 In an exercise to measure the Domestic Resource Cost (DRC) of sugar cane, timber, dry beans, and maize in small-holder production in KwaZulu-Natal, timber was found to have the greatest comparative advantage in the efficiency of resource use (Ngqangweni et al, 1998).

6. THE WIDER ECONOMIC IMPACT OF THE SCHEMES IN THE COMMUNITY

6.1 Introduction

Timber outgrower schemes have been charged with bringing both costs and benefits in the wider economic sense. This section describes how schemes contribute (or fall short of contributing to) skills transfer (**human capital**) to contractors who are involved in spin-off opportunities from the outgrower schemes, infrastructure (**physical capital**) and availability of rural credit (**financial capital**) in the areas where they operate. Some development of contractor associations (**social capital**) is also evident.

6.2 Development of small-scale contractors

The numbers of small contractors that have emerged are relatively small compared with the number of growers. "Small grower timber projects have less potential than sugar cane projects to support linked, income generating activities in contracting and haulage. While contractors have emerged, the nature of the work is too sporadic, and the payment rates set by companies are too low to achieve sustainable employment or economic linkages" (Vaughan 1996:40).

SAPPI and Mondi scheme managers estimate that there are about 60 planting and weeding contractors (in 6 groups), 70 chainsaw operators and 40 short haulage transporters operating among small growers. In addition, SAPPI uses 4 small-scale long haulage transporters.

A Khulanathi forester who is an ex-high schoolteacher with a diploma in resource management gives elementary training in business management skills to growers and contractors but Mondi does not support contractors in any other way. The SAPPI silviculture manager gives regular on-day courses on business skills, budgeting, tasking labour and use of volume tables. The training has been given on a voluntary basis and is not formalized into the scheme.

The likely sale of SAFCOL forests to Mondi will bring benefits to Khulanathi growers and contractors in neighbouring areas. The Nyalazi state forest borders on Mfekayi, the Port Durnford forest on Esikhaweni, and Dukuduku forest on Mbonambi. Bids for these forests have been assessed by DWAF on the basis of skills training and contracting partnerships with local people.

6.2.1 Planting contractors

Mondi has set up 6 local planting contractor groups consisting mainly of small groups of women in various areas. They are introduced to prospective growers and contracted to mark, pit, plant and weed land at set rates. Mondi trained and set up these contractors after growers complained that the advances for planting operations were not sufficient to hire local labour.

The contractors work for extremely low wages. Case studies indicate that these women are drawn from very poor households, who do not have sufficient land to plant their own trees (*Table 3.1 & Box 6.1*).

Box 6.1 Case study of a planting contractor

Mrs. S... moved from the Mthethwa to the Port Durnford area with her husband in 1976. They relocated because they both liked the wet areas and good soils. Neither Mrs. S... nor her husband are formally employed. Her husband is crippled but does not receive a disability grant. She has two daughters, one is at school and the other is married. Her family plant maize, sugarcane, madumbes, and various fruit trees (banana, avocado and mango). They do not have any spare land to plant trees. They plant their sugar on a very small field next to a swamp. They are scared that the water will dry up if they plant trees on this land. In her community people have taken a decision to plant sugarcane whenever an old woodlot is destroyed to try to bring back the swamp lands.

Mrs S... was looking for piece jobs when she met the local Mondi forester. He introduced her to a small team of women who were doing planting for Mondi. The leader of the team had attended training on the various operations with Mondi. The ladies then began working together. They were taken to the fields by the Mondi tractor in the early morning. At first there were 15 but 5 left when they saw it was very hard work. The remaining team were usually able to mark and plant 1000 spots in a day (working from 7am to 4pm). Weeding and firebreaks took about half a day for each operation. Money was shared equally. The team leader does not take more than the others. (They were thus able to make about R20 to R25 each per day). These piece jobs were her main source of income and she had no other steady work in the month. Since the permit system was introduced there has been no more work for the team. (*Khulanathi planting and weeding contractor, Port Durnford*)

The planting contractors do enable households with limited labour (for example pensioners or absent migrant workers) to join the schemes as loan advances are sufficient to pay these workers for planting operations. However, field interviews have shown some resentment, and alienation resulting from the use of these contractors (*Box 6.2*). Some growers mistakenly believe that they have to use contractors and are subsequently alarmed at the rapid buildup of their loan balance.

Box 6.2 Former independent grower – complaints about costs

"I started growing trees in 1978. Before 1978 it was just grazing land. I used to work for Safcol which was growing trees for the government. I joined Mondi in 1995. We were told that the mill would not accept our trees, Only the special trees from Mondi would be accepted [*E. maculata* & *E. paniculata*, which were distributed by the KDAF are no longer accepted at the mills]. Mondi did all the work. We were told that is how the system works. I could have done the job myself." (*Khulanathi grower, Sokhulu area*)

6.2.2 Chainsaw operators

A number of growers reinvest profits from woodlots by buying a chainsaw. SAPPI and Mondi estimate that about 70 chainsaw operators (consisting of both growers and non-growers) service the small grower schemes. Independent chainsaw operators earn about R35 per day. Interviews suggest that operators with previous experience in the forestry industry are able to develop and manage larger operations with full teams working under them to harvest and clear. It is possible for such a contractor to earn in the region of R6000 per month after petrol, maintenance and labour costs, providing there is sufficient work (see *Box 6.3*).

At Mfekayi, there is an association of chainsaw contractors which was formed at the suggestion of Mondi in 1998. The association was reported to have solved some problems around allocation of jobs and standardization of rates. However, the main problem for contractors is that the weighbridge closes for part of the year. It has happened for example that trees had been felled but could not be brought to the weighbridge on time because of delays in transport. These were left to rot in the field and the contractor was not paid for the job. Mondi has not solved this type of problem.

Box 6.3 Case study of a chainsaw contractor

Mr. Z... family was originally from St. Lucia but the community was forcefully removed in the 1950's to Nkolokoto. Mr. Z... first wife died leaving 1 boy (now seeking work) and 3 daughters (still schooling at Nkolokoto). Although he has not yet paid *lobola* for his second wife, he has been living with her at Mfekayi since 1995. He has 4 children by his second wife, 1 has died and the other 2 sons and 1 daughter are schooling. He rents a cottage at Nkolokoto at R400 per month for his other children but they are unable to come to Mfekayi as high schools do not accept children from other schools. The food bill for these children is about R500 per month and R500 for his second wife's family. His wife does grow some food crops but he relies on his business for most of the household income. He would like to grow trees but has no land. He has never approached the T/A for land and thinks that he would probably not get any because there is not much open space left in the area. He does not think that being a newcomer to the area would count against him.

Mr. Z... used to work for SAPPI but was retrenched in 1993. With his small pension he was able to buy a chainsaw and begin contracting at Mfekayi. He now employs two men and 8 women at R15/day. He has trained these people himself. He is normally able to find work for 6 weeks out of 8 in Mfekayi and charges R25/t for felling. It takes about a week to fell one hectare. Whenever he finishes a job he reports to the weighbridge and the foresters then direct growers to him. At the end of the day after paying labour, petrol and repairs to the chainsaw, he does not earn much.

There is also some piece work on commercial forests. When working in these areas he employs local people to help.

Mr Z... suggested that Mondi could help contractors in the following ways:

- Provide short term loans (e.g. to fix the chainsaw if it breaks during a job)
- Help training in business skills management
- Help in technical training (personally he doesn't need this, other contractors do need training but he cannot say anything in case they are insulted)

(Khulanathi chainsaw contractor, Mfekayi)

6.2.3 Transport contractors

Both SAPPI and Mondi recognize the importance of recruiting transport operators at reasonable rates for small growers. In the Kwambonambi area, SAPPI makes use of contractors with 15-ton trucks. This size vehicle is still fairly cost efficient for the long haulage to Mandini, especially when coupled with a trailer, but is small enough to be driven into woodlots. Extraction costs are therefore minimized. (SAPPI has adjusted recommended planting spaces to suit the axle length of these trucks). SAPPI used to have a depot at Kwambonambi. This depot supplied the Mondi mill at Richards Bay under exchange agreements. However, a number of costs were incurred in loading and transporting. The mill no longer accepts single differential trucks (15 tonne or less). They also inspect trucks for roadworthiness and do not accept vehicles in poor condition. This

has mitigated against small scale contractors who SAPPI are trying to help. The Kwambonambi depot has therefore been closed. SAPPI pays set rates to contractors.

These are:

Clearing and felling:	R30/t
Transporting:	
Hluhluwe	R57/t
Kwambonambi	R30/t
Mtatubatuba	R38/t
Short haulage:	R20/t
Loading:	R5/t
Separate mining timber:	R6/t

In the Khulanathi areas, associations of transporters carry timber to various weigh-bridges using ten ton trucks. Those approved by Mondi are paid a set rate.

Box 6.4 Case study of a transport contractor

Mr. M... has lived in the Mfekayi area since birth. He has about 9 hectares of sugar and was able to buy a truck in 1990 from profits made from sugar. He also has 0.6 hectares of trees but believes that sugar is more profitable than timber. He used to get A pool prices (R930/t) but with removal of GATT he now gets R840/t for his cane. In the mean time prices of inputs have escalated. His main income is now from trucking.

In 1993, he began trucking timber to Richards Bay. A year later the depot was closed to single differential trucks and he now delivers to the Mfekayi weighbridge. A meeting of truckers and growers was held in 1996 to decide on fixed tariffs. The meeting was called by growers and instigated by the cane farmers among them who are used to paying per ton and not per load. (Mondi was not involved in this meeting). It was agreed that the price would be set at R22 per ton as a blanket fee for all growers at Mfekayi irrespective of their distance from the weigh-bridge. In the beginning there were 6 truckers who agreed to this price but all the others have fallen away. There are many other transport contractors in the area but they prefer sugar. Reasons are escalating prices of diesel, damage to wheels in forests and damage to load beds from the timber. He is trying to negotiate for a higher price. In 1996 he was able to buy a second truck.

He also does some felling in the SAFCOL forests although most of the work is given to the giants of the timber industry. This work occupies about 2 months a year. For this he employs 9 women at R18.50 per day (peeling and marking), 1 man at R35 per day (cutting) and 3 men at R20 per day (loading). He does not fell locally in order to give small-scale contractors a chance. Normally he only employs people with experience in forestry.

He believes that he was able to make the jump to contracting because of his experience in sugar cane. He attended a course in business management at Illovo which enabled him to keep track of income and expenses. Many contractors (especially small-scale chainsaw operators) find that after paying labour expenses, they are left with no profit. Mondi should provide similar courses for people in the timber industry. He also believes that Mondi could help get reduced prices for diesel that some of the larger contractors enjoy. Mondi should also let single differential trucks transport to their mill from the Mfekayi weighbridge, at present the entire contract is given to a white transporter.

(Trucking contractor for Khulanathi growers, Mfekayi area)

The interviews (for example, *Box 6.4*) indicate that transport contractors have emerged from sugar industry and from private businesses. This has occurred through the

accumulation of capital and business skills in these activities. The small-grower timber schemes do not provide sufficient volumes to support full-time local transporters, and as yet there are no formal programme in place to develop the business skills of contractors.

Both SAPPI and Mondi have tended to favour the interests of the grower over that of the transport contractor. The arrangements have prevented exploitation by unscrupulous transporters and considerably improved growers profits but many contractors are unable to meet the required rates.

6.3 Development of infrastructure

Over the last decade, Mondi built depots in the Sokhulu (1990), Esikhaweni (1993), Mbonambi (1995), and Mfekayi (1998) areas to accept timber from small-growers. The main purpose was to cut long haulage costs by bulking small deliveries to local depots onto 30 ton trucks. In 1999, the Richards Bay mill closed access to trucks smaller than eighteen tonnes. Caterpillar loaders operating at the mill have the capacity to lift 10 tons at a time. Small trucks increased offload times and were often damaged by the equipment.

The decision to close the main depot to small-scale contractors was also a strategy to combat timber theft. An estimated R30 million of timber was stolen in 1998, mostly from large commercial plantations. Timber companies attempted to co-ordinate the use of a timber sourcing document for all transport contractors. For small growers in communal areas, this meant that deliveries would have to be signed by Indunas, verifying the source of timber. Khulanathi management believed that local depots could better handle this function.

Local depots have improved general communications with growers. They have become focus points for notices and grower meetings with foresters and are places from which growers access planting, weeding, chainsaw and transport operators. Water is supplied at the depots and many neighbouring households make use of this facility. Local depots also provide an effective means to enforce quotas.

The SAPPI experience with depots has not been so positive. SAPPI built a depot at Kwambonambi in 1995. "We found it was a disaster. People saw it as a dumping area for underage and poor quality timber and demanded access" (SAPPI Forester). It was closed down in 1998.

SAPPI has stopped purchasing spot timber and is actively encouraging non-contracted growers to join their scheme. This costs nothing, sites are inspected to check on the quality of timber. Certain older varieties are not accepted. Regulations are needed to plan procurement. If non-contracted growers deliver large quantities to the mills it impacts across the board for SAPPI growers.

6.4 Provision of rural credit

Since 1987, Mondi has paid out over R12 mil in advances in 13 magisterial areas. This averages at approximately R72 900 per magisterial district per year. In the three areas of most rapid growth (Mfekayi, Sokhulu, and Mbonambi) loan advances average R93 700 per district per year.

SAPPI advances an average of R3000 per grower over the six year cycle. A total of R1,2 mil was paid out in loans in 1999 in the Zululand area and R300 000 in the South Coast area under Lima. In Maputaland which is the present growth point for Project Grow, SAPPI advanced R150 500 to small-growers in 1999 in two magisterial districts. The four main magisterial districts on the South Coast receive about R50 000 each per annum.

6.5 Comparison with areas administered by Lima Rural Development Foundation

Lima has attempted to maximize farmer involvement both in growing and harvesting. In some cases farmers have set up co-operatives to undertake harvesting in an area. Lima has established 30 micro level contractors who work with bow saws and hand tools. Lima advances R300 for the purchase of equipment which is deducted from gross income with no interest. About 15 small-scale contractors (chainsaw operators) have also been assisted to get loans from Ithala. The scheme makes use of 12 long-haulage local contractors.

Lima has constructed seven depots which stock forestry and agricultural inputs. Up to 1998 Lima was also involved in labour-based construction of access and in-field roads. However, since the Department of Forestry was relocated from Agriculture to Water Affairs, applications for funding for road construction are now made to the Department of Transport (DOT). The DOT has prioritized commuters' needs over forestry roads.

6.6 Summary (wider economic impact)

The timber industry has less potential than the sugar industry to create spin-off opportunities for small scale contractors. There are very roughly 60 planting and weeding contractors (in 6 groups), 70 chainsaw operators and 40 short haulage transporters operating among small growers. In addition, SAPPI uses 4 small-scale long haulage transporters. Interviews with contractors indicate:

- Planting and weeding contractors are drawn from very poor households and are paid low wages (R20-R25/day). They do allow labour deficient households (where adult members are pensioners, or migrant workers) to participate in the schemes as advance payments cover the set rates charged by these contractors.
- Chainsaw operators may earn more (R35/day). Some (possibly former employees in forestry) have progressed to form labour teams. These operators may earn R6000 per month above expenses, if there is sufficient work.
- Transport operators organized by SAPPI and Mondi charge reasonable rates to growers, but allegedly struggle to make a profit. Mondi no longer accepts small trucks at their mill depot. This has reduced opportunities for small transporters.
- Transport contractors have emerged mainly from local business and the sugar industry. The timber industry does not appear to allow the necessary skills and capital accumulation.
- Closure of depots due to the quota system has interrupted work and severely impacted on the livelihoods of all contractors.
- Contractors have indicated a need for business skills. These are offered by the sugar industry but no formal training has yet been provided by the timber companies

The schemes are a significant provider of agricultural credit in the areas where they operate. Approximately R1.2 mil is made available by the companies each year.

The schemes have provided some infrastructure in the form of depots. These depots have become a focus point for growers to meet contractors and foresters. The timber industry has been less successful than the sugar industry in raising government money for access and in-field roads. This is partly due to the location of forestry with the Department of Water Affairs.

Spin-off opportunities appear to be maximized in areas administered by Lima (labour-based access roads, agricultural depots and contractor development). This may be the major advantage of sourcing out administration to a professional rural development organization.

7. WHAT IS THE DEVELOPMENT IMPACT AT THE COMMUNITY LEVEL

7.1 Introduction

The outgrower schemes constitute a source both of collective action and conflict in rural areas. Conflict must be seen in the light of underlying tensions around local government¹², elite landholders and gender roles at the household and community level. Mechanisms to promote collective action or to resolve conflict build the **social capital** (membership of groups and networks) of communities.

7.2 Conflict in the community

7.2.1 Recorded cases early in the schemes

Given the history and threat of land dispossession in the area surrounding Richards Bay¹³, it is unsurprising that many in the communities initially suspected the schemes as being a ploy on behalf of the companies to steal their land. For example in 1992 at Mfekayi, it was rumoured that the community would be forced to leave the area once the land became sufficiently valuable under forestry. Others worried that their land would be redistributed to other community members by the Inkosi (who strongly supported the schemes) if they did not plant trees. Suspicion was strongest in areas like Mfekayi where the schemes had been aggressively marketed, rather than relying on promotion by word of mouth.

In the Ndundulu area, women complained that forests had made the area unsafe as they provided refuge for thugs at night. In this area, an ongoing faction fight led to several woodlots being burnt in acts of revenge in the early 1990's.

Other disputes arose over grazing rights and boundary disputes. In the Mandini area, cattle belonging to non-growers had destroyed trees. Non-growers in turn argued that forests had reduced traditional grazing areas, with the result that their agricultural crops were increasingly destroyed by stock. In some areas, stock owners were forced to herd their cattle all year instead of herding only over the traditional maize growing period. Conflict took the form of intimidation of growers and foresters, verbal disputes and arson. In 1992, it is estimated that 10% of growers had experienced deliberate attempts of arson by non-growers and 26% had experienced stock damage.

Conflicts have been particularly severe in areas planted to large blocks under agreements with Tribal Authorities (see also *Section 3.4*). In October 1991 in the Nkandla district, most of a 18 hectare block of trees was destroyed by cattle. The community did

¹² Communities in rural areas within tribal wards are governed locally by traditional leaders under Tribal Authorities (the Chief, his *indunas* who manage sub-wards and councilors), and elected leaders under District Councils. Tribal Authorities exercise limited legislative and executive powers (for example, presiding over customary law and land allocation), and advise government through the Houses and Council of Traditional Leaders. District Councils are responsible for integrated development planning and the delivery of services. Confusion of roles and political affiliations cutting across these institutions, cause tensions in rural areas.

¹³ The history of land dispossession in the area dates to the annexation of Zululand to Natal in 1897. The boundaries of the 'Native Reserves' were initially established by the Zululand Land Commission of 1902/04 whose purpose was to open up parts of Zululand for white settlement. Boundaries fixed at this time entailed a significant loss of land to white farmers and areas set aside for state forests. Tribal Authorities were established in the 50s and 60s (e.g. Mbonambi in 1959 and Sokhulu in 1968) and grouped under the Amangwe Regional Authority, which in turn became an "area" of the KwaZulu Legislative Assembly in 1972. Under the 1975 consolidation plan for KwaZulu, the area was descheduled and excised from KwaZulu. Over the next ten years, the Tribal Authorities opposed severe threat of forced removal.

nothing to prevent this. In this ward, the Inkosi was dying of cancer and had little control over Tribal matters.

In December 1991 a block planting of 273 hectares in the Mbazwana area (under an agreement between the Tribal Authority and Khulanathi) was destroyed by local youths. Khulanathi investigations into the incident found the main reasons to be:

- Unfair land allocation by the Tribal Authorities, which was perceived to favour themselves and their associates;
- A fear among the youth that they would have no land for their own households;
- Lack of communication about the scheme;
- A breakdown in the traditional authority structure;
- Prevailing unrest over boundaries of game reserves (Cellier, 1994).

7.2.2 Conflict over state forests

Conflict over trees has not been limited to the small-grower schemes. There are approximately 4000 ha of former KwaZulu state forests surrounding Richards Bay. In October 1994, an area of approximately 2000 ha of forest situated next to Esikhaweni Township, was stripped by timber thieves. Approximately 1000 people from surrounding areas invaded the forest, barricaded roads, cut timber with chain saws and axes and transported logs to the Mondi Mill and CTC using pick up trucks, lorries and tractors. Many of the thieves were armed.

Oral accounts suggest that circumstances surrounding the looting were:

- pre-election promises from the ANC were not fulfilled regarding return of the forest to the original Tribal Authorities;
- the surrounding community whose loyalties were with the ex-KwaZulu government felt that the trees no longer belonged to their government. (pers. comm. Vukuziphati members, 1995).

More than 300 people were arrested and appeared at Mtunzini court on charges of theft in December 1994. The magistrate decided to release offenders on condition that they form an association that could enter into legal contracts with the state to harvest and transport timber.

These people met on 3 March 1995 at Empangeni to form Vukuziphati - an association with 350 members, mostly from J2 section of Esikhaweni. To date, their attempts to enter into legal contracts with Mondi and SAFCOL have failed.

In the mean time the forest was not maintained in any way. DWAF allocated the forest as "C-Grade" and mining rights were given to Richards Bay Minerals (the soil is rich in titanium).

7.2.3 Resolution of conflict

Interviews for this report indicate that community conflict over woodlots has declined in recent years. An Induna at Esikhaweni reports that cases over fire or stock damage are now seldom brought up and that "community members respect each other". A grower at Mfekayi put it this way "People here used to be suspicious. We didn't know anything about trees and were scared that our land would be stolen but we have grown up now".

This has come about in part because Company efforts in building capacity of grower committees have been successful in improving communications and explaining the

schemes. For example, Khulanathi foresters believed a serious conflict was developing at Mbonambi in 1993, with consequences far greater than the area lost at Mbazwana, but that it was diffused by timeous grower meetings (Cellier, 1994:145).

However, exogenous factors have also contributed to diffusing community conflict. These are:

- Tribal Authorities are well placed to deal with most cases of boundary disputes and compensation for stock damage¹⁴;
- politically instigated violence prevalent in the early 1990's has significantly declined;
- as the first cycle of harvest and payments came about many fears and suspicions were allayed.

7.3 Land demand and the development of an elite class

MacDonald and Vaughan (1995) argue that agribusiness support for commercial crops will not necessarily lead to an increase in the demand for land from those who take up production opportunities. Other factors such as institutional support, adequate infrastructure, and evident returns to labour and investment over the short term influence households' perceptions on the merits of land utilization. Thus, timber outgrower members in the Ndundulu area were found to be similar in their profiles of needs and priorities to households in areas of no cash cropping opportunities, while there was a 100% demand for more land among small sugar cane growers in areas under irrigation.

However, as MacDonald and Vaughan point out, the study sought polarised examples of cane and timber growers. At Ndundulu, growers had not yet harvested their crop, and the area was marginally suited for trees. In areas where growers have harvested there have been substantial increases in the number of new members and in extension in the size of woodlots (van Loggerenberg, Boake, *pers. comm.*).

Although checks do exist through Tribal Authority structures¹⁵ and egalitarian ethics¹⁶, increased demand for land may lead to agglomeration of holdings and the development of an elite class of land "owner" to the detriment of poorer households in the future. The mechanisms for land acquisition are allocations from the Tribal Authority (which sometimes takes away unutilized land from original holders), outright purchase from the original user and share-cropping arrangements (Box 7.1).

¹⁴ Approximately one third of reported cases of community conflict had been successfully resolved by Tribal Authority action (Cairns, 1995).

¹⁵ In the Sokhulu area respondents reported that sale of land rights was strongly discouraged by the Tribal Authority

¹⁶ For example, MacDonald and Vaughan (1995) cite examples where poorer households in a sugar irrigation scheme had been the recipients of small parcels of land.

Box 7.1 Case study of a large land holding

"I originally came from Mtethwa ward Reserve No 5 in 1965. At that time I was working for *UmAfrica* as a sub-editor then as a clerk in the Empangeni courthouse from 1966-1972. In 1972 I resigned and started several businesses. From 1966, over weekends, I began planting seedlings collected from neighbouring forests. It took me five years to finish my first forest (2.4 ha). I sold this forest to a white contractor in 1979 at R7.50 per tonne. I got R1800 for those trees, the timber was taken to Waterton mill. In 1980 I applied to SAPPI (Mandini) for a quota and was given 8 railway truck loads. I then began to transport timber from other peoples' woodlots. In 1985 I joined CTC to increase my quota. Prices were also higher for CTC. CTC gave me further quotas and at one stage I was filling twenty trucks per month. I then bought timber from other farmers and used two of my own tractors to transport the timber to the railway siding. I now own five tractors.

At present CTC gives the highest prices (R171/t) but they do not take all my timber. In 1998 I joined the SAPPI Project Grow scheme because Mandini mill no longer gave quotas for forests that were not registered with their scheme.

I now own 32 hectares from 13 woodlots in Sokhulu but at Manzingwenya I have about 40-50 hectares. I was given 3 fields by the Tribal Authority and bought another 10 fields. In 1986 I paid R800 for two hectares but last year I bought a forest of 2.4 hectares for R21 000. One man was desperate to get married so he sold his field to me for R13 000 to pay lobola. Another man wanted to build a house. Once a field is sold it cannot be claimed back but I do have a share crop arrangement with one grower. I would like to sell my bottlestore now and concentrate full time on forestry." (*Project Grow member*,

7.4 Alternate structures of ownership – comparison with NCT co-operatives

Outgrowing has led to alternative forms of collective action and development. NCT in particular has encouraged grower and contractor co-operatives among independent producers in order to provide sustained harvest throughout the year. At present, these appear to operate inefficiently (*Box 7.2 and 7.3*), labour costs in particular are high. However, co-operatives may become an effective way to widen spin-off benefits of timber to the surrounding communities.

7.4.1 Grower co-operatives

NCT has set up co-operatives in order to cut transport costs and enable small-scale growers to qualify for Class-A membership. One such cooperative operates at Nkandla (*Box 7.2*). At present, the value of timber extracted only covers labour costs which appear to be very high even when inaccessibility of woodlots is taken into account. However, the founding objective of the group was to provide employment for youth in the area and the cooperative pays out about R20 000 per month in salaries. Unfortunately this situation is likely to be non-sustainable as new woodlot owners join with profit motives. The example illustrates the need for capacity building and training before this type of structure can operate successfully.

Box 7.2 NCT grower co-operative

Mr. M. was retrenched from his work in Johannesburg with Schindler lifts and returned home to Nkandla to start a small trading store. When he came home he was particularly concerned about school leavers who were unable to find work at Nkandla or elsewhere. Many of the youth are beginning to turn to crime. There are many wattle woodlots in the area where he lives and farmers used to send bark to Melmoth, but now the timber is only used for firewood and building. (Transport subsidies from Melmoth to the extraction plant in Hermansberg have fallen away). There are external contractors who clear the woodlots from time to time but the community has never really benefited from these people. Through friendship with a transport contractor working in the Melmoth area he learnt that there was good market for wattle in Richards Bay. After several trips to Richards Bay in which he located the depot and NCT office, he registered with NCT and was visited by the NCT extension officer.

After meeting NCT he called a meeting with his neighbours to discuss setting up a timber cooperative. About 18 forest owners have joined as members but the labour force is estimated at 52 workers (mostly youth). There are five members in a management position. The co-operative does not have a legal status but has registered a constitution at the bank. Most of the youth come from families who own trees but do not yet have their own homestead. When the plans were presented to the Inkosi, he also joined the cooperative.

The cooperative has requested an allocation of 11000 tonnes per annum with the NCT depot. In the four months since starting, they have sent 280 tonnes from five woodlots to Richards Bay, but work was curtailed for about two months by heavy rains and the Christmas season. Seven trucks have been booked for the month of March. To date, five woodlots have been cleared. They have been replanted with purchased seedlings and fertilizer has been applied. Off-cuts are left in the woodlots for firewood, fencing and building. Labour is paid at the following rate:

R19/day	strippers
R30/day	clearers, markers, cross-cutters
R50/day	chainsaw operator

Short haulage is done by a local tractor owner at about R180 for 11,4 tonnes (two loads). Transport costs are R45 per ton (long haulage) plus R4,50 per tonne mechanical loading. The cooperative uses 40 ton trucks from Alex Carriers. Trees from the individual forest owners are stacked in separate piles. In the absence of a weigh-bridge, individual tonnage is estimated when filling the truck. These are recorded to calculate forest owners proportional shares. All payments and tonnage's are recorded by the secretary who has a std 9 education. The cooperative makes use of Mr. M.'s telephone.

To date earnings have just matched labour and transport costs. The co-operative has not yet earned a profit to pay the five forest owners whose woodlots have been cleared or the management team who are each meant to be paid R500 per month for administration. While these two interest groups are hopeful that profits will soon be realized, their stated concern is to provide employment for the 52 members. In the mean time they are attempting to make their operations more efficient. The major expense is seen to be short haulage. NCT has agreed to purchase a 2nd hand Ford 6110 tractor and trailer at a cost of about R85 000 which the cooperative will pay off in one year.
(NCT cooperative member, Nkandla)

7.4.2 Contractor cooperatives

NCT has assisted several groups of contractors to combine efforts in order to meet requirements for preferential prices. The case study (Box 7.3) indicates that neither growers nor contractors necessarily benefit from these arrangements. However, present

inefficiencies in operations (such as employing new labour in each ward) do tend to increase employment in the surrounding communities.

Box 7.3 NCT contractor cooperative

N... Forestry Services was started by three men from the Esikhaweni area in November 1999. They are members of the SAPPI Grow scheme and gained experience in forestry from their own eucalypt plantations which are between 7 and 8 hectares in size. The chairman, Mr. N... is also a sugar farmer since retiring from a clerical job. " We joined NCT as timber farmers and contractors and are 2nd category members as we have not yet completed our probation period. Since demand for wattle is high we are able to get our allocation".

They were introduced into the Nkandla area where they are now working, by a local Induna in November last year. People were at first negative and hostile from experiences with previous harvesting contractors. "The induna said to them 'these people have taken the right approach by coming to me first, those other people you never introduced to me.' After that argument nine homesteads approached us with [wattle] forests to sell. But to be honest, we have been captured by these people along the road. It is more viable to use these trees and the transporter agrees quicker to getting involved."

"We ask the owners 'how should we pay you? Most people are ignorant about tonnage. Now some are saying per truck, others just give a blanket amount". Most people ask about R1300 to R1600 per 40 ton truck load. They regard R1900 per load as the cut off point for most forests in the area. Their cooperative uses Alex Carriers who charge R4,50 per ton to load with a mechanical loader and R45 per ton to transport to Richards Bay. NCT helped them source this transport after their local transporter let them down on several occasions. They use a local tractor owner for short haulage (3 km) from site to depot. He charges R150 per load (about 5 tons). They send about 200 tons a month to Richards Bay. Profits are unknown at this stage

The cooperative hires new labour every time they move to a new *isigodi* (induna's subward). They pay R15 per day to start. If a profit is made the workers earn more. Chainsaw operators earn R35 per day. Mr. N...'s partners are both experienced operators but now they train local people from scratch. They presently have 20 men and women working for them and have moved through three *izigodi* since arriving at Nkandla. (NCT contractor cooperative, Nkandla

7.5 Gender relations

Many of the wider development impacts of the schemes are determined by gender relations at the household level (decision making, provision of labour and allocation of benefits) and gender roles in the community (how land is acquired, participation in local government). The gender structure of rural economies may cause severe constraints on out-grower schemes by affecting the control of producers over their labour. Conflicts are known to arise over who bears the cost of production in terms of additional labour, and who shares in the benefits of this production¹⁷.

17

The following discussion draws heavily on Ojwang's (1999) study of gender and contract timber farming among 30 households in the Mfekayi, Sokhulu and Biyela areas.

7.5.1 Women and land ownership.

Traditional Zulu culture prohibits women from obtaining land allocations directly from the Inkosi. User rights are normally acquired through male members. Single mothers, for instance may be allocated land through their parents or brothers. This limits the freedom that women have in controlling their means of production. Since 1994, government has attempted to change customary law relating to marriages. However, it is still highly unusual for a woman to approach the Inkosi directly for land (Ojwang, 1999: 61,62).

Situations of tension appear to arise within a community and a household on the death of a husband. On the one hand, the case studies illustrate that the schemes do provide an effective means for women to entrench existing land rights for her household in the event of claims by her husbands family or by neighbours (see for example Boxes 3.3 & 5.1).

On the other hand, first born sons are expected to take control over the household, effectively giving them control even over their mother's labour. Traditionally sons were expected to be responsible in their decision making and in particular to care for their mothers. As this ideal is abused, widows increasingly claim control over their resources. This causes tensions in the household. (Mondi has attempted to address this problem through a clause on inheritance in the contract).

7.5.2 Contribution to household livelihood

Contract farming is said to replace other agricultural activities and increase labour requirements thus becoming the major source of livelihood in the family. As women are the providers of labour they are most affected. However, Ojwang (1999) found that none of her respondents considered timber growing as their major source of income. More than 90% of the women derived their regular income from selling subsistence crops that they grow alongside timber. "Most of the respondents did not consider benefits from timber as a source of income given the long period that the timber takes to mature... most families counted on the money for big projects like building new houses or buying cars" (Ojwang, 1999:65). Ojwang also found that women preferred to spend income on their families (school fees, husband's medical expenses, lobola for a son, and building a house) while men spent income on themselves (put in bank account, lobola etc).

Case studies for this report indicate that many families have a range of livelihood strategies and timber may contribute a significant safety net to highly vulnerable households (Table 3.1) except those without sufficient access to land. Where net incomes from woodlots are high (perhaps over R20 000), trees may be considered major contributors to income after the first harvest.

Box 7.1 Case study of a woman who felled early

Mrs M.. first heard about the scheme from neighbours. Her main interest in trees was to get some cash income. After asking permission from her husband she planted the trees in 1994, using Mondi contractors for all operations. The trees were registered in her name.

In 1999 her daughter got married. Her husband who works for in Durban came home in July and decided to harvest the trees to get money for the wedding. Mondi was contacted to provide contractors but there is always a long waiting list and they could not wait for the transport to arrive. They found their own contractors and paid them as follows:

Area	0.9 ha
Yield	about 93 tons
(Compare about 103 t/ha with 177 t/ha of best grower)	
Felling	R150 / truck load x 10 trucks
Stacking	10 people R10/day for 20 days
Transport	R150 / load
Loaders	R20 / load (on) per truck R10 / load (off) per truck

Total contractors	R5300
(Compare Mondi price at R42/tonne = about R4200)	
Mondi loan repayment	R2302
Total income (probably)	R13113
(compare R14 570/ha with R24 761/ha of best grower)	
Take home (probably)	R5511
(compare R6123/ha with R15238 of best grower)	

Mrs M.. does not know how much was earned as her husband took the money. She does not belong to any association of growers though she believes it could be useful to exchange experiences with others.

She believes the family had no choice but to harvest early as the money was needed urgently. She cannot use the trees as collateral with the banks as she does not have PTO on the land. Her husband is seldom home and has a girlfriend in Durban so does not send much of his earnings home. She has 3 daughters (one now married and two staying at home) and three grandchildren. Her main income comes from a part time job in Empangeni. Her daughters at home are attending school. She has a small plot of maize which is fenced (about 0.25 hectares) and madumbes (0.1 hectares). (*Khulanathi grower, Esikhaweni area*)

7.5.3 Decision to join the schemes

Ojwang (1999: 68) found that of thirty respondents, only two males indicated that decision to plant trees was taken jointly with their wives. "A number of women respondents had no role to play in regard to what amount or which piece of land was to be converted to tree planting, while some thought that it was Mondi's directive for trees to be planted". Ojwang reported significantly more decision making powers among widows and single women as heads of households. These findings were contrary to Cairns (1993:32) who found that 80% of growers stated that their spouse or children (where the spouse was deceased) had been consulted about joining. However, Cairns, like Cellier reported a reticence to discuss family disputes particularly from the women.

7.5.4 Decisions over earnings

Critics of contract farming point out that men often control benefits from schemes while women provide the labour. For example, Vaughan (1993) notes that women are increasingly unwilling to provide labour for sugar when they do not control the income generated from the cash crop. This is supported elsewhere where women have been shown to withdraw their labour from contract farming (von Bulow and Sorensen, 1993).

Box 7.2 Case studies – husbands and wives

The X.. family has lived in Port Durnford for many years. The family does grow sugar but yields are poor. In 1993 Mrs. X.. saw trees being planted and asked her neighbour to explain the scheme to her. With permission from her husband who works for the Park's Board she planted 0.6 hectares on land that was previously unused. She hoped to use the money from the trees to build a block house. Mondi hired a tractor to plough the land and she did the rest of the work. Her family does not generally help her in the fields. She was paid a small amount by Mondi to do weeding, firebreaks and fertilization.

The trees were harvested in 1999. The amount received was R19500 in total for 138 tonnes. She paid R1700 (Mondi loan), R4800 (contractor fees) and took home R13000. As she is not working she is unable to open a bank account so she deposited the money in her husband's account. Her husband works away from home and thought that the bank had made a mistake. He quickly spent some of this (amount and purpose unspecified). She has bought some blocks but there is probably not enough money left to build the house which she originally wanted. (*Khulanathi grower, Port Durnford*).

"I go for gum, my husband was interested in sugar, therefore we have both but when we look at our income I always laugh at him. He admits it gives very little. It mostly depends on the situation of the family. We have a Christian family and we are united in our decisions. We share our money but the cheques for the trees are always written in my name" (*Project Grow, member and secretary of association, Ngodweni*)

Ojwang found that most married women did not make major decisions pertaining to use of finances. However, a few maintained that they share decisions as a couple. Interviews conducted for this report also indicated differing husband - wife relationships. Thus, the extent to which males control income from trees that is earned by females, is uncertain. What is clear from the case studies, is that the schemes offer very little protection for woman who are in abusive relationships.

7.5.5 Prior knowledge of costs and benefits

Ojwang (1999) found that while women's labour was required in the schemes, most married women did not understand the terms of contract or have any idea of the income they could expect at harvest. Their husbands seldom included them in negotiations with the timber companies.

7.5.6 Changes in labour responsibilities

Ojwang found that on the whole women had managed to cope with increased labour requirements. Money is available for various activities, but some families preferred to do the work themselves. The reasons were to earn extra income. Both Ojwang and Cairns (1993) found that loans did not cover the full costs of hiring labour. However, Mondi has

recently trained small-scale contractors to do planting and weeding at rates covered by the advances (Section 6.2.1)

7.6 Summary (wider development impact)

Conflict over trees may occur between various interest groups within communities who compete with timber growers for land. The two major parties are:

- pastoralists whose grazing land is depleted (this land may have been previously allocated to grower households but used communally); and
- youth who fear that unutilized land for future households is rapidly disappearing.

Conflict has also occurred within communities where Tribal Authorities have allocated large tracts of land for forestry. Problems have occurred around ownership and responsibility, distribution of profits, and opportunity costs (grazing and land for new households).

While Tribal Authorities do act to prevent acquisition of large holdings, an elite group of timber growers can develop through various mechanisms (land allocation, purchase and sharecropping).

The schemes cannot assist women access new land but are used successfully by female headed households to entrench existing rights over land use. The woodlots do not appear to significantly compete with food crops for household resources (land and labour) and have not particularly locked women into cash crop activities. However, there is evidence that married women are not consulted in the decision to plant trees and have little knowledge of the costs and benefits, yet carry the burden of the labour. Households often share profits in a responsible manner, however, despite the companies' efforts to register forests in the name of the appropriate person there is little that protects women in abusive relationships.

Owang (1999) found that women in female headed households whether widowed or single, have greater decision making powers over their labour and benefits gained from the schemes than married women. She found that gender tensions within the household could be attributed more to unequal power relations legitimized by society than to the schemes themselves. The position of children is also affected by access to benefits of the parents. However, Ojwang and Cellier found priorities were similar for men and women. For instance paying for children's' education was a major priority of both men and women

“The findings suggest a potential struggle by these women to overcome the cultural barriers that confine and bar them from decision making and to establish control over the benefits of their own labour. There is a high level of awareness among women that they are being undermined and disadvantaged” (Ojwang, 1999).

All extension officers are male while more than half the growers are female. Male researchers who have studied the schemes (Cairns and Cellier) have reported a reticence to talk about gender conflict within grower households while women researchers have been more successful (Friedman, Ojwang) in drawing out the issues. In a similar way, Mondi and SAPPI foresters are aware of problems but the fact that they are all male while more than half of growers in the schemes are female, may hinder communication with growers.

8. INSTITUTIONAL SUPPORT FOR OUTGROWERS – LESSONS LEARNT AND ALTERNATE STRUCTURES

8.1 Introduction

This section deals with the approach and learning experience of the outgrower schemes and the alternative organizational arrangements offered by NCT. Comparisons are made with the SAWGU small grower scheme, which offers some clues about the future of institutional support outside a contract farming system.

The entry of NCT has increased the range of choices for small-scale eucalypt growers. Their decisions on which scheme to join¹⁸, will depend largely on relative profitability, and the availability of credit and markets. These factors constitute the **financial capital** of their livelihoods.

8.2 Experiences of SAPPI and Mondi

Project Grow and Khulanathi have not changed their basic approach over time. The lessons learnt (below) relate largely to improving the effectiveness of support (communications, training, reducing grower costs and improving yields), reducing administration costs and avoiding conflict in communities. The schemes have significantly shifted resources from production support (planting and maintenance operations), to market support (cutting harvest and transport costs) in recent years.

8.2.1 SAPPI Project Grow

The SAPPI Project Grow Manager (Zululand) listed the following lessons learnt over the years (van Loggerenberg, 2000, *pers. comm.*):

- It is important to have strong field staff, technical advice should be sound to avoid disappointment at a later stage.
- Good administration can save an enormous amount of money. SAPPI initially made the mistake of paying by cheque. This meant that foresters and growers were travelling huge distances. SAPPI now insists that growers must have bank accounts. Transfers are made electronically.
- SAPPI still does not promote the schemes actively. Project Grow relies on word of mouth and good history to spread.
- SAPPI is experimenting with intercropping legumes in the first two years. Trials in the Tzaneen area have been successful. This would bring some income to growers in the early stages and improve the soil fertility.
- SAPPI has still not got transport side right. Difficulties are compounded by the fact that the volume of timber coming out of Project Grow areas is not enough yet to support a local transporter full time.
- It is important to build up a strong relationship with the grower. Communication should continue especially after the third year when money for weeding ceases. Firebreaks must be maintained and trees should not be felled early. It is essential for the grower to contact SAPPI when felling to make use of approved contractors.
- SAPPI Project Grow has spread itself very thinly. It may have been better to consolidate plantings before starting in new areas.

¹⁸

There is anecdotal evidence that some growers join more than one scheme anyway.

8.2.2 Experiences of Mondi Khulanathi

The Khulanathi manager pointed out the following (Boake, 2000, *pers. comm.*):

- Channels of communication are vital. Companies should limit their geographical spread according to their capacity. Grower committee meetings can be held on a regular basis, but messages are not necessarily passed down due to great distances between members homesteads. Khulanathi now posts notices at all shops, and bottle stores. Local depots have greatly assisted in providing focal points for notice boards, grower meetings, and access to small contractors. Khulanathi foresters also have to visit each grower twice a year and growers are required to sign off these visits.
- Transparency is essential. Foresters cannot and should not try to pull the wool over growers eyes. The allocation system must be explained in terms of world supply. Reasons for cutbacks must be understood by all concerned.
- Management of Khulanathi has changed in emphasis since inception. In the first years foresters concentrated on production (silvicultural extension). Now foresters time is taken up in managing timber supply (quota systems, contractors availability and pricing).
- Administration quickly becomes difficult as new members join. Khulanathi has been unable to convince growers to open bank accounts. For many growers ATM machines are too far away to be of use. Banks have also closed their branches in small towns where transaction costs are high. Mondi now issues cheques that can be cashed at local shops. Many stores have geared up to cater for this form of payment

8.3 The NCT alternative

Relative benefits of co-operatives versus out-grower schemes depend on a number of production and market factors that impact on net profit for growers. Net profit is a function of (a) yield per hectare, (b) contractor (harvest and transport) costs, and (c) market price and availability. Co-operatives may also be better placed to serve the interests of spin-off industries.

8.3.1 Increasing net profit through better production support (yields)

The small-grower schemes significantly improve yields through supplying production inputs and extension advice. Can existing NCT support, evolve to take over the production support functions presently provided through Khulanathi and Grow? The wattle industry provides some clues.

The terms of contract for SAWGU's loan advances evolved out of *discussions* rather than *negotiations* with associations. Wattle associations do not have any bargaining power with SAWGU since the union does not benefit in any way from increased volume from small-growers. In comparison, Mondi and SAPPI benefit from increased volume of timber from out-growers through their mills. Prices are structured to locate profits in the processing rather than production sector and the margin of the timber traded covers the overhead costs of the support programme. A comparison of the loans (*Section 4.5.4*) shows the total amount advanced by SAWGU is tentative, and the terms protect SAWGU's investment rather heavily through fire and life insurance, fencing, and structures to facilitate early repayment. In consequence, wattle growers, unlike their counterparts in the eucalypt industry, have to make considerable personal sacrifices to develop their woodlots (Addo *et al.* 2000).

For similar reasons, NCT support for small-growers is likely to remain Spartan. There are no obvious mechanisms to recover overhead costs of a comprehensive small-grower

support programme. In any case, NCT has historically served members as a marketing rather than a production co-operative.

8.3.2 Increasing net profit through reducing harvest and transport costs

Growers increasingly need assistance in getting timber to markets since costs of harvest and transport consume a significant proportion of gross profit (*Figure 5.1*). NCT is well positioned to assist with marketing. Their approach has been to create depots that are owned and managed by grower co-operatives. NCT has assisted these co-operatives to access cheap long haulage from the depots to Richards Bay (though short haulage remains expensive). By harvesting collective areas, and maintaining a sustainable supply, co-operatives can meet the requirements of NCT membership that individual growers cannot. As members, these harvesting co-operatives gain access to preferential prices and quotas

However, the relative advantages NCT co-operative depots have been eroded recently by the response of the outgrower scheme managers to this need. SAPPI now organizes transport directly from forests to mills using 15 ton trucks with trailers (*Section 6.2.3*). In certain terrain, the trucks are small enough to drive into the forests, thus eliminating short haulage costs. Attached trailers make long haulage more efficient. SAPPI has negotiated timber exchange agreements to allow members near Richards Bay to sell their timber to Mondi mill (*Section 2.2.3*). Mondi has responded to the need by diverting project resources to construct local weigh bridges for bulking up transport to the mills and Mondi foresters time is now more occupied with helping members access approved contractors than with extension (*Section 8.2*).

Thus, there appears to be no significant advantage at this stage of co-operative membership in reducing harvest and transport costs.

8.3.3 Increasing price and availability of market

CTC and NCT can negotiate relative price advantages on independent markets. CTC has historically set the price in the Richards Bay area and further price advantages may be gained through co-operative membership.

The co-operatives may have the capacity to take in timber at times when SAPPI and Mondi are experiencing oversupply on the world pulp market. However, recent timber supply quotas have affected out-grower and co-operative members alike. The reason is that CTC sells primarily to the Kraft industry in Japan and Scandinavian countries. Thus, it's market for timber is linked to the same world boom and bust cycle that affects SAPPI and Mondi. NCT on the other hand has developed a range of discrete local markets and is well placed to accept small-grower off-take in these times.

Thus, better prices and less vulnerable markets appear to be the major (and possibly only) advantages of co-operative membership at present.

8.4 Summary (learning experiences and alternative institutional support)

A co-operative structure such as NCT operates for the benefit of its members. Advantages of joining NCT are higher prices and more secure local markets in times of oversupply on the world market. Support for small grower co-operative action may also have wider developmental benefits (*Section 7.4*).

However, these advantages may be eroded by relatively poor production (skills training and credit advances) and marketing (harvest and transport) support which impacts on net profits achieved by growers.

9. CONCLUSIONS

To what extent can the private sector contribute towards local development through the small-grower / corporate relationships?

The answer may be considered in terms of the contribution of outgrower schemes towards the sustainable rural livelihoods of their participants. Schemes can be evaluated in terms of (Section 1.2):

- the extent to which they build assets required for livelihoods;
- the vulnerability of those assets to withstand trends and shocks; and
- the extent to which schemes enable small-growers to transform the structures and processes governing access and value of those assets.

Of the above three issues, the last is probably the most critical to empowerment of small-growers.

9.1 The vulnerability context of small-grower livelihoods

Although some 20% of South Africa's labour force is in KwaZulu-Natal, it provides 17% of the formal jobs and the capacity of the province to absorb labour in formal jobs is thought to be the lowest in South Africa (May, 1998). Rural households combine livelihood strategies (claims against the state, migrants' remittances, agriculture, informal employment, and home industries) in a way that they hope will maximize income, but choices are highly limited. About 44% of rural households in KwaZulu-Natal have livelihood strategies that are insufficient to prevent household members living in poverty (Section 5.2).

Many growers join the schemes because they have no other income generating alternatives. The following points describe the vulnerability context within which small growers' livelihoods operate:

Level of participation in the development of the schemes

- Some development of the schemes did occur interactively (for example, Project Grow merely formalized support already given to existing growers – Section 2.2.1).
- However, grower associations were weak or non-existent at the inception of the schemes - terms of contract were not negotiated and foresters felt that their job was to promote trees growing and that human and other developments would occur as spin-offs (See Vaughan, 1996 and Section 2.2.3).
- Schemes therefore did not develop out of a participatory process, and are not necessarily tailored to meet the needs of households.

Contribution to household income

- Households across most vulnerability classes appear able to join the outgrower schemes. The obvious exceptions are highly marginalised households without access to any land (Section 3.3, Table 3.1)).
- The average net profit from commercial woodlots is about probably R8000 / ha after 6 to 8 years but up to R16 000 /ha is possible. Depending on the size of forest, schemes contribute 12% - 45% of annual household income taken at the 'poverty line' of R750 per month per family (Section 5.2).



- Outgrower schemes can therefore contribute to household income but they do not take the household out of poverty because access to land is limited (*Section 5.2*).

Distribution of risk (*Section 4.5.3*)

- Firms do not act on defaulters.
- The size of loan and scheme overhead costs are therefore measures of risk taken by the timber companies.
- The risk by taken by households is measured by the opportunity cost on land and labour rather than by production risks (fire, crop pests, and drought) as is normally the case in contract farming
- SAWGU has been able to protect their own and grower investments through fire and life insurance, SAPPI and Mondi do not insure small plantations.

Community conflict

- Forests can be a vulnerable target in revenge attacks (political, or faction) and there have been cases of deliberate arson (*Section 7.2.1*);
- There is competition for land between :
 - Youth (new households) ↔ forest owners (trees) ↔ pastoralists (grazing land) (*Section 7.2.1*).
- An elite class may develop through various mechanisms but large land holdings appear to be discouraged by the Tribal Authorities (*Section 7.3*).
- Grower associations do operate to reduce tensions and conflict appears to be declining in context of declining political violence (*Section 7.2.3*).

Family conflict

- Married women are often left out of decisions (where to plant, when to fell), and don't understand the benefits of joining the schemes (*Section 7.5.3*);
- The classic problem of contract farming where women work but men get payments still persists. There are cases where women have withdrawn their labour from the schemes in protest (*Section 7.5.4*);
- Trees are used by widows as a way of securing land rights for family after their husbands' death (*Section 7.5.1*);
- Gender tensions within the household could be attributed more to unequal power relations legitimized by society than to the schemes themselves (Owang, 1999).



9.2 The extent to which schemes build assets required for livelihoods

The outgrower – company partnerships do significantly build on the asset base (natural, social, human and physical) of rural livelihoods but a number of problems exist. These are summarized in Table 10.1.

Table 9.1 The extent to which outgrower schemes build livelihood assets

	ASSETS	POSITIVE FACTORS	NEGATIVE FACTORS
1	NATURAL CAPITAL		
1.1	Enabling households to acquire more land	They may assist households to acquire new land under sale agreements of state assets. Bids on the 'B-Grade' state forests are to be finalized soon. Bids are to be assessed on the strength of community-corporate partnerships (<i>Section 2.1.1</i>)	Community partnerships with former state forests may be threatened by problems around ownership, responsibility, unfair allocations and distribution of benefits. The schemes have struggled with these issues with block plantings in the past and companies are wary of these types of partnerships (<i>Section 3.4</i>)
1.2	Securing access to land	They provide a means of securing access to land rights within the communal tenure system and when facing threats of expulsion from National Government (<i>Section 3.2.13.3</i>)	By requiring signatures from Tribal Authorities, the schemes may entrench Tribal Authority power, occasionally to the detriment of grower interests (<i>Section 3.3</i>)
1.3	Protecting water resources	Water resources are now protected (under the DWAF permit system) (<i>Section 2.4</i>)	DWAF administration of the permit system has been slow to the detriment of growers and contractors. In some areas springs, groundwater and wetland have already been depleted (<i>Section 2.4</i>)
1.4	Providing fuelwood	The schemes do provide saplings for use as firewood (<i>Section 5.3.3</i>)	Eucalyptus is not an effective fuel source and the growers are discouraged by the contract from using their trees for firewood (<i>Section 5.3.3</i>)
1.5	Use of arable land	Forestry is a rational land use on land too steep for other crops. Households appear to set aside sufficient arable land for food crops (<i>Section 5.3.1</i>)	There are no overarching land use policies in place at provincial level to ensure that arable land is used to its highest potential (<i>Section 5.4</i>)
1.6	Use of grazing land	The economic value of land under trees is higher than land under extensive grazing. Households are increasingly substituting trees for cattle as a form of savings (<i>Section 3.3</i>)	Cattle have a high subsistence and symbolic value that is difficult to measure in economic terms. Use of large areas of former grazing land for trees has caused conflict between growers and non-growers (<i>Section 7.2.1</i>)

2	SOCIAL CAPITAL		
2.1	Membership in the schemes	Loan advances allow very poor households to join as members, and companies are willing to assist households across a range of woodlot sizes (<i>Section 3.3</i>)	Highly marginalized households (without land) cannot join the schemes
2.2	Grower Associations	The schemes build capacity of growers associations (<i>Section 4.5.2</i>)	Associations are weak and function mainly for administrative purposes. They lack power to negotiate terms of contract or influence government policy on forestry (<i>Section 4.5.2</i>)
3	HUMAN CAPITAL		
3.1	Skills Transfer	Skills are transferred on site (silvicultural) and in informal training days (business skills)	Business skills training has been informal and ad hoc. Contractors in particular are overlooked (<i>Section 6.2</i>)
3.2	Allocation of household labour	The schemes enable families to allocate labour effectively between wage and farm employment. The opportunity cost of growing trees is low. An individual may easily grow trees and simultaneously seek formal employment (<i>Section 5.3</i>)	There are a number of ways in which women are exploited in the schemes, gender sensitive policies are not in place (<i>Section 7.5</i>)
3.3	Use of contractors	Loan advances enable labour deficient households to hire contracted labour Highly marginalised households can participate in the schemes as planting and weeding contractors (<i>Section 6.2.1</i>)	Hired labour and contractors may receive extremely poor wages and may operate under unsafe and harsh conditions (<i>Box 6.1</i>)
3.4	Support for contractors	Contractors are given support in terms of informal training and links to growers (<i>Section 6.2.1</i>)	Without further wood processing opportunities the schemes do not provide much capacity for spin-off opportunities (<i>Section 6.2.1</i>)
4	PHYSICAL CAPITAL		
4.1	Infra-structure	Infrastructure (some access roads, input supply depots, weigh bridges) has been developed in some rural areas through the schemes (<i>Section 6.3</i>)	Trees may have been planted in marginal areas where costs of extraction deplete net profits. Companies have been unsuccessful in acquiring government funding for access roads in these areas (<i>Section 5.2.1</i>)

5 FINANCIAL CAPITAL			
5.1	Rural credit	The schemes provide a significant percentage of rural credit in the areas where they operate and most growers repay their debts (<i>Section 6.4</i>)	Farmers are unable to negotiate the size of loans which is a measure of the allocation of risk (<i>Section 4.5.2</i>) Many farmers fell their trees too early to escape interest accumulation (<i>Section 5.2.1</i>)
5.2	Trees as a form of savings	Trees are seen a form of household savings (<i>Section 3.3</i>)	Many farmers fell early to meet emergency needs (<i>Box 7.1</i>)
5.3	Trees as a form of collateral	Plantations cannot be used to gain formal collateral on loans but informal collateral agreements do exist (<i>Box 7.1</i>)	Informal collateral agreements between community members tend to be exploitative
5.4	Provision of markets	The schemes provide secure markets (<i>Section 1.1</i>) There are cases where companies have given preference to small growers in times of oversupply on the world market (<i>Section 2.2.5</i>)	It is not in the companies interest to provide highest prices possible (<i>Section 2.3.2</i>) Growers are denied shares in benefits from the most the profitable sector of the industry (processing) (<i>Section 2.1.1</i>)

9.3 Transforming structures and processes

It is the author's opinion that the key development issue of small-grower / corporate relationships is the extent to which various models enable small-growers:

- Representation in structures (small-grower associations, forestry organizations, cooperatives, government departments, local government, corporate business, forestry organizations, local grower associations); and
- Influence over processes (forestry policy, environmental legislation, terms of contract, rules of membership, share equity,)

9.3.1 Representation in small-grower associations

The SAPPI and Mondi outgrowers' associations are still weak in terms of their ability to lobby for small-grower interests. Set up by the timber companies themselves for administrative purposes, these groups function to co-ordinate meetings and training. In some cases they may distribute advance payment cheques and recently they have been used to allocate the small-growers' quota among members and non-members. However, they lack real power since:

- they lack capacity to engage with government departments concerning policies that affect their livelihoods (for example, the DWAF permit system has severely affected grower expansion but deputation from potential growers have been through local politicians rather than associations, and directed at scheme managers rather than at the appropriate government department);
- they have been unable to negotiate with companies for better terms of contract (for example bigger advance payments) or relative advantages over other

sectors in the eucalypt industry (better prices from the mills, allocations of quotas between large and small growers).

Will the development of these associations empower small-scale eucalypt growers? Their older counterparts in the wattle industry suggest not. Firstly, despite considerable investment by SAWGU to strengthen grower associations, capacity to engage government has been achieved through representation of small-growers in SAWGU, not through their respective associations. Secondly, access to profits from the processing sector of the wattle industry has come about through share ownership in the tannin extract factories, not from the ability of associations to negotiate better prices from these markets. Historically, eucalypt forests were planted to serve the pulp and paper industry and not vice versa (see *Section 2.1.1*) and private eucalypt growers do not have shares in the processing of their product.

9.3.2 Membership in large commercial growers associations

The problem of small-grower empowerment lies therefore in the structure of the eucalypt industry as a whole¹⁹. In 1996, Vaughan recommended “given the regional significance of agri-industry, and the importance of small scale activities in these industries, what might be appropriate at provincial level is an agri-industry forum with a specific focus on supporting and expanding small grower production, on facilitating the entry of new farmers to the sectors, and on developing and supporting small businesses” (Vaughan, 1996).

Can any existing bodies represent small grower interests? Two associations presently service commercial eucalypt growers. These are the South African Timber Growers Association (SATGA) and the Forest Owners Association (FOA). At present neither organization accommodates the needs of small-grower. However, draft plans are afoot for the merger of these two bodies with 25% representation set aside on executive committees for small-growers (Zingle, 2000) - This may be the key factor in true empowerment for small-scale eucalypt growers. However, it is probable that existing grower associations would have to be considerably upgraded to ensure equitable representation locally and regionally to maximize benefits of these new developments.

9.3.3 Alternatives models for small – grower empowerment

Negotiated forms of public-private partnerships are being considered (Zingle, Section 5) with a range of variables (concessions for investment in infrastructure, land value, service agreements, support by NGOs). For example, the sugar industry has trial projects involving the devolution of share equity to workers on large sugar estates. In some cases equity may be converted to land ownership after a probation period. There is an international trend for pulp companies to out-source production of timber. If SAPPI and Mondi were follow this trend of reducing forest ownership, share equity models for small growers would be a route to consider.

¹⁹ Similarly, it has been noted that the structure of the sugar industry with SASA as the administrative arm of a joint grower / miller interest is more conducive to inclusion of small grower interests (Vaughan, 1996).

9.4 Interventions

Proposed policy interventions, best practice principles and models in which existing corporate – community relations can be improved are considered below.

9.4.1 Key interventions

The key interventions should give growers representation on the executive bodies that control **structures** and **processes** of the forestry industry, and have power to lobby for favourable government policies.

- Political empowerment is unlikely to occur unless if grower associations progress beyond their administrative function (conflict resolution and communication), and are incorporated into national forest owners' associations and gain real representative status. Opportunity now exists for representation in the proposed merger of SATGA and FOA. However, to take advantage of this event, ongoing capacity building of grower organizations is needed. Umbrella bodies, which would represent local associations, need to be created. These could possibly incorporate the SAWGU associations would cut across SAPPI, Mondi and NCT structures.
- Economic empowerment is unlikely to occur unless growers are given a greater stake in the profits from their timber. Profits are made in processing rather than production and there is evidence that wood prices are suppressed by the monopoly that pulp companies hold on the market (*Section 2.1.1*). Share ownership along the lines of SAWGU ownership in tannin extract plants is a way of addressing this situation (*Section 2.1.2*). Another method is to use a method of **revenue sharing** in determining the price formulae for timber. By this method the profit is distributed in an agreed proportion between producers and processor. The strengths of this system are that both risks and benefits are shared between producers and processor, and that allegations of unfairness which are common with all the other systems can be avoided.

9.4.2 Policy interventions

Government policies may impact on the effectiveness of schemes in building and protecting **natural** capital and providing funding for **physical** capital:

- The principles underlying DWAF forest permit system and water licensing are undisputed by foresters and likely to have long term benefits on the welfare of small-growers. However, slow implementation has resulted in standstill of operations and severely effected some small-scale contractors. Blanket community permits may resolve the crises. Implementation of the new water licensing proposals must proceed with due regard for consequences in delays.
- There is a need to protect arable land for high value crops. Overarching policies possibly developing comparative advantages of regions are being considered. Agribusiness investment in new ventures can be encouraged and supported by SDI initiatives. Intercropping in the first two years of forest growth should be supported by all forest companies.
- Sale of B-Grade state forests within a framework of black empowerment models has provided opportunities for small-growers to acquire more land. There are a range of ownership models within Land Reform policies which could be implemented on large plantations

- Growers suffer from relatively insecure tenure arrangements, they cannot use their forests for collateral and fixed improvements (fencing) are unprotected. Government policy should assist growers to upgrade ownership to PTO status.
- Special government funding should be considered for access roads in areas where trees have been planted far from main roads (for example, Khangelani outside Mandini), and future forestry activities should be regulated in these areas. Funding for forestry infrastructure should be located in the Department of Agriculture rather than the Department of Transport (which favours commuters' needs over forestry).

9.4.3 Best practice principles

Companies own experiences have began to produce a list of best practice principles. These encompass a range of capital assets:

- More careful consideration of site suitability, distance from mills and condition of access roads should be made by companies because certain areas where the schemes are operating may not be viable. Timber companies should join forces to lobby for funding forestry roads.
- Comprehensive computer records should be kept of yields, input costs, contracting costs, and net profits of individual growers in each area. SAPPI has a computer system in place. Mondi should follow suit. It would be in growers interests if comprehensive analysis of the distribution of gross profits, under varying input intensity, site characteristics and distances from mills could be made using data from both companies. This would determine the viability of recommendations, such as the practice of promoting trees on best sites.
- All schemes have lowered entrance sizes of woodlots to include rural households with small woodlots. Mondi use of planting contractors also enables households with labour shortages to join the schemes. However, these exists some resentment where growers feel forced to use the services of these contractors. Ongoing communications on the distribution of gross profit and cost of contractors are needed.
- All schemes need to formalize business skills training for growers acquiring lump sums and contractors. The sugar industry may offer facilities for business skills development. NCT's lead of a R100 000 revolving credit facility to contractors could be followed by other companies.
- The schemes need to develop gender sensitive policies to cater for women growers (approximately 80% of members are women). Employment of women foresters, assisting women to open bank accounts in their own names, women group meetings (prior to planting in new areas), inserting inheritance clauses to protect widows, are ways in which this may be achieved.
- Mondi should consider reducing interest charges by the value of land rental gained by using outgrowers' fields. This would reduce the cycle of debt that may occur for example, where trees are destroyed by fire or yields are poor. It would also stop the practice of felling early to avoid interest accumulation.

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