

Meeting Rural Woodfuel and Livelihood Requirements
Through Contract Farming and Community Forestry
in KwaZulu-Natal (1960-2000)

By

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Dedication

I dedicate this thesis to my late mother, Lizzie Nyaungwa-Karumbidza, whose encouragement and vision since my childhood never failed me. Without her belief and confidence in me, I would not have discovered my potential. It is a life like hers grounded in the rugged terrain of a rural community that inspired and lured me to this particular field of inquiry. It was her strength and courage that allowed her to pull through the constraints of rural life, making the most of what she had for the better of the society at large, and for us, her children. Notwithstanding her untimely and regrettable death, her profound influence on me is in itself a legacy worth commemorating. Her insistence on hard work is a maxim I share with pride.

Declaration

In conformity with the regulations of the University of Natal, I hereby state that what follows is my own work, unless specifically indicated to the contrary in the text. Furthermore, this thesis has not been submitted for a degree at any other university.

ACKRONYMS

AFRA	Association for Rural Advancement
ANC	African National Congress
CBO	Community Based Organisation
CFD	Community Forestry Directorate
CPA	Communal Properties Association
DBSA	Development Bank of Southern Africa
DEAT	Department of Environmental Affairs and Tourism
DALA	Department of Agriculture Land Affairs
DFID	Department for International Development
DMEA	Department of Mineral Energy Affairs
DWAF	Department of Water Affair Forestry
EDA	Environment and Development Agency
ESKOM	Electricity Commission
FAO	Food and Agriculture Organisation of the United Nations
FOA	Forest Owners Association
GEAR	Growth, Employment and Redistribution
GNU	Government of National Unity
HIV/AIDS	Human Imuno- Virus (which causes) the Acquired Immune Deficiency Syndrome
IFP	Inkatha Freedom Party
IMF	International Monetary Fund
IMPD	Institute for Multi-Party Democracy
INR	Institute of Natural Resources
IRD	Integrated Rural Development
ISER	Institute of Social and Economic Research
LDC	Less-Developed Country
LIMA	Lima Rural Development Foundation
LPG	Liquid-Petroleum-Paraffin
MONDI	Mondi Pulp and Paper Industries
NFAP	National Forestry Action Plan
NFSP	National Forestry Strategic Plan
NGO	Non-Governmental Organisation
NTEC	Natal Tanning Extract Company
NTC	Natal Timber Company
PLAAS	Programme for Land and Agrarian Studies
PWV	Pretoria-Witwatersrand-Vereeniging
RBM	Richards Bay Minerals
RDP	Reconstruction and Development Programme
RDS	Rural Development Strategy
SAFCOL	South Africa Forestry Company Limited
SAPPI	South African Pulp and Paper Industries
SATGA	South African Timber Growers Association
SAWGU	South African Wattle Growers Union
SGDT	Small Growers Development Trust
TA	Tribal Authority
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
WRM	World Rainforest Movement

INTRODUCTION

Background to Study

The commercial tree growing industry in KwaZulu-Natal, as in the whole of the country, is characterised by a particular dualism. On the one hand, there is the commercial plantation sector devoted to the large-scale production of trees (mainly *Eucalyptus*, pines and wattle) for various purposes for the export market. On the other hand however, there are a larger number of small scale black household farmers producing similar tree crops either within contractual relationships with agribusiness or independently.¹ This dualism is underscored by the fact that the commercial plantation sector has adopted modern technological inputs for large-scale production and marketing, while production in the black household sector remains largely traditional with important exceptions.² Nonetheless, there is an apparent dichotomy between the plantation sector and those farmers involved in community production. The production structure in the latter has been greatly influenced by the impact of colonialism and apartheid especially in terms of land distribution, economic underdevelopment and dependence.

This study is interested in the small-scale sector whose main objective is enhancing rural livelihoods. In this regard tree growing is considered specifically as an intervention in rural development. Many models of rural development have been suggested for which community participation has been singled out as central to success. The development process requires integration involving numerous partnerships of communities with community development agencies at the forefront, together with various levels of government. Private capital has also become a very important player in rural development through direct and indirect involvement with communities.

The issue of tree growing as an intervention in rural development, is closely linked to that of woodfuel³ provision. The problem of woodfuel shortages is not unique to the rural areas of KwaZulu-Natal only. All the rural areas of South Africa in general, the region as a whole and Third World countries overall, are faced with the problem of dwindling supplies of firewood for domestic consumption. This problem is worsened by other factors such as, a growing population, a deteriorating environment, increasing poverty and ever-increasing levels of

¹ In practise, the term agribusiness covers a variety of phenomena that tends to make a definition difficult. D. J. Glover and K. Kusterer, Small Farmers, Big Business: Contract Farming and Rural Development. England: McMillan, 1989, define agribusiness as referring to a private firm, alone or in joint ventures with public agencies, in the production, processing and/or marketing of agricultural or agricultural-related goods and services.

² See A. Saville, "The Forestry Sector in KwaZulu-Natal." Paper Presented to the Land Reform Conference held at the University of Natal-Durban, 1994.

³ The term woodfuel will be used in this study to refer to the energy derived from wood. Various terms such as firewood, fuel wood and woodfuel are used by different authors and in different studies. These terms mean basically the same and for the sake of consistence, woodfuel shall be used even where the source(s) used and cited refer to either firewood or fuel wood.

unemployment. These factors have led to very low standards of living for the majority of the people in KwaZulu-Natal. R. P. Moss and W. B. Morgan are of the opinion that the solution to the rural energy problem in the Third World is concerned essentially with the maintenance of the energy supply whilst finding the extra energy needed for development.⁴

Internationally, various studies have been commissioned on the extent of fuelwood use and supply since the early 1970s when the energy crisis surfaced. Most research on the question of rural energy has concentrated on drier lands where fuelwood supply problems have been identified and associated with 'desertification'.⁵ FAO Forestry research Monographs on fuelwood have concentrated on Savanna lands with the notable exception of the report on Thailand which included very humid environments.⁶ Many local (South African) studies were carried out in the former 'homelands' concentrating on particular districts or projects.⁷ These areas are dry lands and have a further condition that complicates energy supply, poverty. This approach is supported by Principle One of the Rio Declaration on Environment and Development, which highlighted that because, "human beings are at the centre of concern for sustainable development (therefore) they are entitled to a healthy and productive life in harmony with nature."⁸ A common feature between local and international studies is that they prescribe afforestation as one of the most sustainable ways to solve the problem.

Recent literature and research has begun to emphasize the role of women as major but marginalised participants in sustainable development. A United Nations Report on Human Development observed that while "women count, they are in fact not counted." The report found out that:

Much of the work that women do is 'invisible' in national accounting and censuses, despite its obvious productive and social worth. The reason is that women are heavily involved in small agriculture, in informal sectors and household activities - areas where data are notoriously deficient. Women have shouldered a large part of the adjustment burden of developing countries in the 1980s. To make up for lost family income, they have increased production for home consumption. Worked long hours, slept less and often eaten less - substantial costs of structural adjustment that have gone largely unrecorded. The low value attached to women's work requires fundamental remedy; if

⁴ R. P. Moss and W. B. Morgan, "Fuelwood and Rural Energy Production and Supply in the Humid Tropics: A Report for the United Nations University with special reference to Tropical Africa and South East Asia." Dublin: Tycool International, 1981. 16.

⁵ T. H. Digernes, "Wood for Fuel: Energy Crisis Implying Dessertification. The Case of Bara, The Sudan." [PhD.] University of Bergen. 1977, 3.

⁶ De Backer, H. and K. Openshaw, "Report to the Government of Thailand on Present and Future Forest Policy Goals: A Timber Trends Study 1970 - 2000." Rome: FAO, 1972.

⁷ Such studies include those done by A. A. Eberhard, 1986, C. A. Linengme in Gazankulu, 1987, M. Gandar's various studies in KwaZulu, 1983, 1984, 1987, and 1994. These are listed in appendix 4.

⁸ Food and Agriculture Organisation (FAO). Forests Fuels and the Future: Wood Energy for Sustainable Development. Forestry Topics Report (5) 1994. 29.

women's work was more fully accounted for, it would become clear how much women count in development.⁹

The importance of women for tree-growing regimes and firewood collection cannot be over-emphasized. In community forestry there is a high concentration of women involvement, either as direct contract bearers or as managers of plots owned by absentee-husbands who are contract bearers and trustees of the land. Therefore, understanding their involvement and contribution will be a major step towards evaluating the extent to which the various forms of tree-centred interventions have been successful in uplifting the lives of the communities.

The issue of rural woodfuel supplies needs to be addressed within the broader context of the multi-purpose role of trees. Women consider woodfuel and cooking efficiency as top priorities as it affects them directly. According to E. Eckholm, for more than a third of the world's people, the real energy crisis is a daily scramble to cook dinner.¹⁰ Woodfuel scarcity has also been closely related to declining productivity of food production systems and deterioration in land use. In 1978 the World Bank issued its influential Forestry Policy Paper which showed a shift from industrial forestry towards environmental protection and meeting local needs. The shift reflected "the reality that the major contribution of forestry to development will come ... from its impact on indigenous people ... in developing countries."¹¹ The Eighth World Forestry Congress was devoted to the theme 'Forestry for People' giving the concept of community forestry rapid and extensive exposure.¹² Since then, community forestry in its various forms has been adopted in many areas in the developing world to salvage deteriorating tropical forests and diminishing woodlands. In South Africa tree growing enjoyed a lot of state support and enforcement throughout its history. A review of the broader environment in which tree growing took root is given in chapter 1 to help in understanding this development.

Objectives of the Study

The main objective of the study is to understand the evolution and development of community forestry as a livelihood strategy. It also considers the extent to which local needs, income and employment needs are met from these community forestry initiatives. It will be shown how and to what extent community forestry as an intervention strategy can assist the development of a community and uplift the livelihood of participants. A substantial portion of the study will focus on the economic logic of the agribusiness-grower relationship, its social impact on the rural community and the ways in which farmers have responded. It will also

⁹ UNDP. Human Development Report. New York: Oxford University Press, 1990. 47.

¹⁰ E. Eckholm, Fuelwood: The Energy Crisis that won't go Away. London: International Institute of Environment and Development, 1984.

¹¹ World Bank, "Forestry Policy Document." 1978. 12

¹² World Bank, "Forestry Policy Document." 12

identify elements that have produced viable schemes beneficial to local communities. Possible areas of interdependence and integration by agribusiness, the growers, the government and rural based-NGOs will be identified.

In the process, the study will establish and analyze the micro and macro-environments under which human and tree interactions supplement the rural livelihoods¹³ of communities in KwaZulu-Natal. This will form the basis for examining the contribution of community forestry in providing the basic rural livelihoods. The evaluation will focus on the extent to which essential commodities that are crucial to the rural households, such as woodfuel, are made available through community forestry. An assessment of the advantages and disadvantages of different tree-centered regimes and the impact of future community forestry inputs and outputs on the grower community will be done. This process would encompass the evaluation of the economic viability of out-grower schemes from the point of view of the small-growers *vis a vis*, the productive systems and livelihood systems of concerned communities, and the impact of such schemes on tenure and other socio-economic issues.

The study seeks to outline the possibility of vertical and horizontal integration opportunities that exist in tree-centred regimes between the government, agribusiness and the rural communities. Emphasis will be made on the social, economic, environmental and developmental implications of the relationship. The research will consider whether such projects challenge poverty by reducing dependence upon subsistence-based agricultural practices and remittances from migrants and pension grants. Other questions and interests that arise include such issues as whether a majority or a minority of the growers benefit, and whether incomes are sufficient to generate a circulation of capital that will stimulate secondary entrepreneurial initiatives. It would also want to establish whether such contract relationships lead to development or to dependency and rural stratification.

Taken into cognisance is the fact that there are diverse political and economic interests in the study area which overlap, compete and diverge over time as social circumstances change. For instance, the study covers the period 1960 to 1999 which is a thirty plus year period encompassing a lot of changes. Up until 1994, South Africa's political economy was dominated by apartheid policies based on racial segregation and separate development. After the establishment of the first democratically elected Government of National Unity in 1994,

¹³ The term livelihood was defined by M. Lipton in a Paper on "Aims and Methods: Suggested Framework for Poverty Alleviation." *Paper Presented at a Design Workshop, Creating Rural Livelihoods in South Africa Project*, Cape Town, 1993, as any strategy or work leading to "receiving a reward that is at least sufficient to prevent household poverty." Community forestry can be regarded as contributing to rural livelihoods as it fits J. May's description of livelihoods strategy as: "a bundle of activities that is ultimately adopted by the household, ... and is an outcome of decisions and conflict over the use of the household resources" in J. May "Assets, Income and Livelihoods in Rural KwaZulu-Natal" edited in M. Lipton, et al. Land, Labour and Livelihoods. 4.

efforts were made to uplift the conditions of those previously prejudiced and disadvantaged by apartheid policies.¹⁴ In the light of this political dispensation, the study covers a period in which expectations for radical changes in policy direction and sustainable development in previously disadvantaged regions are very high. It is interesting therefore to observe what happens to woodlot development and tree-centered alternatives to rural development in these two periods.

It should be noted that agribusiness (represented by both the SAPPI and MONDI Paper) was already engaged in community tree-growing schemes during the apartheid period. These schemes were continued in the post-apartheid era without major alterations to their operation. Agribusiness intervention in this regard will be viewed as but just one force operating amidst a wealth of other transformational factors that are changing both society and the environment. In this way and without emphasizing the political aspects of this development, the study is designed to fulfill two functions. Firstly, to understand the ways in which social and economic institutions amongst residents were being modified by intervention of the SAPPI project amidst other socio-economic developments such as the growth of tourism, the operations of conservation agencies and local agricultural activities. Secondly, it will strive towards understanding the changes that the SAPPI project is bringing about to the communities and particularly growers' relationship with the environment. Specific focuss will be on alterations (if any) with regards to the traditional practices related with the exploitation of natural resources for basic needs, with wood for fuel being a major example. The study also analyses the implemented macroeconomic policies that were intended to achieve the core objective of growth in the rural economy and to ensure equity in the distribution and the availability of basic needs such as energy. It will be taken into consideration that policy approaches have differed over time and have been shaped by the prevailing political-economic climate.

Study Methodology

The study used a method triangulation approach by analysing the data both qualitatively and quantitatively.¹⁵ It is an attempt to describe systematically the living conditions and survival strategies of communities in selected districts in KwaZulu-Natal, particularly focusing on those involved in tree-growing projects. The methodology can be classified as descriptive in that regard as it is in line with R. Kumar's definition of descriptive research. Descriptive research is defined as one that:

¹⁴ See the Reconstruction and Development Programme of the African National Congress for the discussion on how the transformation was going to be achieved.

¹⁵ M. Terre Blanche and K. Kelly, "Interpretive Methods." In M. Terre Blanche and K. Durrheim, [eds.] Research in Practice: Applied Methods for the Social Sciences. Cape Town: University of Cape Town Press, 1999. 128.

Attempts to describe systematically a situation, problem, phenomenon, service or program, or provides information about, say, the living conditions of a community, or describes attitudes towards an issue.¹⁶

The methodology employed included 'data triangulation' which involves the collection and cross-checking of data from a variety of sources.¹⁷ Various sources were used including interviews with sections of rural communities involved in tree-growing projects and those not engaged in such projects. In-depth interviews were held with all the stakeholders in community forestry and tree growing, for instance, timber growers, agribusiness executives and foresters, local and national government officials, and agro-input merchants. These interviews were quite instrumental as they gave me the opportunity to get to know the people intimately, so that I got to understand how they think and feel about the issues with which I am concerned. This was vital for coming to the conclusions about some of the issues that could not be expressed in interviews or are not recorded in any form of documentation.

As noted by A. Kaniki, no research project exists in isolation, but must build upon what has been done previously.¹⁸ Therefore, on embarking on this project I reviewed related work in the field. In doing this, published and unpublished material was very instrumental. A review of journals and academic papers, examination of government documents and press clippings on related issues was central to the analysis. Participation as well as direct observation of key events in the tree-growing industry formed important component of information gathering.

The thesis follows an open-ended anthropological approach, which sought to understand how a particular system functions by close and participative observation of a wide range of phenomena in a narrowly defined cultural and geographical area. The methodology of this study is also influenced by G. Cellier's observation from his study of the Khulanathi Project that.

... both the claims and criticisms of the Khulanathi Project (indicates that) neither the company nor the opponents of the programme had seriously considered the opinions of the growers themselves.¹⁹

¹⁶ R. Kumar, Research Methodology: A Step-by-Step Guide for Beginners. London: Sage Publications, 1999. 9.

¹⁷ L. W. Neuman. Social Research Methods: Qualitative and Quantitative Approaches. Boston: Allyn and Bacon, 1997. 14.

¹⁸ A. Kaniki, "Doing an Information Search." In M. Terre Blance and K. Durrheim, [eds.] Research in Practice: Applied Methods for the Social Sciences. Cape Town: University of Cape Town Press, 1999. 17.

¹⁹ G. A. Cellier. "The Development and Implications of Commercial *Eucalyptus* Woodlots in Selected Areas of KwaZulu, South Africa." [PhD] University of Natal-Pietermaritzburg, 1994. 4.

The inherent problems of data collection from very large populations for attaining data which is detailed and reliable was overcome by the use of a compromise between different research techniques.

Limitations of time and financial resources were severe. These militated against the aim of following up on all main events on the calendar of activities lined up by the growers and agribusiness in the two years within which the study was conducted. The challenges faced are closely akin to those succinctly raised by A. Barnett who observed that:

The researcher's dilemma is one of balancing insufficient time and money to follow an unstructured approach against a concern over the possibly tyrannical nature of the preconceived questionnaire. It is a choice between the 'deep cut' which gets inside a system which may or may not be typical and the 'more representative' sample that may miss the point!²⁰

Financial limitations always inhibit the extent to which data can be effectively collected over very wide geographical areas. Very few researchers have the advantage of significant sponsorship and the blessing of being an insider to the issue on which they are researching. One such researcher is G. Cellier who was a manager of the Khulanathi project he was studying. His study obviously started from a point of advantage, as he was familiar with and known to the subjects of his study. However, the problem of being an insider doing research on your scheme is that growers may be afraid to say exactly how they feel in fear of possible victimisation. Gathering information is equally difficult in situations where the researcher is foreign and a stranger to both parties. This means the researcher has to deal with a lot of suspicion and non-acceptance from all parties who at times are keen to withhold information that would have otherwise been very important to the outcome of the research. I am fully convinced that there is information that was withheld from me deliberately, for instance, in regards to household income levels and sources.

In-depth interviews helped to capture the feelings of the growers on the projects and tree-centred development initiatives in their specific areas. The conclusions of the thesis were founded upon the concerns of the people and their views, which is what has been generally lacking from previous literature. M. Friedman's research into growers was limited to Biyela, one of the smaller areas in which Khulanathi operates. Her focus for the study was to investigate the organisational potential of small growers.²¹ In 1992, R. I. Cairns also did an overview of the costs and benefits associated with small-scale timber products in the former

²⁰ A. Barnett, Rural Energy and the Third World, Oxford: Pergamon Press, 1982. 13.

²¹ M. Friedman, "Commercial Timber Production and Basic Needs: Organisational Potential of Small Growers in KwaZulu - Lessons from an Integrated Rural Development (IRD) Project." Pietermaritzburg: Institute of Natural Resources, Occasional Paper No. 2, 1991.

KwaZulu. He managed to interview 62 out of the then 3 862 growers attached to large companies, citing time constraints and limited financial resources as the major constraints.²²

The above-mentioned studies of the Khulanathi project and Project Grow were undertaken within a few years of their establishment. At this stage, the effects of the programme on the rural economy were only a subject of speculation. The project managers were still basing their arguments on theory and assumptions. At the same time, the growers were still holding on to what the proponents of the projects had made them believe would happen to them. This thesis has the advantage of being undertaken when trees grown under both projects have had more than one harvest. SAPPI's Project Grow trees and those of MONDI's Khulanathi project, particularly those by early growers, have been harvested three times and twice respectively. By reaching out to the growers who have been participating in either of these projects and have harvested more than once, this thesis is best placed to evaluate the economic viability of the scheme as a rural livelihood strategy.

Chapter Outlines

The introduction underscores the fact that the study is focusing on a specific intervention in rural development, that is, tree-centered development by agribusiness and the state. It has alluded to the land reform process shaping the character of rural South Africa, bearing in mind the importance of land in rural development. A brief review of the land reform process was given and two factors need to be emphasised. Firstly, due to the slow process and inability of the state to penetrate rural areas, growing trees became one development option, and secondly, lessons from these experiences may be utilised to inform development initiatives on new lands. The introduction also provides the broader legislative environment within which the current rural development scenario has been and is being shaped.

Chapter One provides an overview of the socio-economic as well as political conditions of rural KwaZulu-Natal. It discusses the issues of employment levels, income, migrancy, remittances, as well as HIV/AIDS. These conditions are worsening by day rather than improving. This discussion forms the basis upon which the contribution of government woodlots and agribusiness timber schemes could be evaluated. The legal issues, such as the Land Acts starting from 1913 for instance, and other instruments of apartheid planning regimes leading to the current conditions of rural poverty are raised. The chapter ends by pointing to the current initiatives made to alleviate these conditions. In this, an overview of the role of the state, conservation lobbying groups and agribusiness is given.

²²

R. Cairns, "Small Grower Commercial Timber Schemes in KwaZulu." Durban: Centre for Social and Development Studies. Research Paper, 1993.

Chapter Two identifies and defines the main concepts related with tree growing for the promotion of rural development. These terms include agro-forestry, community forestry, social forestry and woodlots. The use of these terms is reviewed from their international, regional and local usage and application. Beyond the identification and definition of these terms, the historical background of the usage of the terms in the South African context is attempted. The development of government run woodlots is discussed with particular attention to the ever-changing socio-economic and political conditions and policies in South Africa. It also provides a brief analysis of the limitations of contract-based development projects in the effort to reverse conditions of poverty.

Chapter Three is concerned with how the tree growing regimes of both government and agribusiness could contribute to the rural energy needs. There are two main sections, the first section being concerned with providing an understanding of the woodfuel scarcity situation and its effects on the community. This seeks to demonstrate the seriousness of the problem and shows how tree-growing regimes could alleviate the situation. The second section discusses woodlots as a major response to woodfuel scarcity among other strategies. It estimates the contribution made by these interventions to the woodfuel needs of the communities.

Chapter Four provides a closer look at the activities of agribusiness in utilising trees as cash crops for rural communities while also evaluating their contribution to the promotion of rural development in general. The long history of the domination of the commercial or industrial forestry sector by large corporate business and state plantations is also evaluated. In doing this, the technical characteristics of production and processing, and the specific social conditions leading to disparate outcomes are considered and identified.²³ These issues are either related to the behaviour or welfare of growers or other groups, or to rural development more generally.

The fifth chapter summarises the main arguments raised in the whole study, makes recommendations for both the commercial and wood-based tree growing regimes, and finally gives a conclusion. It highlights the main issues affecting the sustainability of agribusiness and contract farming²⁴ in the province as an intervention towards poverty and the provision of

²³ S. Williams and R. Karen. Agribusiness and the Small Farmer. USAID: Westview Press, 1985. 109.

²⁴ Out-grower schemes and contract farming can be used interchangeably. E. P. Roy, in (Contract Farming and Economic Integration. Darville III: The Interstate, 1972. p. 4), defined contract farming as 'those contractual arrangements between farmers and other firms, whether oral or written, specifying one or more conditions of production and / or marketing of an agricultural product. Contract farming generally connotes a private sector scheme with small growers. The term out-grower scheme has also been used for contracts but it tends to describe more of activities involving government; that is, government schemes, with a public enterprise purchasing crops from farmers, either on its own or as part of a joint venture with a private firm.

basic goods. The experience of growers is used to evaluate the claims that woodlots and commercial tree planting would benefit the communities through direct financial injections, the restoration of tree cover on the land to shield the soil from erosion, and the harvesting of fuelwood. It is concluded that, while the underlying principle was acceptable, the 'single-tree growing model', consisting mainly of *Eucalyptus*, made non-monetary benefits largely unattainable.

CHAPTER ONE

RURAL CONDITIONS AND BASIC NEEDS IN KWAZULU-NATAL

The KwaZulu-Natal province is formed out of the union of the former Natal and KwaZulu - a former 'homeland' characteristically bedevilled by impoverishment, underdevelopment and deprivation. (The policy of separate development espoused by the apartheid with its associated structural poverty continues to impact on the way in which different societies are able to sustain their livelihoods.²⁵ The evaluation of the role of tree planting regimes in these rural communities has to be done from an understanding of the background of this abject poverty. Poverty in this area is largely perpetuated by the lack of alternative development opportunities. The tree-growing regimes will therefore be seen as at least having the capacity and potential to provide an alternative to this dearth of development opportunity through which poverty could be reduced.

Table 1.1 : Statistical Distribution by Provinces of South Africa

PROVINCE	% Pop	% Land	% Male	% Female	% Urban	% Rural
Eastern Cape	15.5	13.9	46.1	53.9	36.6	63.4
Free State	6.5	10.6	49.3	50.7	68.6	31.4
Gauteng	18.1	1.4	51	49	97	3
KwaZulu-Natal	20.7	7.6	46.9	53.1	43.1	56.9
Mpumalanga	6.9	6.5	48.6	51.4	39.1	60.9
Northern Cape	2.1	29.7	49.1	50.9	70.1	29.9
Northern Province	12.1	10.2	45.7	54.3	11	89
North West	8.3	9.5	49.2	50.8	34.9	65.1
Western Cape	9.7	10.6	48.9	51.1	88.9	11.1
South Africa	100	100	48.1	51.9	54.4	45.6

Source: Compiled from Population Census 1996.

(The current conditions of KwaZulu-Natal are largely influenced by the history of apartheid planning. The former 'homeland' of KwaZulu was estimated to have 70 per cent of its approximately 4.6 million people living in rural areas in 1990.²⁶ The results of the 1996 Census indicated that KwaZulu-Natal is the most populous province, followed by Gauteng which however, has only 3.6 per cent of its population living in non-urban areas (see Table 1.1). KwaZulu-Natal by comparison has about 56.9 per cent of its total *de facto* population (approximately 7.7 million people) living in the rural areas.²⁷ This implies that in the most

²⁵ B. James, "Gender, Development and Environments in the Remote Village of Mabibi, KwaZulu-Natal." MA. University of Natal-Durban, 1995. 1.

²⁶ KwaZulu Government., "Strategic Plan for Agriculture and Forestry in KwaZulu." In Policy on Agriculture. Department of Agriculture and Forestry, KwaZulu Government, Pietermaritzburg, 1990. 1.

²⁷ Ministry of Home Affairs, "The People of South Africa Population Census, 1996." Census in Brief. Statistics South Africa, Report No. 1:03-01-11, 1996.

populous province the majority of the population is rural and further suggests that rural material conditions, characteristic of most Third World countries, predominate. These figures are important, insofar as they underscore the demand for rural development; the importance of land (agriculture) based development, and also in understanding the unique character and nature of the rural society in KwaZulu-Natal. In a report by the Institute for Multi-Party Democracy (IMPD) it was estimated that:

... 95 per cent of South Africa's poor are African: 65 per cent of the total African population is poor. Seventy-five per cent of our people are concentrated in the rural areas where the predominant population is women. The poorest of the poor households are those headed by women. Thus, while the poverty rate is 43.6 per cent in the families with resident male heads, it is 70 per cent in families with women heads.²⁸

A 1987 policy report on agriculture drafted by the former KwaZulu government acknowledged that, "the rural population of KwaZulu [are] living in varying states of poverty which is a serious inhibiting factor to rural development."²⁹ More than ten years later that scenario remains unchanged. The report correctly identified the structural limitations inhibiting development. It observed that:

The current education and training systems do not accurately equip rural communities to become involved in their own development. Physical infra-structural development for primary water supplies, roads, energy supplies, sewerage and telecommunications, as well as service centres does not meet the present needs of rural communities ... [observing that] there was a general lack of economic activity in rural KwaZulu and there are few viable non-agricultural activities. Local organisational structures to support economic and other activities are weak and there is an imbalance between people and resources.³⁰

These are still the main problems that the majority of the rural communities in KwaZulu-Natal face. This can be understood in the context of J. May's conclusion on continued underdevelopment in South Africa in general. He argues that:

Although South Africa has undergone a dramatic economic, social and political transition in the last decade, many of the distortions and dynamics

²⁸ Speech by W. Madikizela-Mandela "Our Struggle." Speech read to the Black research Institute and quoted by I. M. Sharma in Towards Democracy. (Magazine of the Institute for Multi-Party Democracy). Vol. 8, No. 1 June 2000. 19.

²⁹ Department of Agriculture and Forestry (DAF), "Policy on Agriculture in KwaZulu." Government Printers, 1987. 5.

³⁰ DAF. Policy on Agriculture in KwaZulu. 12.

introduced by apartheid continued to reproduce poverty and perpetuate inequality.³¹

In KwaZulu-Natal, (as in other provinces except Gauteng) women are the largest proportion of the rural population. This pattern is a result of continued internal migration, mostly amongst men, to the country's largest industrial hub in Gauteng province, the Pretoria-Witwatersrand-Vereeniging (PWV) region. The population of KwaZulu-Natal comprises an especially high proportion of women: higher than in any other province, except the Northern Province and the Eastern Cape.³² Characteristically, the proportion of women is generally higher in the more rural provinces. These population statistics showing the gender composition of the rural population in all the provinces except Gauteng imply a need for policy to be directed towards the development of the rural livelihood strategies to improve the conditions of women. This is particularly important in a situation where the rural population is growing at the rate of about 2.5 per cent per annum and one-third of the potentially economically active population is unemployed.³³ Development planning has to take into serious consideration the population distribution, in terms of gender and age.

The demographic profile of the rural population of KwaZulu-Natal shows a predominance of young people under 20 years of age. As a result of labour migration, women predominate among the adults, especially in the productive age group between 22 and 55 years.³⁴ The Policy Document on Sustainable Forestry Management pointed out that women between the ages of 16 and 65 outnumber men by 40 per cent in rural areas. It also observed that these women often "become effective heads of the households in the countryside, and bear the major burden of maintaining the well-being of these households."³⁵ Thus in many instances farming activities are left in the hands of women, older men and in some cases, children. Addressing the Institute of Black research in 1999 W. Madikizela-Mandela the Chair of the ANC's Women's League stated:

We must forever emphasise that South Africa's rural women are the poorest of the poor in our country, suffering the highest rate of illiteracy and that alone cuts them off from their rights because they do not know them. Their experience is that of our utter desperation; their vision stunted by that

³¹ J. May, "Growth, Development, Poverty and Inequality." In Poverty and Inequality in South Africa: Meeting the Challenge. London: Zed Books, 2000. 2.

³² See provincial population distribution tables elsewhere in the text and in the appendix.

³³ J. May, "Assets, Income and Livelihoods in Rural KwaZulu-Natal." In M. Lipton, F. Ellis and M. Lipton [eds.] Land, Labour and Livelihoods in Rural South Africa. Volume Two: KwaZulu-Natal and Northern Province. Durban: Indicator Press, 1996. 8.

³⁴ While migration is not the exclusive domain of men, and there is evidence of women participation in labour migrancy, men still predominate. Also patriarchy still men have more flexibility of travel and relocation than women.

³⁵ DWAF. "Policy Document on Sustainable Forest Management." 1996.

deprivation and by ignorance of their right to an equitable share in the resources of the country.³⁶

The dual nature of the economy in KwaZulu-Natal made labour migration a prominent feature of life among rural communities. Some four million Zulus are estimated to be living outside the former 'homeland' of KwaZulu but, owing to lack of urban housing and security, many families commute between the urban and rural sectors trying to make a living. In 1990, the former KwaZulu government found that:

The export of labour to the South African economy is much the most important income generating sector in the KwaZulu economy. Earnings sent back to KwaZulu from South Africa are probably in the region of 30 to 40 per cent of total earnings.³⁷

The rural sector is primarily women driven on subsistence terms, while the male members fight to raise cash incomes in the mining, industrial, farming and commercial sectors of South Africa. Migrant labour regimes of the apartheid capitalist system had varying implications for the rural economy. Initially, the withdrawal of men from the rural economy to work in the rising urban mining and manufacturing industries as well as commercial farms led to underdevelopment of the area. In addition when the urban labour market could no longer absorb more workers from the rural communities the resultant decrease in opportunities also had negative effects on the rural economy. Decreased absorption of labour in all sectors resulted in increasing urban and rural unemployment.

The rural urban migration, largely by men in search of work, has in some cases led to permanent losses of the male figurehead to the family. Some males decide not to go back to their extended family units. The extended family unit is a very important aspect of the rural economy. This loss of migrant workers to the extended or immediate family means a reduction in resource circulation. This implies the loss of income from migrant remittances leads to increasing the burdens of women-headed families. There are numerous reports about men who have left families in the rural communities and are reported to be cohabiting with other women in town. The majority of these cease supporting their families back home. One of the Project Grow participants interviewed (Box 1 below) stated that her choice to grow *Eucalyptus* on the family piece of land was a result of lack of assistance from her husband who is working in Durban (the major urban centre of KwaZulu-Natal).

³⁶ W. Madikizela-Mandela "Our Struggle." 21.

³⁷ The KwaZulu Government, "Strategic Plan for Agriculture and Forestry." 1.

Table 1.2 : Provincial Distribution of Poverty and Inequality (1993)

PROVINCE	%Households living in poverty	% Individuals living in poverty	Poverty trap (R million)	Poverty gap as a % of GDP
Eastern Cape	40.4	50.1	3 303	11, 4
Free State	568	64	3 716	157
Gauteng	297	41	917	6
KwaZulu-Natal	361	471	1 159	2
Mpumalanga	338	451	968	31
North West	154	211	1 551	73
Northern Cape	382	48	257	32
Northern Province	619	693	2 948	214
Western Cape	141	179	529	1
South Africa	352	457	15 348	4

Adapted From J. May (2000: 31)

The assumption that families with members involved in the migrant labour system would have access to migrant remittances to sustain their families is not always correct. As in the above case the working husbands are not fulfilling their responsibilities and the burden remains upon the women to cater for the family. The weakening of the extended family system resulting from changing rural conditions and scarcity of resources also leaves women at a disadvantage. Those left behind, largely women, always have to create livelihoods within the survivalist sector.

M. C. Lyne and G. F. Ortmann argue that women are more concerned with the daily sustenance of their families and have little inclination to producing for the market.³⁸ Therefore, besides lack of infrastructure, the absence of able-bodied men can be considered as one of the major reasons why KwaZulu-Natal has a relatively unproductive rural economy.

In recent times, pensions as opposed to migrant remittances have taken over as the foremost important source of income available and act as a cushion to the abject poverty characterising these communities.³⁹ The high rate of illiteracy among adults further compounds the problems of relative lack of progress in agriculture. In the early 1980s, the 'homeland'

³⁸ M. C. Lyne and G. F. Ortmann, "Estimating the Potential for Creating Additional Livelihoods on Commercial Farmland in KwaZulu-Natal." In Lipton, M., F. Ellis and M. Lipton. [eds.] Land, Labour and Livelihoods in rural South Africa Volume Two: KwaZulu-Natal and Northern Province. Durban: Indicator Press, 1996. 60.

³⁹ J. May, "Assets, Income and Livelihoods." 22.

government's agricultural policy for the region looked more and more to trees and forestry to provide improvements in the living conditions.

Box 1: Interview with a Female Grower in KwaMbonambi District of KwaZulu-Natal

When SAPPI people told us about planting trees and that they would provide us with the seedlings, market and money to pay for the tasks done I accepted the idea because I did not have money. My husband left for town (Durban) five years ago to look for a job since he was laid-off from Richards Bay where he worked as a casual labourer at the Mine. Life was better then, but when he went I could not even send my children to school. It pained me to see other children going to school and mine at home. I never heard from my husband. We hear a lot of things, some say he is in Port Shepstone, some Gauteng and some say he is staying with another woman in Durban. I had to stop sobbing about him for the sake of my children so I started growing trees. I have harvested once and my children are in school again. I work hard. I work in other people's woodlots as well. I am happy because my children assist me. They understand that everything I am doing, I do it for them. We did not get a lot of money but at least we are surviving. SAPPI told us we will get more money in the next harvest because I have paid back all my loan.

Another important aspect in the provincial distribution of resources is that of land. KwaZulu-Natal has a population growth rate of about 2.3 per cent per annum. Citing statistics from the Development Bank of South Africa's (DBSA) Population Survey, J. May argues that the size of KwaZulu-Natal's rural population is likely to continue to increase.⁴⁰ As discussed earlier, arable land, as the most important resource for the rural economy, is scarce. The larger part of the arable land is owned by large-scale commercial farmers and the state leaving very limited land available for rural populations. According to C. Cross, *et al.* many of the rural disadvantages stem from apartheid land policies where access to land was distorted.⁴¹ Forced removals and misconceived developmental interventions led to overcrowding. This implies that conditions are conducive to land degradation from over-use and over-population, which is in itself a basis for diminished rural livelihoods.

However, when compared with other provinces, KwaZulu-Natal has a diverse natural resources base which is now under constant threat from the rapid population increase and unsustainable use.⁴² Given the background of abject poverty and rising population pressure,

⁴⁰ J. May, "Assets, Income and Livelihoods." 5.

⁴¹ C. Cross, T. Mngadi, S. Sibanda and V. Jama, "Making a Living under Land Reform: Weighing up the Chances in KwaZulu-Natal." In M. Lipton, F. Ellis and M. Lipton [eds.] Land, Labour and Livelihoods in Rural South Africa Volume Two: KwaZulu-Natal and Northern Province, Durban: Indicator Press, 1996. 122.

⁴² C. Cross, L. Luckin, T. Mzimela and C. Clark, "On the Edge: Poverty, Livelihoods and Natural Resources in Rural KwaZulu-Natal." In M. Lipton, F. Ellis and M. Lipton [eds.] Land, Labour and Livelihoods in Rural South Africa Volume Two: KwaZulu-Natal and Northern Province, Durban: Indicator Press. 1996. 174.

life in the rural communities is basically sustained by the exploitation of these resources. D. A. Taylor, argues that the harvesting of natural resources for rural and marginal populations of the Third World countries has always been a source of livelihood. It has been responsible for supplying basic needs such as, first and foremost, woodfuel for energy, but also food, medicinal products and material for shelter, among an array of other non-timber forest products.⁴³

This is true of KwaZulu-Natal where natural resources utilization is central to rural livelihood strategies. Pessimists and critics have ascribed the rising environmental degradation in these rural communities to the harvesting of natural resources. However, recent studies have shown that to the contrary, traditional harvesting methods in many ways are very sustainable and that it is the clearing of land for agricultural purposes that has led to the environmental degradation. This argument does not seek to undermine the role of conservation policies and management in the harvesting of natural resources. Policy should instead encourage this sustainable utilisation and also focus on alternative sources of the basic needs, particularly in response to the rising demand due to population increases.

The physical environment in KwaZulu-Natal has further compounded the ability of local people to ensure their survival. Cycles of droughts and floods have frustrated the minimal efforts of livelihoods on land. The 1980 drought has only exacerbated the deepening crisis of the rural areas of Natal.⁴⁴ Droughts invariably are broken by massive storm cycles that may cause large scale flooding.⁴⁵ The combination of floods and droughts have particularly afflicted the poorest rural communities in the former 'reserves'. Environmental degradation, soil exhaustion, the growing scarcity of natural resources, and overcrowding makes it difficult for these communities to create livelihoods capable of extricating them from poverty.

KwaZulu-Natal is experiencing the most severe effects of the Human-Immune Deficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS) in the country. The HIV/AIDS problem is causing pressure both on the human and monetary resources available for the rural development of the province.

⁴³ D. A. Taylor. "Income Generation from Non-wood Forest Products in Upland Conservation." FAO Conservation Guide, Vol. 30, 1996, 11.

⁴⁴ P. Brown (first Chairperson of AFRA), "Address to the Inaugural meeting of the Association For Rural Advancement held at the Coast region on the 12th of August, 1980." A. Harley and R. Fotheringham, [eds.] AFRA: 20 Years in the Land Rights Struggle, 1979 - 1999. Pietermaritzburg: The Natal Witness Press, 1999, 76.

⁴⁵ C. Cross, *et al.* "On the Edge: Poverty, Livelihoods and Natural Resources." 174.

Table 1.3: Percentage Estimates of HIV/AIDS Cases in South Africa, 1999

	1994	1995	1996	1997	1998	1999
Eastern Cape	4.5	6	8.1	12.6	15.9	18
Free State	9.2	11	17.5	19.6	22.8	27.9
Gauteng	6.4	12	15.5	17.1	22.5	23.9
KwaZulu-Natal	14.4	18.2	19.9	26.8	32.5	32.5
Mpumalanga	12.1	18.3	15.8	22.6	30	27.3
Northern Cape	1.83	5.3	6.6	8.6	9.9	10.1
Northern Province	3	4.9	7.9	8.2	11.5	11.4
North-West	6.7	8.3	25.1	18.1	21.3	23
Western Province	1.2	1.7	3.09	6.3	5.2	7.1
South Africa	7.6	10.4	14.2	16	22.8	22.4

Source: Adapted from C. Desmond, "The Demographic Impact of HIV/AIDS in KwaZulu-Natal." 2000. 6.

Recent statistics (Table 1.2) on the reported AIDS cases across the country's nine provinces indicate the seriousness of the situation in KwaZulu-Natal.

The cases reported for the province comprise nearly half of those reported for the whole country put together. These figures reflect reported cases only and many cases, particularly in the rural areas where the majority of the population who are more vulnerable live, go unreported. According to C. Desmond, the rapid spread can be explained in the movement of people and the socio-economic characteristics of the province.⁴⁶ Besides the conditions of poverty discussed earlier, C. Desmond emphasises the role of political violence and movements. According to him:

The political violence, which plagued the province in the 1980s and early 1990s, resulted in the disruption of normal life in many communities and the large-scale relocation of people within the province. People fleeing the violence often found themselves in squatter camps or other forms of urban squalor. Disruption of this nature contributes to the spread of HIV. There is greater sexual mixing and less social pressure to limit behaviours.⁴⁷

The importance of the AIDS situation is that it puts a further strain on the already overburdened rural economy. Those who are terminally ill and lose their jobs go back to their rural homes where they are not productive and some carelessly continue to infect other people there.

⁴⁶ C. Desmond, "The Demographic Impact of HIV/AIDS in KwaZulu-Natal." Seminar Paper, Presented to the Health Economics and HIV/AIDS Research Division (HEARD), University of Natal, Durban. 6.
⁴⁷ C. Desmond, "The Demographic Impact of HIV/AIDS." 6.

Rural KwaZulu-Natal also suffers from politically motivated violence even in the post-apartheid era as a result of power struggles between the African National Congress (ANC) and the Inkatha Freedom Party (IFP) leaders and supporters. This has a negative impact on development efforts in the region. For example, schools were burnt, facilities smashed, and the area made unsafe for attracting any investors. Nduna Mkhize, expressed his regret on how the schools and dipping facilities in his area had been destroyed by political agents which he described as 'elements of destruction and enemies of development'.⁴⁸ KwaZulu-Natal is an IFP stronghold, while the ruling Government of National Unity is ANC-led. This political situation has also strained efforts to introduce and implement Integrated Rural Development projects, particularly those initiated by national government. There is suspicion among the recipients of development initiatives promoted by the ANC-led government. Where the rural bureaucrats are ANC-inclined, they are often viewed with suspicion and fear. Their motives and efforts are scarcely understood, and therefore they receive no support from the traditional authorities that normally have more power, control and access to the people.

There are allegations that in some areas local traditional structures have hindered development projects from being implemented in their areas of jurisdiction. The reason for this could be a deep-seated fear among traditional leaders as to the implications of 'externally' controlled development to their own power. There is fear that development will lead to a loss of power and the undermining of their traditional authority. This challenge to development also determines the extent to which tree-centred regimes are firstly accepted and secondly, their capacity to alleviate the shortage of resources and improve rural livelihoods. Even though ideological differences between the major political parties in the province are very minor, the differences in political affiliation often lead to policy deadlocks among national, provincial and local government technocrats. This affects the work of various government agencies in their attempts to address the problems of environmental degradation and rural development. On the contrary, traditional authorities were keen to co-operate with agribusiness initiatives as they were negotiated through them and they anticipated benefits.

At national level, integration and linkages have been forged among various stakeholders in government against environmental degradation and towards rural development. Forums were created between various departments which include; the Department of Water Affairs and Forestry (DWAF), the Department of Agriculture and Land Affairs (DALA), the Department of Environmental Affairs (DEA) and the Department of Minerals and Energy Affairs (DMEA). These departments however, still have a long way to go in terms of an integrated approach towards rural development and service delivery.⁴⁹ The South African Constitution

⁴⁸ Interview with Nduna Mbongiseni Mkhize, Nongoma District KwaZulu-Natal.

⁴⁹ E. M. Govere, "Legal, Institutional Policy and Socio-economic Forest Management." Southern African Forestry Journal, No 179, 1997. 36.

(Act 108 of 1996) is not clear as to whose responsibility it is to formulate policy and implement it. Schedules 4 and 5 of this Act stipulate which functions are the responsibility of national, provincial and local levels of government as well as which are concurrent responsibilities. However, since 1994, the practice has been that the national government establishes uniformity of norms, policies, standards and frameworks between government departments and across the different levels of government.⁵⁰ This deficiency in the Constitution has worked negatively against speedy environmental restoration.

^{23*} (The state of environmental degradation in most parts of KwaZulu-Natal, particularly in the area formerly known as Zululand, is critical. Most of the trees were cleared for residential and agricultural purposes. As a result, this has led to a shortage of wood for domestic fuel needs. The continued harvesting of the limited woodland has led to a vicious circle. The removal of the tree cover from the land left it prone to all forms of erosion. The evidence of this is in the extent of land degradation. Many areas of Zululand are inundated with deep gullies, which are threatening to wash away homesteads. Some gullies are causing havoc to the transport network as large chunks of rural roads get cut away. Extensive surface erosion has also added to the rising shortage of grazing and farmland. Various government efforts were made through the legislature to conserve natural resource. This led to the promulgation of Acts such as the Mountain Catchment Acts of 1970, National Parks Act of 1974, and the Environmental Conservation Act of 1989. (Discussed below as background to tree growing and the conditions of the region). These were designed among other things, to control and empower foresters to arrest offenders who, for example cut down trees "illegally" have not been successful. More recently the response has now shifted from the basic policing of the woodlands to the encouragement of tree-planting regimes which would provide alternative sources of energy.⁵¹ It is in this context that government and agribusiness tree-growing schemes could be regarded as instrumental in the provision of relief to rural poverty and the escalating condition of environmental degradation.)

Dividing and Developing the Land

South African governments throughout their history have been very pro-active in promoting tree planting. Tree growing was promoted as a way of protecting the environment, natural woodlands and forests, and keeping people away from neighbouring white owned plantations. Besides legislation directly concerned with tree growing, legislation that influenced access to land was also very instrumental in the process. Land Acts since 1913 will therefore be reviewed to understand the effect of land allocation on tree growing.

⁵⁰ DWAf. "Promoting Sustainable Livelihoods for Communities through the Use and Management of Natural Resources." Workshop Proceedings and Papers, 12 - 13th May, 1999.

⁵¹ T. J. Foy and C. B. Willis, "A Forest Policy for South Africa: Why we Should have one and What it should Contain?" Southern African Forestry Journal. No. 181, 1998, 34.

The question of land and land tenure reform is of immense importance to the subject of community forestry, agro-forestry, out-grower schemes, and rural development in general. While this study does not seek to offer solutions to solve the land tenure, reform and redistribution problem, it will point out how it basically affects its operations and possible success. The SAPPI project was actually conceived with local models of land resource definition in mind. The woodlots were established according to existing local norms of land tenure and land use. The support of the Tribal Authorities, under whom land in the communal areas fall, was sought. This enables SAPPI to access the land while showing a general regard for the traditional systems of land tenure. However, the SAPPI project should not be seen as simply an adaptation to a fixed set of circumstances, but as an intervention which has also contributed to change in these circumstances.

The Land Act of 1913 was the most fundamental piece of legislation in material terms and also symbolically the most potent up to the present day. It introduced (though without completing) the definitive division and its legal sanctification, of the land of South Africa between areas of white and black settlement and permanent residence. The cumulative impact of the 1913 Land Act served to intensify pressure on subsistence activities and reproduction in the 'African Reserves'.⁵² It formalised the racial division of land and the spatial basis of social segregation which further limited the area "reserved" for Africans. However, the Native Bills of the 1936 after the creation of the Native Trust, increased land for Africans to a meagre 13 per cent after experts warned of the impact of overcrowding in the 'Native areas'. According to R. Davies *et al*:

Beginning in the 1930s, a series of government commissions warned of acute landlessness, overcrowding, severe soil erosion, the creation of "desert conditions" and the 'spectre of mass starvation' in the reserves.⁵³

The 1936 Natives Land Trust and Act extended from 8 per cent to 13 per cent, the land 'reserved' for Africans, which 60 years later, at the end of apartheid had not been fully allocated. Agrarian interests were central to the success of the National Party in 1948. The ascendance of apartheid as the state policy in 1948 is strongly related to the control of land and the labour resources of Africans, and entrenching the hegemony of Afrikaner farmers over the Africans, at the same time effectively ruining any chance of an African peasantry class to rise. According to H. Bernstein, "apartheid represented primarily an attempt to restructure relations of exploitation to cope with agriculture's labour crisis."⁵⁴

⁵² H. Bernstein, "South Africa's Agrarian Question: Extreme and Exceptional." in H. Bernstein [ed.], The Agrarian Question in South Africa. London: Frank Cass, 1996. 5.

⁵³ R. Davies, D. O'Meara and S. Dlamini, The Struggle for South Africa. London: Zed Books, 1988. 16.

⁵⁴ H. Bernstein, "South Africa's Agrarian Question." 9.

The segregation by race and the dispossession of Africans' land and livestock that characterised apartheid led to the degradation and untold sufferings in designated African 'reserves'. The Tomlinson Commission's report tabled before Parliament in 1954 made some recommendations for the measures aimed at the recovery of African areas and 'betterment planning regimes' in the designated 'Black Areas'.⁵⁵ According to C. De Wet, "betterment planning officially refers to attempts to combat erosion, conserve the environment and develop agriculture in the South African homelands."⁵⁶

One important development in this period was the formation of the 'Bantustan system' through the Promotion of the Black Self-Government Act 46 of 1959. This Act enshrined apartheid by making Africans citizens of ten nations or ethnic 'homelands'.⁵⁷ H. Bernstein, argues that:

In a not unfamiliar paradox of capitalist development, and at a time of rapid economic growth, the bantustans were undergoing a shift from cheap breeding grounds for black labour to a dumping ground for a growing relative surplus population as agriculture and industry became more capital intensive.⁵⁸

Between 1960 and 1983 the accelerated forced removal of blacks from white areas affected more than 3.5 million Africans. The scale of these forced removals, together with demographic growth, exacerbated already serious pressures of population density in the Bantustans.⁵⁹ The South African state also funded the 'homeland administrations' resulting in the creation of a collaborationist petty bourgeoisie, which acted as a counterweight to popular opposition.

The funding of Bantustan regimes by the South African State reached massive dimensions in the final phase of apartheid, going into their proliferating ministries and government departments, development corporations and schemes, parastatal companies, universities, and so on. ... the structures of repression in the Bantustans were thus combined with opportunities for accumulation from above.⁶⁰

⁵⁵ D. Page and M. A. Rabie, "Land-use Planning and Control." In R. F. Fuggle and M. A. Rabie (eds.), Environmental Concerns in South Africa: Technical and Legal Perspectives. Cape Town, Juta and Company Ltd, 1983. 460.

⁵⁶ C. De Wet, "Betterment Planning in a Rural Village in Keiskammahoek, Ciskei." Journal of Southern African Studies, (15) 2, 1989. 329.

⁵⁷ D. Page and M. A. Rabie, "Land-use Planning and Control." 460.

⁵⁸ H. Bernstein, "South Africa's Agrarian Question." 12.

⁵⁹ D. Davies and H. Corder, "Restructuring the Rural Economy: Legal Issues." In M. De Klerk [ed.] A Harvest of Discontent: The Land Question in South Africa. Pretoria: IDASA, 1991. 27.

⁶⁰ H. Bernstein, "South Africa's Agrarian Question." 12.

The funding of Bantuastans should be understood in the context that, as a result of partitioning the country unequally, the apartheid regime was then confronted with the the problem of development in the reserves if they were to continue to serve their intended purposes in the national economy. Out of this concern, emerged various development practices. In 1983 the apartheid regime established the Development Bank of Southern Africa (DBSA) a South African version of the World Bank to finance 'homeland' economic development. Instead of adding land to the homelands, the focus was on establishing development projects.⁶¹ However, these projects were always affected by a shortage of land. The transition from apartheid through the establishment of the Government of National Unity introduced a new era in the land reform history of the country. However, even before this process began to unfold, agribusiness intensified its involvement with rural communities.

Agribusiness investment in community forestry projects was practised with little concern for the social and political structure of society, particularly with regards to residents' economic interests in the land. Instead it expressed a more direct process of negotiation and investment in land. As will be discussed later under the growers' experience with SAPPI, the residents were promised the opportunity to change their agricultural practices for financial gain in the market place without changing the principles of land tenure.

The 1970s were a benchmark in the history of community forestry and woodlot development. This development can be understood in the context of the energy crisis debate sparked by the hike in world oil prices. The importance of the energy crisis was that it exposed how dependent developing countries and particularly rural communities were on wood and that the forests were facing imminent depletion. Woodfuel shortages were discussed on the basis of a straightforward supply and demand imbalance. There were more people, less trees. The responses suggested for the problems were driven by Green Revolution thinking (high external input and technological development) and therefore, direct energy policy programmes were opted for to close the gap by planting more trees.⁶² Attempts to model solutions for the woodfuel crisis were premised upon the incongruous assumption that the process of deforestation was driven by the cutting down of trees for fuel needs. Instead, it was the large-scale clearance of trees from land intended for agricultural development which in turn led to a chronic woodfuel shortage. As a result, initiatives were directed at the symptoms of the woodfuel crisis and failed to address the underlying problems of poverty, rapid population growth, inappropriate patterns of urbanisation and deforestation.⁶³

⁶¹ D. Davies and H. Corder, "Restructuring the Rural Economy," 28.

⁶² B. Munslow, B. Y. Katerere, A. Ferf and P. O' Keefe. The Fuelwood Trap: A Study of the SADCC Energy Secretariat Carried out by the ETC Foundation. London: Earthscan Publications, 1988. 15.

⁶³ P. Dewees, "The Woodfuel Crisis Reconsidered: Observations on the Dynamics of Abundance and Scarcity." World Development. (17) 8, 1989. 12.

The 1970 Mountain Catchment Act provided for the conservation, use, management and control of land situated in the mountain catchment areas. It also covered aspects of forestry and watershed protection for which woodlot development was prescribed as a possible solution.⁶⁴ In 1974 the National Parks Act was passed and provided for the designation and management of National Parks. This Act provided for the absolute protection of all trees and other forest produce in parks, even though there were some specific trees which were protected regardless of their location. The effect of these Acts was to limit the access by communities living contiguous to mountain catchments and National Parks. As observed by M. R. De Montalembert, *et al.*:

... moves to reform the tenure of forests and forest lands, whether through nationalization, privatization, regulation or deregulation, have tended to restrict or penalise access by local people to wood fuel which they have long regarded and treated as common property. Where exclusion is inevitable, agro-forestry or social forestry projects enabling wood to be grown for energy use in conjunction with farming operations or on purpose-grown community woodlots, can foster constructive alternatives.⁶⁵

In 1983 the Conservation of Agricultural Resources Act was passed to provide for land rehabilitation measures including agro-forestry and other tree planting projects for soil conservation. This was followed by the Forest Act of 1984 which was meant, *inter-alia*, to "provide control over afforestation and over State Forests, protection of biota and ecosystems and the establishment of a Forestry Council to promote and encourage the development of the forest and timber industry."⁶⁶

The Act also set out the powers of forest officers, the nature of offences, and the power of the police and magistrates with regard to forest issues. Concern about the rate of environmental degradation led to the Environment Conservation Act of 1989 passed to provide for the effective protection and controlled utilisation of the environment. The Act introduced new thinking about integrated environmental planning which had the effect of bringing forest management into the orbits of environmental planning.⁶⁷

However, as would be demonstrated later, there was a shift in environmental policy in the 1990s influenced by international finance and research organisations that emphasised the importance of sustainable systems of agriculture and use of natural resources.

⁶⁴ D. Page and M. A. Rabie, "Land-use Planning and Control." 469.

⁶⁵ M. R. De Montalembert and J. Clement, Fuelwood Supplies in Developing Countries. Rome: FAO-Forestry Paper 452, 1983. 17.

⁶⁶ M. R. De Montalembert and J. Clement, Fuelwood Supplies. 19.

⁶⁷ M. Gandar and S. Christie, "Commercial and Social Forestry. Working Paper 18." Johannesburg: Land and Agriculture Policy Centre, 1995. 13.

In the same period (1980s), apartheid was facing mounting resistance both locally from the black communities and internationally. This was also the time when the IFP was consolidating its roots in the rural areas of KwaZulu-Natal. The National Party and Agribusiness renewed their attempts to reduce rural pressure by allying with the IFP in the pretext of addressing the needs of local communities. Non-Governmental Organisations (NGO) such as the Environmental and Development Agency (EDA) also joined the bandwagon by supporting initiatives to develop community based tree projects in the name of woodland regeneration. These initiatives led to an increasing engagement of communities in community-based forestry and various tree-growing regimes later to be known as community forestry.⁶⁸ Of these initiatives, the most interesting development to have profound effects even in the post-apartheid period was the involvement of agribusiness with rural households in commercial forestry projects. Rural black households with land held under the tribal/communal land tenure system were contracted to become commercial small growers of trees such as *Eucalyptus*, pine and wattle.

In 1983 a private company, the South African Pulp and Paper Industry (SAPPI), initiated Project Grow, a scheme to assist growers to plant from 1 to 5 hectares of trees with free seedlings and interest free loans. The rationale of this programme (as with that of MONDI's Khulanathi Project commenced in 1989 and SAWGU's Small-Growers Project commenced in 1992) was officially recorded as a 'social responsibility'. The idea was to give these small growers access to extension services, markets and inputs and provide them with a chance to accumulate capital. The communities were made to believe that there would be infra-structural spin-offs in the form of improved roads. In fact the former KwaZulu government had promised that they would construct access roads as soon as there were income generating projects in the communities, a promise they did not fulfill and which still remains a stalemate issue between growers and the local councils.⁶⁹

LIMA a rural development foundation and NGO was contracted by SAPPI in 1987 to administer and extend the small grower scheme in to southern KwaZulu-Natal.⁷⁰ LIMA's approach is different from that of SAPPI, MONDI and SAWGU. LIMA promotes multiple land use options, ranging from vegetable gardens, poultry projects, bee keeping and others, besides tree growing. LIMA's rationale is to present other enterprise options to farmers and assist toward 'rational land use'. In 1989, MONDI (operating under the name of its key timber acquisition, Natal Tanning Extracts (NTE) also followed suit initiating their Khulanathi Project based on business principles. It was an open business venture which made

⁶⁸ M. Underwood, "In Search of an Appropriate Agro-forestry Model." Occasional Paper No. 25/97. University of Natal-Pietermaritzburg: Institute of Commercial Forestry Research, 1997. 9.

⁶⁹ Interview with Induna Mkhize and iNkosi Cele, Mahlabatini District, Ulundi. September 1999

⁷⁰ Interview with B. Gumede (Project Grow Manager).

use of communally owned land which it could not access legally, to enhance its tree growing capacity, and as a result meet its demand for timber. In 1992, the South African Wattle Growers Union also established a Loan Scheme intended for the rural black communities to enhance deliveries of their wattle products (bark and chips, etc).

Besides tree planting, the sugar industry is also a major player in contract arrangements with rural communities. According to A. McIntosh and A. Vaughan:

... over the past 20 years, the sugar industry has intervened significantly in the economy of KwaZulu-Natal by encouraging and facilitating the development of a small grower sector. ... From the point of view of the farmers who have accepted support, participation in production may be said to have had benefits and costs. The opportunity to produce cane has meant an opportunity to earn a cash income, which, particularly in the case of irrigated production, may be substantial and sustained.⁷¹

The history of organised small-scale cane producers in the former KwaZulu goes back to around 1973 when the South African Sugar Association (SASA) established a revolving credit system – the Financial Aid Fund (FAF) to draw small producers into cane growing.⁷²

The Physical Planning Act of 1991 was passed to promote the orderly physical development of the country and emphasised the need to enforce afforestation permits which were enacted in 1972. In 1992 the Management of State Forestry Act was promulgated to allow government to establish a parastatal to manage commercial plantations on state land. As a result the South African Forestry Company Limited (SAFCOL) was established as a private company registered in terms of the Companies Act.⁷³ SAFCOL is run on a private sector, profit making basis, with due and proper regard for the environment, its employees, its customers, and for the well being of the forest industry in general. (Between 1993 and 1995 the Institute of Natural Resources initiated a research project, the Biomass Initiative. This was an attempt to research community models to address the rapidly deteriorating energy supply situation through the supply of woody biomass.) Important lessons were learnt from this research effort. One of the more important findings was that a pure focus on energy (fuelwood) was insufficient and that an integrated approach to preferred land use systems and livelihood objectives was required.⁷⁴

⁷¹ A. McIntosh and A. Vaughan, "Enhancing Rural Livelihoods in South Africa: Myths and Realities." M. Lipton, F. Ellis and M. Lipton [eds.] Land, Labour and Livelihoods in Rural South Africa. Volume Two: KwaZulu-Natal and Northern Province. Cape Town, Indicator Press, 1996. 91 – 92. The chapter gives an in-depth overview of the small-scale sugar sector and the experiences of the participants.

⁷² A. McIntosh and A. Vaughan, "Enhancing Rural Livelihoods in South Africa." 91 – 92. The chapter gives an in-depth overview of the small-scale sugar sector and the experiences of the participants.

⁷³ S. S. Masuku, "Report to the Directorate Community Forestry, Year Ending 1998." Northern Region Community Forestry Zone. Eshowe, December 1998, 3.

⁷⁴ See the Biomass Initiative Reports 1 – 8. Institute of Natural Resources, Pietermaritzburg.

It was recommended that an institutional capacity for community forestry development with a national co-ordinating body was needed. It also realised the need for a nationally co-ordinated extension service linked to other rural development services operating at regional level to be established. In addition further testing of tree planting and management models was needed. One of the key recommendations was to acknowledge the importance of government funding. It criticised existing support services as inappropriate and fundamentally lacking in terms of the participatory and technical skills related to woodland management. However, it recommended that efforts should continue to focus on the establishment of woodlots and tree planting.⁷⁵

Post-apartheid woodlot development has to be understood within the broader South African macro policy. The first democratic elections in 1994 ushered in a new dispensation to South Africa driven by the desire to right the wrongs of the apartheid era in the spirit of reconciliation and accommodation. At the core of South Africa's transformation was the Reconstruction and Development Programme (RDP) developed by the ANC. Although the RDP is no longer a responsibility of one Ministry, it still enjoys political support. In theory, many of the government's policies and programmes still subscribe to the principles, goals and objectives of the RDP whose central goal was the creation of a strong, dynamic and balanced economy to eliminate poverty and redress wrong practices from the past. The Growth, Employment and Redistribution (GEAR) strategy now outlines ways in which the original RDP objectives are to be achieved.⁷⁶

* One of the Acts of Parliament passed with the objective of transforming rural livelihoods was the Restitution of Land Rights Act of 1994. Its main rationale was the restoring of land to former occupiers and to redress the former apartheid land policies. Land reform was regarded as being the pillar upon which the RDP initiative was going to transform the rural landscape. In 1995 a Rural Development Strategy within the RDP was formulated which recognised the development and management of forest resources as capable of playing a major role in improving living environments and economic opportunities for rural communities. The strategy anticipated rural development to be directed by local people with the assistance of representatives of local government.⁷⁷ In 1995, the Development Facilitation Act was passed with the intention of introducing extraordinary measures to facilitate and speed up the implementation of the RDP and land related projects. It also laid down the general principles governing land development throughout South Africa with its consequent effect on

⁷⁵ H. Sohne, "The Biomass Initiative: Helping to Avert the Crisis." *Arbor*, April, 1994. 6.

⁷⁶ P. Bond, *Elite Transition: From Apartheid to Neo-liberalism in South Africa*. Pietermaritzburg: University of Natal Press, 2000. 89.

⁷⁷ P. Bond, *Elite Transition*. 92.

afforestation. In the same year, the Land Administration Act was passed to provide for the administrative support required in the land restitution and redistribution exercise.

In 1996, the Communal Property Associations (CPA) Act was promulgated to support the Government's efforts on land reform. The formation of the CPA was regarded as the most important legal 'entity' communities could establish when woodlots were devolved to rural communities by the DWAF.⁷⁸ This was an important development considering that the poor are still widely dependent on common property resources. In most woodlot programmes and projects, the social forestry interventions are predominantly on land outside the forest. Any intervention regime that seeks to effect joint management of forest land, building on the potential of mutual benefits to be obtained from greater access to forest products by local people and reduced protection costs for common property resource use would be of advantage to all parties concerned.⁷⁹

These features were incorporated in the 1996 White Paper on Sustainable Forest Development and the National Forestry Action Plan (NFAP) of September 1997. The argument informing these documents was that there was a need for a new and equitable forest policy. This new document regarded community forestry as "forestry defined to and applied to meet local social household and development ... implemented by or with the participation of local communities."⁸⁰ In this framework the role of DWAF was defined as that of a "service provider to other service providers."⁸¹ The implication of DWAF's assigned role in community forestry was that government had to identify and support the efforts of NGOs and agribusiness in rural communities. In this way the government realised the initiatives of the two major timber giants and NGOs involved in tree growing activities with rural communities.

In 1997, four White papers, the first one on the Conservation and Sustainable use of South Africa's Biological Diversity, the second on an Environmental Management Policy for South Africa, a third on South African Land Policy and finally one on a National Water Policy for South Africa - were published. These policy documents were based on the Constitution, emphasising the need for fairness and equity in access to resources. They envisaged major changes in the way land use decisions would be taken, particularly with regard to those that

⁷⁸ After the first general election of April 1994, the Department of Forestry was transferred from Agriculture to join the Department of Water. The reason was that the main issue in forestry was regulation and management, within the context of sustainable development.

⁷⁹ P. Reyneke, "Focus on Rural Forestry: Trees for the People." Wood South Africa and Timber Times, August, 1993. 14.

⁸⁰ DWAF. "National Forestry Action Plan (NFAP): South Africa's National Forestry Action Programme." Pretoria: DWAF, 1997. 7.

⁸¹ DWAF. "NFAP." 27.

either affected the environment or were regarded as stream-flow reduction activities.⁸² The White papers became the basis for future Acts, for example the White Paper on National Water Policy for South Africa informed the National Water Act (No 36 of 1998) which was aimed fundamentally at reforming the laws relating to water resources. The need for afforestation permits was informed by the recognition of forestry as a major stream-flow reduction activity.

The National Forests Act (No 84 of 1998) and National Veld and Forest Fire Act promulgated in 1998 as an instrument of policy laying legal foundation for implementation of policy had a direct bearing on the community forestry sector. It provided the appropriate environment for greater participation in forest management. It defined the principles or framework within which forests must be managed and acknowledged changes in the role of the State in forest management.⁸³ In the same year a discussion document on Agricultural Policy in South Africa was circulated with the rationale of supporting agricultural development at all levels while sustaining natural resource use.

In conclusion rural KwaZulu-Natal is characterised by high unemployment levels, low income, high migrancy, growing HIV/AIDS cases and general social strain. Industrial development has not been able to reach the remote areas of the province. Apartheid economic planning based on separate development ensured that the black communities would not benefit from industrial development in urban areas. As a result, the most important form of capital injection in rural areas in the nature of old age and disability grants as opposed to migrant labourers' remittances. It is in this background that initiatives by NGOs, agribusiness and the post-apartheid government have been received by traditional authorities and well as politicians in the belief that they would help expand the chances for the people in rural communities who are locked in abject poverty. The following chapter discusses the concept of community forestry, its development and supposed ability to contribute to rural development. This it fulfills by tracing the history of the concept, its theory and application within the context of South Africa in general and KwaZulu-Natal in particular.

⁸² A. Kuhn, "Making Forest Policy Work: Proceedings of a Five Day DWAF Course." Pretoria: DWAF and the UK Department for International Development (DFID), 1999. 97.

⁸³ A. Kuhn, "Making Forest Policy Work." 104.

CHAPTER TWO

COMMUNITY FORESTRY AND RURAL LIVELIHOODS

The shortage of woodfuel and job opportunities in rural South Africa created conditions for which tree-growing models which were to be popularly known as community forestry were seen as viable intervention measures. The concept of community forestry will be looked at from the point of view of community woodlots established mainly for wood fuel and that of company supported commercial tree plots by individual landholders meant for sale to timber giants. These two forms of tree growing models have been proposed as important to the improvement of livelihoods for rural households. The woodlot model has its history stretching to as far back as the end of the nineteenth century but gaining momentum during the apartheid period mainly as an intervention for the environmental disaster ensuing in the former 'homelands'. Thus woodlot development in this instance was primarily for conservation purposes and the sourcing of basic needs including woodfuel became secondary to it. The woodlot story is pursued closely in chapter three where its history and capacity to deliver its supposed benefits are evaluated. The involvement of agribusiness on the other hand, and particularly in the former 'homeland' of KwaZulu, also lies within the apartheid period where agribusiness sought to access land held under the Ingonyama Trust and to make concessions with the former KwaZulu Government in the name of development partnerships. This is basically a story of agribusiness' needs coinciding with the development interests of the government rather than a need to see rural areas redeemed from poverty on the part of the former. This part of the story is central to the study and is pursued extensively in chapter four where a specific agribusiness scheme, Project Grow, is evaluated and analysed critically. The current chapter therefore provides a historical background, conceptual and analytical overview of these two tree-growing initiatives. While chapter one provided an understanding of the geographical area of study, chapter two is concerned with the issues being studied thus forming a background to chapters three and four. In chapter two linkages between the concept of community forestry and the provision of rural livelihoods are also sketched.

In South Africa the term 'community forestry' was first used by the South African National Commission of Agriculture's (SANCA's) 1976 Report. The term was used to describe a programme of "activities [meant] to encourage those who depend on fuelwood and other forest products to produce their own supplies in order to lighten the burden on production forestry."⁸⁴ According to M. M. Cernea, "the emphasis in social forestry should be in initiating support programs specifically aimed at influencing the social actor to be able to

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Government of South Africa. The Report of the National Commission of Agriculture, 1976. 26.

perform this expansion.”⁸⁵ This implies that there should be a deliberate effort to empower the grower to participate in the development process and to maximize his or her profit.

There were high expectations for community forestry as opposed to industrial-based development programmes to bring better livelihoods for rural people. Apartheid industrial policies were deliberately meant to benefit a specific and minority section of the South African population, the whites. Employment for the blacks in industry was minimal and wages often too low, without any opportunities for upward mobility for the majority of black workers. This left the rural areas having to subsidise industry by reproducing cheap labour and in many cases totally estranged from the cash economy of urban employment. The reproduction of labour was left entirely in the hands of the rural economy, leading to continued marginalisation. According to J. E. M. Arnold:

In very broad terms, industry based development programmes often failed and in the few success cases, they were highly localised failing to relate to people's actual needs, with the generated wealth seldom spreading to the rest of the population, leading to growth patterns that actually worsened the impoverishment of those outside the growth sectors.⁸⁶

Given this background, one can assume that community forestry was at its best a scheme hatched to keep Africans in the homeland. It was expected that with its supposed development and rural livelihoods provision potential it would put a hold to rural-urban migration. However, this was to prove unachievable as the extent to which community forestry can be profitable depends on the ability of an individual household to put previously earned resources to use. In many cases, these families do not possess anything they can re-plant into these schemes.

The post-apartheid South African government planners and rural-based NGOs look at the small grower sector as having the potential to improve the rural economy. The new optimism in rural agriculture is supported by the fact that transformation in growers' access to markets and facilities would improve their efficiency. However, A. McIntosh and A. Vaughan are sceptical about this populist paradigm, which emphasises the potential of land reform and redistribution in alleviating poverty and the restructuring of South Africa's rural economy. They also deny that small holder development could support small-scale agriculture and become an effective mechanism for creating and enhancing livelihoods in the rural areas. They propose that there are better prospects for significant inputs to rural livelihoods in South Africa through smallholder agriculture. The inherent weakness in smallholder agriculture

⁸⁵ M. M. Cernea, [ed.] "Social Knowledge for Development Projects." Putting People First: Sociological Variables in Rural Development. World Bank: Oxford University Press, 1985. 12.

⁸⁶ J. E. M. Arnold, Community Forestry: Ten Years in Review. FAO: Rome, 1992. 1.

requires that poverty alleviation be achieved through local initiatives and other social strategies without significant capital injections.⁸⁷

Neo-populists, on one hand, expect small-scale agriculture to take the central role in economic development of rural areas. On the other hand orthodox theorists follow the tenets of classical economics by placing emphasis on the expansion of the scale of production. For instance, the Russian populist movement opposing the orthodox models argued that industrialisation can allow an expansion in the output of agriculture, and advocated that small-scale agriculture production on the land was an alternative to capitalist development. The populists wanted to avoid the cost of primitive accumulation, that is, the dispossession of some producers in order that others might accumulate.⁸⁸ In post apartheid South Africa there is hope that through promoting small-scale agriculture the government would be able to provide a living for the majority of the people living on land in the rural areas and bring them into the economic mainstream.

This desire to promote rural development through the utilization of local resources can be seen in the definitions of terms such as agro-forestry, community forestry and social forestry (occasionally used interchangeably even though they mean different things), among others. Policy documents in which these terms were adopted and used, betray the enthusiasm and hope that bureaucrats and technocrats had in these terms that were elevated to the same level as rural development. The National Forestry Act No 84 of 1998 closely follows the definition of community forestry given in the FAO Report on Community Forestry in 1987. It defined community forestry as:

... any situation which intimately involves local people in a forestry activity. It embraces a spectrum of situations ranging from woodlots in areas which are **short of wood** and other forest products for local needs, through the growing of trees at the farm level to provide cash crops and the processing of forest products at the household, artisan or small industry level to **generate income**, to the activities of forest dwelling communities [my emphasis].⁸⁹

According to this definition, community forestry can be perceived as encompassing activities by individual households, men and women, individual and family farmers, as well as involving a community as a whole.

⁸⁷ A. McIntosh and A. Vaughan, "Enhancing Rural Livelihoods in South Africa: Myths and Realities." [eds.] M. Lipton, F. Ellis and M. Lipton. Land, Labour and Livelihoods in Rural South Africa (Vol. Two) : KwaZulu-Natal and Northern Province. Durban: Indicator Press, 1996. 104.

⁸⁸ A. McIntosh and A. Vaughan, "Enhancing rural livelihoods in South Africa." 105.

⁸⁹ FAO. Forestry for Rural Communities. Rome: FAO-Forestry Department, 1987. 7.

Community forestry comprises three main elements. Firstly, the provision of 'food and the environmental stability necessary for continued food production.' Secondly, the provision of 'fuel and other goods essential to meeting basic needs at the rural household and community level' and finally, the generation of 'income and employment in the rural community'.⁹⁰ Community forestry should therefore be seen as capable of generating rural livelihoods from its potential to provide the poor with basic goods and introduce a dimension of become self-reliance. Forestry for community development must therefore be forestry for the people and involving people at the grassroots level. Community forestry is participatory and therefore capable of addressing the expressed needs of the rural poor.

The term community forestry can also incorporate the activities that have been described as agro-forestry. P. K. Nair, defines agro-forestry as, "the conscious and sustained integration of woody perennials and their crops with arable and/or pastoral husbandry with the object of increasing rural productivity and improving the character of the land."⁹¹ The term agro-forestry received greater use in the early 1990s with emphasis on the output within the parameters of a sustainable economic system. However, attempts to implement agro-forestry as a way of addressing the environmental and economic dimensions of development often failed to recognise the existing social dynamics. It is this limitation of the agro-forestry approach that stimulated the development of the community forestry model. Community forestry is part of a nexus of intertwining and inter-dependant webs. As demonstrated in Figure 1 below, community forestry has linkages with many systems.

The term social forestry is also used to discuss tree-centred interventions in the rural economy. M. Underwood defined social forestry and went further to differentiate it with community forestry.⁹² According to him:

Social forestry is the involvement of local people growing a few trees here, a few trees there, a small village woodlot, trees along the road or inter-spaced (for shade and wind breaks) in the fields, differing with community forestry in that it relates to the individual use of trees and tree products, usually in small scattered stands as opposed to group community initiative normally associated with a more substantial block.⁹³

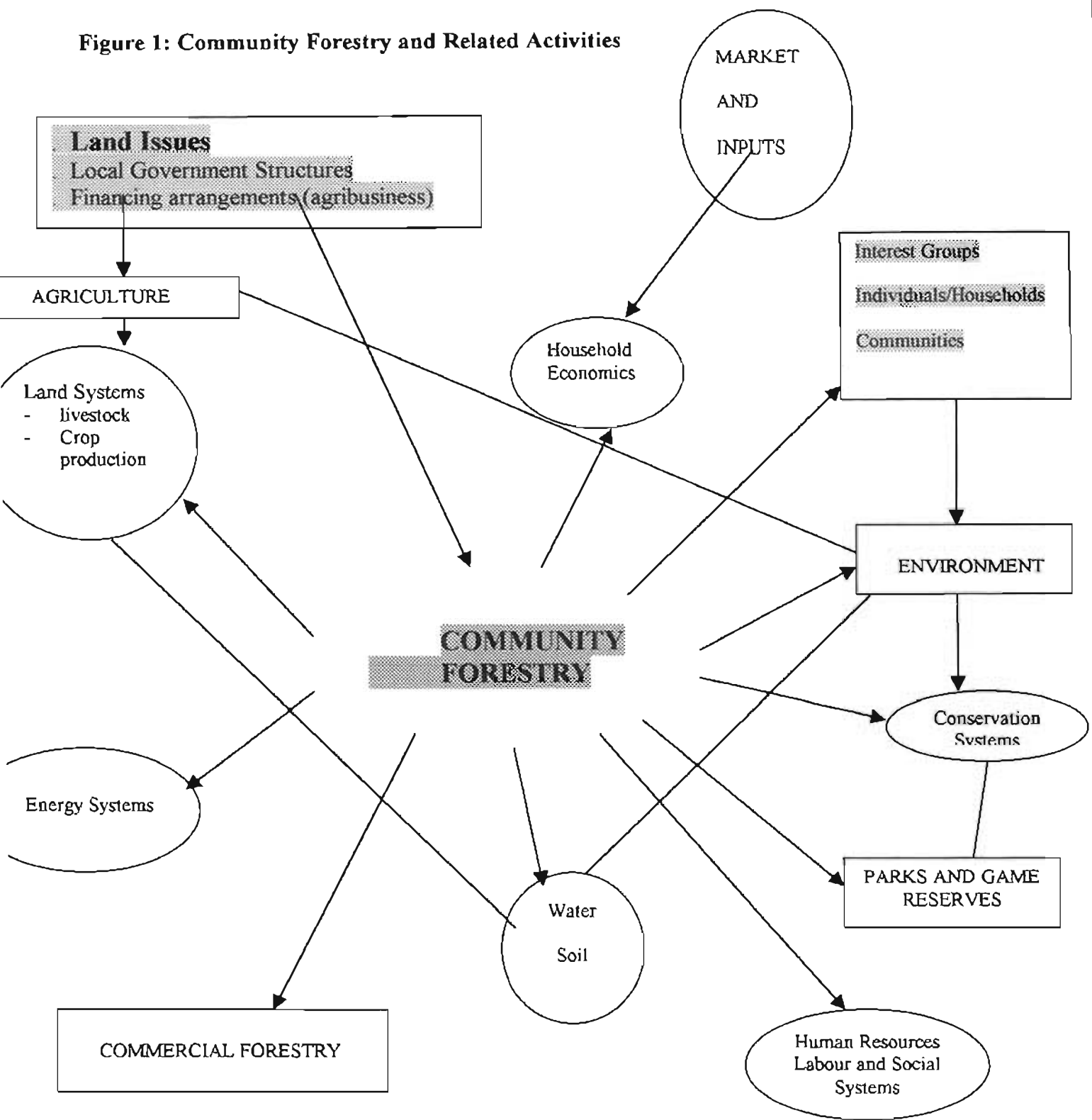
⁹⁰ FAO. Forestry for Local Community Development. Rome: FAO-Forestry Paper 7, 1978. 12.

⁹¹ P. K. P. Nair, "Multipurpose Leguminous Trees and Shrubs for Agro-forestry." Agro-forestry Systems, Vol. 2, 1984. 147.

⁹² Mike Underwood is a Community Forestry Co-ordinator in the Forestry Programme in the School of Agricultural Science and Agribusiness, based at the Institute of Commercial Forestry Research, University of Natal-Pietermaritzburg.

⁹³ M. Underwood, "Agro-forestry Defined - Its Applicability to the Forestry Industry." Paper Presented at the SAIF (Western Cape Branch) Symposium on 'Trees in the Landscape' held at Stellenbosch University on 19 May 1993. 3-4.

Figure 1: Community Forestry and Related Activities



Illustration

Notwithstanding this distinction provided by M. Underwood between the two concepts, social forestry is generally used interchangeably with community forestry. Others use the term social forestry to describe an implicitly narrower spectrum of activities surrounding the

fuelwood/afforestation/woodlot issue. Some use the term community forestry to emphasise the idea of woodlot for the whole community by the community. S. Christie and M. Gandar, however, argue that the end use of the trees and their ownership is important in determining which term to use.⁹⁴

The current use of the term community forestry encompasses all the other concepts such as agro-forestry, farm forestry, social forestry, forest farming, permaculture, among other tree related farming projects. This current use considers community development or rural advancement as a common end out of any of these activities. This approach ignores the differences arising from ownership either by the community or individuals, and the differences arising from the end-use of the tree. This study considers community forestry as a tree-growing activity by either individuals or communities with the common goal or common objective of rural development. It regards tree growing as an opportunity for creating rural livelihoods and capable of providing an alternative development opportunity for the communities or individuals involved.

The Evolution of Woodlot Development: International and Local Experience

Almost everywhere in the world where tree growing was promoted it was largely for the purposes of conservation. As a result the emphasis was on the re-afforestation of previously forested areas. Many people who depended on wood for fuel and other daily household uses faced growing shortages of wood and the most popular reaction was to restore the wood biomass by growing trees. However, other areas which were previously largely grasslands and scarcely wooded were also caught up in this tree-growing frenzy. This would also partially account for the promotion of tree growing in areas in the former KwaZulu which were historically grasslands and had been known more for their grasses sustaining the cattle-economy of the Zulus. The overcrowding of this former 'homeland' like any other self-governing 'Bantustan' in South Africa led to massive environmental degradation and threatened the communities with starvation from shortage of cropland, grazing land for livestock and also the shortage of fuelwood. Experts advised the 'homeland' government to embark on woodlot schemes to restore the environment and provide the people with basic tree-based needs. Thus wood for fuel and conservation became the largest driving forces behind the woodlot schemes in this period.

According to B. Munslow *et al.* wood is the main source of energy for 50 per cent of the people in Africa compared to 20 per cent in Asia and Latin America. In regional terms, southern Africa has more than 70 per cent of the entire population largely *if not totally*

⁹⁴ S. Christie and M. Gandar, "Commercial and Social Forestry." Working Paper 18. Johannesburg: Land and Agriculture Policy Centre, 1995. 67.

dependent on wood for energy with the rural populations having an almost total dependency on wood resources.⁹⁵ W. B. Morgan and R. P. Moss argue that:

The dependence of rural communities on natural resources is direct and immediate ... unhappily, people on the margins of survival are compelled by their poverty and their consequent vulnerability to inflation to destroy the few resources available to them.⁹⁶

A clear gap exists between sustainable supplies and a seemingly exponential growth in demand for fuelwood. Population growth places a growing burden on fuelwood users who have to search even further and further afield for firewood. According to R. P. Moss and W. M. Morgan, the effects on the rural ecology resulting from the removal of wood are far reaching for the whole economic base of the rural communities involved.⁹⁷

With the existing wood stock being widely mined to meet firewood demand, there is no feasible large-scale alternative to fuelwood. Often rural people find themselves having to divert crop and animal residues needed for soil replenishment, to fuel use. It is in this context that the principal means of averting growing shortages, and the attendant deforestation and human suffering, was seen by the government as capable of initiating widespread planting of additional trees. A 1984 World Bank Study on woodfuel needs in Sub-Saharan Africa, projected that tree planting would have had to increase 15 fold to close the projected fuelwood gap by the year 2000.⁹⁸ This projection put woodlot development on the cards as a way to restore fuelwood sufficiency by communities in wood depleted areas. The development of village woodlots for fuelwood supply became the pre-occupation of policy makers.⁹⁹ Some of the internationally acclaimed woodlots projects are those of village woodlots in Korea, the Panchayat woodlots of early social forestry programmes in India, the Judean woodlots in Israel, the village afforestation programme in Tanzania, and so forth. These were concerned with creating new tree growing areas for woodfuel rather than with the management of existing forests.¹⁰⁰ The lessons learnt from these projects indicated that much greater success was achieved with participation by individuals than by communal groups. Neither individuals nor groups appeared to share the perception that priority should be accorded to planting trees to provide fuelwood. By contrast, individual farmers in many places pursued the planting of trees for sale and for other purposes of economic value, such as fodder and fruit, with considerable vigour. The growing of trees as cash crops attracted considerable criticism in

⁹⁵ B. Munslow, *et al.* 29.

⁹⁶ R. P. Moss and W. B. Morgan, Fuelwood and Rural Energy Production, 188.

⁹⁷ R. P. Moss and W. B. Morgan, Fuelwood and Rural Energy Production, 189.

⁹⁸ J. E. M. Arnold, "Community Forestry," 83.

⁹⁹ M. M. Cernea, [ed.] "Social Knowledge for Development Projects." Putting People First: Sociological Variables in Rural Development. World Bank: Oxford University Press, 1985. 76.

¹⁰⁰ Ford Foundation. Forestry for Sustainable Rural Development: A Review of Ford Foundation-Supported Community Forestry Programmes in Asia. New York: Ford Foundation, 1998. 14.

some countries on the grounds that it had negative impacts on food supplies, rural employment and, in some cases, on the environment.¹⁰¹

The local interest in community forestry was largely a result of local pressures that were a direct result of apartheid economic planning. However, South Africa was not blind to international trends and developments. Internationally, community forestry received a boost when the 1992 United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, Brazil approved a framework for a Convention on Climatic Change. The framework pledged world-wide stabilization (ideally by the year 2005) of greenhouse gas emissions at levels no higher than those achieved through afforestation programmes. This was ratified in the Rio Declaration which set targets for community forestry as a model for sustainable development. Agenda 21, Chapter 14 of the declaration targeted:

Agriculture and community forestry to (not later than the year 2000) initiate and encourage transition in rural communities, from unsustainable energy sources, to structures and diversified energy sources by making available new and renewable sources of energy.¹⁰²

This was supported by Principle 8 of the declaration which focussed towards the goal:

To achieve sustainable development and a higher quality of life for all people, states should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.¹⁰³

Funds were made available for communities through government, non-governmental organisations and other interested bodies to develop community forestry programmes for development and environmental management.

In South Africa, by the end of the 20th century a number of woodlots under direct government control and supervision had been established in the whole country (see Table 2.1.). The majority of these woodlots are however, concentrated in KwaZulu-Natal and the Eastern Cape. The establishment of woodlots was boosted by the establishment of a Community Forestry Directorate (CFD) in DWAF in the post-apartheid era. This led to a substantial increase in the number of households involved in tree planting activities and the number of hectares planted to exotic trees in the rural communities.

The government did not restrict their extension services to independent small growers only, but also gave their service to those in out-grower schemes. As discussed earlier, the concept of out-grower schemes was based on the companies giving technical assistance, inputs and

¹⁰¹ Ford Foundation, Forestry for Sustainable Rural Development, 27.

¹⁰² J. E. M. Arnold, "Community Forestry," 13.

¹⁰³ J. E. M. Arnold, Community Forestry," 14.

loans whilst retaining the rights to the first crop and the farmers providing labour, land and being in agreement to sell to the assisting company. The government perceived its role as a service provider to other service providers and that it had a duty to facilitate activities of those who were assisting in the development of rural communities.¹⁰⁴

Table 2.1: Showing Area Planted to Trees under Different Types of Woodlots in 1989 and by 1999

Type	Area in 1989 [ha]	Area in 1999 [ha]
Individual	1076.9	28760.5 ¹⁰⁵
Tribal	877.3	1076.4
Community	789.2	1157.5
Conservation	764.8	358
TOTAL	3 508.2	31 352.3

Source: Compiled from Community Forestry Status Report File, DWAF, Dec 1999.

Government tree projects were mainly promoting exotic tree production. In the late 1980s, research trials on indigenous species were established at Mbazwana, Somkhele, Ngome, Mondlo and the University of Zululand (See Map 2). Of these trials, only Mbazwana and Somkhele are still surviving.¹⁰⁶ Tribal woodlots depended on community participation. The community provided labour, land, and did the planting, tending and protection work under the control of Tribal Authorities and the guidance of extension officers. They also decided on the end use of timber. The government contributed by supplying free plants and technical inputs. Once the woodlots reached maturity a date was set for the official handing over of the woodlot to the tribe to do the harvesting.

When dealing with community or individual projects, the current CFD procedure is that the community or individual arranges everything for themselves with the assistance of the government forester. They would buy plants at the low cost of four cents each (current rate is now 30 cents per plant). The participants could utilise the trees as they wished. Where woodlots were seen to be big enough to be commercially viable, the forester approached the grower about selling opportunities. The local community forester also focussed on assisting small-scale wattle bark growers. In the new system, the Department's involvement was mainly through facilitating quotas and doing surveys, for example in the case of wattle areas in the Natal Midlands.¹⁰⁷ This role is now being directly and effectively fulfilled by SAWGU with co-operation from DWAF.

¹⁰⁴ DWAF, "NFAP." 3.

¹⁰⁵ The more than doubling in the amount of individual woodlots as counted at 1999 is because some commercial woodlots established with company assistance were also counted.

¹⁰⁶ M. V. Gandar, "Woodlots." 11.

¹⁰⁷ DWAF, "NFAP." 17.

Agribusiness and Tree Growing in KwaZulu-Natal

Although the growing of tree crops for subsistence and commercial purposes has a long history among black communities recent developments have generally evolved along three identifiable lines. The first one is through entrepreneurial individual households with use rights to communal land in districts close to the markets. Examples of such households can be found near Richards Bay and in the Natal Midlands. These households planted *Eucalyptus grandis* and/or wattle (*Acacia mearnsii*) respectively, in woodlots of about half a hectare to two hectares.¹⁰⁸ This group entered the industry using its own initiative and with practically no or little assistance.¹⁰⁹ The second line of development was through companies such as SAPPI and MONDI who initiated out-grower (contract farming) schemes in rural communities in KwaZulu-Natal, particularly in the north (see maps 1 and 2 in the Appendix).¹¹⁰ These schemes were advertised as part of the companies' social responsibility programmes in the case of SAPPI, or as commercial schemes in the case of MONDI. For this category the underlying goal was to secure more raw materials to supply pulp and paper milling companies in response to an anticipated growth in demand.

Thirdly, in 1990 the South African Wattle Growers Union (SAWGU) opened its membership to black households who were already engaged in wattle growing on their own.¹¹¹ A scheme was initiated that actively supports the expansion of the small-grower sector through extension services, training and loans. The Natal Timber Co-operative (NTC) was also actively involved in the provision of extension services to aspirant tree-growers so as to expand its source of raw timber from the small-grower sector. The NTC was interested in ensuring quality support for the small growers so as to improve their access to basic needs that could result from tree growing activities.¹¹²

¹⁰⁸ M. Friedman and A. Vaughan, "The Implications and Problems of Small Grower Production," *Symposium on Sugar and Timber: Their Future in Zululand*. University of Durban-Westville: Institute of Social and Economic Research, 1990. 12.

¹⁰⁹ M. Ngcobo, Personal Interview. Moffart Ngcobo was the first Forestry Extension Officer in the KwaZulu-Natal region. He served under the Agriculture and Forestry Department of the former KwaZulu Government between 1980 and 1994. With the transition from to the Post-apartheid Government of National Unity in 1994, he joined the Provincial Community Forestry' Directorate's Office under the Department of Water Affairs and Forestry.

¹¹⁰ These projects were initiated during the apartheid era and have continued after the elections that put in place a popular government. The context and reasoning for these projects were however different. It could be argued that community involvement during the apartheid era was contemplated in areas contiguous to commercial plantations in the fear that these communities would set the plantations on fire, steal trees or do any other such misdemeanour.

¹¹¹ J. Feely and D. Ngcobo, "Report to the South African Wattle Growers Union (SAWGU) 1999 Annual Congress." September 1999

¹¹² E. Rosenthal, *Wattle Chronicle: The Story of Wattle Industry in South Africa*. Pietermaritzburg: Institute of Commercial Forestry Research, 1987. 21.

In KwaZulu-Natal, north of the Tugela River (historically known as Zululand), the main agribusiness participants in out-grower schemes are SAPPI and MONDI. In the Natal Midlands the dominant agent of out-grower schemes is SAWGU. Southern KwaZulu-Natal is dominated by SAWGU and SAPPI's schemes under the auspices of a Non-Governmental Organisation (NGO) called LIMA sub-contracted by SAPPI's Project Grow in that area. The rapid development of tree growing by black farmers on communal lands can be attributed to the efforts of these companies and organisations. G. Linscott of the The Mercury recently reported:

An increasingly significant component of forestry in KwaZulu-Natal is the small growers' schemes, facilitated by the corporate timber giants, SAPPI and MONDI, as well as the SA Wattle Growers Union which buy the small growers' production. Last year [1998] there were something like 10 000 small growers, with 14 000 ha planted - an estimated current investment of R30 million, earning an estimated R24 million a year. About 2000 small growers enter the industry every year, planting an extra 3 000ha.¹¹³

This study will focus on SAPPI's Project Grow, as there are already in existence, numerous studies of MONDI's Khulanathi project. These include, the study conducted by T. Quinlan, *et al.*, from the Institute of Social and Economic Research (ISER) in Mbazwana in 1991.¹¹⁴ After this, G. Cellier conducted an internal communication audit in selected districts north of the Tugela River in KwaZulu-Natal.¹¹⁵

While studies exist which comment on the SAPPI out-grower schemes, none looks at the projects with the same depth of the Khulanathi project studies. The studies that allude to SAPPI's activities merely mention these or refer to them in passing. For this study, interviews were carried out among officials and growers of all projects, that is, MONDI, SAWGU and SAPPI. Comparisons will be made of Project Grow and the other projects, where their circumstances and operations affect the growers in different ways. It should also be realised that during and after the apartheid era, government policy towards these agribusiness

¹¹³ The Mercury Highroad, 27 January 1999.

¹¹⁴ T. Quinlan, J. B. Adam, and J. Zingel, "Environmental Impact Assessment Study of Proposed Afforestation in the Mbazwana Area: The Socio-economic Component Report." University of Durban-Westville: Institute of Social and Economic Research, June 1991. This study was part of an impact assessment initiative by MONDI before the establishment of out-grower schemes in Mbazwana. The terms of reference for this socio-economic study was, *inter-alia*, to "provide a preliminary assessment of significant social and economic operations and impacts of the land use option - afforestation - in Mbazwana.

¹¹⁵ G. A. Cellier was the manager of MONDI's Khulanathi project. He carried out research on the Khulanathi project, "as part of an ongoing learning and communications process between the growers and company officials, (with the aim of) building on the established relationships and trust that had been fostered over the previous four years." His study attempted a forecast of the development potential and impacts of commercial *Eucalyptus* woodlots in selected areas of KwaZulu-Natal. He later submitted the findings of the research in a PhD thesis to the Geography Department of the University of Natal-Pietermaritzburg in 1994.

schemes in rural communities remained supportive. Government involvement in rural community is the terrain of various departments whose aims are both multi-fold and diverse. The various government departments with an interest in rural development include the Department of Water Affairs and Forestry, the Department of Agricultural and Land affairs, and the Department of Mineral and Energy affairs. These departments have adopted an integrated approach within the concept of the Rural Development Strategy. The Forestry and Energy Departments had an interest in reducing the total dependence of rural peoples on natural woodlands for woodfuel (mostly) and other forest-based requirements. The main aim can be regarded as conservation as there was a need to preserve the natural woodlands by providing an alternative source of wood for fuel.¹¹⁶ By the same logic, government wanted to reclaim those areas, which were environmentally degraded and affected by erosion. Trees in this case were used for donga reclamation and swamp management.

There are several forms of agribusiness activities involving rural households. Contract farming is one such activity and entails the most direct and the most complex relationship between large corporations and the small farmers. In contract farming, the firm replaces or supplements company production of agricultural commodities with purchases from local farmers through contracts. Contracts specify conditions of sale and obligations. It can be theoretically argued that contracts provide advantages to both the firm and its growers, particularly with respect to risks and uncertainty. Prices, quantities and quality standards are often pre-set (allowing the growers an assured market and for the company assured volumes of material of consistent quality).¹¹⁷ This is expected to lead to a relationship of interdependence. However, in the contracts studied there is a tendency to lead to increased dependence of growers on the firms. There is also a scope for the companies to operate together with government institutions and institutions offering credit.

Academics' and policy makers' interest in agribusiness increased considerably during the 1970s and 1980s for numerous reasons. African famines of 1974 and 1985 led to a focus of attention on the continent's continuing crisis in food production.¹¹⁸ This brought agribusiness into the limelight as it was thought that the involvement of private capital would offer a solution not only to the food problem but also to the shortage of capital in the newly independent states to promote rural development. This period also coincided with the energy crisis with concerns arising from the oil price increase of the early 1970s discussed in earlier

¹¹⁶ DWAF. "Woodlot Development in Remote Areas: Past and Present." Report of the Directorate of Community Forestry, for the Year 1998. 3.

¹¹⁷ D. J. Glover and K. Kusterer, Small Farmers, Big Business: Contract Farming and Rural Development. England: McMillan, 1989. 13.

¹¹⁸ J. Aron, A. A. Eberhard and M. V. GAndar, "Demand and Supply of Firewood in the 'Homelands' of South Africa" [Second Carneige Inquiry into Poverty and Development in Southern Africa: Post Conference Series No. 21] Cape Town, July 1989. 2.

sections. Aid agencies tended to see contract farming as a way to meet production and equity goals simultaneously, leading to the commissioning of a number of evaluative and prescriptive reports. Also, public corporations came under intense scrutiny as governments tried to reform or justify these institutions to the International Monetary Fund (IMF) and the World Bank; multi-partite arrangements were examined in this context (as case studies of success and failure).¹¹⁹ However, such concern prompted relatively few academic studies of agribusiness.

Earlier studies of agribusiness include project evaluations by practitioners,¹²⁰ and the 'food first' approach.¹²¹ The latter tends to be highly critical of agribusiness for diverting resources from staple food production to cash crop production, exerting monopoly power over rural household producers, promoting inappropriate tastes and technologies, and so forth. There is also the business school approach¹²² whose tendency is to look at agribusiness in terms of the problems it presents to the firm and neglects the questions of grower welfare and sociological and political questions. For example, R. Karen and S. Williams state that, "beneficial outcomes for peasant farmers are largely the result of goodwill and good management on the part of the firm."¹²³ This implies that where goodwill lacks, and good management is non-existent, then the small growers benefit nothing. Out-grower schemes involving tree growing have their own complications pertaining to the length of the production period, technology required and the nature of the commodity.

It is important to consider the key concepts and issues in the operation of contract farming so as to evaluate their role and contribution to the basic needs of the communities concerned. J. E. M. Arnold argues that for big companies, contracting is rated together with partial mechanisation and improved utilization of men and machines as a way in which big

¹¹⁹ A. A. Eberhard and C. van Horen, Poverty and Power: Energy and the South African State. Cape Town: University of Cape Town Press, 1995. 27.

¹²⁰ G. Lamb and L. Muller, "Control, Accountability and Incentives in a Successful Development Institution." The Kenya Tea Development Authority, in World Bank Staff Working Paper No 550, Washington D.C. 1982.

¹²¹ The examples of these are:

1. F. M. Lappe and J. Collins, Food First. San Francisco: Institute for Food and Development Policy, 1977.
2. S. George, How the Other Half Dies. Hammondsworth: Penguin, 1976.
3. B. Dinham, C. Hines, Agribusiness in Africa. Earth Resources, 1983.

¹²² This school of thought in agribusiness and contract farming is represented by the likes of:

1. R. Goldberg, Agribusiness Management for Developing Countries. Cambridge: mass Ballinger, 1974.
2. J. Austria, Agribusiness in Latin America. New York: Prager, 1974.

¹²³ S. Williams and R. Karen, Agribusiness and the Small Farmer. USAID: Westview Press, 1985.
S. Williams and R. Karen, Agribusiness. 85.

companies set out a continuous effort to increase labour productivity as a part of the process of containing costs.¹²⁴ He considers contracting to be:

A new model of labour use in timber growing operations which forms part of a wider process of spinning off operations that can be better carried outside the company, so that the latter can concentrate on its core business.¹²⁵

S. Williams and R. Karen, are in full support of this argument.¹²⁶ They further suggest that for companies who have the technical advantage over production, contracting gives them an amount of control over the production process. The company need no investment in land, (which is a very expensive component), does not have to hire labour or manage large-scale farming operations that might tax the managerial capacity and technical expertise of a primarily industrial firm.¹²⁷ The firm could promote good public relations and present a progressive image by involving local producers. There is also the advantage of great flexibility in meeting market fluctuations since it is simpler to cut back on contractual obligations than to reduce the output of a single vertically integrated firm. It could be a non-equity form of investment. As a result, S. Williams and R. Karen conclude that, "beneficial outcomes for peasant farmers are largely the result of goodwill and good management on the part of the firm."¹²⁸

From the company's point of view, the implications of a contract relationship include access to commodities, in this case trees, at a reduced cost, and to have cheap access to land otherwise inaccessible because of the nature of tenure within which it falls. As a result capital is released as less investment is needed in equipment, transport and housing. Costs are easily controlled and it reduces the likelihood of operational problems causing major disruptions in overall timber supply flows. In South Africa there are no government incentives for private tree growing as earlier incentive programmes were aborted for being too cumbersome or due to a shortage of funding.

Supporters and sympathisers of agribusiness-grower contract relationships argue that the contract relationship facilitates the transfer of capital into rural communities that are otherwise capital poor. According to J. Khosa, a Mondi Khulanathi project facilitator, cited in G. Cellier:

¹²⁴ J. E. M. Arnold, "Employment and Small Business Options in the Forestry Industry in South Africa." Paper Presented to the Oxford Forestry Institute, 1994. 17.

¹²⁵ J. E. M. Arnold, "Employment and Small Business Options." 17.

¹²⁶ See S. Williams and R. Karen, (Agribusiness and the Small Farmer.) for a more detailed discussion of the argument sketched here.

¹²⁷ S. Williams and R. Karen, Agribusiness. 109.

¹²⁸ S. Williams and R. Karen, Agribusiness. 109.

These schemes inject capital into marginal areas and provide farmers with timely and appropriate inputs, professional advice, an assured market and local employment spin-offs. In return the timber companies gain free access to land close to the markets, responsibility of labour management and certain production risks are delegated to the growers and at the same time, the public image of the companies is enhanced.¹²⁹

The implication of this is that contract relationships have benefits for both the company and the growers. For a practical point of view, the main reason for agribusiness to contract communities is that it makes economic sense. However, whether this implies benefiting at the expense of the communities is what this study seeks to address. There are both positive and negative reactions to contract farming. As stated earlier, there are those who perceive contract farming relationships as (either) 'dynamic partnerships' between small farmers and agribusiness with a potential to bring substantial benefits to the interest of agribusiness and communities.¹³⁰

These advocates and proponents of contract farming fail to take into account the tense and conflict-ridden relationships that almost inevitably develop between companies and the out-grower constituency. Furthermore, through making substantial claims for this form of production as a kind of panacea to the problems of development in the Third World, proponents cannot allow space for a thorough and stringent assessment of the appropriateness of this form of farming under different conditions or circumstances. On the other hand, there is the work of those who attempted to depart from an overtly positive interpretation and strive for a carefully balanced and a fairly rigorous assessment of costs and benefits of these contract-farming relationships.¹³¹ This is the basis upon which the thesis will be developed. Making an attempt to depart from a one-sided approach to contract farming and attempt to find out whether the people have been in any way uplifted in terms of their living standards.

There are different reasons for agribusiness' involvement in contracts with small growers. As stated earlier, agribusiness gains access to otherwise inaccessible land and also to secure more timber for their mills or for the market. On the other hand, small growers receive loans, technical assistance and a guaranteed market from an otherwise protected market. However,

¹²⁹ G. Cellier, "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots in Selected Areas of KwaZulu, South Africa." [PhD] University of Natal-Pietermaritzburg, 1994. 61.

¹³⁰ This includes, for example, the work of Levin (1988), Clapp (1988), Glover (1984) and Cellier (1994). Full details of these works are given elsewhere in this text and in the bibliography.

¹³¹ Good examples of these include: A. Vaughan and McIntosh, "Enhancing Rural Livelihoods in South Africa: Myths and Realities." 1996, and G. Cellier, "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots" 1994. On the international level works by A. Goldsmith, "The Private Sector and Rural Development: Can Agribusiness help the Small Farmer?" World Development, (13) 10/11, 1985., D. Glover and K. Kusterer, Small Farmers, Big Business: Contract Farming and Rural Development, England: MacMillan, 1989.

in these contract relations the weaker partner tends to be at a disadvantage and absorbs all the risks involved therein. According to D. J. Glover and K. Kusterer:

The basic goal of the small farmers is to increase the security and income of their families while, retaining their independence as owners and operators of a farm enterprise. ... yet the pursuit of this goal has been threatened by the increasing demands of the market and state, pulling them into a nexus of relationships that extend beyond the farm to the national and international level.¹³²

The size, complexity and 'impersonality' of the organisations have resulted in a qualitative change in the nature of the small holders' relationship with the outside world. Growers develop new linkages with the wider economy through the buying of inputs, through silvicultural processes, and the harvesting, transporting and marketing of trees.

The grower has different interests than the company but due to the specificities of the interaction a point of common interests may be found. Such coalition of interests are always complex and, from the farmers' point of view, formidable. However, the broad interdependence involved is not without room for conflicts of interests, exploitation and bargaining with internal dynamics changing significantly over time.¹³³ As will be elaborated in the subsequent sections, in the tree-planting contracts there is no mechanism or organised structure for conflict resolution. The growers have no bargaining power and exploitation is rife. In the timber contracts, the purchases from smallholder tree growers only supplement and do not substitute for company production. The companies in this study are bulk producers of the timber crop themselves. This factor is of importance as growers are affected negatively when there is a market decline or an oversupply on the market. As will be discussed in chapter four, the companies will prioritise their own timber at the expense of the small growers'. Contracts give the company control over the production process. Companies retain the right, and always have the choice, to source produce from company farms, non-contract growers as well as from the open market.¹³⁴

Contracting is supposed to allocate the distribution risk between the firm and its growers in the sense that the grower should take up risks associated with production and the company those in marketing the product. Small growers absorb all the long-term risks of production in the case of a market collapse, when the company may ignore the timber crop. Tree growers are not able to pose supply cut-off risks on the companies that would normally affect the

¹³² D. J. Glover and K. Kusterer, Small Farmers, Big Business. 1.

¹³³ A. Goldsmith, "The Private Sector and Rural Development: Can Agribusiness Help the Small Farmer?" World Development, (13) 10/11, 1985, 1127.

¹³⁴ D. J. Glover, "Increasing Benefits to Smallholders from Contract Farming: Problems for Farmers' Organisations and Policy Makers." in World Development, (15) 4, 1987, 445.

company's final product sales. In this case, contract risks are carried by the grower with the company having minimal risks that have to do with writing off the loan in case of a fire. In any case, this risk is shared with the grower.¹³⁵

There are however, various pricing regimes that can be considered. In the case of the tree growing contract in KwaZulu-Natal, the contract specifies that trees will be bought at the market price at the time of delivery is used.¹³⁶ D. J. Glover and K. Kusterer, discuss a wide range of pricing formulae that can be applied. The price policy, which would benefit both the grower and the company, should be given consideration. It should be a pricing policy where:

... prices are calculated according to the state of the market (in between the market price and a basic price, average prices over a period of time, pooling prices) prices taken from current market prices (fixed difference to market prices; market prices limited to a fixed latitude between maximum and minimum fixed prices; average prices taken from several quotations).¹³⁷

For small farmers, contracts have their own implications. They expect to overcome some of their traditional problems. Small growers face competition from producers who have adopted new technologies but are often reluctant to adopt these technologies themselves because of the risks and costs involved. Small grower productivity is always hindered by weak input supply.

In LDCs, governments lack the capacity (financially and logistically) to supply fertilisers and other agro-chemicals to small growers. Where they do, they are unable to supply in sufficient quantities or in a timely fashion. In South Africa, the former 'Homeland' Government of KwaZulu did not have the finance and capacity to facilitate Small Farmers projects.¹³⁸ D. J. Glover and K. Kusterer's argument for private contracts between communal farmers and agribusiness is also valid for South Africa where political transition has not automatically meant any significant changes. Agricultural extension servicing is still very weak. On the one hand, the 'free rider' problem makes it hard for private companies to earn profits from extension. The difficulty of designing an appropriate incentive system for staff, on the other hand, weakens public extension agencies.¹³⁹

For rural farmers in general access to credit from banks is virtually impossible, while at the same time accessing financial assistance from government is difficult. Irregularities in public loans and bureaucratic procedures marginalise the poor, while established larger farmers get

¹³⁵ D. J. Glover, "Increasing Benefits to Smallholders." 447.

¹³⁶ The Sappi/Grower Agreement. Copy in appendix 3.

¹³⁷ D. J. Glover and K. Kusterer, Small Farmers, Big Business. 7.

¹³⁸ DAF, "Report on Agriculture Development." 17.

¹³⁹ D. J. Glover and K. Kusterer, Small Farmers, Big Business. 11.

the lion's share. Private credit requires some credit worthiness and collateral, which the rural farmers do not have. Whenever it is made available, it carries higher interest rates thereby making it prohibitive. Besides access to credit, small rural producers often have problems with access to markets. National markets can be monopolised while international markets are more inaccessible to rural farmers, therefore specific channels or 'middlemen' are required for entry.¹⁴⁰ As a result of these reasons and conditions, rural farmers have had difficulties in breaking out of the situation of food insecurity and the other limitations of subsistence farming to more sustainable land-use systems.

In theory, contracts with agribusiness provide the potential to facilitate this transition from subsistence to commercial agriculture, as growers would be expected to adopt modern farming methods to increase their produce. D. J. Glover and K. Kusterer are optimistic that contract farming has the potential to overcome the resource limitations faced by rural farmers.¹⁴¹ The optimism with contract farming stems from fact that contacts could facilitate technology transfer/adoption, where the firm has direct interest in seeing that input supply and extension are efficient. Companies approach their contracts with profit in mind and their services tend to be more superior to those offered by government. Credit provision is facilitated because the company can deduct loan repayment from crop payments and can use the crop as collateral. Theoretically, the usability and capacity of the crop to act as collateral can make it easier for a grower to get loans from banks.¹⁴²

Contractual agreements between agribusiness and rural farmers are not always smooth. Often problems arise as a result of growers' lack of experience with formal contracts and the likely difficulty in implementing the contract as intended. When there are attempts by a party to manipulate contracts to their advantage and to outwit the other, the dominant party (agribusiness) is normally the culprit and guilty. However, there are circumstances where out-growers try to cheat the company by withholding the crop or by supplying someone else, so as to avoid paying back loans. In the contract arrangements, the growers are provided with a 'package' of inputs and services. The importance given to individual aspects of the growers' package from agribusiness by individual growers varies from case to case. S. Williams and R. Karen recognized the significance of credit as an inducement to enter a contracting relationship and argue that how it is used determines the seriousness of the resulting indebtedness.¹⁴³ If contracting is basically arrived at to allocate risk between company and growers, what are the observable variations in this respect among cases of contract farming?

¹⁴⁰ D. J. Glover and K. Kusterer, Small Farmers, Big Business. 11.

¹⁴¹ D. J. Glover and K. Kusterer, Small Farmers, Big Business. 14.

¹⁴² D. J. Glover and K. Kusterer, Small Farmers, Big Business. 14.

¹⁴³ S. Williams and R. Karen, Agribusiness. 19.

What does it imply about the grower most likely to enter a contracting relationship? These questions will be evaluated with particular reference to the tree-farming contracts.

Evaluations of agricultural projects typically emphasise changes in the income of participants.¹⁴⁴ Existing studies so far give a 'snapshot' of grower income at a point in time. This study will use an extended approach to assess the changes over time, and the secondary effects of or from re-investment of the original income. There is a tendency for policy and investment in commercial agriculture to favour larger farms at the expense of small farm establishments. However, it is possible for entrepreneurial individuals to benefit where conditions for agribusiness dealings with small growers exist. These conditions are numerous including the kind of situation where areas most suitable for a specific production regime are already characterised by the predominance of small farmers. Other conditions are those where local government encourages agribusiness to make use of small growers, and where small-scale farms may have lower costs of production than large farms. Then there are those where small-scale farmers may be willing to accept lower prices or greater shares of risk.

A. Vaughan argues that if rural incomes are generally raised, social strains are almost inevitably introduced. Contract farming is not perceived by her as a panacea for rural poverty, but, and this is probably the most important point to be derived from this perspective, it takes various forms which vary in the degree to which small farmers have benefited.¹⁴⁵ J. E. M. Arnold criticises the out-grower schemes for providing incomes in 'lumps' at very long intervals. He argues that this is suitable for households with other sources of income for their daily needs. In some areas of KwaZulu-Natal, tree growing has become the sole source of income for some households and the communities involved are convinced that it is a means of accumulating savings.¹⁴⁶ In many areas studied, *Eucalyptus* is the main timber crop grown and this has the problem of being a single use crop when compared to wattle, which can be sold into several markets. Wattle also has the potential of meeting household self-sustaining needs such as wood for fuel and construction. The qualities of *Eucalyptus* trees make them unsuitable for firewood.

The Social Status of Contract Farmers

Knowledge of the status of growers was essential in order to understand the changes taking place resulting from their contract relationship with agribusiness. Earlier research on out-growers did not consider the social status of the growers. D. J. Glover and K. Kusterer are of

¹⁴⁴ J. P. Gittinger, *Economic Analysis of Agricultural Projects*. World Bank: Economic Development Institute, 1982. 26.

¹⁴⁵ A. Vaughan, "Options for Rural Restructuring." In R. Schrire [ed.] *Wealth or Poverty? Critical Choices for South Africa*. Cape Town: Oxford Press, 1992, 14.

¹⁴⁶ J. E. M. Arnold, "Community Forestry." 18.

the opinion that the social status and characteristics of farmers are important to an understanding of agribusiness-farmer interaction.¹⁴⁷ To try and understand the growers' status, D. J. Glover and K. Kusterer asked a number of questions that include the following. Firstly, why do some farmers decide to enter contracts, while some people in the same area and under the same circumstances choose to stay out? Secondly, are there any previous social relations that encourage or impede the participation of small growers? In answering these questions, the effects of the tree-growing scheme on the community will be highlighted.

For rural farmers, contract farming is by far the easiest way to enter more lucrative and remote markets for high value crops. A. Goldsmith argues that the small growers who join the schemes have a double-fold agenda. Firstly, "to establish a minimally capitalised and reasonably secure economic base for subsistence farm and household work." Then secondly, to acquire "cash income to purchase necessities that cannot be obtained within the household."¹⁴⁸ Small growers do not intend to be totally dependent on the cash crop and to move away from their other sources of production. In fact as will be discussed in detail later, tree growing was accepted because it can be done alongside other activities. A. Glover correctly observes that growers have a preference for a diversified approach which will spread the risk for bringing income directly into the hands of each individual male and/or female adult member of the household. Small farmers seek income from other sources such as, the sale of labour, farm products, or non-farm home-based goods and services.¹⁴⁹

Small-scale timber growers are not conspicuous within their community or rural area by size of holding, volume of turnover, income, wealth or sociol-political power.¹⁵⁰ Growers cannot establish economies of scale because of a shortage and unequal access to land. Those who have access to more land always fare better. The chiefs (*amakhosi*) and headmen (*izindima*) have considerably larger areas grown to trees than ordinary citizens. In Mbazwana a certain *inkosi* has more than 80 ha of *Eucalyptus* while the average grower has only two hectares. There are two reasons for this inequality in access and ownership of land. The main factor leading to this scenario is that tribal authorities are responsible for allocating land, which is held under the Ingonyama Trust. This has become a source of differentiation that is discussed in detail below. According to A. Vaughan, stratification does exist and does occur because some people start off with larger pieces of land, and because some are able to acquire tractors and become land preparation and haulage contractors.¹⁵¹ These have the capacity to be true beneficiaries from the contract.

¹⁴⁷ D. J. Glover and K. Kusterer, *Small Farmers, Big Business*, 14.

¹⁴⁸ A. Goldsmith, "The Private Sector and Rural Development," 1127.

¹⁴⁹ J. D. Glover, "Increasing the Benefits to Small Holders," 445.

¹⁵⁰ D. Christodou, *The Promised Land: Agrarian Reform and Conflict Countrywide*, London: Zed Books, 1990, 17.

¹⁵¹ A. Vaughan, "Options for Rural Restructuring," 14.

Secondly, the promoters of tree growing schemes targeted traditional leaders first. It can be argued that the intervention of private sector interests has changed the political status quo by providing opportunities for the Tribal Authorities to challenge their subordinate status, *vis a vis* the state. T. Quinlan, *et al.* discuss the complex dynamics which underpin this development.¹⁵² These dynamics include the scope for financial gain for Tribal Authorities made possible through either ceding land or by attempting to combine juridical and commercial roles in the use of land. This opens an avenue for financial accumulation, as the rising demand for land would tempt them to sell it to those who have money. This development is antithetical to the development of the poor who may not be able to raise money to buy favours with the authorities. The study by T. Quinlan *et al.* shows how such actions effectively lead to appropriation of land from residents and hence, negation of local principles of land tenure and of political authority.¹⁵³ Also, extensive establishment of individually managed woodlots provides the individual with *de facto* ownership of the land. In future it will be particularly difficult for the Tribal Authorities to redistribute land planted to trees given that the timber grower owns the crop and given that coppicing of the trees ensure the owner's control over the land for many years. This introduces a complication and a challenge to communal tenure as other people would not have access to that land as long as someone's trees are still on that land.

Differentiation and Development in Contract Farming

In the 1970s, the international debate on agriculture concentrated on peasant differentiation, the breakdown of a relatively homogenous subsistence peasantry into a series of strata with different incomes, values and relationships to the land as the cash economy expanded. According to D. J. Glover and K. Kusterer, as potential contract farmers differ in ownership of assets, farming skills, degree of risk aversion, *inter-alia*, it is reasonable to expect growers to respond differently to agribusiness opportunities.¹⁵⁴ Results could be increased differences among contract growers or between those who enter into a contract with the firm and those who do not. It was also expected that the centralised control and uniformity of the contracts might tend to produce homogeneity among contract growers. Much would depend on the degree of prior homogeneity of the community and the nature of the contracting relationship in each case.

D. J. Glover and K. Kusterer observed that it has become a common idea in rural development studies that the growth of commercial agriculture leads to the differentiation of

¹⁵² T. Quinlan *et al.*, "Environmental Impact Assessment." 12-14.

¹⁵³ T. Quinlan *et al.*, "Environmental Impact Assessment." 14.

¹⁵⁴ J. D. Glover and K. Kusterer, Small Farmers, Big Business. 16.

the peasantry.¹⁵⁵ This view is in line with Marxist thinking that the growth of capitalism leads to competition among independent artisans and farmers, with the larger and more successful minority become bourgeois employers while the majority are squeezed out to become wage labourers in the growing capitalist enterprise. In contrast to this, D. J. Glover and K. Kusterer concluded that, "there is evidence that contract farming is at least as likely to prevent social differentiation as to enhance it."¹⁵⁶ While it is difficult as yet to get evidence of social differentiation because of the general conditions of poverty in the communities, contract farming has obvious tendencies to differentiation.

Previous investment by the individual out-grower also plays an important differential role in the long run in the contract. S. Williams and R. Karen outline the mechanisms that contribute towards differentiation in commercial agriculture as, differential access to land, inputs, credit, new techniques and markets. Theoretically however, contract farming can act as a leveller, reducing risks and increasing access to inputs, credit, new technical knowledge and markets. D. J. Glover and K. Kusterer maintain that contract farming reduces social differentiation amongst participants rather than increasing it. However, there is no evidence of reduced differentiation among growers in the tree growing schemes in KwaZulu-Natal. The original landholding differential remains as a factor, causing those with larger areas of farmland to increase their income faster than those with smaller farmlands.¹⁵⁷

The use of income derived from tree growing is one source of differentiation. Small growers use a larger proportion of their increases in income to provide themselves with more adequate levels of basic human needs; food, shelter, clothing and health care.¹⁵⁸ Large-scale growers would have more of their increases in income available to reinvest in productivity-enhancing capital or, as they often prefer, to invest in secondary or college education for their sons and daughters. A repetition of this over a long period of time allows the large-scale growers to raise their incomes and living standards more rapidly than the small-scale growers. However, D. J. Glover and K. Kusterer insist that contract farming appears to be the least differentiating route yet known for the transition from traditional local market agriculture to highly commercial capitalist agriculture. They argue that instead, "differentiation between initially poor participants and poor non-participants" will occur quite rapidly.¹⁵⁹ The most obvious differentiation is between growers and non-growers, as participation is voluntary.

The other reason for differentiation as opposed to development of the rural community in general is that the income from the trees tends to be spent on commodities rather than re-

¹⁵⁵ J. D. Glover and K. Kusterer, Small Farmers, Big Business. 16.

¹⁵⁶ J. D. Glover and K. Kusterer, Small Farmers, Big Business. 16.

¹⁵⁷ S. Williams and R. Karen, Agribusiness. 23.

¹⁵⁸ R. I. Cairns, "Small Grower Commercial Timber Schemes in KwaZulu." 32.

¹⁵⁹ J. D. Glover and K. Kusterer, Small Farmers, Big Business. 141.

invested or accumulated by those in the lower echelons. As mentioned earlier, much of the income is spent on consumer goods and not re-invested in agriculture or tree growing. However, the social significance of the forms of investments that occur should not be underestimated. There is no doubt that tree growing has made a recognisable (for the average out-grower) and visible difference to the quality of housing in rural communities in KwaZulu-Natal, and that it has enabled people to pay for secondary and tertiary education for their children.

After a close study of the Swaziland sugar cane out-grower schemes, R. Levin was convinced that the characteristic divisions in grower communities were extant. He observed that they were basically caused by the fact that:

Some people are struggling along on very tiny plots; some have quite substantial holdings; and others are entrepreneurs who combine haulage contracting and cane growing.¹⁶⁰

In KwaZulu-Natal, silvicultural activities, harvesting, short-hauling and transporting of timber grown by small growers is sub-contracted to registered contractors. This created an opportunity for the rural elite to establish harvesting and short-hauling contracts. These contracts depend on the availability of cheap labour within the communities. Those who can afford to set up such contracts, particularly harvesting and short-hauling contracts, end up being better placed than the growers. It is in these cases that previous investment creates more differentiation among contract-farmers. Enterprising growers and local non-growers, with capital or means by which to access extra loans, invested in transport to short-haul harvested timber from the fields to the weighbridge. Those who were able to buy trucks and tractors for the haulage of timber (transport costs form more than 40 per cent of the production costs) became much richer than the rest. Growers who have the capacity to branch out into service provision to other growers become more successful than those who remain growers alone, unless they have access to much larger tracts of land.

The importance attached to community forestry by the South African CFD was informed by three important assumptions. These are; firstly, that the multiple of products from tree growing contributes to economic growth. Secondly, that community forestry is environmentally sustainable and, thirdly, that it has the capacity to improve living conditions and standards in rural areas.¹⁶¹ As pointed out earlier, the United Nations Convention in Rio de Janeiro also set wood energy and its economic applications in the context of a sustainable,

¹⁶⁰ R Levin, "Contract Farming in Swaziland: Peasant Differentiation and the Constraints of Land Tenure." *African Studies*, (47) 2, 1988. 17.

¹⁶¹ R. Wynberg, *Exploring the Earth Summit: Implications for South Africa*. Cape Town: University of Cape Town, 1993. 11.

multiple use forestry. Community forestry was located alongside the management of forest products and non-wood forest product extraction, and the service functions of forests and forestry lands.¹⁶² For South Africa, this highlighted the fact that community forestry regimes had the capacity to bridge the gap between industrial, household and other modes of energy use.

In summary, community forestry has been argued to be capable of injecting substantial cash incomes to growers. As the need for cash increases even in the rural economy, cash as opposed to cattle is increasingly becoming the determining factor in the social status of individuals in rural communities. Due to overcrowding in the former 'homeland' communities, discussed earlier, the average farm size per family unit continues to decline due to further sub-divisions. Decreased landholding per family unit and the general decline in soil productivity threatens food self-sufficiency among the rural communities. This has made tree growing for cash income progressively more attractive to the communities.¹⁶³ Economic considerations permeate the decisions of those in the largely subsistence economy, a situation that community forestry can respond to. There is huge capacity for small enterprise operations in the forest sector even though this may lead to economic differentiation within communities.

Support for community forestry as a development model has emphasised the importance of the income and employment opportunities made available to the poor. The argument is that the availability of contract farming relationships in the equation improves the capacity of the poor by providing capital and the skills needed. This is also believed to reverse the shortage of resources resulting from over exploitation and deforestation. In South Africa, the reduced access by the poor to forest areas was a result of a multiple processes. Indigenous forests that were deemed worthy of protection were declared as "demarcated" by law. The expropriation of land by private concerns, individuals and the state led to the forests therein being automatically privatised by virtue of being owned. The effect of this was to heavily limit the access of communities to indigenous forests and therefore, forest resources. The assumption that poor families must devote their energies to the production of staple food has, unfortunately, led to a situation where it has been specified that trees should be grown only on waste land or land that is not arable. Poor farmers' resources are however, too limited for them to be able to meet their annual food requirements. As a result they have to give priority to income generation in order to be able to purchase food.

Rural economies are resource and finance scarce and as such are likely to accept any form of intervention that promises provision of resources and finance. The choice of community

¹⁶² FAO. "Forestry Review: Ten Years in Community Forestry." Rome: FAO, 1995. 30

¹⁶³ R. Wynberg, Exploring the Earth Summit. 19.

forestry as a poverty alleviation and livelihood strategy was adopted in many cases without careful consideration of the cost and benefits (this is the subject of later sections on trees as cash crops). An evaluation of the contribution of tree growing schemes to rural development is the main focus of this study. U. Lele defines rural development as “improving living standards of the mass of low-income population residing in rural areas and making the process of their development self-sustaining.”¹⁶⁴ For rural development to take place, two important measures should be considered. Firstly, the setting of priorities for the mobilisation and allocation of resources that would reach a desirable balance over time between welfare and productive services available to the rural sector. Secondly, the process should be self-sustaining for which appropriate skills and implementation should be present. The rural sector is also in itself an integral component of a wider system of social relations. The ability of the process of rural development to feed into the trajectory of the rural-urban, and wider global economy becomes important.

To understand the need for rural development in KwaZulu-Natal, two fundamental issues about rural life in the province should also be known. One is the all-pervasive importance of the land tenure question, that is, the property relations surrounding the most basic resource of rural existence - the land. The second is the centrality of the small farm household as the basic unit of social and economic activity. The importance of resources and the household as the major factors in the rural development endeavour is emphasised. P. I. Gomes defines the rural development process as a:

Systematic process in which the control and productive use of resources and opportunities are directed to material and qualitative improvements of standards of living by rural households.¹⁶⁵

The success or failure of a development process should be measured through its effects on the household. As discussed earlier, the household depicts the fundamental social, economic and cultural unity of human activity. The objective of betterment in conditions of people's lives remains the basic goal of development. P. I. Gomes outlined the objectives of rural development as the use of the resources of the rural economy in ways that abolish poverty among rural families. The basic objectives would include, *inter-alia*, the increased incomes for rural populations, expansion of agricultural production and productivity. Expansion of agriculture would increase the employment opportunities among rural populations and maximise participation of rural population in the decision making process. The desired effect

¹⁶⁴ U. Lele, “Designing Rural Development Programmes: Lessons from Past Experience in Africa”. In G. Hunter, *et al.*, [eds.] Policy and Practice in Rural Development. London: Croomhelm, 1976.

¹⁶⁵ P. I. Gomes, Rural Development in the Caribbean. London: C. Hurst & Co. 1985, xvi.

of this would be to empower rural people to control the social services and economic resources of the rural sector.¹⁶⁶

The SAPPI model as espoused by Project Grow, views 'development' as the promotion of commercial afforestation through contract farming. The conceptualisation of development by agribusiness and that of growers differed in many instances. According to Quinlan *et al.* in their study of the MONDI project:

Residents' conception of development can be described as diversification of resource base and resource use in order to maximise means of income generation and alleviate poverty. In practice, this means that households employ multi-faceted strategies that utilise all available human and natural resource at their disposal.¹⁶⁷

In the rural areas, access to natural resources is tied to land tenure. The restriction of individual tenure is found to be a way to guarantee communal access to natural resources. As stated earlier, the relative aridity of the area under study and the scarcity of forest resources, is continuously regarded as the basis for retaining communal rights to the resources.

Several survival strategies have been worked out in communal areas. Some of the multi-faceted strategies involve varied use of household labour to provide varied sources of income and a variety of products. In the first instance, the strategies are designed to maintain the household in a context where few people can expect to acquire the means for supporting themselves entirely on the basis of their own efforts. Secondly, the strategies include reciprocation of labour and goods with other households as a means to consolidate the position of the household in the community and to ensure support in times of dire need. Thirdly, the strategies are designed to maximise the income generating opportunities for survival in a context of poverty and for investing in means to escape poverty.¹⁶⁸

In conclusion, the most important and immediate need of the rural communities is development. Development in these regions is considered in the availability and general access to basic necessities. Access to resources and facilities is at the centre of the demand for rural development. On this list are land, energy resources, water, transport network, employment opportunities, schools and social amenities. A variety of approaches have been tried to provide these and many of these failed because there was little consultation and involvement of the communities concerned. Lately, tree growing has been used as one intervention to some of the problems affecting remote rural communities. The challenge has been to work

¹⁶⁶ P. I. Gomes, *Rural Development*, xvii.

¹⁶⁷ T. Quinlan, *et al.* "Environmental Impact Assessment," 10.

¹⁶⁸ F. Ellis, *Peasant Economics*, 126.

out a woodlot or agroforestry model which is accommodates both male and female tree needs. It is important for both men and women to accept tree-centred interventions for rural problems as they use trees for different reasons. D. Palin observed the different categorical uses of trees by gender. According to him:

... men and women tend to use different products or services provided by the forest. Women tend to be concerned with food, woodfuel, and plants used for medicine, dye or cosmetics, while men are concerned with the wood for construction, fencing, tools and implements, thatch, fodder and honey. As a result men and women are not usually looking for the same species in a rich natural forest. Nor will they be looking for the same things from planted trees. Nor would they necessarily agree on the place where trees should be planted. This distinction begins to break down when women become heads of households and de facto farm managers.¹⁶⁹

These were important considerations in the coining of the interventions such as woodlots, agro-forestry, social forestry and community forestry. The state was the main stake-holder in initiating and developing this intervention. Its immediate objective was to provide woodfuel and therefore avert the energy crisis. The success of woodlots and related social/community forestry ventures to achieve this goal are discussed in detail in chapter three. In KwaZulu-Natal, agribusiness also brought in another dimension into community forestry by offering out-grower schemes in which rural communities would participate in tree growing as a cash crop. The official objective given for this development was the need to provide cash and employment for the rural communities. Chapter four is devoted to discussing this intervention and evaluating its success in meeting the cash and employment needs of the rural communities as claimed.

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D. Palin. "Social Forestry in South Africa and International Experience." Johannesburg: Land and Agriculture Policy Centre, Policy Paper No 13, 1995. 4.

CHAPTER THREE

RURAL ENERGY NEEDS: THE CRISIS AND RESPONSE

Wood fuel as energy should be the concern of government planning because adequate energy supply is an essential pre-condition for economic development... thus decisions affecting energy will affect many other areas of the economy.¹⁷⁰

We are committed, as government, to improving the lives of all the people of South Africa, so that they can have access to health care, so that they can live, with dignity, in a clean and healthy environment.¹⁷¹

The lack of services and resources make rural life very hard for the rural poor. Domestic energy is one of the most immediate of the daily needs of rural communities. The lives of the rural poor and women in particular are affected by the ever-increasing shortage of woodfuel. The challenge to local development practioners, politicians, academics and politicians alike is to develop alternative energy supplies that are compatible with rural socio-economic conditions. This should be understood in the background of the abject poverty that characterises most rural households. The appropriate energy provision model should be one that is both less costly and easily accessible to remote communities who suffer most from poverty and exclusion from the mainstream economy.

The government promoted woodlot projects to encourage the communities that depended on woodfuel and other forest products, to produce their own supplies and therefore lighten the burden on indigenous forests. (Wood is as much a necessity in rural life as the food it cooks, the shelter it builds and the water it boils.) There are a whole range of other non-wood uses of trees that are very important to rural society and these include: construction of cattle kraals, thorn fences, grain stores, carving, medicine, rope, dyes, sledges, farm implements, smoke curing, among many others. In terms of wood quantity used, woodfuel is the main use.¹⁷² The extent to which the various government and contract-based tree-centered development regimes have been, and to what extent they are capable of providing for basic needs such as wood-fuel energy provision and the general development of the rural landscape and the people in KwaZulu-Natal is important to this study.

¹⁷⁰ A. A. Eberhard and C. Van Horen, *Poverty and Power*, 8.

¹⁷¹ DWAF, "Foreword to the National Forestry Action Programme." K. Asmal (then Minister of Water Affairs and Forestry) September 1997. ii.

¹⁷² M. Underwood, "Agro-forestry Defined – Its Implications to the Forestry Industry." Paper Presented at the South African Institute of Forestry (Western Cape Branch) Symposium on Trees in the Landscape. Stellenbosch, 19 May, 1993. 7.

As discussed in the previous chapter, woodlot development and contract farming in trees, known as community forestry were looked upon to supply basic needs such as wood for domestic energy, as well as improving the general livelihood of rural communities. The role of trees in the alleviation and prevention of environmental degradation and development has a very long history in the region, province and country. The problem of dwindling natural resources affects the whole of Africa and the Third World at large. This can be accounted for in terms of long historical developments and processes which include, *inter-alia*, clearing land for settlement and agricultural purposes. This has been exacerbated by other problems such as over-population, over-grazing, unsustainable harvesting of rural and other forest resources, among others. One visible result of this in rural communities is the chronic shortage of important natural resources such as firewood on which the majority of the people are dependent for their daily domestic fuel requirements. An overview of the extent of wood shortage and demand will be sketched to contextualise the background in which woodlot development as a solution was proposed and promoted.

The Demand, Consumption and Supply of Woodfuel

The literature on woodfuel and rural energy tends to use the terms consumption, demand and requirements interchangeably. A. A. Eberhard and J. B. Dickson are of the opinion that it is important to differentiate between energy consumption, energy demand and energy requirements to be able to discuss alternative solutions and argued that:

Consumption refers to the existing energy usage patterns, ... demand refers to perceived needs, which would typically be greater in quantity and better in quality than consumption. In addition energy demand may often be a social and political issue ... Requirement is a debatable concept, in quantitative terms, which refers to 'objectively' identified energy needs.¹⁷³

[It is the consumption figures that should be used to understand the extent of woodfuel shortage. Using the supply-side to understand the woodfuel crisis, B. Munslow, *et al.* defined 'effective supply' of 'rural woodfuel' as that proportion of the woody biomass resource which is available for fuel and 'woodfuel demand' as a reflection of energy needs, mainly for cooking and domestic heating.¹⁷⁴] Effective supply and demand of woodfuel is determined by various factors including population size, technologies employed, the monetary or non-monetary costs of obtaining and consuming fuels, and availability and costs of alternative fuels. It is these factors that should be considered when determining possible interventions because the material conditions of affected people will place limitations on the possible alternatives available.]

¹⁷³ A. A. Eberhard and B. J. Dickson, "Energy Consumption Patterns and Alternative Energy Supply Strategies for Underdeveloped Areas of Bophuthatswana." Final Report No. Gen. 144. University of Cape Town: Energy Research Institute, June 1991. 62.

¹⁷⁴ B. Munslow, *et al.* The Fuelwood Trap, 20.

The shortage of wood has reached critical levels with international, regional and local studies¹⁷⁵ indicating that the demand for woodfuel is much higher than the available supply. Attempts to increase the supply of wood resources significantly are hindered by local and national factors such as lack of economic incentives, insecure tenure arrangements and inappropriate government policies, at differing proportions in various areas. Those proposing woodlots as solution in their various forms have accepted to address these factors so that they support rather than hinder the development of a sustainable forest programme aimed at rural development in general with a focus to wood self-sufficiency. There is a clearly defined geographic pattern in woodfuel use and demand (Firewood requirement/demand is higher in rural areas where electricity is not available or where the people are too poor to afford it (or other alternatives and making it more readily affordable is regarded as an important need, at least in the short and medium term). In these rural areas firewood has been traditionally considered a 'free good' this is has been harvested without any regard to sustainably. This is gradually changing as wood fuel becomes scarce, work involved in its procurement increases and chances of selling surplus are on the increase but also moved into protect certain forests.)

B. Munslow *et al.* suggest that solutions for rural energy supply and/or the woodfuel crisis have to take into consideration the fact that rural areas are a site of woodfuel production and consumption. In these areas neither the cash nor the distribution system are sufficient to permit widespread conservation. Also because of the poverty characterising the majority of the households, fuel-switching options on a scale large enough to reduce the woodfuel demand, given the rising population, are also inhibited.¹⁷⁶ This contrasts with urban areas, which are essentially areas of woodfuel consumption. In the urban situation cash is available (at least survival is based on the cash economy) and a distribution and marketing network already exists. This enables fuel-switching, conservation and other initiatives to be taken. In this regard, when woodfuel supply falls, it is relatively easy to introduce other alternative sources of energy to replace wood. It is from this point of view that those who propose the significant improvement of the management of woody biomass as an intervention to curb scarcity emphasize the introduction of tree growing regimes within the existing production systems.¹⁷⁷ The effect of this school of thought was to promote agro-forestry, community forestry and woodlot development as an appropriate intervention to the wood fuel scarcity problem. According to B. Munslow *et al.*:

¹⁷⁵ See World Bank and UNFAO Studies for the international; B. Munslow and Y. Katerere for the regional and M. Gandar and A. A. Eberhard for the local studies, for example. These are all cited in this work and listed in the bibliography.

¹⁷⁶ B. Munslow *et al.* The Fuelwood Trap. 22.

¹⁷⁷ B. Munslow *et al.* The Fuelwood Trap. 39.

The best way to ensure future wood fuel supplies, and simultaneously to prevent environmental degradation, is to improve the management of woody biomass within existing production systems based upon the innovations and responses already occurring among small-holder-farmers. For this operation to succeed at a national or even at a regional level, new relationships have to be developed between ministries responsible for energy, forestry, rural development, environment and agriculture ... these new networks will support woody biomass production by local farmers. This, of course, requires that strategies go beyond energy and forestry projects and are incorporated into as many other development schemes as possible.¹⁷⁸

This approach can be understood as forming an integrated approach to resource use and resource management. This emphasis on including tree planting within the existing production systems can be seen as one of the main factors behind the renewed enthusiasm in woodlot development in South Africa.

In a broader regional context woodfuel remains the main source of household energy for many poor families. B. Munslow, *et al.* observed that in comparison to other household fuels, it appears that woodfuel consumption will continue to grow in absolute terms. They correctly postulated in 1988 that by the year 2000 the majority of over 100 million people in the SADC region would still rely upon wood fuel for domestic energy use.¹⁷⁹ Many areas of the region are already experiencing difficulties in obtaining woodfuel. With supplies diminishing and consumption growing the region faces a major challenge. Unlike other energy sources, wood is not a solely marketed commodity. It does not carry a production cost because it is often freely, (or considered to be so) available. This factor poses a challenge for policy-makers to devise solutions to the growing scarcity of woodfuel. It is thought that because of this fact the problem has worsened. Munslow, *et al.* argue that:

The woodfuel problem was neglected for too long, precisely because it was assumed to be an easily available free good. Therefore the taking, to cook, boil water, give warmth in winter, brew beer, provide light in the evenings, and as a social focus for the household, was considered a right.¹⁸⁰

The lack of pro-activeness in the part of governments in general in the woodfuel problem, unlike in the oil crisis, led to a further deterioration in the wood sector. The woodfuel problem did not immediately ring bells for governments. In South Africa for instance, as will be demonstrated in subsequent sections, woodlot development was promoted for the purpose of conservation with the supply of wood coming secondary to it. The marginality of rural households in policy determination by central government continue to make planning for rural

¹⁷⁸ B. Munslow *et al.* The Fuelwood Trap. i.

¹⁷⁹ B. Munslow *et al.*, The Fuelwood Trap. 5.

¹⁸⁰ B. Munslow *et al.*, The Fuelwood Trap. 6.

development sidelined. In the wood sector, there were no sudden balance of payment deficits nor fuel shortages affecting the vital arteries of transport and industry, thus government was not under any pressure to act. The growing shortages of woodfuel did not easily impress any urgency upon policy makers who rarely use it. As a result of the delay in responding to the growing scarcity, the impact of the woodfuel problem is having far reaching effects.

Studies of wood fuel use, demand, supply, shortages and supply strategies were done mainly on the basis of the former 'homelands' (listed in appendix 4). Estimates provided for the whole of South Africa's woodfuel demand are based on very vague calculations. A. Kuhn estimated in 1999 that 'about two million rural households benefit from forest and woodland resources implying a harvesting of nine million metric tonnes of wood for fuel per annum'.¹⁸¹ Earlier estimates include those of M. Gandar who estimated in 1994 that:

The total annual consumption of woodfuel by low income household in South Africa was about 11 million tons of which about 6.6 million tons are used in rural areas in the former 'homelands' and about 3.5 million tons by farm workers. About two-thirds comes from indigenous woodland, particularly savanna with a sizeable portion of the remainder coming from the commercial plantation sector. Self-seeded exotics are important in certain areas. Woodlots, which cover an estimated 62 000 ha, provide relatively little firewood.¹⁸²

M. Gandar's calculations supported the effort towards the development of woodlots to provide wood fuel for the rural people. What is often underplayed in these reports is the role of alternative sources of energy, which could be provided cheaply to rural households.

A. A. Eberhard and C. Van Horen raise the issue of alternative energy sources in their energy transition model, which they propose for the rural communities. Their model identifies three phases of energy use. The first phase, which they regard as the traditional phase is characterised by the use of or total dependency on woodfuel and other forms of biomass, such as crop residue and dung. The second phase was characterised as having one or more transition phases where people increasingly use commercial fuels including paraffin, liquid-petroleum-gas (LPG) and coal. Finally, the third phase exhibits a full or total dependency on electricity – a fully modernised energy use.¹⁸³ However, as stated earlier, the ability to provide alternative sources of energy in the rural areas is complicated by the conditions of poverty prevalent in these communities. These poor households cannot afford to pay for other

¹⁸¹ A. Kuhn, *et al.* "Making Forest Policy Work: A Five Day DWAF Course." DWAF in Conjunction with the UK Department for International Development. September, 1999. 26.

¹⁸² M. Gandar. "Afforestation and Woodland Management. Paper 9." University Cape Town: Energy for Development Research Centre. UCT, 1994.

¹⁸³ A. A. Eberhard and C. Van Horen, Poverty and Power. 66.

alternative sources of energy. } A Food and Agriculture Organisation (FAO) report focussing on wood energy for sustainable development in South Africa, noted that:

Alternatives to wood fuels are often scarce in rural areas remote from national grids of centres of distribution of fossil-based fuels such as kerosene or coal. Yet even where such conventional or 'convenience' fuels are available, many cannot afford them or simply prefer to use wood fuels for specific purposes.¹⁸⁴

However, there is a problem of looking at rural households as homogenously poor. There are various levels of differentiations and those who can afford can adopt non-wood alternative sources of energy. In fact this would have the net effect of reducing total dependency on wood for fuel.

This idea of fuel switching and multiple sources use was demonstrated in S. Ward's study in Mabibi district in the former 'homeland' of KwaZulu which provides interesting figures on households' uses (Table 3.1 below) of different energy sources. As indicated by the figures in Table 3.1, while wood is the most used source of energy for cooking and for lighting in the households, there is a high incidence of adoption of other energy sources. For instance, non-wood sources of energy have been adopted largely for the purpose of lighting represented by candles ranking second after wood, with 18.97 per cent, followed by paraffin and DC batteries with 17.44 per cent and 12.35 per cent respectively. The report however, does not show the percentage usage of the various sources of energy per household *vis a vis* their income levels. It may not be correct to generalise therefore either that only those families who are well off can afford non-wood fuels nor that, poorer families cannot afford them. However, what is clear from the report and the research undertaken for this study is the fact that the procurement of energy sources has important financial consequences to rural households, particularly those that are poor. An increment in the budget allocated for energy means an automatic cut on other important things such as food.)

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FAO, "Forests, Fuels and the Future: Wood Energy for Sustainable Development." *Forestry Topics Report No. 5*. Rome, 1994. 3.

Table 3.1: Household Fuel Use in Mabibi District (KwaZulu-Natal)

Household Fuel	Percentage used
Candles	18.97
Coal	3.53
Crop Residues	6.32
DC battery	12.35
Dung	7.06
Electricity	5.30
Gas	4.18
LA Battery	3.97
Paraffin	17.44
Petrol	1.10
Wood	20.76

Source: Adapted from S. Ward¹⁸⁵

According to the Ward Study, the most commonly used sources of energy are candles (95 per cent), wood (85 per cent) and paraffin (79 per cent). Coal and gas usage varies greatly between areas depending on availability and incomes. The availability of coal in the area of study, Nqutu, which is a coal mining area, means that nearby households with access to coal can use it. High gas usage is reflected in Mabibi and the study shows that many households had gas appliances bought from migrant remittances by those members of the family involved in migrant labour. Car batteries are an important source of energy for electrical appliances (Hifis and TVs) as are DC batteries.¹⁸⁶

In deliberating on the issue of wood for fuel, the supply and demand for it, environmental concerns come to the fore particularly in KwaZulu-Natal, which is largely grassland by vegetational characteristic. The intensive household use of firewood as a 'common property resource' goes largely unregulated and poses a high risk both to trees and to the people who depend on them for their livelihood, accelerating a cycle of forest depletion, stagnating local economies and worsening poverty. However, regulatory levers cannot be expected to change patterns of energy use and production in the 'neediest' communities most vulnerable to firewood shortage, unless reinforced by incentives at the point of use. Communities enjoying open access to forests and the right to use and manage them should adopt careful and protective attitudes towards wood fuel resources. In B. James' study of woodfuel harvesting in Mabibi (an area which is still a relatively densely wooded area) it was concluded that by and large "the resource use practices of the communities can be comfortably considered as

¹⁸⁵ S. Ward. "Review of Rural Household Energy Use Research." 6.

¹⁸⁶ S. Ward. "Review of Rural Household Energy Use Research." 6.

sustainable.”¹⁸⁷ Her observation was that the provision of firewood for subsistence purposes has from history been the domain of women and still remains so. She emphasised that the “persistence of women’s specialist knowledge of woodfuel species, species avoidances and collection of dry wood, has resulted in resource management practices remaining sustainable.”¹⁸⁸

Overview of the Effects of Woodfuel Shortage

(Wood fuel is strongly linked to the livelihoods of rural people.) It is normally harvested as a ‘common property resource’ from forests and from scattered pockets or belts of trees at field margins or roadsides and on waste or common ground.) It has the scope to create income and jobs when traded as a market commodity.¹⁸⁹) In well-wooded areas woodfuel gathering is confined to dead wood and such harvesting has relatively less harmful effect. (Rural overcrowding creates a large demand for wood, but diminished supply because of the clearance of fields and the cutting of live trees for hut, kraal building and firewood.) Live trees continue to succumb to the axe of woodfuel gatherers and indiscriminate gathering. (This leads to the loss of soil cover and other biomass cover and diminishes the water holding capacity of the soil, leading to environmental degradation.))

M. Gandar argues that it is through the use of multiple responses involving the introduction of cheaper and simpler stoves that use wood more efficiently, that afforestation “would make the greatest contribution in the foreseeable future.”¹⁹⁰ (Already, wood fuel scarcity has become a household phenomenon, characterised by long distance hunts for wood, the use of expensive transport, and the commercialisation of what was once a ‘free’ resource. Fossil fuels are increasingly playing a prominent role where firewood is scarce. In rural areas with isolated closer settlements with little access to woodlands or shrub lands, woodfuel scarcities are most acutely experienced.)) In their study of energy consumption patterns in Bophuthatswana, A. A. Eberhard and J. B. Dickson found out that, woodfuel scarcity and rural peoples’ dependence on it are at the root of the energy problems experienced by the people living in rural and underdeveloped communities.¹⁹¹ A brief discussion of the various effects of woodfuel shortage for rural communities will help to explain the need for woodlot development. The shortage of wood on domestic energy has various implications on the welfare and livelihood of the rural household. The ramifications are far reaching and include economic, social, health, environmental, among other effects.

¹⁸⁷ B. James, “Mabibi Community - A Socio-economic Study.” University of Cape Town: Energy Research Institute. 1991. 23.

¹⁸⁸ B. James, “Gender, Development and Environments in the Remote Village of Mabibi, KwaZulu-Natal.” [Masters Thesis] University of Natal-Durban. 1995. 88.

¹⁸⁹ FAO, “Forestry Review.” 16.

¹⁹⁰ M. Gandar, “The Poor Man’s Energy Crisis.” 22.

¹⁹¹ A. A. Eberhard and J. B. Dickson, “Energy Consumption Patterns.” 23.

Economic Costs

The economic costs resulting from the scarcity of woodfuel are very obvious and far-reaching. The scarcity of the previously considered 'free' firewood has made it become increasingly commercialised. According to G. Best about 80 per cent of the price of firewood is for the transportation, being a bulky product. (Calculations made by S. Ward's in her study of energy consumption in Mabibi district indicated that by paying for alternative energy sources, rural communities incur an additional cost of 15.6 per cent extra cost value of their monthly household income. However, not all families living in areas with severe woodfuel scarcities can afford to buy increasing quantities of fuel.¹⁹²) It is these families who face the severest problems resulting from firewood scarcities. (In their Bophuthatswana study of 1987, A. A. Eberhard and J. B. Dickson, calculated that the average monthly household income is R161.74 of which on average R20.62 is spent on fuel.) They concluded that, "it is difficult for families to reduce expenditure on fuel without possibly dropping below levels to meet minimum nutritional requirements."¹⁹³) Poorer families who cannot afford a higher fuel bill are therefore forced to utilise 'free' fuels that have a higher social cost in terms of inconveniences and the time and effort involved in their collection. In this regard the poor suffer most economically from woodfuel scarcity.)

Social Costs

The increasing scarcity of woodfuel implies that households, largely the female members, cover an average of 15 to 20 km of walking per fetching trip. In KwaZulu-Natal, the same studies have estimated 150 woman (man) hours of work consumed in gathering firewood each year. M. Gandar argues that:

If the gathering of firewood is counted as part of food preparation, more effort is (therefore) consumed in preparing it than by the growing of it. As the burden of merely existing increases relatively, so the opportunity for channelling human energy into development projects decreases.¹⁹⁴

The major social cost incurred by families is the time and effort required to provide the simple basic need of fuel for cooking and heating.¹⁹⁵ An enormous amount of effectively unproductive time is spent gathering fuel, a service that is simply taken for granted by those with access to electricity.¹⁹⁶ Most rural household labour and daily household maintenance is largely the concern of women. In traditional African households the duty of cooking and caring for the children and family is left to women and gathering firewood, are considered by these communities as part of the cooking process. As a result a significant portion of a woman's working day is devoted to gathering firewood from diminishing natural woodland

¹⁹² S. Ward, "Review of Rural Household Energy Use." 10.

¹⁹³ A. A. Eberhard and B. J. Dickson, "Energy Consumption Patterns." 69.

¹⁹⁴ M. Gandar, "The Poor Man's Energy Crisis." 21.

resources. According to B. James, "the collection of wood is undertaken by women as a key function of their reproductive roles which are determined by the gender division of labour within the households."¹⁹⁵ The division of labour in traditional households is such that men are rarely involved in firewood collection. It is only occasionally that a man may carry a load on his bicycle, (back from work) or on a donkey cart after organised firewood collection expeditions on donkey carts.¹⁹⁶ }

This view was supported in interviews carried out in the Edlebe ward of Nongoma district. Most people interviewed stated that those men who are seen to be doing tasks that are generally regarded as women's tasks (such as fetching firewood) are thought to be either weak or bewitched by their wives.¹⁹⁷ In the SADCC study, B. Munslow *et al.* also observed that almost uniformly in southern Africa "the woodfuel problem is a burden carried and carried quite literally by women, whose voice so often remains unheard but whose labours keep the wheels of everyday life turning."¹⁹⁸ It therefore, can be said that one of the heavy costs associated with deforestation (the decline in the woody biomass supply) is the effect it has on women's time and duties. By increasing the distance women have to walk on wood collection expeditions, it automatically increases women's labour-time. As already mentioned, the most common response to the growing scarcity of woodfuel is further investment in labour-time allocated to wood collection.¹⁹⁹ }

According to I. Tinker, "the real energy crisis is too often the lack of women's time."¹⁹⁹ Women's time is a constantly undervalued resource yet it is the backbone of the rural economy because with the migrant labour system women effectively do all the household work, including that which was traditionally male, such as looking after cattle, maintaining houses and thatching them. This negatively affects their roles in food production, child-rearing, taking care of the old and house keeping. Theoretically it is supposed that by alleviating the burden of firewood collection, agricultural production or other productive non-farm activities can increase.²⁰⁰ When women are over-worked it affects their health and that of their families.

¹⁹⁵ B. James, "Gender, Development and Environments." 82.

¹⁹⁶ E. Cecelski, "Energy and Rural Women's Work: Crisis, Response and Policy Alternatives." International Labour Review, (126)1, 1987. 45.

¹⁹⁷ Personal interview with a group of women met on a wood collection expedition in Edlebe, Nongoma. July 2000.

¹⁹⁸ B. Munslow *et al.*, The Fuelwood Trap. 6.

¹⁹⁹ I. Tinker, The Real Rural Energy Crisis: Women's Time. Washington D. C: Equality Policy Centre. 1984, 23.

²⁰⁰ I. Tinker, The Real Rural Energy Crisis. 23.

Health Costs.

Negative health effects of woodfuel can emanate both from the scarcity of it and from dependence on it. Total dependence on wood fuel also has deleterious effects on users. There are diseases and irritations associated with the smoke from burning wood, particularly where it is used indoors. Some of these include lung, eye, and throat diseases as well as respiratory complications. The negative effects of woodfuel scarcity are however more numerous and more serious for those who depend on it for energy. A. A. Eberhard maintains that in South Africa many households are consuming the minimum energy level required to meet basic domestic needs, while some are below this level.²⁰¹

|| The most obvious negative effect of a woodfuel shortage implies less cooked meals, which decreases nutritional standards. As mentioned earlier, increased scarcities mean that part of the family income has to go to purchase alternative sources of energy. Where families are living below the poverty-datum-line, this re-channelling of income represents an economic burden. For those families who cannot afford this increased burden they may resort to using less fuel. This option may lead to health problems, which include reductions in nutritional and hygiene standards.¹ For instance, in many rural areas where there is not access to piped water, water must be boiled before being used for drinking. Shortage of woodfuel would mean the water might not be boiled. E. Cecelski suggested that, "there is a close association between per capita food consumption and that of fuel."²⁰² This is relevant as the bulk of household food is cooked before it can be eaten. The availability of fuel for cooking determines the ranges of food that families can prepare. As a result the availability of fuel for cooking can be regarded as very central to the ability of households to meet their dietary requirements. ||

Environmental costs.

It has been argued earlier that the deforestation that led to the current wood shortages was not a direct result of felling wood for firewood but clearing of land for agriculture purposes. However, following the scarcity of wood for fuel, woodlands came under direct pressure from woodfuel collectors. In the long run, the cost incurred as a result of environmental degradation caused by pressure on natural woodland could ultimately be the most severe. A.

|| A. A. Eberhard argues that:

... perhaps the most serious long term effect of growing woodfuel demand and scarcities is the environmental degradation associated with the denudation of

²⁰¹ A. A. Eberhard. "Energy Consumption Patterns in Underdeveloped Areas in South Africa." University of Cape Town: Energy Research Institute, 1986. 38.

²⁰² E. Cecelski. The Rural Energy Crisis, Women's Work and Basic Needs: Perspectives and Approaches to Action. Geneva: ILO Rural Employment Research Programme, Technical Co-operation Report, 1985. 12.

woodland cover; for whenever the rate of wood collection exceeds natural regenerative capacity of trees and shrubs and green wood is cut the forest and woodland cover is stripped and denuded and this may exacerbate soil erosion, ultimately resulting in diminished agricultural yields.²⁰³ //

This summarises the negative effect that uncontrolled harvesting would have on the environment.²⁰⁴ However, there is a need not to exaggerate the singular responsibility of scarcity of wood as the main cause of environmental degradation. //

Besides the pressure exerted on diminishing woodland through the search for firewood, the clearing of land for agriculture and high livestock densities also play a significant part in the reduction of tree cover in areas of KwaZulu-Natal.²⁰⁵ Woodfuel harvesting only helps deplete the remaining trees.²⁰⁶ Generally, as populations grow, so do livestock herds, the demand for additional 'cropland', and the demand for poles and other building materials. If this overall process of degradation of the environment, as a result of diminishing tree cover, is not slowed this will ultimately lead to loss of top soil and reduced agricultural potential.²⁰⁷ According to E. Eckholm *et al.* while deforestation and the woodfuel crisis are obviously linked, the two problems are not identical. From this argument, they proposed that, to understand and effectively attack woodfuel scarcity, it is crucial to consider several issues. What is happening to local forests and why? How do different forest resources use affect the availability of woodfuel? And also, how do trends in woodfuel use affect forests?²⁰⁸ //

Woodfuel shortages, likes those of other non-timber forest products have to be understood within the context of rising human populations stripping adjacent forests bare of trees, thereby creating a woodfuel scarcity. This is much worse in rural South Africa's former 'homelands' where land appropriation has left very little land available for the ever-increasing African population.²⁰⁹ It can be safely concluded from the body of recent available research that woodfuel scarcity is as much a consequence as a cause of deforestation.²¹⁰ E. Eckholm *et al.* argue that firstly, the widespread clearing of lands for agriculture severely reduced the available forest area. Secondly, there followed a time when the gathering of fuel from the remaining woodland began to exceed the sustainable harvest.²¹¹ This argument should not, however, overshadow the effects of land expropriation. As discussed in chapter 1, in KwaZulu-Natal, like other provinces of South Africa, apartheid land allocation led to overcrowding in the 'homelands'. E. Eckholm *et al.* argue that while converting woodland to agriculture makes social and economic sense, often the environmental protection offered by woodlands can outweigh the benefits provided by the clearance for agriculture.²¹² //

²⁰³ A. A. Eberhard, "Energy Consumption Patterns." 39.

²⁰⁴ E. Eckholm *et al.*, Fuelwood. 12.

²⁰⁵ E. Eckholm *et al.*, Fuelwood. 19.

²⁰⁶ E. Eckholm *et al.*, Fuelwood. 19.

A. A. Eberhard and J. B. Dickson observed however, that continued woodfuel harvesting in areas of insufficiency implies less selection, and living trees are harvested. Testifying to this is the reduced density of wooded areas surrounding settlements.²⁰⁷ It can therefore be concluded that firewood scarcity and rural people's dependence on it are at the root of the environmental degradation.²⁰⁸ While woodfuel harvesting is just one element that contributes to deforestation, it is still important in its own right. Depleted natural woodland is no longer providing for the energy requirements of the rural dwellers. The ecological impact resulting from scarcity tends to exert more pressure on social, economic and health costs that arise from woodfuel scarcity. The threat of increasing environmental degradation in South Africa was the primary reason for which woodlot development was promoted. A sketch of the the historical development of woodlot since the 19th century will demonstrated this phenomenon and how woodfuel was always secondary to the conservation motive.

Brief History of Woodlots in South Africa from the late 19th Century

Woodlot development in South Africa was promoted in the interest of conservation and the provision of wood for fuel was secondary. Very few parts of South Africa are heavily wooded with natural vegetation. The state's involvement in woodlot development has a very long history. During the first half of the 20th century, at a national level, tree planting in rural communities was the responsibility of the Department of Native Affairs.²⁰⁸ Under apartheid small-scale plantings remained the responsibility of the Native Affairs Department (or relative departments) while large-scale commercial tree planting increasingly fell under the control of the Department of Forestry.²⁰⁹ According to H. Witt, the establishment of large-scale commercial plantations were not the only endeavours of the state. In fact the state also participated in the establishment of smaller plantations and woodlots for African use.²¹⁰ The first state community woodlots were established in 1893 for rural black communities near King William's Town and were sanctioned by the Cape Forest Act. The rationale behind the move was to provide woodfuel and relieve the deterioration of natural resources, especially woodlands and forests. The Cape Colony government realised that woodlots require large areas of land which were costly to prepare and monitor.²¹¹ Strict government interventions in the matter however failed to address people's expressed needs, and the complexity of patterns of rural woodfuel supply and demand. There was no integration of woodlots into larger land

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A. A. Eberhard and B. J. Dickson, "Energy Consumption Patterns." 62.

²⁰⁸

The names of the Departments responsible for blacks' affairs changed several times with changing administrations. For example, Native Affairs between 1957 and 19, the Bantu Affairs 19-, then Plural Development etc.

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H. Witt, "Trees, Forests and Plantations: An Economic, Social and Environmental Study of Tree-Growing in Natal, 1890 - 1960." [PhD | University of Natal-Durban, 1998.

²¹⁰

H. Witt, "Trees, Forests and Plantations." 123.

²¹¹

H. A. Luckhoff, "The Story of Forestry and its People." [ed] W. E. Immerlman *et al.*, in Our Green Heritage: The South African Book of Trees. Cape Town: National Boekhandel, 1973.

use and livelihood objectives. Uncertainty over tenure and ownership was not clarified and the woodlots failed as no one took responsibility when the woodlots were handed over.

At the turn of the century a new phenomenon of individually managed woodlots began after the poor result of the village woodlots that dominated the 19th century. For instance in 1900 individual households established woodlots in Pondoland and Swaziland ranging from 0.1 to 2 hectares. Some of these woodlots were established for commercial purposes. The aim was to source and sell wood for fuel in the neighbouring rising urban centres. However, the conservation motive in woodlot development remained paramount. This can be demonstrated by clauses in the Union Forestry Act of 1913 that promoted the planting of woodlots as a way to safeguard the harvesting of natural woodland. The government actively promoted individual commercial woodlots during the Second World War when there was a rising demand in timber. The Land Bank was mandated to facilitate this development and the 1944 Land Bank Act, amongst other things, included a clause allowing for the provision of advances for the cultivation of timber to meet the rising demand. The Land Bank only serviced White Farmers, as its mandate was to service struggling poor whites and not blacks. The Department of Native Affairs which was responsible for African affairs made no effort to actively promote individual tree growing in African areas of both Natal and Zululand later to become the 'homeland' of KwaZulu.

In the 1950s the state increased its commercial plantations in rural communities but continued to promote woodlots for the use of those communities. The establishment of woodlots in this era was envisaged as an alternative to the physical shrinking of and legalised constraints on the access to indigenous forests, with the expectation that they would provide relief. In the twenty years between 1937 and 1957, there was an acreage increase from about 2 744 acres to 21 150.2 acres of commercial timber trees on Trust land.²¹² In the same period, the Native Affairs Department established no more than 500 acres of community woodlots. A new era was introduced through 'betterment planning' regimes which involved state driven land use planning which was often forced and resulted in villagization and the demarcation of arable and grazing land, residential sites and woodlots.²¹³ This was of course met with widespread resistance. There was hostility to state planning and imposed conservation initiatives.

The last years of the 1950s introduced remarkable changes in both the management and development of Tribal Authority woodlots. In 1955, following the recommendations of the Commission for the Socio-Economic Development of Bantu Areas, the Departments of

²¹² H. Witt, 'Trees, Forests and Plantations.' 124.

²¹³ P. A. McAllister, 'Reversing the Effects of 'Betterment Planning' in South Africa's Black Rural Areas.' *Africa Insight*, (21) 1, 1991. 116.

Forestry and Native Affairs made a commitment to develop woodlots. They agreed that the Department of Forestry would undertake all tree-growing projects in African areas on behalf of the Native Trust, until such stage when the trees were disposed of as timber. The Department of Native Affairs would control woodlots and smaller plantations used for fuel and hut building material. By 1958, about 4 146 acres of Trust land in Natal and Zululand were planted under trees by the Department of Forestry, with an additional 20 131 acres of plantation land being added to Trust land.²¹⁴

This increase in tree growing brought competition for land with traditional land uses such as cattle grazing and food crop production. Food shortages in most 'homelands' led the government to site village woodlots on marginal land so as to leave productive land available for traditional food crop production. In 1976 the Department of Agriculture and Forestry established an additional five woodlots in the Ngwavuma district, with a total area of about 1 620 ha. The Department added another 1 820 ha in 1982 planted to trees for non-commercial purposes.²¹⁵ This development was quite substantial given that there was no extension officer directly responsible for the promotion of community or Tribal woodlots.

Notwithstanding the proposals to develop woodlots in African communities the commitment to carry this through was often lacking. There is overwhelming evidence pointing to that lack of commitment and follow up. For instance, it was only in 1980, that the first Forestry Extension Officer was appointed to service the rural areas of both the former KwaZulu and Natal regions. It took another three years for two more extension officers to be appointed to service the area between the former Transkei and Mozambique. There was only one school of forestry for blacks, at Fort Cox in the former 'homeland' of Ciskei, for the whole country with a fixed enrolment allocation of six black students per province per year. Even in fiscal terms there was no enthusiasm to support this policy goal, as for example, in 1981 only one per cent of the former KwaZulu government's budget was devoted to forestry development in rural communities.²¹⁶ Except for the small-scale commercial forest projects established by SAPPI in 1983, 94 per cent of the former 'homeland' of KwaZulu's planted trees were still in commercial plantations by 1985. According to M. Ncgobo, this indicates the enormity of the task in the implementation of community afforestation projects.²¹⁷

Writing in 1983 M. Gandar calculated that in the case of KwaZulu-Natal, if half of the 'homeland's consumption of 2 million tonnes per year was to come from woodlots, 125 000

²¹⁴ H. Witt. "Trees, Forests and Plantations." 132.

²¹⁵ DAF. Policy on Agriculture in KwaZulu. 27.

²¹⁶ Personal Interview with Mr Moffat Ncgobo, the first Extension Officer in charge of rural afforestation (1980 - May 2000).

²¹⁷ Moffat Ncgobo, Personal Interview. April 2000

hectares of woodlots had to be established.²¹⁸ By 1982, KwaZulu-Natal had a total of 14 070 woodlots as compared to a total of 62 287 with the other eight provinces included. Out of the 14 070 woodlots only 31 were recorded as community woodlots with the remaining 35 in the Transkei 'homeland'.²¹⁹ This shows that woodfuel was harvested from shrub lands. Woodlot programmes focussed mainly on land owned as Tribal Trust Lands by Tribal Authorities (TAs).²²⁰ The former 'homeland' of KwaZulu had about 582 TA 'woodlots' in 1985. Available studies on woodlot establishment in the former homelands almost unanimously confirm that TA woodlots (sometimes misleadingly referred to as community woodlots)²²¹ were largely disappointing. They were almost without exception *Eucalyptus* woodlots with sizes ranging mainly from two to eight hectares. Woodlots had an average of about five hectares, though a few exceeded 50 hectares. The absence of any extension and management support for the TA woodlots led to the conditions of this potentially valuable resource deteriorating alarmingly and often being abused by the intended beneficiaries.

S. Christie and M. Gandar describe what they refer to as 'departmental woodlots' which remained under the control and were harvested by the relevant 'homeland's department of forestry.²²² The former 'homeland' of KwaZulu did not have any recorded departmental woodlots that were considerably larger on average than TA woodlots and tended to be more plantation-like than woodlots. S. Christie and M. Gandar observed that 'the distinctions between departmental woodlots and the commercial forestry operations of the Departments of Forestry tends to be blurred and that the latter was usually used to sell poles and firewood.'²²³ M. Gandar also observed that there were two programmes promoting community woodlots, that is, those owned and controlled by the local community and those in the direct charge of the Department of Forestry.²²⁴ Direct establishment costs of TA woodlots were reduced because of the labour contributions of the community. However, the whole programme was made costly because of the high cost of extension workers.

²¹⁸ M. Gandar, "Wood Requirements of Rural People." 14.

²¹⁹ M. Gandar, "Wood Requirements of Rural People." 22.

²²⁰ The sustainability of Tribal Authorities as vehicles for rural development has been questioned (Daphne 1982, McIntosh 1990). However in South Africa, TAs will not be easily eradicated, and the ANC indicated their commitment to the recognition of traditional leadership. In South Africa, both local and government authorities are involved in regulating common resources. The development of local institutions for resource management cannot be separated from institution building for development.

²²¹ The difference between Tribal Authority Woodlots and Community Woodlots is that, TA woodlots were planted on land provided for by TAs by the government mainly for conservation of natural wood lands. The TA had direct control over such woodlots after they were handed over and in most cases personalized access to the Community woodlots were individual woodlots planted within the community for their individual gain, in terms of sourcing wood for fuel and other wood and non-wood products. However, the latter was not a very wide-spread phenomenon until a much later date.

²²² S. Christie and M. Gandar, "Commercial and Social Forestry." 68.

²²³ S. Christie and M. Gandar, "Commercial and Social Forestry." 69.

²²⁴ M. Gandar, "The Imbalance of Power: Energy and the Environment." J. Cock, *et al.*, [eds.] In Going Green: People, Politics and the Environment in South Africa. Cape Town: Oxford University Press, 1991. 47.

Woodlot Development in the Post-apartheid Era

In the 1980s, apartheid was faced with a lot of pressure both from many spheres. Township violence, rural insurrection and the business sector were all against apartheid. In this period the state made attempts to release pressure by engaging in rural development particularly in the former 'homelands' so as to mobilise support against the anti-apartheid movement. By the end of the 1980s decade it had become clear that apartheid would finally capitulate to the forces of liberalism. With the unbanning of political parties and the release of Mandela in 1990 there was a process towards establishing democracy and a Constitution that upheld human rights. Issues of rural development were also given priority in the ANC's statement of intent included in its document "Ready to Rule". The 1994 elections saw the ANC-led Government of National Unity come into power. As discussed earlier, this ushered in a regime of transformational policies focussing on reversing the unequal development paths that underlie the legacy of apartheid administration. Among other things, the new government committed itself to "ecologically sustainable development and use of natural resources" and the promotion of "justifiable economic and social development."²²⁵ The government adopted the ANC authored Reconstruction and Development Programme (RDP) as its transformational strategy.

The goals singled out in the RDP strategy included: achieving equitable growth, sustainable development, full employment and poverty alleviation. This strategy was aimed at local economic development and is based on a multi-sectoral approach to development. Within this framework, the role of the Department of Water Affairs and Forestry (DWAF) was the provision of basic services and the creation of a facilitative environment for local economic development. DWAF's vision was set as:

To contribute to the social and economic upliftment of all peoples of South Africa by promoting the responsible and sustainable utilization of our natural resources and encouraging tree centred development in South Africa.²²⁶

The RDP strategy recognised the forestry sector as an important contributor to the development of local natural resources. It was these natural resources that were expected to contribute significantly to the improvement of living environments and economic opportunity for rural communities. The Department of Water Affairs and Forestry (DWAF) was mandated with a mission to:

²²⁵ A. Andrews, "A User Guide to the National Environmental Management Act (NEMA)." Department of Environmental Affairs and Tourism, Johannesburg: Legal Resource Centre, 1999. 2.

²²⁶ DWAF. National Forestry Action Programme. 12

Address the national problem of social deprivation, impoverishment, deforestation and land degradation in all sectors of rural and urban communities through community forestry development.²²⁷

Community forestry in particular was seen as capable of significantly contributing to achieving these national goals in both rural and peri-urban areas. A strategic plan was made which turned the policy set out in the White Paper on Sustainable Forestry Development into action, and was named the National Forestry Action Programme (NFAP). The objective of the NFAP was to provide a framework for implementing the new forest policy as set out in the White Paper. Central to the community forestry strategy is the principle of people-driven development and the management of natural resources through partnerships with local communities.

In theory, the Government's forestry strategy formed part of a national forestry strategy that is coherent with rural development, urban development, energy provision, and other relevant policies for South Africa and is integrated into local development plans. To facilitate and implement this, a Community Forestry Directorate was created on the basis of the recognition that to address local development in a sustainable and effective way, the existing and potential tree-based component of livelihood systems must be effectively developed. This was based on the understanding that trees play a vital role in meeting the basic needs of many South African households by providing fuel, income and food and various less tangible but equally important services such as protecting the natural resources of land and water and supporting agriculture.

In 1995 the Government of National Unity affirmed in a discussion paper towards a Policy for Sustainable Forest Management in South Africa, that the government had a role in promoting community forestry. It also noted that the constraints to afforestation included concerns about water resources, and loss of habitat and bio-diversity. It was noticed that there was need to relate afforestation potential to socio-economic factors as well as the state of soils and climate, and that the implementation of a social forestry scheme, needed to be guided by incentive schemes. The government also intended to streamline and standardise decision instruments such as permit application procedures and environmental impact assessments to reduce cost and associated delays, while improving the quality of the decisions.²²⁸

²²⁷

DWAF. "White Paper on Sustainable Forestry Development." iii

²²⁸

DWAF. "Towards a Policy for Sustainable Forestry Management." 8.

The government committed itself to providing support to small growers and processors. This commitment was influenced by the fact that the majority of the poor people in South Africa and KwaZulu-Natal are found in rural areas as indicated in Table 1.1. According to the government strategy for a sustainable forestry management:

Government is intent on developing its role as a supporter of forestry, especially through social forestry and the small-farmer sector. Clear policies, strategies, and framework plans, based on information and participation are needed at the outset.²²⁹

The government intended to fulfil this role by providing information and advice through extension services. Extension services were to be made available to all rural communities or individuals whether they were contracted to any company or organisation, or whether they were growing their trees independently. Such advice and expert services would be subsidized by the government, which meant that the grower did not have to pay for consultation. The government was to work out a system for availing financial services with the understanding that rural economies are fund-scarce economies. After providing extension and financial services, the next step was to work on capacity building for the rural economies by providing, and then developing, management skills.

The new paradigms governing energy policy in South Africa are based on three broad themes namely; the need for improved social equity, economic growth, and environmental sustainability.²³⁰ B. Munslow, *et al.* observed that, on regional terms, some governments have tried to address the demand for woodfuel by promoting conservation or by encouraging substitution with electricity, coal or oil.²³¹ This approach to the woodfuel problem forms what has been referred to as, 'conventional supply enhancing, demand-constraining and fuel switching approaches.' According to B. Munslow, *et al.* while these approaches have substantial values to be learnt they however, are not adequate in tackling the woodfuel problem alone, essentially because the problem itself has not been understood. They propose therefore that:

The woodfuel trap, into which governments and donor agencies fall, is to assume that they have identified an obvious problem and consequently there has to be a simple solution. Unfortunately, this is not the case.²³²

If the woodfuel problem was a simple supply problem, then such conventional intervention systems would be appropriate. It would be a matter of linking the area suffering an energy shortage into the national electricity grid. The problem is that the rural areas are very remote

²²⁹ DWAF. "Towards a Policy for Sustainable Forestry Management." 8.

²³⁰ A. A. Eberhard and Van Horen, Poverty and Power. 36.

²³¹ B. Munslow. *et.al.*, The Fuelwood Trap. 11.

²³² B. Munslow. *et.al.*, The Fuelwood Trap. 11.

and poverty stricken. They cannot afford paying for the connection of their area into the national grid. Where funds are made available either from government budgets or donor funding other structural problems are faced, such as the haphazard settlement patterns of rural households, which makes it far more expensive to supply electricity. For a number of cultural and other reasons, rural households do not wish to be moved to settle in a linear system that would facilitate and enable service provision. Even if in the provision of electricity is still on the cards in South Africa, the development of woodlots for woodfuel was considered the currently the most viable way of meeting the rural communities fuel demands affordable and available to the rural poor. This led to the development of community forestry. A. A. Eberhard and J. B. Dickson are of the opinion that:

The overall strategy for meeting the domestic energy requirements, particularly for cooking and to a lesser extent space and water heating in the rural areas, must focus on afforestation. This strategy should include large-scale government plantations and a concerted effort to encourage and stimulate community woodlots and agro-forestry.²³³

The post-apartheid state adopted specific policies to address this problem and incorporate woodlot establishment in its National Forestry Action Plan, in the name of community forestry.

As a result of this retaliatory incendiarism, the emphasis changed to the promotion of individual woodlots, agro-forestry, community woodlots, conservation projects, windbreak projects and commercial projects. The post-apartheid government adopted the tree growing schemes within a new context that moved away from a racially divided terrain and the need to keep rural communities within their isolated boundaries. The new political dispensation required policy to be directed towards the improvement of the majority, and particularly the previously disadvantaged. Improved service provision for the masses of the people became a matter of policy priority. For the post-apartheid regime woodlot and community forestry development became part of a defined rural development initiative. The main objectives and general thinking of the new government, focussed at providing employment and income to the rural people. It was within the context of empowerment that the new government revitalised the forestry sector and created provincial directorates responsible for the promotion of community forestry throughout the countryside.²³⁴ The main reason for this was to supply wood for fuel to the rural communities.

²³³ A. A. Eberhard and B. J. Dickson, "Energy Consumption Patterns." 77.
²³⁴ DWAF. "National Forestry Action Programme."

Addressing a conference as early as 1983, M. Gandar had hinted on the problems in the implementation of woodlots. He singled out the reason for the problem as being that "the only tried and tested methods of forestry are aimed at commercial wood production, not firewood."²³⁵ This was confirmed by the experiences of the former KwaZulu's Department of Agriculture and Forestry. In 1984 the Department began to promote projects aimed at developing tree growing by the rural people for meeting woodfuel demand. According to the then Extension Forester for the Department, Mr Moffat Ngcobo:

There was a directive to the Minister to the effect that woodlots should be set up in every ward under the responsible Tribal Authorities. A nursery was set up first in Ulundi and then in Eshowe to supply seedlings for this purpose. There was a major drive towards promoting tree growing for the supply of wood primarily, and also trees for construction and other purposes.²³⁶

However, such programmes were not as successful as envisaged and they were bedevilled by a number of problems as discussed in the following sections.

M. Gandar was convinced that woodlot development was the best way towards solving the wood fuel crisis and devoted a lot of his time to the practical establishment of woodlots in the Nongoma district. He argued, "The main constraints to woodlot establishment are social and economic rather than technical" and proposed that a third of a hectare was capable of providing one household with enough firewood on a sustainable basis.²³⁷ M. Gandar's idea of a woodlot was that of a small block of trees planted specifically for the harvesting of wood. This type of woodlot would not compete with crops for land or livestock for grazing, nor would it have effects on water availability. According to him, "woodfuel production must not (necessarily) be concentrated in very large units if the aim is to lessen the time spent fetching wood."²³⁸

A. A. Eberhard and J. B. Dickson also supported M. Gandar's notion that several approaches to afforestation programs were necessary as viable alternatives and possible energy supply solutions. They also agreed with M. Gandar on the constraints to woodlot development. While government woodlots tended to be relatively easy to plan and implement they were however, limited by the lack of financial resources.²³⁹ Theoretically, it was assumed that

²³⁵ M. Gandar. "Wood Requirements of Rural People and an Approach to Woodlot Development." Occasional Paper No. 3. Presented at a Seminar on woodlots organised by the National Council of Women held at Botha's Hills. Pietermaritzburg: INR, 1983. 22.

²³⁶ M. Ngcobo. Personal Interview. (First forester under the former KwaZulu Government, and Senior Forester in the new Government's Department of Water Affairs and Forestry until April, 2000). Pietermaritzburg: DWAF, June 1999.

²³⁷ M. Gandar. "Wood Requirements of Rural People." 22.

²³⁸ M. Gandar. "Wood Requirements of Rural People." 22.

²³⁹ A. A. Eberhard and B. J. Dickson, "Energy Consumption Patterns." iii.

community woodlots would have the major advantage of involving more people and therefore have a higher success rate at a lower cost. Consequently, it was expected that the products from these woodlots would be conveniently available at a lower cost. This, it was hoped, would displace the demand for alternative sources of energy whose prices were considered prohibitive for the limited rural households' financial resources.²⁴⁰ This was also the case in KwaZulu-Natal, where the majority of the people have financial difficulties. Other proposed alternatives included ways of reducing the quantity of net energy required from woodfuel by introducing more efficient cooking and heating appliances such as low cost fuel-efficient wood burning stoves. Alternative fuels such as fossil fuels and reconstituted wastes could also be promoted. Coal and briquette discard coal and paper wastes offer the most promising alternatives.²⁴¹ However, if one has to consider a tree-centred regime that would provide woodfuel, among other socio-economic benefits such as income and employment, then community forestry in the sense of commercial lots by small growers should be examined.

In the rural turbulences characterising the resistance to apartheid in many of the 'homelands', the regime sought to be seen to be interested in the development of these areas and reduce the pressure from these circles. It is in this context that community forestry was viewed as a development initiative capable of buying the regime some political mileage. Outside South Africa woodlots were also established in Swaziland and Lesotho in partnerships between development agencies and communities with varying degrees of success. A. A. Eberhard reported that by 1982, Lesotho's community woodlots were selling wood with about 20 per cent of the proceeds going to a community development fund and the remainder covering running and re-establishment costs. He however observed that as a result of the considered antagonism between agriculture and forestry, the Lesotho Mountain Project (which he was at some point employed in) was not as successful. It met with a lot of resistance and therefore, could not lead to any meaningful contribution to the community. He concluded that, "there is little evidence that this huge investment in the mountain region has had any negative effect on agricultural production nor improving the well-being of rural households."²⁴² Commenting on a similar woodlot project established in 1976 in Thaba Tseka in Lesotho, J. Ferguson sees the problem as that, "those whose fields lay within the area that had been claimed by the project had their allocations revoked, and were deprived of their holdings without compensation."²⁴³ Perhaps the most important lesson from these projects is that

²⁴⁰ FAO, "Tree Growing by Rural People." *Forestry Paper 64*. Rome: FAO, 1980. 45.

²⁴¹ D. J. Mbewe, "Assesment of Rural Energy Supply and Demand." In A. A. Eberhard and C. Van Horen, [eds.] *Poverty and Power*. 71.

²⁴² A. A. Eberhard, "Technological Change and Rural Development: A Case Study in Lesotho." [PhD] University of Edinburgh, 1982. 24.

²⁴³ J. Ferguson, *The Anti-Politics machine: 'Development', Depoliticisation and Bureaucratic State Power in Lesotho*. Cape Town: David Phillip, 1990.

bureaucratic impositions on communities always face resistance from the communities once they feel alienated from the process. Therefore, community forestry needs to be an integrated development approach, that is, one that involves the communities and also observes agriculture and forestry as not being antagonistic activities competing for limited land.

The White Paper on Sustainable Forest Development in South Africa identified the need for partnerships between national, provincial and local government in achieving sustainable management.²⁴⁴ Central to this is the proposed concept of a unified extension service whereby community forestry is offered as one component of an integrated natural resource portfolio. The White paper on Agriculture also recognised the need for co-ordination with other rural development support service providers. The White Paper on Transformation of the Public Service identified the restructuring of the public service as central to ensuring co-ordination between service providers.²⁴⁵ The Rural Development White Paper recognised the need for focussed services to support rural development and the role of local government in co-ordinating services.²⁴⁶ Also the Rural Development Strategy (contained in the RDP) required that rural development be based on a multi-sectoral approach where development is directed by local people and delivered by a combination of rural people, representatives of local government and the provincial and national government agencies involved. The Government departments currently involved, or having the potential to be involved in community forestry include; the Department of Water Affairs and Forestry (DWAF), the Department of Agriculture and Land Affairs (DALA), the Department of Environmental Affairs and Tourism (DEAT), the Department of Minerals and Energy Affairs (DMEA), and the Department of Education (DE).

Presently DWAF is taking a leading role in providing a community forestry support service which includes extension service, the supply of seedlings and research. DWAF, however, has very limited capacity. Furthermore, DWAF sees its role as providing a "critical mass of community forestry specialists at the national level, which supports other field-level staff within a unified integrated support service".²⁴⁷ DWAF therefore had to shift from its traditional role of field-level service provision to that of a broader support service to other field-level service providers such as the Department of Agriculture and NGOs.²⁴⁸ It was recognised and acknowledged that community forestry is essentially a new discipline in South Africa and that there is limited comprehensive knowledge about it available. A research network, which consists of the Universities of the North, Western Cape and Stellenbosch, have been tasked with investigating community forestry research needs and

²⁴⁴ DWAF, "White Paper on Sustainable Forestry Management." iv

²⁴⁵ Department of Public Service. "White Paper on Transformation of the Public Service." 1996.

²⁴⁶ The Rural Development Framework.

²⁴⁷ DWAF. "National Forest Action Plan." 27.

²⁴⁸ K. Asmal, "Foreword to the NFAP." ii.

developing appropriate research projects. The terms of reference of this Taskforce on Community Forestry include researching the broad field of community forestry in the light of possible meaningful contribution towards poverty alleviation amongst previously disadvantaged communities. Furthermore, it was envisaged that future research undertaken would contribute towards the development of sound and appropriate policies for successful development in South Africa.

The main objective was to develop a framework to ensure that research is needs based and/or demand-driven and focussed on poverty relief and equity.²⁴⁹ In 1999, the KwaZulu-Natal province drafted a Community Forestry Strategic Plan that adopted the national vision and mission of contributing to the social and economic upliftment of all peoples of South Africa. It aimed to achieve responsible and sustainable utilisation of natural resources and encouraging tree centred development in the province. Among other things, emphasis was given to addressing the problems of social deprivation, impoverishment, deforestation and land degradation in all sectors of rural life through community forestry.²⁵⁰ As in the national government's National Forestry Action Plan, the provincial government also focussed on community forestry. The provincial government set out six core functions to be achieved by the Community Forestry Directorate.

The first core-function is 'woodlot devolution' in which the ownership, control and management of formerly state controlled commercial plantation contiguous to communities are being conferred onto the communities. The aim of this process is to support the development of viable community enterprise for income generation and the provision of resources. The second core-function is the new afforestation initiative where community forestry is mandated with supporting the development of new afforestation both commercial and for community needs.²⁵¹ The third core function is that of woodland management. In this, community forestry is supporting the sustainable use of natural forest and woodland resources by working in partnership with local government and other service providers. The aim is to support sustainable livelihood development with communities using natural forest and woodland resources. 'Urban greening', is the fourth core function. The partnership of local government in community forestry development through the development of urban greening strategies was recognised. The municipalities would provide trees and seedlings to urban communities through the local government. The fifth core function is that of 'rural greening' which is important to this study. In rural greening, community forestry is supporting local government and other service providers in developing sustainable rural

²⁴⁹ DWAF. "National Forest Action Plan." 23.

²⁵⁰ S. S. Masuku, "KwaZulu-Natal Province: Community Forestry Strategic Planning 2000-2005." Eshowe: Department of Water Affairs and Forestry, 1999, 7.

²⁵¹ S. S. Masuku, "Community Forestry Strategic Planning 2000-2005." 9.

livelihoods. This includes supporting the provision of trees and seedlings to rural communities for agro-forestry, reclamation, soil erosion control, rural enterprise, community woodlots and other projects. The aim is to provide practical examples of the means by which trees contribute to rural socio-economic development.²⁵² In 'rural greening' DWAF intends on building upon already existing resources that include 'donga' reclamation projects and the woodlots promoted by foresters and agribusiness. DWAF seeks to achieve this through a number of tree-planting regimes, which include, *inter alia*, promoting activities such as Arbor Week, Edu-Plant, the President's Forest Awards and other tree related activities focussing on local structures and communities. The government also set out to promote linkages with other role players, service providers, stakeholders, Community Based Organisations (CBOs) and NGOs in tree-related projects with the communities. An example of this initiative is the *Siyakhanyisa Networking Forum*, which includes representatives of the above organisations. This network seeks to incorporate plans or plan jointly with existing structures, including also the regional councils, tribal authorities and any other recognised existing traditional structures.

Finally, community forestry is mandated with the duty of explaining legislation to the communities and promoting its implementation. Community Forestry officers are also expected to implement provisions of the Veld and Forest Fire Act of 1989 and the new National Water Act (No 36 of 1998) that affect communities and woodland/forestry preservation. This is done through promoting public awareness of the Acts. The aim is to reduce the incidence of fire outbreaks and water depleting activities that would prove a threat to the sustainable management and harvesting of natural resources.²⁵³ This will also reduce the damage caused through forest, woodland and veld fires, reduce the impact of fire on the lives of rural and urban communities and promote continued availability of water to downstream users. Community forestry in KwaZulu-Natal also adopted the *Batho Pele* (people first) guidelines of the ANC-led government for improving public service delivery. The preparation and presentation of provincial community forestry strategies were designed to meet many of the principles of *Batho Pele*. The evaluation of government tree-based initiatives in promoting community development shall also be evaluated from the point of view of these principles.

In conclusion, it can be said that the idea of woodlots and community forestry as the main solutions to wood fuel scarcity comes from the most basic assumption that physical scarcity of wood is the key issue to address. The distance and time taken to collect woodfuel is

²⁵² S. S. Masuku. "Community Forestry Strategic Planning 2000-2005." 23.

²⁵³ A. Andrews. "A User Guide to the NEMA." 12.

commonly used as the yardstick of scarcity and the need for remedies.²⁵⁴ The logic of the argument is that, since increasing physical scarcity or distance can impose considerable costs on consumers, a strain on rural communities, and increase the burden on women, the basic aim of wood fuel interventions should be to reduce the costs and strains by reversing physical scarcity.²⁵⁵ This section will therefore discuss the potential of woodlots to supply wood for fuel to the rural communities. B. Munslow *et al.*'s observation and warning about the wood fuel issue should be borne in mind when carrying out this task. They argued that:

There is a myth that we know all of the answers to the problems surfacing in the wood sector. The truth is that we know some of the answers but in some cases we do not even have the questions yet.²⁵⁶

Those who argued that afforestation is the way forward for enhancing wood fuel supply identified several approaches to afforestation that could be available to rural communities for the alleviation of the rural energy crisis and the environmental degradation that goes with it. The approaches include farm forestry, which is essentially commercial tree growing by farmers on their own land for profit and sometimes with technical and financial assistance. Secondly, the growing of trees for fruits and construction, as well as for firewood by families aimed towards self-sufficiency on an individual household basis. Thirdly, agro-forestry where trees may be planted in hedges, in rows alongside roads, as windbreaks around houses or agricultural fields and inter-cropped with food production or other trees. Fourthly, community forestry involves community ownership, management and benefits of woodlots grown on communal property with technical and perhaps financial state assistance. And finally, state woodlots, where land expropriation and woodlot programme implementation are based on state initiatives.²⁵⁷ What can be said for certain is the fact that the post-apartheid South African government has not changed radically from apartheid's view of rural development and the provision of basic services. In any case, one thing that remains very clear is that the ANC-led government is as little interested in the affairs of rural communities as was that of the apartheid regime.

The government in South Africa is currently divided into national, provincial and local levels. In tracing and analysing the efforts in, and impact of, government efforts in rural communities in KwaZulu-Natal there is a need to identify the effort of each of these tiers of

²⁵⁴ A. Mascarenhas. "The Relevance of the 'Miti' Project to Wood-based Energy in Tanzania." In A. B., Temu, K. Kaale and J. A. Maghemhe [eds.] Wood Based Energy for Development. Dar es Salaam: Ministry of Natural Resources and Tourism, 1984. 32.

²⁵⁵ G. Leach and R. Mearns. Beyond the Woodfuel Crisis: People, Land and trees in Africa. London: Earthscan, 1988. 16.

²⁵⁶ B. Munslow, *et al.* Fuelwood Trap. 19.

²⁵⁷ M. Gandar. "Woodlots: A New Role." Paper Presented to the Plant for Life Conference. Pretoria. 1994. 13.

government. There are however, points of complementarity and parallels in their operations. At some points the differences between the two are not clear, a situation that has varied over time. The apartheid administration instituted a policy promoting a 'homelands' policy based on the self-government principle, which gave Zululand a 'homeland' and self-governing status.²⁵⁸ The effect of this was to transfer the cost of running the province to the 'homeland'. In this new division of labour between the national state and the 'homeland' administration, the rural communities took over the cost of reproducing labour for the capitalist centres.²⁵⁹

This chapter was divided in two main sections. The first focussed on the issue of the demand, consumption and supply of woodfuel and the effects of its scarcity on households. This was followed by the overview of woodlot development as a direct response to woodfuel shortage. It was indicated that there is a very large gap between available wood resources for domestic fuel and the demand by rural households. The suggested 'fuel-switching' response to the scarcity has very limited plausibility in the rural communities which are cash stricken. It was also established that investment in alternative non-wood sources of fuel implies a further strain on the household budget. This has implications on the general livelihood and welfare of the family. It is in this regard that woodlot development was discussed as possibly the most direct and workable solution to the domestic energy problem. It was also established that tree-growing regimes are also capable of contributing to other needs of the household, besides fuel. However, a number of complications and strains were realised in the development of woodlots for community use. Some of these include the view of wood as a 'free' good by the communities and tree growing as more valuable as a cash crop than it is as a source for woodfuel. It can be concluded however, that the growing of small portions of wood by every household is very important. Rural bureaucrats and policy makers should work on developing workable models of tree growing regimes that could be acceptable as well as profitable for the households involved in them.

²⁵⁸ D. Davies and H. Corder, "Restructuring the Rural Economy." 139.

²⁵⁹ D. Cloete, "Organising for Rural Development." S. Mathlape and A. Munz, [eds.] Towards a New Agrarian Democratic Order: Beyond Apartheid. Pretoria: Proceedings of the South African Economic Research and Training Project (SAERT), 1989. 3.

CHAPTER FOUR

TREES AS CASH CROPS: TOWARDS IMPROVED RURAL LIVELIHOODS?

The involvement of rural communities in the growing of trees (particularly *Eucalyptus*) in northern KwaZulu-Natal with the direct assistance of agribusiness is entirely new and, to some extent, is based on the expansion of sugar cane outgrowing which preceded it. This change in the forestry sector can be understood within the context of the internal transformations in the forestry sector. Similar structural changes took place in the sugar cane production sector in KwaZulu-Natal over the past two decades. Commenting on these changes, A. Vaughan proposed that the interventions could be understood “empirically in terms of the history of reformism, and theoretically in terms of the logic of capitalist development.” She further argued that, the success of corporate initiatives in encouraging petty production is partly due to the history of production in the region.²⁶⁰

Generally, South Africa has a long history of small Growers involvement with cash crops even if its peasantry was successfully crushed even before the ascendancy of apartheid as a dominant political and economic dispensation. Cash crops have been planted alongside subsistence crops at varying levels and different places and times. Sugar for example, has been grown for the past half century under contract relationships with agribusiness. According to A. Vaughan, “petty commodity production has been a more persistent feature of South Africa’s rural history than is often supposed, and is also a significant element of a contemporary reality.”²⁶¹ This observation is relevant in understanding the extent to which the commercial production of petty commodities will influence change in the rural economy. However, commentators on the involvement by agribusiness with rural communities argue that such contractual relationships have a tendency to be accompanied by social differentiation and introduce dependency relationships.²⁶² This chapter will explore the validity of these claims in the context of the contract relationships between SAPPI and the communal farmers. Critisms by different commentators and interest groups will be gauged against the daily experiences of contracted farmers, and where possible compare them to those who are non-contract growers.

²⁶⁰ A. Vaughan, “Contracts with Capital: The Small Grower Experience in Natal/KwaZulu.” University of Durban-Westville: Institute of Social and Economic Research, 1992 4.

²⁶¹ A. Vaughan, “Contracts with Capital.” 8.

²⁶² These include locally, M. Friedman, “Commercial Timber Production and Basic Needs.” 1991 and A. Vaughan and A. McIntosh, “Enhancing Rural Livelihoods in South Africa: Myths and Realities.” 1996, and G. Cellier, “The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots.” 1994. On the international level works by A. Goldsmith, “The Private Sector and Rural Development: Can Agribusiness help the Small farmer?” World Development, Vol 13, No. 10/11, 1985., D. Glover and K. Kusterer, Small Farmers, Big Business: Contract Farming and Rural Development, England: MacMillan, 1989, represent these commentators.

The process by which rural communities have been involved in cash crop production can be viewed in the context corporate commercialisation of 'Bantustan' agriculture. This process, which took the form of incorporating small producers as out-growers or contract farmers did however fail to transform the whole production process from traditional to a modern and scientific system. It was in any case never meant to achieve that as it was promoted with the view of utilising traditional methods and not requiring expensive external methods that however, would not be within easy reach of the rural populace. There is scope however, to viewing the state and capital as strongly intervening in facilitating the reformulation and the regeneration of a smallholder class. R. Levin and M. Neocosmos are of the opinion that the processes of proletarianisation and of peasantisation are an integral part of the contradictions of capitalist development. They also view rural transformation in the form of land reform and the restructuring of the market as capable of leading to a future proliferation of petty commodity production in South Africa.²⁶³ However, in the case of the contract relationship between agribusiness and the communities under study, peasantisation is neither accompanied by, nor is it a result of proletarianization. At the same time the contracts do not result from a land reform process and neither is there any restructuring of the timber market.

The contract relationship in this case should be regarded as a special relationship between the company (aiming at meeting the demands of its mills), and poor communities. The poor communities were made to understand that they had nothing to lose by making available portions of their land to tree growing (particularly in the absence of alternative development opportunities). While the Levin and Neocosmos view acknowledges a strong future role for smallholder production, it should be kept in mind that any rising peasant class is at the mercy of the capitalist class that created it. This raises question and speculations of the possibilities of differentiation levels to rise to the extent of buyouts of smaller growers by larger growers resulting in a significant wipe out by the forces of capitalist development. This seems a lot far-fetched however, considering the land tenure system ensuing in the area of study. Land used by small growers is not private and therefore cannot change hands. So the possibility of buyouts of smaller and less progressive producers by larger growers is not likely. It is important to outline the way in which peasant production has been incorporated into and sustained in a capitalist economy. It is also necessary to establish the degree to which processes of social differentiation are either accelerated or inhibited, *vis a vis*, the goal of achieving rural development.

The growth of the smallholder sector in KwaZulu-Natal from the late 1980s through the last decade of the 20th century represents a process of agricultural restructuring unprecedented in

²⁶³ R. Levin and M. Neocosmos, 'The Agrarian Question and Class Contradictions in South Africa: Some Theoretical Issues for Consideration.' Africa Perspectives, (1) 5/6, 1987.

the recent history of the country. What is important in this development however, are the effects of this development on the lives and livelihoods of the participants in areas other than income and employment generation. These issues are interlaced one with the other. They include a wide range of concern including effects on gender relations, labour, tenure and access to land and the organisation of growers, among other things. The contract relationship between agribusiness and the communities was introduced into the community without any prior study as to its possible social, economic as well as political implications to the communities involved. Interests between the parties concerned were not harmonized. For agribusiness the possibility of the development potential of the scheme in the community was only a welcome spin-off and not a primary objective. It was only acceptable to them to regard their initiatives in that light as it meant gaining a reputation as business with social responsibility to the areas they do business in.

Growing Trees for Cash in KwaZulu-Natal

The contract relationship between SAPPI (as the first timber giant to be involved with rural communities) and the growers was negotiated between 1981 and 1982 with the KwaZulu former 'homeland' government. The first woodlots were established in 1983 under SAPPI's scheme dubbed 'Project Grow'. By 1990 the two major timber giants in South Africa, SAPPI and MONDI were already actively involved in tree growing schemes with rural households under contract relationships. By the time of the 1994 general election, both SAPPI's Project Grow and MONDI's Khulanathi were already responsible for more than of 10 000ha grown to trees by rural households.²⁶⁴ The post-apartheid South African government also sought to promote these social forestry projects. The Land and Agriculture Policy Centre in Johannesburg initiated research that sought to address policy and institutional issues relating to social forestry with a view to informing policy discussions in South Africa. A report was published in 1995 indicated the policy aim to:

... enable appropriate non-governmental agencies, instead of governmental ones, to become increasingly involved in actions of direct assistance to members of rural communities, because of their greater flexibility, unencumbered history and simpler mandate and organisation.²⁶⁵

To qualify for the credit and support services members do not need to have any collateral, as the high value attached to the crop allows it to be taken as security against the loan.²⁶⁶

²⁶⁴ Details of the development of the SAPPI's Project Grow are outline elsewhere in this work. B. Othusi's Masters work on "Small-scale Forestry in the KwaMbonambi Region." 1997, gives a more detailed historical outline of this development. For MONDI's Khulanathi Project, G. Cellier's Ph.D. thesis and T. Quinlan's seminal work (all in the references elsewhere and bibliography) are quite informative.

²⁶⁵ D. Palin. Social Forestry in South Africa. 45.

²⁶⁶ A. McIntosh and A. Vaughan, "Enhancing Rural Livelihoods in South Africa." 103.

In the Biyela region, projects were pioneered by the Institute of Natural Resources (INR) affiliated to the University of Natal-Pietermaritzburg under the auspices of Integrated Rural Development Project and gave households in the area wider choices than those in many other areas of KwaZulu-Natal. Propagation of woodlots on individual landholdings began on a large scale in 1987 in association with the Natal Tanning Extract Company (NTEC), which was to become MONDI, and the former KwaZulu government's Department of Agriculture and Forestry. The NTEC provided technical advice, loans to growers, and establishment of woodlots, which were supposed to be established predominantly on steep slopes where traditional food crop production would not be possible. In 1989 MONDI's integration with the NTEC was completed and it incorporated the Biyela area scheme into its Khulanathi Project.²⁶⁷ MONDI provides seeds and fertilizers, while growers plant and tend the trees. Loans are offered at 10 per cent interest. MONDI concentrated on more accessible land with favourable soil types.²⁶⁸

Growers in the Khulanathi project experience difficulties and constraints some of which include inadequate financing, fear of indebtedness, and lack of understanding of the contracts they got into. Many times, set amounts for tasks are not adequate to pay the labour required. As a result, out-growers end up adding money from other sources to pay contractors or they carry out the tasks, using unpaid family labour. When growers work on their own plots still can claim for labour. However, some choose not to so as to keep the amount owed to the company as low as possible. In many cases growers complained that money made available for labour was often inadequate. Debt seems to scare the most needy, perceiving it to increase their insecurity, thereby reducing the likelihood of entering into contract with agribusiness. Where loans and contracts are not understood, for instance in the case of MONDI's Khulanathi project, growers have a sense of alienation from MONDI. The NTEC had not surveyed the soils, leading to stunted woodlots and leading to a degree of (local discontent) dissatisfaction with the timber project.²⁶⁹ Rural landholdings were too small for the establishment of relatively larger plots whose proceeds would contribute substantially to household incomes. There is a need for more land on which tree planting and harvesting could be rotated and annualised. Thus in a situation where the smallest workable and economically viable lot is 3ha, and the crop is ready in 7 years, a 21ha piece of land is desirable. Timber unlike sugar has failed to sustain and provide a constant supplementary income for growers.

²⁶⁷ G. Cellier, "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots." 17.

²⁶⁸ A. McIntosh and A. Vaughan, "Enhancing Rural Livelihoods in South Africa." 104.

²⁶⁹ T. Quinlan, *et al.*, "Environmental Impact Assessment Study." 25.

Many growers have raised concerns against the highhandedness with which Extension Officers handle the arrangement of work to be done on growers' fields. Workers complained that agribusiness officials simply contracted people to perform jobs on the out-growers plots without consulting with them. The problem with this was that tasks were carried out at a more costly price than when the grower had sought his own contracts. A study commissioned by the Institute of Natural Resources (INR) reported that tree growing turns out to be a means to accumulate savings in the long run and not significantly contributing to daily survival in the short run.²⁷⁰ On the basis of the findings of this study it was argued that, on the one hand, those with other sources of income to meet their basic daily requirements would find it easier to enter into contracts. On the other hand, those who have immediate financial needs may choose to involve themselves in other activities that are likely to give them money in the very immediate future.²⁷¹ In practice, however, the tree growing schemes become a survivalist venture. For instance in KwaZulu-Natal, many households in the Project Grow scheme are poor and decided to grow trees with the expectation of improving their livelihoods. There are however, many other factors determining who joins the contracts and who does not. For example, land is a very important factor as discussed earlier. Those with extra land may enter and those without cannot.

It should be noted however, that the establishment of contract relationships with small growers by agribusiness did not in effect pioneer a new avenue for the rural communities in KwaZulu-Natal. Through the establishment of the Small Growers Development Trust (SGDT) interested community members were already involved in tree growing for the pulp and paper mills and the timber market. The SGDT secured funding to promote training programmes and human resources development.²⁷² S. Masuku commented that, the intervention of the timber companies in commercial timber production among communal farmers, only saw a further increase in the numbers of people entering into contracts rather than introducing tree growing by rural growers.²⁷³

Since the mid-1980s, *Eucalyptus* small growers have outnumbered wattle growers due to the drop in the bark market and a rise in the demand of timber. From 1983 to 1995, more than four thousand black farmers in KwaZulu-Natal were involved in *Eucalyptus* projects.²⁷⁴ The arrangements were that the company purchases all trees subsidised by the schemes and retained first rights to the timber from subsequent coppice re-growth. In 1995 small grower

²⁷⁰ G. A. Cellier, "The Changing Landscape: Is there Room for Forestry in the new South Africa?" South African Forestry Journal No. 167, Dec 1993. 59.

²⁷¹ G. A. Cellier, "The Changing Landscape." 59.

²⁷² J.E. M. Anorid, "Employment and Small Business Options." 13.

²⁷³ S. S. Masuku. Personal Communications

²⁷⁴ G. A. Cellier. "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots." 12.

contribution to SAPPI's timber supply, was expected to grow to about two and half per cent when the woodlots were in full production.²⁷⁵

Box 2: The Independent Development of Tree Growing in KwaZulu-Natal

Over half a thousand people planted domestic woodlots of *Eucalyptus grandis* in an area along the Zululand coastal plain. These woodlots, producing commercial roundwood, were planted without outside intervention as people copied what they saw in nearby plantations. Secondary micro-enterprises, in contract harvesting and short haulage to railhead, also sprang up simultaneously. The growers are concentrated in an area near Richards Bay, and it is clear why this is the only area in which timber growing began spontaneously because of its conducive conditions for timber production. Wattle bark producers are slightly more widespread, but found in about five nodes in KwaZulu-Natal particularly in the Natal Midlands. About 2000 private wattle woodlot owners have registered as wattle bark producers and get quotas for bark sales. This sector also emerged with little or no outside intervention, though in recent years, there has been support for wattle producers from the KwaZulu Department of Forestry and the South Africa Wattle Growers' Union (SAWGU). Their woodlots are generally 1 to 5 ha in size, larger on average than non-commercial homesite woodlots. Wattle bark production is well suited to small private woodlots in that the commercial side does not necessarily conflict with satisfying local needs for fuel and poles. Most growers are in KwaZulu-Natal with some in the former Transkei and KaNgwane, making this the only South African scheme to operate outside KwaZulu-Natal.

Source: Report of the SGGT, November 1997.

Progress with timber out-growers is slow when compared to the sugar industry projects, which in 1995 involved 45 000 households in KwaZulu-Natal. In essence, sugar-cane growing small-scale farmers represent about 94 per cent of all forms of out-grower schemes in the province. The small sugar farmers represent about 23 per cent of the total production annually.²⁷⁶ In a 1995 discussion paper on Policy for Sustainable Forestry management, it was observed that:

It is unlikely that out-growing in forestry [would] make the needed contribution to community needs unless the industry applied some of the lessons from the sugar sector, in working more closely with government, and building stronger institutions to support the out-growers.²⁷⁷

This observation was valid in the sense that small-scale tree growers lack the necessary institutional and infrastructural support. For instance, as stated earlier, there are no irrigation schemes for tree growers and the road networks are not developed. Small-scale sugar farming falls under the Ministry of Agriculture whilst small-scale tree growing (like larger plantations) falls under the responsibility of the Department of Water Affairs and Forestry (DWAF). The location of tree growing, that is forestry together with water affairs is

²⁷⁵ B. Gumede, Personal Interview. (A transcript of the full interview is contained in the appendix).

²⁷⁶ A. Vaughan, "Contracts with Capital." 12.

²⁷⁷ DWAF, "Towards a Policy for Sustainable Forest Management." 36.

problematic even though water affairs and forestry affairs fall under independent directorates. Unlike the Agriculture Ministry, which uses its budget on the institutional development and productivity of agricultural projects, Water Affairs and Forestry instead emphasizes water management and conservation. The irony is in fact that, tree growing is viewed by Water Affairs officials as a bulk water user that has negative downstream effects. As a result of this these officials are against the promotion tree growing in areas that are water scarce as a matter of principle. These internal contradictions in the Department have left tree growers without much support from the government. As a result, despite the creation of a Community Forestry Directorate within DWAF not much progress in terms of the institutional and infrastructural support services have been developed for tree growers.

Contract Arrangements: The SAPPI-Grower Agreement

The company-grower relationship is based on a contract (appendix 3) that however, was not negotiated between the two parties. The contract document and arrangement is one of the most controversial issues in the whole out-grower business. One contracted document was used from the inception of Project Grow until about 1999, without amendment. In 1999 a consultation process was initiated to revise the contract in the light of the problems, constraints and criticism levelled against the original agreement and the experience from company-grower interaction.²⁷⁸ R. Cairns agrees with M. Friedman that, the contract is not an equal business contract, but reflects the imbalance of power between the growers and the timber companies.²⁷⁹ In both SAPPI and MONDI contracts for instance, all decisions including the selection of growing sites, the species grown, the silvicultural methods applied, the harvesting time and methods, and marketing are dictated by the company. G. Cellier proposes a new model based on, flexibility (to accommodate farmer's objectives which are not the same as the company's but may not be too dissimilar either), equal participation in decision-making, empowerment, and "ownership" of the project by growers.²⁸⁰ Even if growers own the land that the trees are grown on, they are reduced to labourers on their own land if they are not in control of the production process.

From the experiences of small-scale growers under contract with SAPPI, it can be said that contracts are designed to protect the interests of the strong. As discussed in earlier sections, M. Underwood also emphasizes that in out-grower schemes, the contracting company has many ways of manipulating the agreement and to take advantage of the vulnerability of the small growers.²⁸¹ The contract mentions nothing about risks and risk bearing and responsibility on the part of the company. It is not clear, for example, that SAPPI agreed to

²⁷⁸ B. Gumede, "Interview"

²⁷⁹ R. Cairns, "Small Grower Commercial Timber Schemes." 26.

²⁸⁰ G. A. Cellier. "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots." 71.

²⁸¹ M. Underwood, Personal Interview

guarantee the growers income if their woodlots are damaged by fire. Instead the company promotes the creation and maintenance of firebreaks as a form of insurance for the grower. With increasing labour costs, the creation and maintenance of firebreaks has become expensive. Growers either respond by not maintaining fire-breaks at all as the high costs imply a cut into their income, thereby becoming a disincentive to proper silvicultural practices.

The contract represents the demands and conditions dictated by the company. For instance, Clause 5.1 of the contract reads, “... when such timber in **SAPPI's opinion**, (my emphasis) reaches maturity and SAPPI agrees to purchase the timber.” The implication of this clause is that SAPPI determines the readiness of the trees for harvest and not the trees' age or other features applicable to determining maturity. SAPPI may not agree to buy the timber from the grower for any reason, without any justification. This puts the grower at a disadvantage as the same clause demands that the “grower ... sell all planted timber on the property ... to SAPPI.”²⁸² The nature of the contract does not give the growers any room to negotiate the price of their timber. The contract states that the trees “shall be bought at the going market price.” The working of the timber market is highly determined by global factors, the operation of which the growers do not have the capacity to comprehend.

On June the 5th 1998, D. Savides of the Zululand Observer reported on the market related problems in the out-grower schemes stating that the growers were threatening action. He wrote; “small timber growers who planted gum trees eight years ago with the prospect of a lucrative harvest are now being turned away from local mills.”²⁸³ While the small growers' timber was being turned away, timber from the company's plantations was being accepted. This angered the out-growers who, according to D. Savides, “in their outrage they are getting ready to stop anyone else whose timber is being accepted.”²⁸⁴ In this incident, the reason given to the small growers was that there was an oversupply on world pulp markets due to the collapse of the Asian economy.

The problem is that the communal farmers do not have the capacity to understand the intricacies of the working of the world markets. What they simply know was that they were asked to grow trees and that at maturity the company would buy them. A spokesman for the NCT Forestry Co-operative was quoted by the same paper as sympathizing with the growers stating; “I do not expect these people to fully understand the complexities of international

²⁸² SAPPI. Project Grow Contract. see appendix 3.

²⁸³ The Zululand Observer, 5 June 1998.

²⁸⁴ The Zululand Observer, 5 June 1998.

economics and I sympathize with them.”²⁸⁵ W. Mene (Chairman of the Durban and Coastal Branch of the Botanic Society) reiterated these sentiments and was concerned that:

... big companies promoted this type of exercise by appointing extension officers to handle their ‘RDP’ efforts. They were proud to be helping the people but this is now being questioned as they leave them in the lurch.²⁸⁶

One of the growers was keen to raise the fact that the contract did not allow them to sell their crop to anyone else. He said, “we are also by contract not allowed to sell the timber to anyone else.”²⁸⁷

The other problem growers have experienced is that of company neglect. In out-grower schemes, timber companies have fundamental interests and put a lot of effort into supporting the communities in the first rotation. In subsequent rotations, the company relaxes as it focuses on new growers. This can be explained in two ways. Firstly, the company has limited capacity to handle all the growers at the same time. Secondly, the company benefits more in the first rotation where it will recover its loan. Change of fortune in the marketing and demand of the timber may not necessarily affect the company after the first rotation as it would have already collected its loans and interest. For example, as a result of the mid-1990s glut on the international timber market for trees,²⁸⁸ many small growers’ trees were not bought at all by the companies. The companies always have their own plantations to source timber from first. In any case, the out-growers timber crop was considered as a supplement, not the main business.

The contract also technically allowed the companies not to buy small-scale growers’ trees under these circumstances. It makes economic sense that when faced with stiff competition on the market, the company should focus on quality as opposed to quantity. As a result, they would always abscond from small growers’ timber claiming that it is not yet ready for harvest. The companies have ways and means to dodge and ignore the small growers’ product, as a result leaving them in the cold.²⁸⁹ The allegations that the companies neglected their growers were, however, refuted by B. Gumede.²⁹⁰ He denied that growers under Project Grow were affected, claiming instead that it was those in MONDI’s Khulanathi Scheme. He however, admitted that they sent away growers who were not registered with them or MONDI because the company had not planned for them. Besides, he also alleged that SAPPI had to forgo harvesting up to 30 000 tonnes of their own mature trees so as to accommodate

²⁸⁵ The Zululand Observer, 5 June 1998.

²⁸⁶ The Zululand Observer, 8 June, 1998.

²⁸⁷ The Zululand Observer, 8 June, 1998.

²⁸⁸ FAO. “Changing Markets for Forest Products.” Rome: FAO-Forestry Department, 1998. 29.

²⁸⁹ M. Underwood, Personal Interview

²⁹⁰ Bheki Gumede is the current and second Manager of Project Grow since its inception in 1982.

the trees from growers registered under Project Grow. On the other hand, the turning away of unregistered tree growers led to the increase in the number of growers associated with Project Grow in the period 1996/1997 by about 89 per cent. Independent growers noticed that while they had the advantage of being debt free, joining the scheme gave them automatic market access. In this case, it can be said that the marketing conditions provided by the market led growers to relinquish their sovereignty.

As stated earlier, there is a controversy in the sense that while SAPPI reserves the right not to buy, growers are bound by the contract not to sell to any other competitor. Clauses 7.1 and 7.2 stipulate that growers may not sell their trees to anyone else and that the company is the sole buyer. Selling to a second party or other parties other than SAPPI constitutes a breach of the contract. This becomes a disadvantage to the grower when a third party is offering a higher price than what SAPPI is offering. It also goes without saying that the grower is at a disadvantage in situations of an emergency where money is needed urgently. According to the harvesting procedures discussed in detail in following section, if the grower is not on the immediate harvesting list, or SAPPI does not consider his or her trees as ready for harvesting, they would not be bought. This is because even where a third party is offering a better price or considers the grower's trees as ready for harvest for the particular use intended for the trees, the trees are contractually speaking, not available for such sale. It can be said therefore, that tree growing under the Project does not represent a form of capital for the farmer in the same way as cattle, for instance, can be regarded as a banking system for crisis situations. The grower cannot just dispense with his or her trees at anytime of financial need. Tree growing therefore is not a convenient form of investment for under-capitalised poor families who require some source of daily livelihood. The experiences of individual grower households are strongly determined by the nature of the contract.

Small Growers' Experiences in the Project Grow Scheme

As stated earlier, Project Grow was conceived in 1982 after negotiations were made with various stakeholders. In 1983, the year following the inception of the programme, SAPPI had three growers on 5ha of land, while ten years later the project boasted 1 640 growers on 3 360 ha of land, as indicated in Table 4.1 below. According to B. Gumede, the initial aim was to have communal farmers within a 30km radius of SAPPI pulp and paper mills to grow trees on their extra pieces of land. However, due to the overwhelming response from the communities, Project Grow has grown and expanded beyond that to the extent that the furthest grower is more than 200 km away. The project was replicated in southern KwaZulu-Natal where the Lima Rural Development Foundation (LIMA), a development NGO, is in charge of its administration.²⁹¹

²⁹¹

B. Gumede. Personal Interview, contained in the appendix.

Table 4.1: Membership of Project Grow from 1983 to 1999.

YEAR	GROWERS	AREA IN HECTARES
1983	3	8
1989	970	1380
1993	1640	3360
1999	3122	9469

Source: Compiled from Growers Registers 1984 to Dec. 1999.

Since the first harvest, it has yielded more than 120 000 tons of timber a year which means substantial savings on the company's production costs. The scheme has attracted more than 8 000 subsistence farmers, who are growing trees on about 9 700 ha of communal land. In its October 1999 to October 2000 financial year, SAPPI expected Project Grow to contribute 82 000 tons while its own plantations would yield 134 000 tons, representing close to 25 per cent.²⁹²

The benefits accruable to the small growers have been highly publicised by SAPPI, nationally and internationally in journals, magazines, Field-days/trips and on its website.²⁹³ SAPPI has used Project Grow, which they regard as part of their 'corporate responsibility', to gain an international image as a company with social responsibility towards the communities among which they work, an image which allegedly won them their recent European acquisitions.²⁹⁴ SAPPI has been self-conscious about not being a development organisation and has therefore carefully advertised its schemes as a "social responsibility" scheme. Commissioning the project officially, the Executive Director of SAPPI described the project as part of its 'social engagement with communities within the vicinity of their business'. According to B. Gumede, the project initiative reflects:

A significant 'economic empowerment co-efficient' for rural communities and offers returns far greater than a farmer would earn farming sheep, cattle or maize on the same piece of land.²⁹⁵

B. Gumede also pointed out that 80 per cent of the project farmers are women, which allows them to perform maternal duties while supplementing their household income in a situation where many of the men are migrant workers. This argument was also repeated by D.

²⁹² Project Grow Annual Report, Year-ending December, 1999.

²⁹³ www.za.SAPPI.com

²⁹⁴ www.za.SAPPI.com/projects/Dec99.html.

²⁹⁵ R. Marc (SAPPI's Forest Projects Manager) "Corporate Responsibility: Subsistence Farming Empowerment Grows with SAPPI" in The Earthyear Magazine: The Essential Environmental Guide, [Edition 20] December, 1999. 104.

Mncube²⁹⁶ who stated that “about 80 per cent of the Project Grow farmers are women” and uses this to argue that the schemes have been promoted “without jeopardising their traditional roles as wives and mothers thereby guaranteeing the participation of rural women.”²⁹⁷

Tables 4.2 and 4.3 below, indicate that 75 per cent of the growers are female. The weakness in these figures is that they do not indicate which women farm trees on male-owned plots. Table 4.2 indicates that in all of the seven areas of study women either own or run the majority of the schemes. However, Table 4.3 below shows that much of the land planted to trees is owned and/or controlled by the male members of the community. An interesting observation from the gender distribution of growers is that while there are more women-owned plots, the men-owned plots have a bigger average. Women growers average approximately 1.43ha/grower, while men have an average of 4.92ha/grower. This is a factor rising from the gendered distribution and access to land. Men have more preference in access to land.

Table 4.2: Gender and Geographical Distribution of Growers

Area	Female Growers	Male Growers
Biyela	109	33
Hlabisa	661	195
KwaMbonambi	367	172
Mbazwana	528	105
Mfekayi	344	124
Nkandla	89	31
Sokhulu	302	133
Total	2407	793

Source: Growers Register

D. Mncube suggests that the fact that the project allows women to perform maternal duties while supplementing their household income in a situation where many of the men are migrant workers is very important in a society where women are in the majority and are fundamental players in the rural economy.²⁹⁸ There is however, no evidence of sufficient capacity to raise women’s income in absolute terms while significantly increasing income as

²⁹⁶ D. Mncube, is the General Manager for Sappi-Forests, Zululand. He is responsible for the supply of timber to the mills and Project Grow falls directly under him. B. Gumede, the Manager for Project Grow reports to him, and they work together.

²⁹⁷ D. Mncube, “Sustainable Forestry into the New Millennium: SAPPI Forest Project Grow.” *Paper Presented to the Symposium on Forestry and Development In Africa*. Stellenbosch University: School of Forestry, Bloemfontein, May 2000.

²⁹⁸ D. Mncube, “Sustainable Forestry into the New Millennium.” 6.

a proportion of total household income. Instead, the scheme has led to an increased burden on women who already are 'beasts of burden', carrying all the drudgery of rural life.

The *Eucalyptus* trees that are grown have more value for their commercial value than as firewood, therefore women still depend on natural woodlands for their daily energy needs. Women also tend the fields for subsistence crops as well as taking care of other survival chores in the homestead. The task of growing trees for sale further compounds their already difficult work.

Table 4.3: Project Grow Growers Distribution by Gender by Dec, 1999

Growers	Number of Growers	Area in ha	Average in ha
Female growers	2407	3 431	1.43
Male growers	793	3 934	4.92
Total	3200	7 365	2.3

Source: Compiled from Growers Register.

Even if women officially own woodlots, by virtue of having entered into contract with SAPPI, they could not use the proceeds from tree selling as it is taken away from them by the male household heads.²⁹⁹ Rural family life is patriarchal and the importance of the male head is unchallenged and it is the male who will make the important decisions in the family.

The literature and reports generated by agribusiness on the project, as well as the interviews and discussion carried out during the course of the research, view the project as consistent with the government's rural development initiative. There is a need to account for the initiation of the programme in the early 1980s when apartheid as a political system was under pressure and there was high resistance to its 'betterment planning' system. It could be argued that engaging the communities was a security measure for the company as its property was within the proximity of communal lands. It was feared that a disgruntled and poverty ridden community posed a security danger to the company in the sense that they would want to attack company property. The urban and township response to apartheid in the 1980s was feared to spread to the rural areas. The effort by labour unions to make South Africa ungovernable included attacks on capitalist property. Partnership with these communities would generate general community sympathy to company property. Also, promoting tree growing would mean that the communities would not steal from company plantations. Again,

²⁹⁹ Interview with Female Growers at SAPPI's Pulp and Paper Mill at Mandini. See appendix for full text of interview.

besides opening a chance for the communities to raise income, providing advances and seedlings to them would put the company in a good light with the communities. The total effect of this was psychological in the sense that once the company was considered a benefactor to the community, no harm would be done to company property. However, these factors are not mentioned in company literature or discussions where the social responsibility factor is given centre-space.

Agribusiness prides itself as being first to place rural communities on the road to development. It embarked on the promotion of tree growing projects well before the establishment of the Government of National Unity. The National Party government emphasized rural development and empowerment of rural communities as a strategy through which communities could be delivered from abject rural poverty. However, after 1994, it justified continued tree growing by rural households as consistent with the government's broader empowerment programme. Thereafter, the term rural development appeared regularly in company presentations and literature on the project. B. Gumede argued that the project subsidizes the government's rural development initiative by injecting capital investment into the rural areas. He pointed out that:

Project Grow requires no subsidy from the government and is contributing to the government's programme of wealth redistribution, in terms not only of immediate benefits but also of long-term job creation and training. ... it helps to transfer skills and develop a culture of entrepreneurship in rural communities where lack of training and skills have, in the past, been a major stumbling block to progress.³⁰⁰

Theoretically, the scheme does not only provide cash but is a human resource development in the sense that it transfers skills. This proposal opposes the other acclaimed advantage of the scheme, being that tree growing is consistent with traditional agricultural systems. In fact, from the study area there is evidence that tree growing is not a very technical engagement, except for harvesting. The implication is that the human and skills development factor in tree growing by rural communities is very minimal. The technical aspects of tree growing are often left to the rapidly mushrooming class of contractors. It is only these contractors who benefit from the skills and human development, as opposed to other growers. This also becomes a source of differentiation.³⁰¹

The scheme was also sold on the basis that the would-be growers would have access to extension services, markets, fertilisers, and seedlings. In addition, many growers were also attracted by the loans that were given to growers upon signing the contract. However, some households decided not to join the schemes for fear of being indebted by the loan.

³⁰⁰ R. Marc. "Corporate Responsibility". 104.

³⁰¹ See chapter two for a detailed discussion of sources of differentiation in contract farming.

In the first year, SAPPI provides an interest free loan of R432/ha to establish trees, seedlings worth R320/ha, and R90/ha for fire protection. Thereafter, each year, farmers receive R90/ha fire protection and a profit advance of R108/ha. Total assistance amounts to about R842/ha in the first year and R198/ha annually until the trees are harvested.³⁰²

According to B. Gumede, a participant “can realise a profit, after costs have been deducted, of R5 600 per hectare after seven years.” At the same time, “the farmers provide SAPPI with 80 000 tons of timber a year, worth R12 million, mainly for the SAPPI Tugela and Saiccor Mills.”³⁰³

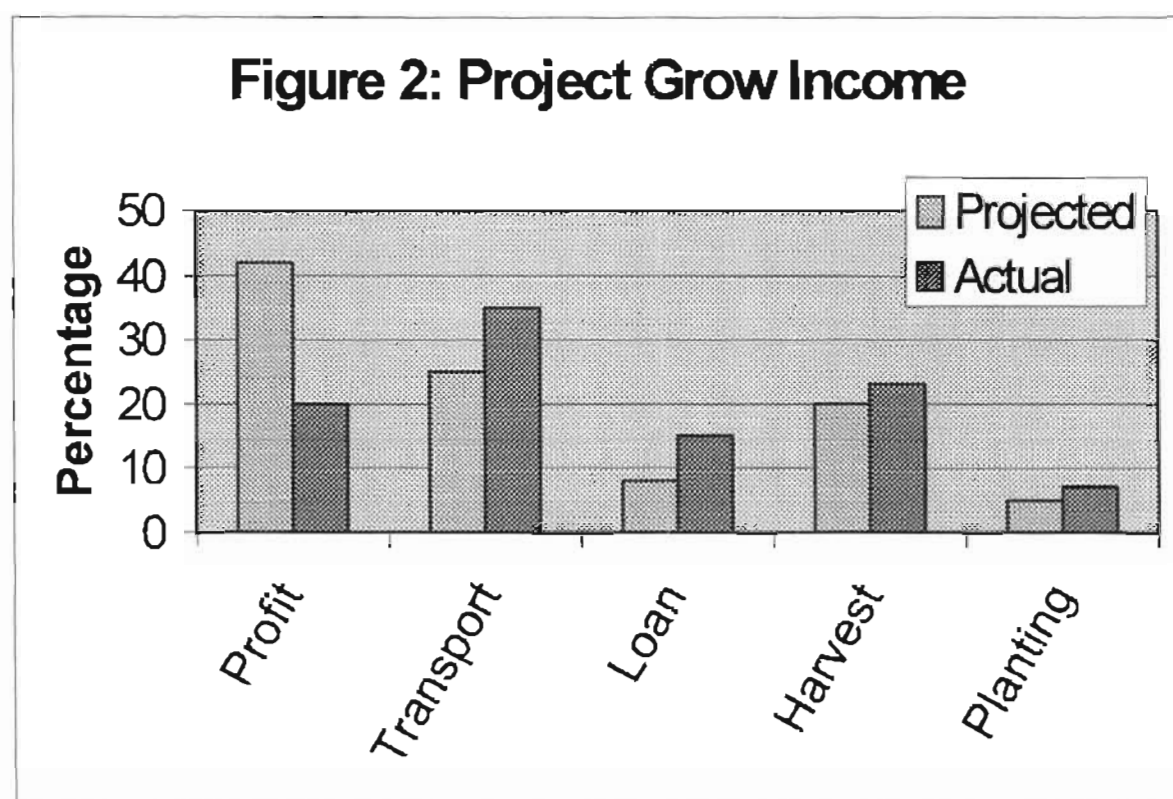
Official calculations and projections for Project Grow were that, “the turnover generated by Project Grow would be split 42 per cent to the grower, 30 per cent to the transporter, 20 per cent to the harvester and 8 per cent to SAPPI in loan payments.”³⁰⁴ The 30 per cent for transport was calculated for those growers who are within the radius of 30km from the mills. However, as shown in Figure 3 below, the cost projections were much lower than in reality and therefore the projected profit too high. Transport costs were much higher for those growers beyond the 30km radius. For the growers in areas such as KwaNgwanase (further north), which is about 280 km away from SAPPI’s Mandini Mill, for instance, much of the profit is eroded by transport costs, which are usually above 50 per cent of the total production costs. Even though there is an extra R10 per ton paid to these growers, profits are as low as 17 per cent of total turnover for them. This undermines the extent to which income can be substantial and critical for the grower to the point of improving his or her livelihood.

The main reasons for community involvement in the scheme is to raise money and therefore to improve their livelihood. Besides the direct income from tree planting, it is also argued that the scheme is a fundamental alternative source of employment to the communities. There is high unemployment in the rural areas of Zululand, as stated earlier in Chapter 1 and a high incidence of unemployment among grower households (see Table 4.4 below).

³⁰² R. Marc, “Reaching the People: SAPPI’s Project Grow Operation.” Paper Delivered at the 1998 SAPPI Field Day, at SAPPI Kwambo, Empangeni.

³⁰³ “Corporate Responsibility.” 104.

³⁰⁴ “Corporate Responsibility.” 106.



Source: Compiled from Company Register

Therefore, the argument in company circles that the scheme helps to create employment for those households that have no other sources of income seems to be supported by the fact that the majority of the growers do not work. There is no doubt that unemployment and diminishing livelihoods were the main push factors for those who joined Project Grow. According to R. Marc:

As many jobless people return to their homes in rural KwaZulu-Natal, pressure is increasing on the limited resources in the area. The areas that are suitable for trees are benefiting enormously through Project Grow and as people there see the advantages and job opportunities, we are seeing greater demand to plant additional areas.³⁰⁵

Out of the male growers, the majority are either: retired migrant workers, or have been laid off, or have never worked at all. Only about 280 growers, representing 9 per cent are engaged in one form of employment or the other. The majority are contract workers on nearby farms or mines. However, as discussed elsewhere, the employment factor per hectare of *Eucalyptus* farming is low when compared to other cash crops such as sugar or vegetables.

³⁰⁵ R. Marc, "Corporate responsibility". 106.

Table 4.4: Employment Status and Gender Distribution of Growers.

Growers	Unemployed	Employed
Female	2280	127
Male	634	159
Total	2 914	286

Source: Compiled from Grower Register.

Out of the 40 growers asked about employment in the Sokhulu and KwaMbonambi areas, 23 of them started tree farming because they had lost their jobs in town or the mining sector, while 12 of them had never been employed anywhere else, and five were sugar cane growers. Besides direct employment creation, the emergence of contractors in the small grower sector has become one of the most celebrated spin-off effects of Project Grow. In an interview Gumede emphasised that:

SAPPI's Project Grow not only provides an income to nearly 8 000 KwaZulu subsistence farmers, but is also cultivating an industry of small contractor operations to harvest and transport the trees. On the lower South Coast, 66 emerging contractors, harvesting about 70 per cent of the timber with bow saws, deliver almost 120 000 tons of timber, worth R3-million, each year from Project Grow forests to SAPPI's Tugela Mill at Mandeni and Saiccor Mill at Umkomaas.³⁰⁶

The first Project Grow trees were harvested in 1991 and the company did not have the capacity to incorporate the harvesting and transporting of Project Grow timber together with the demands of SAPPI's traditional plantation sector. SAPPI lacked the capacity to service small growers. Enterprising growers, and particularly those who had previously earned investable capital became contractors in their own right providing services to other growers. Several contractors sprang up to take care of harvesting, short- and long-hauling, and transportation of logs to the processing plant. This was also the time in which SAPPI's traditional plantation sector was moving into privatising its service functions in line with its new challenges as a globalizing company.³⁰⁷ According to B. Gumede, "a transport contractor can earn up to R20 000 a month and provides jobs for about four people, and a harvesting contractor employs as many as 15 people."³⁰⁸ However, this has led to differentiation within rural society as those growers who had previous savings and some significant capital investments in the form of tractors and bakkies were able to take advantage of this development.

³⁰⁶ R. Marc, "Corporate Responsibility." 106.

³⁰⁷ Interview with SAPPI Forests (Zululand) General Manager, Mr Dinga Mncube.

³⁰⁸ Interview with Project Grow Manager, Bheki Gumede.

Only growers were allowed to register as contractors with SAPPI to avoid the entry of the richer rural businesspeople. Table 4.5 below shows that out of the 64 registered contractors, only 2 are non-growers.

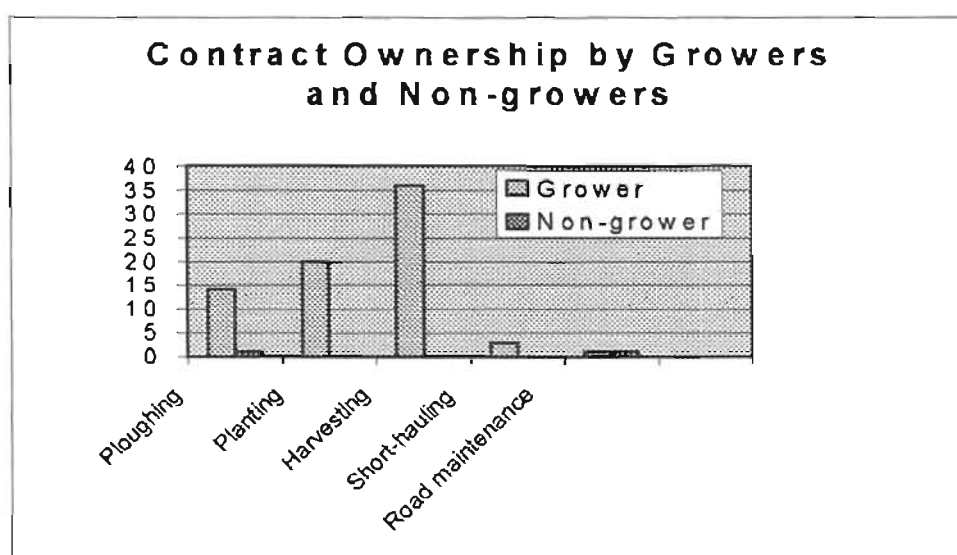
Table 4.5: Contract Ownership by Growers and Non-Growers

	Ploughing	Planting	Harvesting	Short-hauling	Road maintenance
Grower	14	20	36	3	1
Non-grower	1	0	0	0	1

Source: Project Grow Register.

The two non-growers are retired company employees who had the necessary knowledge and technology for planting and are also members of the communities. Given that harvesting and transporting provide large returns, growers who own contracts are much better off than growers who do not. The fact that the growers operate the majority of the contracts indicates the company's success in promoting entrepreneurship and promoting business skills. Besides contracts that are directly related with tree growing activities there are 2 growers who are now running tuck-shop businesses and 3 who managed to get into the taxi industry with money from selling trees.

Figure 3: Contract Ownership by Growers and Non-Growers



Source: Compiled from Project Grow Register

While the majority of tree growers are women, only 3 out of the 64 contracts of varying specialisations, are owned or run by women (see Table 4.6 below). This shows the gender disparity within the contract sector of the small-scale commercial timber projects. Women

have limited access to previously investable capital. Very few women are involved in the migrant labour system and have no alternative sources of income. When growers receive payments for their trees, usually nothing or very little to invest remains as they use it for household up-keep.

Table 4.6: Growers Contract Ownership by Gender.

	Ploughing Planting	Transport contract	Harvesting contract	Shorthaul contract	Road maintenance
Female	2	0	3	0	0
Male	15	18	33	3	2

Source: Project Grow Register.

Planting and harvesting are the main tasks and there is a very high concentration of contracts that specialise in those silvicultural activities. As many as 48 out of the 64 contractors (representing 75 per cent), are involved in the planting and harvesting business. The reason for this is that they are more labour intensive than capital and technological intensive. Planting and opening of fire-guards in particular, do not necessarily require complicated technology but the ability and authority to gather together workers and then organise tasks with growers.

Notwithstanding however, some of the supposed benefits of the schemes are not forthcoming, even if agribusiness enthusiasts regard the project as a success. For D. Mncube for instance, the scheme has endless advantages. In a statement to a newspaper he pointed out one such advantage as that tree growing is compatible with other land-use activities that contribute to a more efficient tree-growing regime.³⁰⁹ In practice the above activities are rarely possible. In the first two years of the tree growing cycle it is not permissible to allow cattle grazing within the tree plot because they destroy the small trees. That means two years of denied access to grazing land. In order to economise on space and to increase the number of trees per hectare, small growers tend to grow trees much closer together (of course against the advice of foresters). This means that in the next four to five years the trees shield the ground from the sun and effectively stifle the growing of grass. In any case, foresters discourage growers from removing dead wood and from grazing cattle in the timber fields as it disturbs their growth and quality. As a result, grazing in the woodlots is not a common practice.

Fire is indeed a problem but the company has concrete plans in place besides encouraging the growers to establish fire-breaks. The complacency of the company to the problem of fire in

³⁰⁹

“Beating Poverty with Tree-farming.” Sunday Times Business Times, [Forestry Survey], 30 April 2000.

the small grower sector is reflected by D. Mncube's suggestion that fire is not a problem and can be dealt with by the neatness of women in the woodlots. He said:

An unexpected feature of the project has been the meticulousness of their [women] farming technique. The practices of grazing cattle between the rows and collecting kindling for firewood, combined with a woman's natural inclination to tidiness, have led to the ground being virtually free of any debris or weeds. The risk of fire - the biggest problem in forestry - is non-existent in the scheme."³¹⁰

This attitude is regrettable. SAPPI has been very lucky in the northern region as none of its small growers had their trees destroyed by fire. But they are aware of a MONDI contracted grower who lost trees planted on 3 ha of land to fire in the Sokhulu district. According to a grower contracted to SAPPI who stays in the same area, the fire crossed the road.³¹¹ This shows that even fire-breaks at their best are not adequate measures against the dangers and loss that fire can cause. In the event of a fire the growers will lose all the several years' work, as the companies do not insure growers against fire outbreaks. Not only will the crop be destroyed but also villages will be demolished as the trees are grown in close proximity to residential quarters, which in many cases comprises of clusters of thatched huts.

The Forest Owners Association (FOA), on the other hand, takes the increasing number of participants joining the project annually to mean that the industry is offering a commendable level of support to the communities. As a result R Godsmark, the FOA's economist submitted to the "Forestry Survey" compiled by the Sunday Times that:

The small grower schemes are well on the way to becoming one of the most important resource bases for the future of the forestry industry, let alone being one of South Africa's most exciting developments in the context of employment creation strategy, providing economic stimuli for disadvantaged communities.³¹²

This comment however was not accompanied by statistical evidence to support these claims. In fact, as argued earlier, the employment creation capacity of tree growing is far lower than that of other cash crops such as sugar cane, and traditional crops such as maize per ha. In the same survey, agribusiness also made claims that people were shifting from traditional agriculture. It claimed that:

KwaZulu-Natal communal farmers are abandoning their reliance on subsistence farming as a means of alleviating the crushing poverty in their

³¹⁰ "Beating Poverty."

³¹¹ Interview with a Grower at Sokhulu.

³¹² "Beating Poverty."

areas, [contending that] forestry is well positioned to drive rural empowerment schemes, small grower community-development programmes and related entrepreneurial activities. It is almost entirely rural based, has a replenishable raw material and operates from a powerful economic platform.³¹³

This romanticisation of the small grower forestry sector exaggerates and falsifies the reality of the situation on the ground. In no way has tree growing constituted a full time business and contributed total income for the households involved. Tree growing still remains largely marginal and an off-season activity for those involved. Furthermore, a lot of problems arise, when particularly viewed in the light of the definition of sustainable development that guided the Government's National Forestry Strategic Plan (NFSP). Sustainable development was defined as, "development that delivers basic environmental, social and economic services without threatening the viability of natural, built and social systems upon which these services depend."³¹⁴ Commercial tree growing on its own may not represent a sustainable model for rural development. For instance it is not capable of timeously providing rural communities with material and cash needs.

Gender Issues in Out-grower Schemes

A rural household embodies a complex division of labour with different family members attesting to different aspects of the contract. For instance, different persons could attest to either the actual signing with agribusiness, making farming decisions, supplying agricultural labour, receiving payment, making expenditures and/or other productive processes. A contracting relationship that benefits the grower (legally defined) may not necessarily benefit those who provide those who actually participate in the production process. A good example is where the contact bearer is an absentee husband and his wife and children perform the tree growing functions. Household members (in many cases) have responsibility for different expenditure items and their expenditures must be financed from their own income. The effects of increased household income on investment in physical capital or school fees, on food consumption or family obligations will vary as much with intra-household division of expenditure responsibilities as with the marginal increase in income.

According to J. D. Glover and K. Kusterer, "the establishment of an agribusiness-grower contract may have dynamic effects, changing previously accepted gender and age roles."³¹⁵ Changes in income patterns and farming practices resulting from contracts with agribusiness can be expected to interact with pre-existing household roles. The changes vary from case to case according to specific characteristics of firms and households. As discussed elsewhere in this chapter, the interaction between SAPPI and the growers has been characterised by

³¹³ "Beating Poverty."

³¹⁴ DWAF. "National Forestry Action Plan." Pretoria: Department of Water Affairs and Forestry, 1997.

³¹⁵ D. J. Glover and K. Kusterer. Small Farmers, Big Business. 15.

different types of strains and in varying degrees. It is not easy to quantify how women are affected by their participation in the contract relationship. However, it can be said that as women add to their daily tasks of providing for the family, the added task of tree management may leave them overworked.

Women are potentially affected by contract farming in two ways. As members of grower-households, they are affected by the shift (of labour allocation and income generation within the household) arising from the contract farming activities. They are also affected by the shifts in employment opportunities resulting from (direct and indirect) agribusiness hiring. Another important development was that of the rising contestations over land ownership and access to land by women. In Nongoma for example, in 1993 a woman-headed household lost its land to a male-headed extended family for tree growing. Even though this matter was referred to an *indima*, the household is still struggling to regain their land.³¹⁶ There are however two issues here, one of traditional inheritance and the second is the access of land by female members in the traditional society.

Theoretically and very often in practice, tree growing offers an economic option to rural women who have little other opportunity, provided they have access to some land. In the SAPPI project, about 75 per cent of the contracts are held by women. A study of MONDI's Khulanathi project by G. Cellier however, indicated that many woodlots are contractually owned by men, but actually worked by women.³¹⁷ M. Friedman contends that, depending on how the contractual arrangements work out, the labour aspects have the potential to intensify men's cash income although women do the work.³¹⁸ The issue is highlighted by that fact that the contract agreement provides for cash payments to contract growers. The payment procedures are such that the contract holder approaches the company when some task has been completed. The contract holder or grower then pays out the money to those who were responsible for carrying out the task. Where family labour carried out the task, the grower may not claim for it, so as to keep the payable loan as low as possible. However, many growers claim the money for other personal, non-tree related purposes. This money seldom goes to the women and children who did the work as men often consider them already paid by virtue of staying in their homestead.

³¹⁶ Interview with Ms Mkhize, at Edlebe Kraal in Nongoma, Zululand.

³¹⁷ G. A. Cellier, 'The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots.' 72.

³¹⁸ M. Friedman, "Commercial Timber Production and Basic Needs: Organisational Potential of Small Growers in KwaZulu-Natal - Lessons from an Integrated Rural Development Project. University of Natal-Pietermaritzburg: Institute of Natural Resources, 1990.

Effects on Labour

Growers cultivate the plantations using a combination of household labour and hired labour, relying primarily on the former to minimise costs. Tree growers also have a need to hire labour although not at the rate that plantation owners do or the rate of small growers involved in other cash crops, such as sugar cane for example. It is difficult to compare the conditions of workers on the parent firm's plantations with those of workers on out-growers' plots for a number of obvious reasons. Workers on the company's plantations are full-time workers, working in plantations for the most part of their active day, they are defined by the work they do and how they do it. This is not similar with those working for growers on a contract basis. They work on a task basis. Depending on the size of the tree plot, it may just be a matter of hours. These workers do not necessarily have to pay any allegiance to any one individual. Instead of thriving on their ability to organise they depend on the quality of service they give. In any case, many woodlots are worked by family labour and the only major labour demand that household labour may not readily provide is for harvesting and short-hauling.

The fact that agribusiness tree growing projects would help to increase (directly or indirectly) the chances of rural employment is also subject to debate. There is no overwhelming evidence from Project Grow, particularly when compared with other cash crops such as sugar cane production. Calculations by A. Vaughan indicated that for every 19 casual jobs and piece works created in the sugar cane industry only one is created on the same piece of land in timber production.³¹⁹ Labour demands in timber production are only more intense in the first two years of the production cycle, making the rest of the remaining five or so years more or less idle. Timber has a low work creation intensity. This can be both an advantage and disadvantage. On the one hand, the advantage is that with the majority of the years demanding less labour, production costs are kept lower while, on the other hand, the disadvantage is that after the first two years the only task that remains is to renew firebreaks, implying that the employment created is very minimal and seasonal in nature.

x J. D. Morissy sees contract farming as a way of initiating the transfer of agricultural technology from firms to growers. He argues that the company has a direct interest in increasing the quality of its growers' produce, thus could provide technical assistance more conscientiously than would a government agricultural extension service.³²⁰ In general, contract farming can produce dramatic changes in the farming and management skills of small farmers over relatively short periods of time. There are examples from Project Grow where farming systems and household dynamics changed markedly in a few years. The establishment of new crops arising from community-agribusiness partnerships often lead to new technology dissemination and rapid technology transfer. A good example is the transfer

³¹⁹ A. Vaughan, "Contracts with Capital." 18.

³²⁰ A. Goldsmith. "The Private Sector and Rural Development." 1132.

of management techniques such as: accounting practices, negotiating skills, awareness of the importance of quality, characteristics of export markets and contract provisions. These skills are especially important and only likely to be developed in certain specific circumstances. These include situations where producer prices closely reflect quality and final market prices, and where farmers receive detailed accounts of the company's payments for crops and deductions for inputs. These skills are easily transferable where farmers are given substantial responsibility for managing their operations, rather than operating within a scheme where control is highly centralised.

Grower Organisation

The ability of farmers to form organised structures through which they could confront their operational challenges is a very important aspect in contract farming. According to J. D. Glover and K. Kusterer, the degree to which contracting is beneficial to the welfare of out-growers depends not only on economic variables, but also on related political ones and depends upon the ability of farmers to organise and bargain collectively.³²¹ A. Vaughan's study of the sugar cane small growers noted that:

Effective farmer organisation is a crucial element if the balance of forces in the relationship between agribusiness and small growers is to be swung towards the latter.³²²

In the tree out-grower schemes it would be expected that having a single adversary with whom to negotiate would promote solidarity among growers. Instead, however patron-client relationships arose between growers and the firm, a phenomenon that led to lack of solidarity among the growers. The lack of organisation among the tree growers is influenced by the heterogenous composition of the contract growers. A. Vaughan observed that the interests of different groups within the grower constituency are not only divergent, but are sometimes conflictual.³²³ This can be observed among tree growers in the area under study.

In trying to consider how the interests of small growers could be articulated, it is useful to know where the splits and divisions are, and why they occur. There are many groups that can be observed among the grower constituency itself. There are those growers who own relatively larger tracts of land as opposed to those who own very small woodlots. There are those growers who have capital in terms of cash and technology that they can mobilize for effective operation of their trees. Others have enough labour at their disposal and do not need to hire any labour as opposed to those who need to employ contractors to do the jobs for them.

³²¹ J. D. Morrissey as quoted in D. J. Glover and K. Kusterer. Small Farmers, Big Business. 17.

³²² A. Vaughan. "Contracts with Capital." 15.

³²³ A. Vaughan. "Contracts with Capital." 14.

Another important group is that of growers who run contracting operations ranging from silvicultural operations to harvesting and short-hauling. The various groups realise different profits at the end of the tree-growing period. This leads to dissimilarities in demands and needs of the different grower groupings determined by differential access to resources. There are various forms of divergencies by sex, contract ownership and employment. Male growers face different challenges from female growers. Also women contract owners differ from those who are growing on behalf of absentee contract holders (in many cases, the husband who is an absentee landowner - working away from home). Another distinction exists between the growers who employ contract labour and those who use predominantly family labour.

For growers, the relationship with agribusiness itself makes collective action among out-growers particularly hard. R. A. J. Clapp suggests that this difficulty is rooted in the ambiguities and/or inequality of the relationship with agribusiness that establishes the company as both the source of contract income and clear target for farmer frustration and resentment.³²⁴ He suggests that, "in their antagonism to the company, peasants are condemned to silent, isolated, petty, and devious mechanisms of resistance which concede the unequal extractive terms of the relationship."³²⁵

While deeper theoretical and methodological debate on the reasons for the lack of cohesion is deliberately avoided here, it will suffice to say that some of the differences within the grower constituency cannot be simply explained by the differences between the growers themselves. H. Bernstein's work on petty commodity production suggests that 'a broader class-based reason for an ideological ambivalence militates against collective coherence.' In response to this, A. Vaughan is of the opinion that, if the implications of H. Bernstein's analysis are followed through, then some of the problems of small farmer organisations must be traced, not simply to the specifics of uneven contractual relationships, but to the nature of a petty bourgeois class position.³²⁶ The establishment of contract farming relationship between agribusiness and small growers has an inherent effect on prevailing agrarian relationships. Formal contractual relationships typical of agribusiness, and their frequent emphasis on world markets, are significantly different from the style of interplay between growers and elites in traditional rural societies. Credit, inputs, information and obligations are allocated through new mechanisms.³²⁷ This process also entrenches the authority and hegemony of traditional

³²⁴ R. A. J. Clapp, "Representing Reciprocity, Reproducing Domination: Ideology and the Labour Process in Latin American Contract Farming," *Journal of Peasant Studies*, Vol. 16, No. 1, 1988. 7.

³²⁵ R. A. J. Clapp, "Representing Reciprocity, Reproducing Domination." 7.

³²⁶ A. Vaughan, "Contracts with Capital." 16.

³²⁷ A. Vaughan, "Contracts with Capital." 16.

authorities because they have an upper hand due to their control over land, the most important production factor.

At the centre of agribusiness' ability to maintain profit and high input levels from small growers lies voluntary grower co-operation. In the wattle tree growing schemes, small-growers have representation on the SAWGU's Board of Directors, allowing them access to the total profit from their business.³²⁸ However, in the *Eucalyptus* agribusiness schemes, patronising the local authorities has been opted for as a way of enlisting grower co-operation. To facilitate grower co-operation without being seen as imposing, agribusiness formed partnerships with the communities through their traditional structures.³²⁹ A. Vaughan argues that these impediments to organisation can be ameliorated by instances of coherent and effective farmer organisation and suggested that organisation should be built around issues and difficulties.³³⁰ For instance, it is in the interest of contractors and growers to unite and negotiate a favourable price for harvesting and short-hauling with both the company and the small growers. There is also a need for training in organisational skills and resource management, which would benefit from a shared conservation initiative. Grower organisations should also promote grower awareness with regard to environmental issues. This would enable farmers to disseminate, debate and where necessary, contest environmentally damaging agronomic practices.³³¹

Effects on Food Production

The 'food-first' theorists mentioned earlier criticize the production of non-food cash crops for export. Their main problem with non-food production for export is that it has the effect of withdrawing scarce resources such as land from its traditional use. This land is arguably withdrawn from meeting the basic food requirements of the poor to meeting the needs of affluent consumers in developed countries. This is alleged to reduce the total amount of food available to the nation. The food consumption and nutrition of contract growers will suffer as they increasingly specialise in cash crops. Contrary to this view, critics of the 'food-first' regime propose that instead through specialisation and comparative advantage there would be an increase in total food supplies. In KwaZulu-Natal, J. E. M. Arnold noted an apparent competition for land and labour in areas where the contracts were initiated.³³²

The logic is that an efficient producer of a cash crop should be able to trade his product for a greater amount of food than he could produce with the same resources. However, both

³²⁸ J. Feeley. Personal Communications. 1999. (Mr John Feeley is the Chairman responsible for managing SAWGU's small grower section.

³²⁹ B. Gumede. Personal Communication. May 2000

³³⁰ A. Vaughan, "Contracts with Capital." 17.

³³¹ A. Vaughan, "Contracts with Capital." 18.

³³² J. E. M. Arnold, "Employment and Small Business Options." 17.

arguments rest on very thin empirical evidence. There is insufficient data to relate changes in total food production to agribusiness activity and much less about nutritional levels. For instance, advocates of export agriculture have little to say about the intra-country distribution and utilization of export earnings or about the imperfection in world commodity markets that might cause actual flows to diverge from those indicated by comparative advantage. In KwaZulu-Natal, as mentioned before, growers of trees as a cash crop have not abandoned their traditional crop production and cattle raising activities. This has given rise to competition between tree growing and other systems of production, particularly over land.

Besides the shortage of land for crop production, there is also an alleged competition for land between trees and grazing. The economy of KwaZulu-Natal has been historically considered as a cattle economy. In fact its grasslands are more conducive to cattle keeping than crop production. Shifting cultivation and fallow management systems helped land to rotate productively between cattle grazing and crop production. The land that farmers left fallow to regain strength would automatically become available for grazing. It is now this land that growers are using for tree cultivation. MONDI's block plantings has been criticised for encroaching on communal land left for grazing.³³³ Friction between tree growers and grazers has been a widespread phenomenon. In Mbazwana there is a popular case where a MONDI woodlot block was uprooted by school children. This could reflect the fear of young people when they see land kept in trust by the chief for their future allocation and use when they become adults being put to trees.

Globally, the impacts of agribusiness contracts with small-scale growers on the food supply and the nutritional status of the rural poor has been the subject of intense debate. In KwaZulu-Natal, it is difficult to say with certainty whether timber growing had any negative impact on the food situation. However, it is clear that growers are growing trees on land without considering its potential profitability for other crops, even if they insist that they only use the land not conducive for food production. In fact, when SAPPI negotiated with the former KwaZulu Government to establish Project Grow, it was stipulated that trees would be grown only in areas with gradient of more than 12 per cent.³³⁴ This agreement was not realistic as it overlooked important operational issues. Timber is a bulky product whose harvesting becomes more complicated and expensive with the increase in the gradient of the plantation or plot. Increases in the harvesting and short-hauling costs reduce the profit margin for the under-capitalised growers' operation. This works contrary to the considered and acclaimed advantage of minimal use of expensive and complicated technology for rural tree growers.

³³³ J. E. M. Arnold, "Employment and Small Business Options." 17.

³³⁴ Interview with Councillor Z. Mkhize, formerly a member of the government of the former KwaZulu 'homeland'.

Under the circumstances, where local conditions are suitable for export crops such as timber more than food crops, it would seem that timber production represents a significant welfare gain for the communities involved. However, it is important to consider that given the poor quality of land left to the blacks in the former 'homeland' of KwaZulu, land was tilled on a rotational basis with other land left fallow. This rotation has been the basis upon which subsistence agriculture continued to feed the rural populace. As noted by A. Vaughan, the result of growing trees for commercial purposes against the background of a rising population, is the considerable reduction of the land available for food production and for future generations.³³⁵

Changes in Company-Grower Relationships

The relationship between agribusiness and growers has changed over time (like in any relationship). As such, a 'snapshot' taken at one moment (stage) will not convey an accurate picture (an evolution) of that relationship over time. Changes could either be case-specific, but some tend to be more widely observable. There are many factors that determine the contract relationship. The size of the grower, the importance of the crop to agribusiness, the ability to access alternative markets or to establish other marketing and distribution channels, among others, are important determinants of agribusiness-grower relationships. Besides, the reasons behind entering the contract relationship for either party are also important. The amount of bargaining power yielded by either the grower or agribusiness is very instrumental in determining the relationship. In many cases, as in the tree-growing contract however, agribusiness has more power over the growers. Growers have very little chance for manipulating the contract to their advantage (as will be discussed later in this section).

④ D. J. Glover and K. Kusterer argue that there is a tendency to view small rural farmers as backward and unreceptive to innovation.³³⁶ The daily reality is one of conflicting short run mutual interests, and this short-run tension can hide the long run individual interest in continued co-operation. Once normalised, the relationship between grower and company is full of continual low-level conflict, as each side seeks to maximise its own benefits to the point just short of severing the relationship altogether. The impact of this daily conflict on the small grower is not entirely or necessarily negative as by distrusting the company, the grower learns to keep his or her own accounts. After learning the art of the requirements and processes, the grower goes on to check on the outlook for lower cost alternatives to company supplies.

³³⁵ A. Vaughan, "Contracts with Capital." 17.

³³⁶ D. J. Glover and K. Kusterer, Small Farmers, Big Business. 133.

Another way of looking at the relationship between the company and the growers is to look into the extent of grower satisfaction with the contract agreement and arrangement itself. J. E. M. Arnold argues that the degree of dependence on the companies, and a lack of balance between the growers and agribusiness arrangements require critical analysis.³³⁷ Growers have no say in the company-drafted contract. The majority of them do not understand it. At the end of 1999 SAPPI began the process of translating the contract into vernacular. For about the past 15 years most growers have had to sign to document they scarcely understand. The fact that the contract agreement was not negotiated alienates the growers from the whole process.

Misinformation is also a reason for the strained relationship. An example of this is that growers had exaggerated expectations of accruable incomes from the programme. Misunderstandings and problems between growers and non-growers stem from insufficient knowledge of working parameters of the programme. Communication is the main problem in the programme. It mars the success of the programme. According to J. E. M. Arnold, growers should be allowed and helped to exercise more control over the process of producing trees on their land, farmers need to identify with the decisions. Grower associations should be formed and trained to reduce grower dependency on outside input and further improve the profit obtainable from tree growing.³³⁸

There are instances when growers tried to cheat by defaulting on supply, but their lack of the full understanding of the contract makes it difficult for growers to utilise the contract to the best of their potential advantage. Some contracts and contracting situations allow more scope for favouritism than others, (an element always present in varying degrees). Critics of agribusiness contracts with small farmers have argued that companies favour more educated 'medium sized' growers who have the potential to squeeze out smaller farmers as the 'medium sized' growers expand operations.³³⁹ In the SAPPI scheme however, there is no evidence of squeezing out of smaller farmers. This could be because of the fact that land is not privately owned and no individuals can sell the land they use to other growers. The only favouritism that is evident is that which arises between local authorities, the *izinduna* and *amakhosi*, in land allocation.³⁴⁰ The only problem cited against SAPPI was the alleged delay in payments. This is a problem of significant severity especially when such delays exceed up to four months, particularly where inflation is high.³⁴¹

³³⁷ J. E. M. Arnold, "Employment and Small Business Options." 18.

³³⁸ J. E. M. Arnold, "Employment and Small Business Options." 19.

³³⁹ A. Goldsmith, "The Private Sector and Rural Development." 1129.

³⁴⁰ Interview with a Grower in Amatikulu District.

³⁴¹ A. Goldsmith, "The Private Sector and Rural Development." 1129.

Among the growers in the area of study, debt was a constantly cited problem. This is made particularly worse by the fact that timber is a crop, which has a long growing time before the first harvest. Farmers wait for several years to earn revenue, therefore, loans become necessary to carry the farmer over the period and resultantly high levels of indebtedness accumulate. In cases of projected profits not being realised because of changes in production costs or market conditions, repayment problems result. This problem gets compounded into the economic and institutional environment of the area of study falling within the previously disadvantaged former 'homeland' of KwaZulu. Communal farmers with limited business experience often have difficulty keeping their own records of loan disbursements given to them in the growing process. Payment on a regular basis at the rate equivalent to a minimum or subsistence wage can create the image that they are receiving a wage for performed work prior to harvest, rather than a repayable loan. D. J. Glover and K. Kusterer, argue that:

The more distorted the price, the less experienced that farmer, the longer the pre-harvest period, the more likely it is that problems of perception will exacerbate and compound financial problems.³⁴²

This is a real problem among SAPPI-contracted growers. *Eucalyptus* trees take an average of six to eight years to get ready for harvesting. In areas with higher rainfall, such as Port Durnford for example, trees mature even as early as five years, but in drier areas it takes up to nine years.³⁴³

Effects on Income and Livelihoods

Traditional plantation agribusiness has been criticised for its 'enclave' nature, that is, its failure to provide linkage effects such as demand for local inputs or services that would promote development of the economy. According to F. Ellis, the linkage effects of plantation and contract production are equally slight. He argues that a scheme that stimulates local entrepreneurship in one environment might remain an enclave in another.³⁴⁴

The former KwaZulu government accepted and encouraged contract farming in the belief that it would produce greater spill-over or linkage effects with the local economy than would plantation production. The only form of employment created by contract in the tree schemes is in the form of the several specialised contracts, such as in the weeding, harvesting and haulage of timber. These contracts are in fact the basis of a differentiation process. Only

³⁴² J. D. Glover and K. Kusterer, Small Farmers, Big Business, 130.

³⁴³ Port Durnford is said to have the best *Eucalyptus* growing conditions in the world that even surpass those of countries where it grows naturally. For further information on the plantation areas of South Africa see, W. E. Immerlmann [ed.] Our Green Heritage: The South African Book of Trees, Cape Town: National Boekhandel, 1973.

³⁴⁴ F. Ellis, A Study of Employment in the Banana Export Industry of Panama and Central America, Geneva: ILO, Dec 1977.

those with other sources of capital are able to establish them. Besides the contracts, there is no evidence of a spill-over for the out-growers themselves into other areas of development. Observations on Project Grow participants indicate that there is very little evidence of increased income or increase in household consumption. Besides investment in the education of children and dependencies, out-growers have made very limited productive investment in areas outside the arena of contract farming activity itself.

The most common area of investment is in education of dependants, which is the single most important investment among contract farmers. In the rural areas, boys are sent to secondary school and to receive tertiary education to earn such credentials as would qualify them (hopefully) for non-farm employment. According to F. Ellis, this could be a result of a judgement by a family that its economic future would be better served by human capital investments, which get members out of agriculture, rather than by farm investments.³⁴⁵ The investment in household capital only contributed to the subsistence economy without necessarily affecting it. For instance, trees did not effectively replace domestic livestock production considered as the small farmer's traditional 'savings account'. There are no innovations in the way of purchase of farm or household equipment that could be rented out or used at home.³⁴⁶ Levels of such investment are quite small, negligible and accidental when compared to the investment in contract farming activities and male children's educational advancement. Even if there is a heavy proliferation of women in Project Grow, this has not translated to their material advancement in absolute terms. There is no evidence of sufficient capacity to raise women's income in absolute terms while slightly affecting them as a proportion of total household income. A. Vaughan's conclusion that the participation of women in these schemes did not in any way facilitate their advancement and entry into the cash economy therefore remains valid.³⁴⁷

In the SAPPI project, there is no evidence of situations where the contract-based investment was sufficient to make the family farm a 'full-time' business. All growers depend on other sources of income for the daily livelihood of their households. There is very limited scope for creating a rural farm-based macro-economic enterprise and communal business ventures based entirely on tree growing.³⁴⁸ This could be explained in terms of the limitations within the model itself and the cash crop grown. For instance, the growing of *Eucalyptus* trees does not supply other non-wood requirements of the growers and non-growers in the community.

³⁴⁵ F. Ellis, *Peasant Economics* 251.

³⁴⁶ M. C. Lyne and G. F. Ortmann, "Estimating the Potential Creating Additional Livelihoods on Commercial Farmland in KwaZulu-Natal." In M. Lipton, F. Ellis, and M. Lipton (eds.) Land, Labour and Livelihoods in Rural South Africa Volume Two Two: KwaZulu-Natl and Northern Province. Durban: Indicator Press, 1996.

³⁴⁷ A. Vaughan, "Contracts with Capital." 21.

³⁴⁸ M. Underwood, "In Search of an Appropriate Agro-forestry Model." Occasional Paper No. 25/97. University of Natal-Pietermaritzburg: Institute of Commercial Forestry Research, 1997. 11.

This implies that *Eucalyptus* growing does not provide a scope for other markets other than those for pulp and paper milling.

Theoretically, through the diversification of small contract farmers, the increased income is expected to permeate their household and communities. Capitalisation occurs, together with investment increases in subsistence agriculture, commercial farming, non-farm micro-enterprises and education.³⁴⁹ However, the resulting economic development is more visible with larger farmers who can buy equipment such as tractors, pick-up trucks and lorries. Smaller growers cannot afford this investment and have to rely on the 'larger' growers.³⁵⁰ In the MONDI-SAPPI contracts, a number of small growers, especially those who had been retrenched with sizeable packages and other sources of investment capital, managed to buy tractors, pick-up-trucks, lorries and harvesting equipment and established themselves as 'grower-contractors'. It is these who have managed to take advantage of and who have made use of these schemes. The poorest of the poor, in this case, are left out, and may even be much poorer than they started as they borrow more than the well established: for silvicultural purposes and also pay more for harvesting and short-hauling.

Proponents of agribusiness have, on the other hand, argued that benefits of tree growing should be measured against the inputs required. Tree planting requires less labour as compared to other agricultural land-use activities such as sugarcane planting which is also widespread in some areas of KwaZulu-Natal. It tends to expand where farm households are short of economically active labour, and take advantage of less labour intensive crops. This could be the reason for some small growers shifting from sugar to trees. Participants also stress the expectation to get "higher returns" to the time required and the ease of management as reasons of growing trees in preference to other land uses.³⁵¹ Anyway, as already alluded to, there are no higher returns that accrue to the majority of tree growers in these projects.

Environmental Concerns from Project Grow

The expansion of tree monoculture in KwaZulu-Natal is particularly favoured by the combination of inexpensive land, low labour costs, fast tree-growth and the poverty trap in which the majority of the people find themselves, together with the lack of government pro-activeness in reducing poverty. One of the most negative impacts of tree monoculture is the severe impact it has on the environment. As small growers' woodlots were originally expected to remain at a low average of about one and half hectare, it was not thought that they would have any large impact on the environment. As a result there was no effort from either SAPPI or the government to audit and take care of the likely environmental impact.

³⁴⁹ D. J. Glover, "Increasing the Benefits to Small holders." 448.

³⁵⁰ M. Friedman and A. Vaughan, "The Implications and Problems of Small Grower Production." 27.

³⁵¹ M. Friedman, "Commercial Timber Production and Basic Needs." 42.

Contrary to this supposition, woodlots turned out to be very large particularly after the first harvest in 1991 and 1992. Woodlots grew to be as large as up to ten hectares while in Mbazwana the *iNkosi*, for example, has more than 80ha of *Eucalyptus*. There is also the cumulative impact as the collection of small individual units of woodlots adds up to vast tracts of plantation. These large woodlots, coupled with poor land management by the communities brought about negative effects on the environment. The World Rainforest Movement is of the opinion that:

Such substitution of natural ecosystems by large-scale tree plantations usually result in negative environmental and social impacts such as the decrease in water production, modifications in the structure and composition of soils, alteration in the abundance and richness of flora and fauna, encroachment on indigenous forests, reduction of land available to the communities and loss of livelihoods.³⁵²

KwaZulu-Natal, like South Africa as a whole, is very poor in indigenous forests. This means that any activities that encroach and destroy the little natural forest that exists would have a relatively large negative impact on the environment in general.

Many foresters, from companies and government alike, claim that, "tree plantations help alleviate pressures on natural forests, thereby contributing to halt deforestation."³⁵³ M. Gandar also promoted the idea of woodlot development. His argument was that firewood seekers depleted 'native' forests therefore planting woodlots would relieve them from unsustainable harvesting.³⁵⁴ The public is enticed to believe that tree plantations are beneficial and should be further supported and promoted if we wish to save the natural woodlands (or shrublands in the case of KwaZulu-Natal). The alleviation of natural woodlands by tree planting has materialised only where communities have planted trees to serve their own needs. Unfortunately, the growing of large-scale fast-growing *Eucalyptus* for commercial purposes by rural communities has not been able to address the issue of environmental degradation and to offer relief on natural woodlands.

There is overwhelming evidence to prove that plantations either increase deforestation directly (or in the best of cases) they do not play any role at all regarding forest conservation.³⁵⁵ A visit to Duku Duku forest, for instance, revealed how invaders have cut

³⁵² Statement of the World Rainforest Movement for the Intergovernmental Panel on Forests (IPF) meeting, New York, February 20th, 1997.

³⁵³ C. Ham and J. M. Theron, "Community Forestry and Woodlot Development in South Africa: The Past, Present and Future," *Southern African Forestry Journal*, No. 184, 1999, 71-79.

³⁵⁴ M. Gandar, "Woodlots - A New Role," 12.

³⁵⁵ See Reports by the World Rainforest Movement for the Intergovernmental Panel on Forests (IPF) Meeting, New York, February 20th 1997. (<http://www.wrm.org.uy>)

down extensive areas of the forest to plant *Eucalyptus* for the SAPPI and MONDI pulp mills so as to earn the promised income. However, besides trees there are also portions planted to crops such as bananas and sugar cane used for both food and cash purposes. In many instances, trees grown for their commercial value are hardly used for domestic purposes. Research among the tree growers in Project Grow has indicated that an overwhelming majority of growers would not cut down their trees for fuelwood. The implication is that where trees have a greater commercial value as a market commodity than energy value, the demand for fuelwood remains. Commercial tree growers remain largely dependent on forests for their fuelwood needs.

The conversion of grazing or other agricultural land into *Eucalyptus* plots was driven by SAPPI and MONDI in their eagerness to obtain control of suitable land. After acquiring the land available on the market the timber companies embarked on a course that encroached on communally owned land without having a direct claim to it, but using it without renting, under the auspices of contracts with the communities. As a result, woodlots which total thousands of hectares were established without being subjected to planting permit applications; these were only applied in 1999. The contracts signed with the growers make woodlots, *de facto*, the property of the large plantation companies, even though they stand on land that the companies have neither purchased nor paid any rent for. The timber companies concerned do not only refuse to take responsibility for the negative social and environmental problems arise, but also refuse to acknowledge them.

Water shortage is one of the most immediate and serious environmental factors arising from woodlot development even though it is difficult to quantify. Table 4.7 below shows the resource availability in the seven districts as seen by the growers. Forestry and plantation agriculture was identified as a major water user in the New Water Act of 1998. This also explains why the Department of Forestry was removed from Agriculture and married to Water Affairs in the post-apartheid period. Company officials and the majority of growers deny that their tree growing activities have negative effects on water because their plots are small. On the other hand, non-growers have very negative views on the tree growing activities.

A lot of non-growers emphasize the negative effects of tree growing on water, grazing land, crop growing land and natural woodlands. This is quite understandable as the company and

Table 4.7: Resource Availability Ranking per Area.³⁵⁶

Area	Water	Grazing land	Cropland	Woodland
Biyela	4	3	2	1
Esikhawini	4	3	4	2
Elabisa	4	3	4	4
KwaMbonambi	5	4	3	1
Mbazwana	3	3	3	2
Mfekayi	3	4	3	2
Sokhulu	5	4	4	1
KEY: 1 - Very Scarce 2 - Scarce 3 - Limited 4 - Available 5 - Abundant				

Source: Compiled from Survey Results

Growers' 'benefit' from the schemes and yet there are no benefits accruable to non-growers. However, in essence tree-growing activities have immense effect on down stream activities and water run-off. This is a result of the collective impact of each woodlot.

General Profitability for Small Growers

The income potential of a partnership with agribusiness is perhaps the main factor that attracted growers into partnership with SAPPI and MONDI alike. There were however, ambiguities as to exactly what the grower would earn, but it was assumed that growers will earn sizeable incomes if each individual established a number of woodlots. There were two options presumed that the grower would take.

Firstly, it was thought that if an individual establishes a large woodlot of several hectares, s/he would earn a considerable amount of money in seven years' time. Secondly, if an individual put one or more hectares under timber each year, (that is, rotational cultivation) s/he will obtain a regular and meaningful annual income after the first harvest in seven years' time. While both options have been recognised by a few growers, this was however impossible for the majority who were constrained by the limited availability of land. In many cases, it is common for growers to harvest their first crop and depending on what they earn, they either get encouraged or discouraged to plant new woodlots. As a result not many growers are capable of realising the full benefits of the scheme. Neither do they understand the need to establish additional woodlots each year to ensure a regular annual income in the

³⁵⁶

The information supplied in the table above has two fundamental weaknesses. Firstly, it could represent growers' failure to observe the negative effects because they choose to focus on the positive side and they expect to benefit. Secondly, it does not show whether the scarce and limited resources are such as a result of tree growing in the area.

future. In any case, this was not explained to growers when they joined the contracts. In fact, this problem was not envisaged in the Project Grow model at its conception and inception.

The model was designed in reference to the local conditions of land tenure and land use such that it also assumed most growers would establish only one woodlot of 1 to 2 hectares. T. Quinlan, *et al.* pointed out that the assumption was that each household would simply obtain an additional and intermittent source of income from using part of its land-holdings for timber production.³⁵⁷ As a result, the project set in these terms suggests that subsistence oriented farming can be improved by including a cash crop which will assist a rural household even if the income does not meet all of the household's financial needs. Essentially, the income potential of the project is dependent on the growers' ability to establish larger woodlots and to introduce a rotational cultivation regime. Since the establishment of the woodlots there is no evidence, at least for the majority of the growers, that growers will realise significant incomes from afforestation (although there are a few exceptions).

According to official calculations, a grower is expected to earn about R4200 per hectare over seven years.³⁵⁸ This works out to a monthly income of R50 which is very little. In calculating the income from MONDI's Khulanathi project, T. Quinlan, *et al.* arrived at a figure of a R334.36 per month. This figure has fatal errors in the sense that the total of R4 012.34 which they adopt as the official expected income after seven years of waiting was divided by only 12 months and the whole six years were ignored. The reason for dividing by 12 months instead of 84 months (the total production period and the time which production costs are incurred and the grower invests in labour-time) is not given. If R4 012.34 is divided by 84 months, the monthly income therefore will be as low as R47.77. This figure does not even compare with the weekly incomes offered by major employers in northern Zululand and the coastal areas for unskilled and casual labourers. For example, companies operating in the area of study offer higher weekly and monthly wages to their casual labours when compared to what the growers raise. Richards Bay Minerals pay about R150 per week to a casual worker; National Parks Board about R134 per week; Ovland about R87.50 per week, and PineChem offering the lowest weekly wage of about R55.13 per casual worker.³⁵⁹

This indicates how limited the project is in generating income. It can therefore be concluded on that basis that the project would not provide any significant improvement in the financial

³⁵⁷ T. Quinlan *et al.*, "Environmental Impact Assessment." 24.

³⁵⁸ B. Gumede, Interview

³⁵⁹ RBM. "Opportunities for Interdependence and Corporate Social Responsibility." Address to Stakeholders' Workshop Towards Development and Stability. Attended by Business Concerns and the Uthungulu Regional Council. November, 1999.

status of rural households. T. Quinlan *et al.* made the same observations in their impact assessment study of the MONDI project and warned that:

The project would not provide an incentive to redirect labour resources away from migrant work opportunities. It would not provide enough income for substantial investment in other local income generation opportunities.³⁶⁰

Given the general levels of poverty amongst rural households, the once in seven years receipt of several thousands of Rands would probably be spent on attempts to raise, however slightly, the material quality of life by buying, for instance, additional food, consumables, school fees for children and uniforms. At best, the average grower with the best of production conditions would be stuck at a point where commercial tree growing would provide a significant additional source of income but not enough for him or her to change substantially their current strategies of survival.

The assumption that growers can earn meaningful incomes by establishing rotational cultivation regimes does not consider the availability of land to plant blocks of trees in rotation. T. Quinlan *et al.* also pointed out that the assumption that growers would establish rotational cultivation regimes implies that growers can become commercial plantation farmers.³⁶¹ If this was the case, then the project must be evaluated in terms of the opportunity it provides for growers to support their households primarily from this activity rather than any other. However, there is very little evidence from the study pointing to the fact that growers would be able, at any time, to entirely depend on tree farming without resorting to other sources of income. The other area of contestation stems from the company's assumption that its loans would go a long way to assist growers by subsidising production costs. SAPPI officials claim that their model offers more chances for income as they do not levy any interest on their loans. (MONDI levies a ten per cent interest on the loans advanced to growers). According to A. Goldsmith credit systems for small farmers have always been a problematic feature of 'development' projects and therefore, require regular re-assessment as the project evolves to avoid misunderstanding and conflict.³⁶²

The company evidently does not have enough capacity to take care of the rising demand for the scheme. This can be reflected in the forester-grower ratio per growing area or district. There are only about four foresters for the whole of Zululand who are servicing about three thousand and two hundred growers on about nine thousand six hundred hectares of land planted to trees. That means only one forester is responsible for eight hundred growers. As

³⁶⁰ T. Quinlan *et al.*, "Environmental Impact Assessment." 25.

³⁶¹ T. Quinlan *et al.*, "Environmental Impact Assessment." 25.

³⁶² A. Goldsmith, "The Private Sector and Rural Development." 1129.

stated earlier, this is because the participation rate is much higher than what the company had anticipated and was prepared to handle. SAPPI welcomed the high response rate as it meant sufficiency in *Eucalyptus* for its pulp and paper mills. It had to sub-contract the management of the community commercial tree-growing scheme in southern KwaZulu-Natal to LIMA. It is also a pity that while the majority of growers are women, there is no woman forester. A woman forester would be more able to understand and appreciate the impact of the project on female participants.

In conclusion, it can be said that many of the promised benefits from growing trees as cash crops have remained illusory. Contract farming did not manage to revolutionise the lives of those households involved. Neither did it manage to change the agricultural tradition nor did it significantly lead to improved livelihoods. Rural communities have remained undercapitalised, generally poor and the schemes have not been able to generate significant employment opportunities. However, contract farming in *Eucalyptus* production like woodlot development for woodfuel supply cannot be totally dismissed as totally detrimental to the environment and developmentally unnecessary. This argument is developed further in the next chapter that provides a summary, conclusions and recommendations from the previous discussions.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

The majority of the rural people face a daily struggle for survival. Meeting their basic needs on a day-to-day basis is all that concerns them.³⁶³

This chapter summarises and concludes the debate on woodlot development for woodfuel provision and the ability of contract farming to improve rural livelihoods. In so doing it evaluates the sustainability of woodlot development and tree-centred contract farming in supplying the basic needs of rural people and contributing to the general livelihood of the communities involved. The task of evaluating the sustainability of tree growing schemes of agribusiness in KwaZulu-Natal and their ability to promote rural development in general was considered from the point of view of the general material conditions of poverty of the rural communities involved and the nature of the contract. A number of measures were used including the extent to which basic needs such as woodfuel, are met as well as household income for participants and their general well-being. As outlined earlier in Chapter one, the communities studied are imbedded in conditions of poverty. This is characterised by a plethora of crises ranging from the decline in food production per capita, malnutrition among children, ill-health exacerbated by malnutrition and the spread of HIV/AIDS, rising unemployment, declining standards of living and environmental degradation.³⁶⁴ The basic differences between community woodlots and 'commercial' woodlots sponsored by agribusiness is that the former is focused on providing wood for fuel while the latter is primarily for supplying timber for SAPPI's pulp and paper mills, in others words commercially oriented.

Both woodlot types grew exotic trees to meet their different objectives. This contributes to the reasons why the woodlots that were meant to provide woodfuel failed to succeed in their task. One of the main criticism levelled against tribal woodlots was the type of trees planted, *Eucalyptus*. *Eucalyptus* is not a choice tree for woodfuel as it limits the potential and extent of fuelwood provision because of its low qualities as firewood.³⁶⁵ Communities in areas without woodlands or farms without other sources of wood or fuel are those who may use *Eucalypts*. For example, communities around Eshowe and KwaKhoza use *Eucalyptus* for firewood more than in KwaMbonambi, Mabibi, Mbazwana and Sokhulu. KwaKhoza, just

³⁶³ B. Munslow, *et al.* The Fuelwood Trap. 12.

³⁶⁴ J. May, [ed.] Poverty and Inequality in South Africa: Meeting the Challenge. London: Zed Books, 2000. 34.

³⁶⁵ S. E. McClintock, "An Integrated Rural Energy Strategy for the Upper Tugela Location, KwaZulu." Investigational Report No. 35, KwaZulu Department of Economic Affairs, 1988. 99.

outside Eshowe, and other surrounding areas do not have any woodlands or shrublands remaining having put much of their land to sugar cane farming. In this area government woodlots assist in supplying wood for fuel. There are very few households in this area who have woodlots, but those that have sell their trees for construction, fencing and firewood to the community.³⁶⁶

In KwaMbonambi, Mabibi, Mbazwana and Sokhulu, for example, there are two undelying factors influencing wood choices. Mabibi and Mbazwana, for example have comparably greater natural woodland resources that the communities still harvest. B. James' study in Mabibi demonstrated that the harvesting of firewood in these woodlands is done on a very sustainable basis.³⁶⁷ However, in KwaMbonambi and Sokhulu, besides the availability of woodlands where people harvest indigenous trees for fuelwood, there are also high levels of access to electricity. A mining company, RBM has been involved in local development programmes in conjunction with ESKOM to provide electricity to a number of households in the area.³⁶⁸ It should be pointed out however, that those who use *Eucalyptus* for wood fuel do it out of desperation. It is ranked together with crop residue in terms of its desirability and quality for wood fuel. Among the commercially grown trees, wattle is more acceptable as wood for fuel or construction. In fact, wattle is more desirable even when compared to other indigenous trees. However, *Eucalyptus* is the dominant tree planted in this area. It can be said therefore that, these schemes' contribution to reducing the wood fuel crisis is very minimal. On the other hand, communities cannot harvest wood from company plantations.³⁶⁹

Tree growing schemes by agribusiness have largely not been able to provide woodfuel relief as claimed by company officials. J. S. Crush and O. Namasasu are of the opinion that in fact woodlots are not direct solutions to rural problems such as woodfuel shortage.³⁷⁰ In planning for energy provision to the rural communities the government has many challenges. There are problems associated with conventional supply-enhancement strategies. Supply-demand balances and projections include a complex pattern of specific areas of surplus and deficit.³⁷¹ Woodfuel shortages occur in pockets or mosaics, varying the levels of stress on local resources. Woodfuels shortage and availability vary from area to area. For instance in the area of study, villages in Hlabisa have more woodfuel when compared to those in areas

³⁶⁶ Interview with the Chairman of the Local Rural Development Committee

³⁶⁷ B. James, "Mabibi." 68.

³⁶⁸ Personal interview with the *iNkosi*, for Sokhulu.

³⁶⁹ R. Carrere and L. Lohmann, Pulping the South: Industrial Tree Plantations and the Paper Economy. London: Zed Books, 1996. 201.

³⁷⁰ J. S. Crush and O. Namasasu, "Rural Rehabilitation in the Basotho Labour Reserve." Applied Geography, Vol 5, 1985. 17.

³⁷¹ T. J. Bembridge, "Woodlots, Fuelwood and Energy Strategies for Ciskei." South African Forestry Journal, Vol. 155, 1990. 43.

around Eshowe. As a result of this planning for woodfuel requires a decentralised approach for intervention to be effective. T. J. Bembridge and J. E. Tarlton rightly argue that unless both the specific site and people most affected are identified correctly, then any action taken will not have a significant impact.³⁷²

The supply-and-demand of woodfuel energy analysis is based on the calculation of growing stocks and their annual increments measured against estimated consumption and 'deficit'. Little attention is paid to changing land-use despite evidence that it is not the demand for firewood which creates deforestation but land clearance for agricultural production.³⁷³ There must be a sense of scale, a way to separate the site-specific from the broad situational analysis. Of vital and more widespread importance, energy-planning conceptions of the problem have often been at odds with people's perceptions. Local people do not necessarily think of firewood as a problem, or at least a priority given the array of difficulties they face. Wood is perceived as a 'free good' in rural areas, and also considered as residue from other economies, for example, timber, fruit, fibre and other crops.³⁷⁴ As a result, tree-growing regimes are only attractive for their perceived economic importance rather than for woodfuel harvesting.

For these reasons, in spite of the prevalence of tree growing in KwaZulu-Natal, woodfuel collection still remains a problem. In areas where woodlots are offered as solutions for resource scarcity, wood from the woodlots has shown to become more valuable for other purposes than woodfuel and the intended beneficiaries find they cannot afford it (when it become available for sale as woodfuel).³⁷⁵ The Sustainable Forestry Management discussion paper noticed that even if more than 7000 people were involved in the tree growing, either in farm forestry, agro-forestry and other forms of community forestry, the contribution to the wood supply problem remained small. The contribution was estimated at probably less than 2 per cent, but income from timber sales is or can be an important contributor to household income, and there is significant potential for growth.³⁷⁶

Small growers are not allowed to cut the trees planted for sale to the contracting company for firewood. While M. Gandar observed that irrespective of that, "plantation residues are an

³⁷² T. J. Bembridge and J. E. Tarlton, "Ciskei Woodlot Survey and Fuelwood Strategy." *South African Forestry Journal*, Vol 12, 1988, 37.

³⁷³ A. A. Eberhard, "Energy Consumption Patterns." 17.

³⁷⁴ I. Tinker, *The Real Energy Crisis*, 108.

³⁷⁵ S. Christie and M. Gandar, "Commercial and Social Forestry." 28.

³⁷⁶ S. Christie and M. Gandar, "Commercial and Social Forestry." 35.

important source of woodfuel for many rural populations.³⁷⁷ It should be stressed that tree residues particularly from *Eucalypts* are not desirable as woodfuel. They burn out as fast as crop residue. They are only used to start a fire but not to sustain it and cook on it.³⁷⁸ Therefore, tree residues cannot be seen as a sustainable source of woodfuel. However, there is very little movement away from woodfuel as the traditional energy source to more modern sources of energy. The reasons for this are many. The most important reason is the lack of financial resources to purchase other fuels such as paraffin, coal, diesel, gas and others. However, B. James argues that a pervasive theme in firewood and anthropological studies in Africa signal the fire as a site of household and cultural cohesion. According to her the reasons given for resistance to change to commercial fuels are bound up in the symbolic significance of the fire.³⁷⁹ She concluded that attitudes towards wood as a good fuel are consistently grounded in the fact that it is cheap and therefore can be used everyday and that it is the habit of people of the area (Mabibi) to use wood as their mothers and fathers did.³⁸⁰ The ordinary household's diet ('samp' and beans) demands a long cooking time, making woodfuel the most suitable energy source as compared to gas and paraffin whose costs make it prohibitive. Tradition holds wood at ransom as the main supplier of energy. Many people are reluctant to rely on other sources of energy which they are either not familiar with or they cannot afford.

Besides fuelwood, there are other numerous potential advantages and benefits from the various tree-based intervention regimes in the various rural districts of KwaZulu-Natal. The discussion paper on 'Sustainable Forestry Management' noted the strengths of the schemes in the provision of income to the participating households and state that the woodlots themselves are also used as a means of saving.³⁸¹ Out-grower schemes are expected to reach the poorest and the most isolated farmers, since the timber companies operate in isolated and neglected rural areas and have a vested interest in seeing that woodlots are successfully cultivated and the profits are acceptable to farmers.

The contract relationship between the small growers and agribusiness has not resulted in any significant change in the conditions of rural poverty in KwaZulu-Natal. B. Munslow *et al.* argue that for the majority of the poor who live in rural areas facing a daily struggle for survival, meeting their basic needs on a day-to-day basis is all that can concern them.³⁸² However, even in this regards, tree-growing schemes have failed as they result in the

³⁷⁷ M. Gandar and S. Forster, "Impact of Commercial Afforestation on the Rural Areas of South Africa." Working Paper No. 8 Johannesburg: Land and Agriculture Policy Centre. 1994. 27.

³⁷⁸ B. James, "Mabibi Community." 47.

³⁷⁹ B. James, "Mabibi Energy Consumption Patterns." 31.

³⁸⁰ B. James, "Gender, Development and Environments." 73.

³⁸¹ DWAF, "Towards a Policy for Sustainable Forestry Management." 36.

³⁸² B. Munslow, *et al.*, The Fuelwood Trap. 34.

accumulation of savings in the long term, rather than the short term and ongoing basis. Testimony to this is the fact that the conditions of women who operate the majority of the contract schemes have not improved in any noticeable way. Instead, from the way the contractual arrangements work out, the labour aspects have the potential to intensify men's cash income although women do the work.³⁸³ As demonstrated from G. Cellier's study which demonstrated that while many woodlots are contractually owned by men, they are actually worked by women. SAPPI's Project Grow has more women than men growing trees (about 75 per cent) compared to 35 per cent for MONDI's Khulanathi.³⁸⁴ As a result, there is potential for intra-household conflict and for women to become further disadvantaged. The incidence of some women being disadvantaged is a disturbing reality that must be taken very seriously. As a result of the inherent gender in-equalities in communal tenure, women may work the woodlots but risk having the money taken away from them by their husbands (or male heads) on the basis of ownership of the land on which the trees were grown. Besides the social impacts of the schemes, environmental issues are also a major cause for concern in this sector.

Environmental activists strongly believe that the schemes are more detrimental than beneficial to rural communities and their environments. These also propose that the negative socio-economic effects of the schemes override their proclaimed benefits, and conclude that the small grower schemes are not worthwhile.³⁸⁵ This criticism is understood in the light of the fact that sustainable development should enhance community livelihoods by providing means for people's immediate and short-term needs without destroying the long term.³⁸⁶ Project Grow failed to protect the source of basic rural livelihoods, that is, the environment. No regulatory measures or control mechanisms were put in place by either the government or agribusiness to ensure that growers comply with environmentally sustainable practices. This lack of control led to trees being planted closer to rivers, river sources and wetlands had an untold effect on down stream water availability. Areas of rare grasses and rare shrubs were also cleared for tree growing leading to encroachment on the natural woodland (shrublands and grasslands) significantly disturbing the natural ecosystem. SAPPI realised the need for an environmental audit system. It was first implemented on growers' plots as late as 1997, when more than ten thousand hectares had already been planted to exotics.

The role of afforestation on stream run-off and ground water levels has been high on the agenda of environmentalists. There are also conflicts between small growers and the state over the application of the Afforestation Permit System (APS). KwaZulu as a former

³⁸³ R. Cairns, "Small Grower Commercial Timber Projects." 24.

³⁸⁴ G. A. Cellier, "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots." 73.

³⁸⁵ R. Carrere and L. Lohmann, Pulping the South. 46.

³⁸⁶ G. H. Brundlandt, Our Common Future. (World Commission on Environment and Development Report) Oxford: Oxford University Press. 1987, 43.

'homeland' did not have the permit system until very recently, (1998) with its enforcement beginning in 1999. Initially, the state's efforts to impose the APS on commercial woodlots were ignored and resisted. However, the emerging farmers need assistance to be able to complete the APS application forms and undertake an environmental impact analysis. In 1991, there was a request that the state's APS permit system should exclude plantations below ten hectares. The state refused this request because it realised that numerous small plantations in a catchment can add up to a large forestry development with a major collective impact on run-off. M. Gandar and S. Forster suggest that the answer lies in developing two categories of timber grower within the APS and setting a certain amount of permits aside for each. In this way they argue that the small grower is not burdened with the same application constraints as the large companies, but is nevertheless sufficiently regulated to prevent the over-allocation of water resources.³⁸⁷

Agricultural economists and academics are also critical of these tree-growing ventures. They condemn the schemes on the basis of their inherent weakness and inability to uplift rural communities. According to calculations by B. de Laborde, the claimed employment effect of timber is much less when compared to the employment effect of, for example, sugar schemes by small growers.³⁸⁸ In fact timber giants have adopted the contracts as a cost saving mechanism. J. E. M. Arnold, correctly points out that for big companies, contracting is rated together with partial mechanisation and improved utilisation of men and machines as a way in which big companies set out a continuous effort to increase labour productivity as a part of the process of containing costs.³⁸⁹ He contends that far from being inspired by the need to "develop" remote communities and give them a source of livelihood, contracts represent:

A new model of labour use in forestry operations which forms part of a wider process of spinning off operations that can be better carried outside the company, so that the latter can concentrate on its core business.³⁹⁰

The tree-growing schemes are also criticised for the entrenchment of dependency relationships on agribusiness by growers. The schemes have failed to demonstrate an ability to improve the lives of the participants is very important. In this regard, the income gained and its use by growers becomes one way to judge the viability of Project Grow. R. Cairns argues that there is, potentially, a reasonable profit for the small-scale commercial timber grower. A survey of growers in all three schemes showed that the net profitability of timber is R2 212.40 per hectare for the first rotation. On average, the mean age at felling was six to six and half years (which is about one year earlier than the economic optimum) so the average

³⁸⁷ M. Gandar and S. Forster, "Impact of Commercial Afforestation." 29.

³⁸⁸ Personal Interview with Bob de Laborde, Hilton - Pietermaritzburg. April, 2000.

³⁸⁹ J. E. M. Arnold, "Employment and Small Business Options" 5.

³⁹⁰ J. E. M. Arnold, "Employment and Small Business Options." 7.

annual net productivity is R340 per ha.³⁹¹ S. Christie and M. Gandar argue that this level of profitability is only possible because small-growers have no land cost and do not insure their trees, bearing in mind that the price paid for timber in South Africa is actually quite low.³⁹²

The operation of the contract-based schemes often has more disadvantages to the grower, being the weaker partner in the contract. As noted earlier, the contract is largely one-sided, having more advantages for SAPPI. The contract is not an equal business contract, but reflects the imbalance of power between the growers and the timber companies.³⁹³ As G. Cellier demonstrates using the Khulanathi programme all phases in the production process are dominated by the company making it necessary to seek a new model aimed at the empowerment of growers.³⁹⁴ At policy level, the government realized the need for this policy direction and proposed social forestry in 1995 to:

... allow resource management in rural areas to be governed by the people through planning processes in which the community members have the opportunity to participate, rather than by government or other "external" agencies. This palling process becomes the central activity and the people are helped to develop the appropriate institutions to carry it out and to implement the plans.³⁹⁵

There was however no significant steps taken by the government ever since to follow up on these goals. The backtracking from RDP to GEAR in 1996 clearly demonstrated government's lack of the political will to facilitate rural development. The empowerment of rural growers therefore remained a distant goal. There was no practical effort to improve rural literacy level and resource management skills to facilitate the integration of rural communities into the mainstream business society.

Another problem that has been noted is that of grower isolation. According to S. Christie and M. Gandar, small-grower schemes suffer on two fronts. Firstly, small growers are isolated from the mainstream of commercial forestry. They do not have access to insurance, and membership of co-operatives. For example small growers from rural communities are not members of the South African Timber Growers' Association (SATGA) which is an elite organisation. Unlike SAWGU that has undergone a degree of reorientation to accommodate small-scale bark producers, SATGA has not yet opened its doors to small black farmers except expressing its willingness to accept them if they apply.³⁹⁶ Secondly, small-grower schemes operate largely in isolation from other rural development efforts (with the exception

³⁹¹ R. Cairns, "Small Grower Commercial Timber Projects." 24.

³⁹² S. Christie and M. Gandar, "Commercial and Social Forestry." 69.

³⁹³ R. Cairns, "Small Grower Commercial Timber Projects." 27 – 31.

³⁹⁴ G. A. Cellier, "The Development Potential and Impacts of Commercial *Eucalyptus* Woodlots." 71.

³⁹⁵ D. Palin, "Social Forestry in South Africa." 1.

³⁹⁶ M. Underwood, "Interview" May 2000

of the Lima project). The fear has been expressed that good arable land will be “lost” to trees, though at present there does not seem to be a serious diversion of land away from crop production.³⁹⁷ Another detrimental effect of the lack of integration of forestry into rural development is that the potential spin-offs in the form of contracting, small-scale processing, and other associated micro-enterprises are not fully developed. This problem is exacerbated by the fact that most growers are contracted to sell the whole crop to the contracting company. As a response, a number of recommendations can be proposed to mitigate these disadvantages faced by small growers. The business of managing and operating the contracts should be out-sourced to development NGOs or other agencies with a focus on client development and capacity building. The sub-contracting of Project Grow’s business to Lima in southern KwaZulu-Natal by SAPPI can be considered as a better model. Not only is Lima able to offer farmers a range of development options, but it also engages the local community in road construction, which would open up the remote areas to transport and communication networks, thereby creating conditions for rural development.

It has been suggested that the schemes have potential for increasing conflict within the community from a number of areas. Serious sources of conflict include disputes over boundaries for the individuals’ allocation of land, or between small-growers and stock-owners over loss of grazing or damage to plantations.³⁹⁸ There is profound social impact from individual tree blocks in a situation of communal land tenure. MONDI attempted to avoid this by organising afforestation in consolidated blocks which however proved not to be as successful as individual plots. It can therefore be concluded that small grower schemes have been deeply divisive in rural communities. Some factors contributing to the slow and limited development of social forestry in South Africa include the past agricultural policies that hampered the development of social forestry projects. There are no proper arrangements for ownership of woodlots by local people, or ownership arrangements were inappropriate. Support and extension services to the emergent social forestry farmers were weak. Many state-imposed rural development schemes tended to focus on a single, large project such as irrigation schemes, instead of implementing projects within the framework of integrated rural development.³⁹⁹

According to G. Leach and R. Mearns the major constraints to community-based woodlots arise from the heterogeneity of rural communities and the associated issues of land and tree tenure.⁴⁰⁰ It is also regarded as an extra demand on agricultural labour time and inputs. The loss of private land for communal use is also among the fears. TA woodlots were affected by

³⁹⁷ R. Cairns, “Small Grower Commercial Timber Projects.” 31.

³⁹⁸ M. Friedman, “Commercial Timber Production and Basic Needs.” 17.

³⁹⁹ M. Gandar, “Woodlots: A New Role.” Paper Presented at the ‘Plant for Life’ Conference, Pretoria, 1994.

⁴⁰⁰ G. Leach and R. Mearns. Beyond the Fuelwood Crisis. 66.

low participation as a result of factionalism within the community. As discussed earlier in Chapter One, political affiliation has often been a cause for disunity in KwaZulu-Natal. This leads to many operational problems, suspicions and fears. There is also an inherent lack of confidence in traditional authorities who in most cases are uneducated and therefore considered as incapable of bringing any development. The rural bureaucrats tend to over-emphasise the need to plant trees at the expense of their sustainable management.

The timber giants can still be blamed for not doing enough to make the goal of poverty alleviation possible. For instance, by providing adequate information to participants in their schemes growers will be able to use the schemes to their best advantage. The government's role should be that of providing services to the communities and to the companies as service providers to the rural communities. This it should fulfill by providing infrastructure, roads for example, to assist in this development. It is argued, even if the schemes have not been able to significantly impact on the lives of the majority of growers, they have at least managed to provide a source of income for the traditionally cash stricken and subsistence rural sector. Chapter One identifies the crisis in the rural community as that of the scarcity of alternatives. Viewed from this condition of poverty it can be argued that for the rural communities tree growing was a necessary evil. It can be said from the discussion with many growers that there is a general feeling that as a result of the absence of alternative development projects, tree growing regrettably became the only livelihood enhancing scheme available to them. For this reason, rural communities adhere to tree growing, no matter its effects on their environment. These people view government aloofness and its rhetoric about rural development (RDP) with contempt. At least, they can grow trees (thanks to SAPPI and MONDI) alongside the drudgery of their daily rural life.

Driven by their disillusionment with government, the people came into the schemes with very high hopes based on what the extension foresters and company officials had made them believe. However, the growers were soon to realise that most of the promises were not forthcoming. Yet, notwithstanding the disillusionment, there have not been any withdrawals from the scheme. The scheme represents more of a survivalist strategy in a community ridden by poverty and a dwindling supply of resources. The feeling of surrender and disillusionment can be captured in a statement by one of the first growers to join the schemes, (after about 17 years of tree growing and three harvests):

What problems? They are numerous; some we anticipated but many we did not. Yet we cannot stop planting trees. ... That is the only thing that we can get to do and at least get that small money to send children to school. It is not as

great as it was suggested but we will continue to grow trees until government comes with a better alternative...⁴⁰¹

Even where other natural resources are domesticated and grown under agricultural regimes such as woodlots and plantations for trees, these activities should not endanger other life support systems. As recognised by an American president, J. F. Kennedy in a statement quoted by I. Tinker:

Our entire society rests upon - and is dependant upon - our water, our land, our forests and our minerals. How we use these resources influences our healthy, security, economy and well being.⁴⁰²

Tree growing regimes also have the need to balance between the timber needs for companies, woodfuel needs for communities as well as other environmental concerns. Growers joined Project Grow on the basis of the persuasion of company officials who exaggerated the financial benefits that would accrue to them. Many growers joined without having known other implications of tree growing on their social life. The choice to grow or not to grow trees should be based on detailed information from the company so that it does not constitute a bribe. Many participants were not adequately informed about the costs of services provided by the company. Growers have the right to be told how difficult and expensive it will be to convert their land back to pastures or other crops. Also the grower should be made to understand how the pulp and paper industry and the market works. It should be made clear that there is no guarantee that the company will buy their trees when they are ready, if there is no market. The Government and land-based NGOs should join hands with the timber giants to research and find ways to provide multiple land-use potential within the tree regimes. Committing land to trees alone for up to seven years does not provide enough income to provide sustainable livelihoods for the growers. Multiple land-use systems should be introduced so that growers raise extra income on the same piece of land. For instance, bee-keeping for sale to both the local and urban markets could be considered within the *Eucalyptus* plots.

The government as well as agribusiness, as stakeholders, have the responsibility to warn growers about the likely negative effects of growing trees on communal land. The government should monitor and regulate the planting of trees and ensure that growers do not plant trees in wetlands or close to rivers and streams. Growers are not warned that their water supply may be affected negatively if they do not use good silvicultural and environmental

⁴⁰¹ Interview with Growers, Contractors and Company Officials at Sokhulu Weighbridge. September 1999.

⁴⁰² J. F. Kennedy as quoted in I. Tinker. The Real Energy Crisis: Women's Time. Washington, D. C.: Equity Policy Centre, 1984. 11.

practices. Sufficient mechanisms should be put in place to evaluate and audit growers' environmental practices by agribusiness. These efforts must be subject to further evaluation and audit by government or a joint committee set up by all stakeholders. Measures such as refusing to buy trees grown in wetlands and along stream banks should be considered to enforce sustainable growing methods.

It is clear that commercial tree planting by local communities does not constitute 'green gold' for growers. Instead, it has a tendency of initiating a 'green desert' scenario in which people have trees surrounding them but they do not have enough wood for energy, they do not have money, conditions of living do not significantly change for the better and water also dwindles, among other problems. However, it is difficult to dismiss rural communities' involvement in these schemes as totally destructive and therefore unnecessary and exclusively retrogressive to the aim of development. For the rural communities involved, tree growing has become a survivalist activity as often they are without any other alternative. For them choices are limited. Rural development funding as well as the political will to address rural developmental concerns is always lacking. This often translates into government aloofness to rural development and a general urban bias in development thinking by the ruling bureaucrats. The rural constituency is largely illiterate and therefore does not pose any critical challenge to ruling governments, notwithstanding the fact that they form the largest percentage of the electorate.⁴⁰³ There is need for an integrated approach to rural development. Tree growing is different from traditional food crop production in the sense that a grower cannot easily switch away from trees.⁴⁰⁴ This is one of the factors that growers did not take into consideration when they joined the scheme.

The government discussion paper on the Policy for Sustainable Forestry Management observed that government and agribusiness need to clarify complementary and mutually reinforcing roles, since both already promote forestry among farmers and communities.⁴⁰⁵ To protect the growers and empower them against possible exploitation, the government should design policy to employ and put choices in the hands of intended beneficiaries where communities and small farmers are contracted to big business. This empowers growers to be able to make sound decisions and choices. Minimizing bureaucratic processes would allow more simple and direct procedures by government officials in assisting growers and

⁴⁰³ A. A. Eberhard and C. Van Horen, Poverty and Power, 23.

⁴⁰⁴ Interview with Mike Underwood, of the Institute of commercial Forestry Research, lecturing in the Community Forestry programme offered by the school of Agriculture economics at the University of Natal-Pietermaritzburg, May 1999.

⁴⁰⁵ DWAF, "Green Paper on the Policy for Sustainable Forestry Management." Pretoria: Government Printers, 1995. 3.

ultimately facilitate rapid development.⁴⁰⁶ According to S. Christie and M. Gandar, current support and extension programmes need to be re-evaluated and re-designed. They should:

... ensure that the programmes are aligned with current rural development strategies, by pilot implementation together with the current small-farmer support and land reform pilot projects in the RDP. To evaluate the delivery system and ensure that it leads to empowerment of the intended beneficiaries and viable, self-sustaining forestry projects, and avoid ones which are dependent on government.⁴⁰⁷

Integrated rural development means that the people in every district should implement the best set of development options available to them, taking advantage of their social, economic, political and traditional institutions. The aim of integrated development should be to provide social, economic and environmental benefits to the community. Socially, rural development should lead to the provision of social amenities such as education, democratic decision making, recreational facilities, and adequate health care.⁴⁰⁸ Economic benefits should also accrue where economic activities are encouraged sufficiently in rural areas to provide job securities. These should sustainably improve the living standards of the communities by involving (simultaneously and harmoniously in development) several sectors such as agriculture, forestry, tourism and small enterprise.⁴⁰⁹ Economic activities can only take place using natural resources therefore, the challenge to rural people and government planners is to ensure that the resources base is managed in a sustainable way. Integrated development should directly focus on the environmental sustainability of activities as the communities directly depend on natural resources to secure a livelihood.⁴¹⁰ It is imperative therefore that environment planning should form the foundation upon which the overall development planning in rural areas is based.

There are several factors that suggest a strategic role for government in community forestry. There is an opportunity to contribute to the goals of the RDP and these contributions are possible even in the most remote rural situations. There is need to strengthen the capacity of disadvantaged communities and farmers to participate in development schemes initiated either by themselves, agribusiness or the government. There is a need for investment to rehabilitate degraded land and to provide the energy needs of remote rural communities. Tree growing schemes provide the opportunity to accelerate rural development through a

⁴⁰⁶ A. A. Eberhard and C. Van Horen, Energy and Power, 57.

⁴⁰⁷ S. Christie and M. Gandar, "Commercial and Social Forestry." 9.

⁴⁰⁸ M. M. Cernea, Putting People First, 89.

⁴⁰⁹ M. Todaro, Economic Development, [7th Ed.] New York: Longman, 2000. 174.

⁴¹⁰ FAO., Forests, Fuels and the Future, 59.

partnership between government, agribusiness, other stakeholders in rural development, and disadvantaged communities.

There is need for a framework to choose the most appropriate community forestry strategy in each district, based on understanding the determinants of community forestry. This should take into account the bio-physical potentials in different parts of the province. Government planners should take into account the technical factors determining the choice of systems, the economic factors at different scales, the household economy (including such things as household time budgets). It is upon these that sound policies, strategies and institutional arrangements should be developed to provide an energy strategy and livelihoods strategy for rural communities.⁴¹¹ Significant concerns that require addressing are those regarding the role of government at national, provincial and local levels, and the relationship between them in terms of community development. Appropriate models and working relationships should be established between these levels of government with agribusiness, rural-based NGOs and the traditional authorities. Traditional Authorities are particularly important in KwaZulu-Natal where their influence is strong and they have representation through the Ingonyama Trust. M. Gandar suggested that links should be established with a community committee, whose role would be to liaise closely with the tribal authority while communicating directly with the local community committee.⁴¹²

These interest groups should iron out the problems with the new APS. There is need for more awareness campaigns by concerned government departments and education by agribusiness concerning the importance of the APS. The bureaucratic delays in the issuing of permits by government should be resolved. Agribusiness views government and environmental lobby groups as antagonistic to their tree growing schemes and as a result are not supportive of the APS which they view as retrogressive to their efforts. It is imperative that these different interest groups come to a consensus about the APS issue for the benefit of the communities. The government's efforts to control the planting of alien trees in areas of environmental danger have been limited by the nature of nurseries in the province. There is a high proliferation of private nurseries in the province supplying alien trees. The government cannot easily control the supply of seedlings because many of the nurseries in the province are privately run.

In conclusion, it is clear that the advantages from commercial tree planting by local communities do not outweigh the negative effects associated with them. Indeed it has a tendency of initiating a 'green desert' scenario in which people have trees surrounding them

⁴¹¹ R. Chambers. Whose Reality Counts?: Putting the Last First. England: Longman, 1997. 73.

⁴¹² M. Gandar, "Wood Requirements for Rural People." 23.

but they do not have enough wood for energy, they do not have money, conditions of living do not significantly change for the better and water availability also dwindles, among other problems. However, it is difficult to dismiss rural communities' involvement in these schemes as totally destructive and therefore unnecessary and exclusively retrogressive to the aim of development. The rural communities have no other choices to them given government aloofness to rural development and the general urban biases in development thinking of the ruling bureaucrats. There is need for an integrated approach to rural development. Various stakeholders should come together to regulate the operation of the schemes and introduce other dimensions, which are out of the scope of the operations and limits of the timber giants.

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B Interviews

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Bob De Laborde (Agricultural Economist), 10 Committee Lane, Hilton 3245, South Africa, Bdelaborde@altavista.com

Chairman of the Local Rural Development Committee in KwaKhoza village, Eshowe District. August 1999

Cooper, Kieth The Chairman of the Wild Life Society of South Africa, a Durban-based environmental lobby group.

Gumede, Bheki The current (1999-2000 when the research was being carried out) Project Grow Manager. Several discussions and follow-up interviews were carried out with him between October 1999 and June 2000. The main interview with him at the Sappi-Kwambo offices in May 2000 was recorded in full and is in appendix 5.

Mkhize, Z: A councillor and former member of the government of the former KwaZulu 'homeland' administration. A very long discussion was made which covered a variety of issues ranging from socio-economic, political, environmental and others were discussed. September 2000

Mkhize (*iNduna*) and *iNkosi* Cele, Mahlabatini District, Ulundi. September, 1999.

Kruger, Erna: An Agro-forester employed by the Farmer Support Group, a unit affiliated to the Center for Rural Development Systems, under the School of

- Masuku, Siphosiso: Regional Manager, Community Forestry for KwaZulu-Natal in the Department of Water Affairs and Forestry. Several discussions and follow up interviews were held with him. At the time when this research was under way (1999-2000) he was based at the DWAF offices in Eshowe, the Northern Region under the KZN Community Forestry Directorate. A number of field trips were carried out together with him.
- Mkhize (Ms): A rural tree grower under the Project Grow scheme at Edlebe village in Nongoma District, Zululand who runs a harvesting contract, July 2000.
- Mncube, Dinga: The General Manager of SAPPI Forests (Zululand) and has direct responsibility to the running and operations of Project Grow. B. Gumede reports directly to him. An interview and a number of discussions were carried out with him between May 1999 and October 2000. He also made several addresses and presentations on open days and other occasions which shed light to a number of issues and official position of the company as regards Project Grow and its participants.
- Ncogo, Moffat: He was the first Forestry Extension Officer in the KwaZulu-Natal region who first served under the Agriculture and Forestry Department of the former KwaZulu Government from 1980 till 1994. After the transition in 1994, he joined the Provincial Community Forestry Directorate's Office under the National Department of Water Affairs and Forestry until his retirement at the end of May 2000.
- Thornhill, Marita: Employed (at the time of research 1999-2000) by the Department of Environmental Affairs in the KZN provincial offices in Pietermaritzburg is responsible for Forestry Legislation. She had a lot of interest in the regulation of small holder timber growing activities and help organised numerous symposia and conferences to address this issue.
- Underwood, Mike: A Lecturer and Community Forestry Co-ordinator, Forestry Programme, School of Agricultural Science and Agribusiness, and Researcher at the Institute of Commercial Forestry Research, University of Natal-Pietermaritzburg.

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Group Interview 1 (Discussion) with a women on their return trip from a wood-collection expedition in Edlebe village, Nongoma District. November, 1999.

Group Interview 2 (Discussion) with Growers, Contractors and Company officials at Mondi's Sokhulu Weighbridge. February 2000.

Group Interview 3 (Discussion) with female growers found at SAPPI's Pulp and Paper Mill at Mandini, March, 2000.

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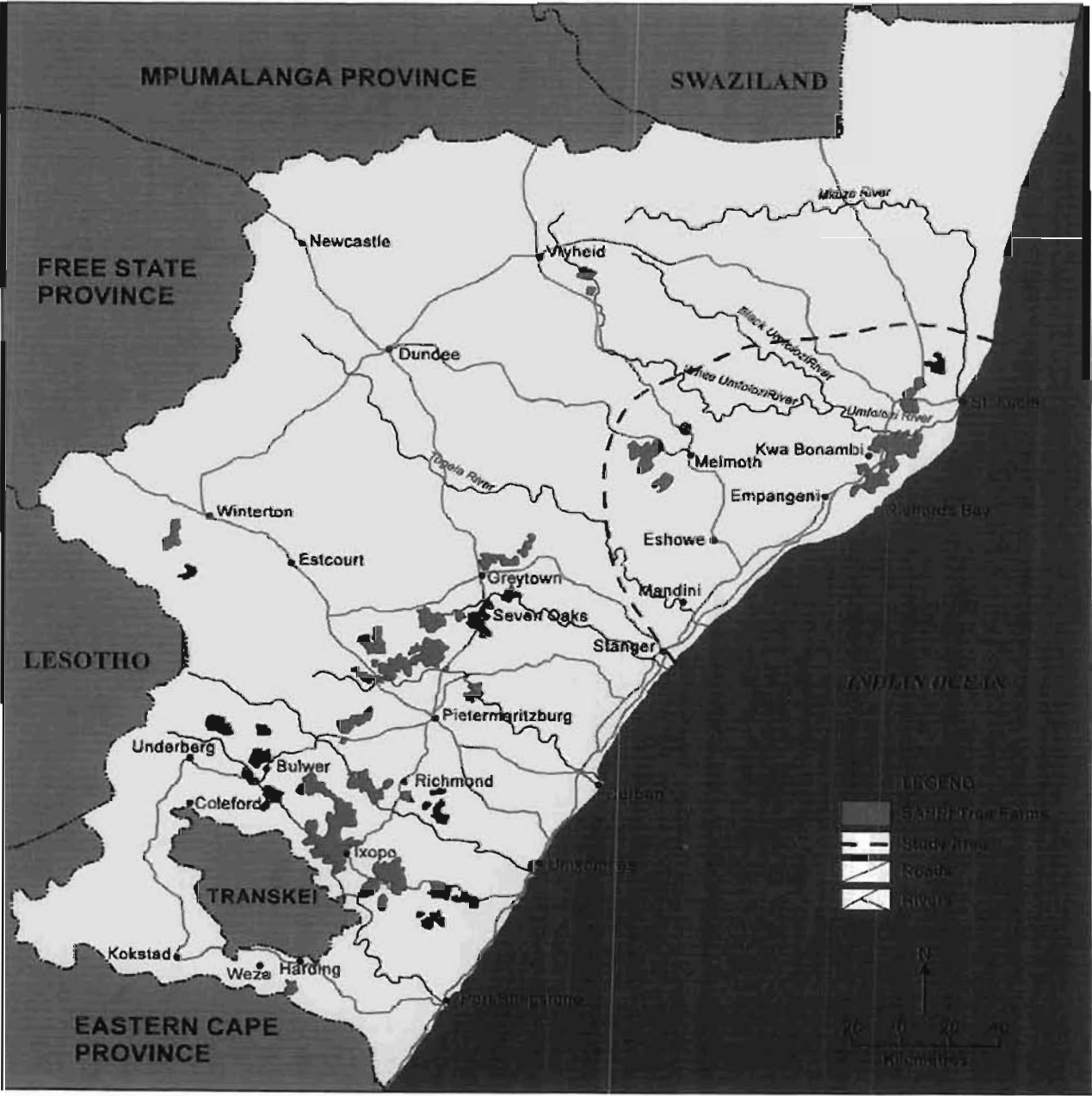
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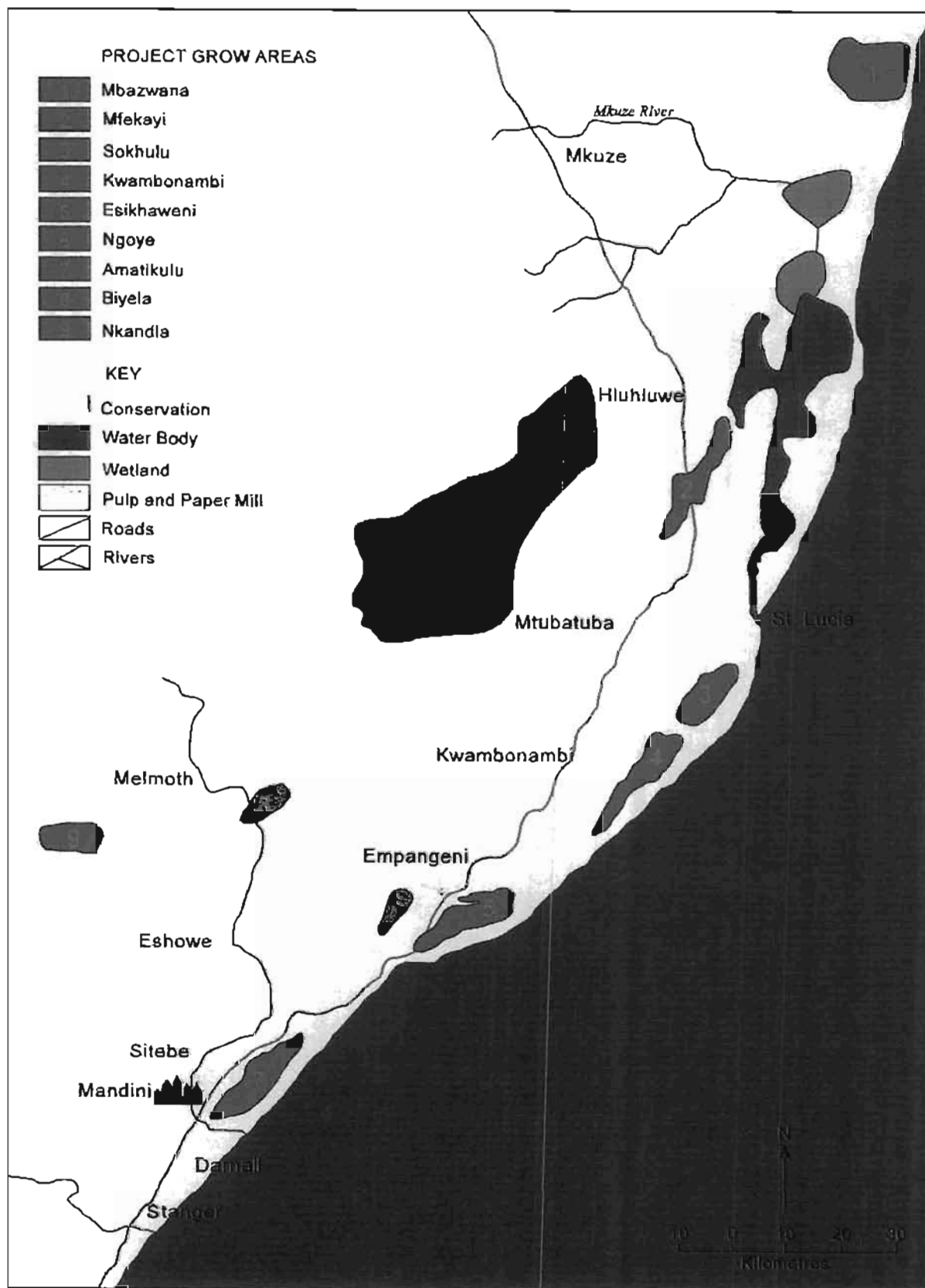
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Map 1 : Tree Growing Areas in KwaZulu-Natal.

Appendix 2



Map 2 : Project Grow Areas in Northern KwaZulu-Natal.

Appendix 3
The Agreement Between SAPPI and the Growers¹

AGREEMENT

Between

**SAPPI FORESTS (PROPRIETARY) LIMITED (hereinafter Sappi) and the Small
Timber Growers in KwaZulu-Natal (hereinafter) Growers.**

1. BACKGROUND

- 1.1 Sappi has established a fund to assist small Timber Growers in KwaZulu-Natal.
- 1.2 The Grower has applied for financial and other assistance from Sappi to afforest certain portions of the property referred to in 1.3.2.
- 1.3 The Grower's Application for Assistance is annexed hereto marked "A". This consists of:-
 - 1.3.1 personal details for the Grower, Marked "A1";
 - 1.3.2 the full description and details of the property to be afforested, marked "A2" (hereinafter referred to as "the property");
 - 1.3.3 details of the assistance required by the Grower and the number of planting spots to be planted marked "AS", and
 - 1.3.4 the applicable Tribal Authority's consent marked "A4".
- 1.4 Sappi has inspected the property and has undertaken to assist the Grower financially and technically afforest certain portions of the property.
- 1.5 The Grower has agreed to sell to Sappi and Sappi has agreed to buy from the Grower all the timber emanating from the afforested areas of the property when such timber reaches maturity.
- 1.6 The parties wish to record the terms of their agreement in writing.

2. DURATION

Notwithstanding the date of signature hereof, this agreement shall deem to have commenced on _____ and shall continue in operation until all the timber has been removed from the afforested areas of the property and the Grower has repaid the full amount of his indebtedness in terms hereof to Sappi.

¹ This is a typed version of the original copy of the agreement that characterised the relationship between SAPPI and the growers between 1985 and November 1999.

3. ASSISTANCE

- 3.1 Due to the difficulty in measuring the area of the property to be afforested, the area and corresponding advance payments to be made by Sappi to the Grower shall be measured and calculated per 1000 planting spots.
- 3.2 Sappi undertakes to assist the Grower to establish an initial area of _____ planting on the property as specified in annexure "A" below.
- 3.3 Sappi will supply free of charge, sufficient seedlings for the initial number of planting spots agreed upon in terms of 3.2 hereof.
- 3.4 Sappi undertakes to supply fertilizer and other assistance for the initial establishment of plantation on the forested area as more fully set out in annexure "A3" attached hereto.
- 3.5 The full amount of the Grower's indebtedness to Sappi based on the Grower's Application for Assistance is set out in Annexure "B" attached hereto.
- 3.6 At all reasonable time during the currency of this agreement, Sappi will, if required by the Grower and subject to Sappi's agreement and consent thereto, supply additional seedlings, fertilizer, technical advice and any other assistance agreed upon by Sappi. The amount of such additional assistance will be added to the Grower's initial indebtedness in terms hereof.
- 3.7 Any subsequent financial advancement in terms of clause 3.6 will only be given once Sappi has checked and confirmed that the initial establishment of afforested areas has been satisfactorily carried out by the Grower.
- 3.8 Sappi will submit to the Grower a statement of his annual loan account once per year.

4. THE GROWER'S OBLIGATION

4.1 The Grower:-

- 4.1.1 shall undertake all planting silvicultural practices and felling strictly according to Sappi's prescription and in accordance with Sappi's forestry practice.
- 4.1.2 shall allow the members of the KwaZulu Department of Forestry and/or the Department of Water Affairs and Forestry (where the property is situated within the KwaZulu homeland) and/or the South African Department of Environment Affairs, and authorised employees and technologists of Sappi, to inspect the afforested areas of the property at any time during the duration of this agreement.
- 4.1.3 shall discharge the amount of the Grower's indebtedness to Sappi in terms of the agreement by setting off the amount thereof against the purchase price of the timber which will become payable by Sappi to the Grower in terms of clause 5 hereof for timber which is harvested from time to time.

- 4.2 Shall notwithstanding anything to the contrary contained in this agreement, repay the total amount of his indebtedness to Sappi within a period of 12 (twelve) years from the commencement date of this agreement.
- 4.3 Shall sign the statement of his indebtedness to Sappi on annual basis.

5. PURCHASE AND SALE OF TIMBER

- 5.1 The Grower shall sell all timber planted on the property pursuant to this agreement to Sappi and to no other person whatsoever, when such timber in Sappi's opinion, reaches maturity and Sappi agrees to purchase the timber.
- 5.2 The price payable by Sappi for the timber purchased in terms of clause 5.1 shall be the ruling local market price paid for types and quality of the timber in question at the time the timber is felled, having regard to the purpose for which Sappi wishes to use the timber. Should the parties hereof, fail to agree on any of the date on which Sappi gives the notice to the Grower that wishes to purchase the timber described in clause 5.1 upon the price payable by Sappi for such timber shall be the delivered pulpwood prices then payable by the Tugela mill or the Sappi depot nearest to the Grower.

6. BREACH

Should the Grower breach or fail to comply with any terms and/or condition of this agreement, then the Grower's entire indebtedness in terms of this agreement shall, notwithstanding anything to the contrary herein contained, immediately become due owing and payable in one lumpsum by the Grower to Sappi upon demand thereof by Sappi.

7. CESSION

- 7.1 As security for the due fulfilment by the Grower of all his obligations in terms of this agreement, the Grower hereby cedes, assigns, transfers and makes unto and in favour of Sappi all his right, title and interest in and to all amounts which will become owing to the Grower in respect of timber emanating from the afforested areas of the property in the event that the Grower breaches his obligation in terms of clause 5.1 hereof and sells such timber to a third party.
- 7.2 This agreement shall constitute written authority to any third party which timber has been sold in terms of this clause 7.1 to give effect to the terms of this clause and the Grower consents to the payment of proceeds of such timber being made directly to Sappi.

8. TRANSFER OF RIGHTS

8.1 The Grower shall not be entitled to cede, delegate, assign or subcontract any of his rights and/or terms of this agreement to any person or entity other than one which succeeds the Grower as the Registered owner of the property without the written consent thereto Sappi being first had and obtained which consent shall not be unreasonably withheld.

8.2 The Grower:-

8.2.1 shall procure that the provisions of this agreement are binding upon all successive registered owners of the property including the Grower's heirs, curators and/or executors, until expiry of Sappi's rights in terms of this agreement; and

8.2.2 shall not be entitled to sell or alienate the property or any portion thereof to any person or entity unless and until the Grower shall first have delivered to Sappi may reasonably require of any such successors-in-title that he or it is bound by the provisions of this agreement.

9 NOTICE

All notices to be given to the Grower by Sappi in terms of this agreement shall be delivered to the Grower personally or by placing it in his home.

10 JURISDICTION

The Grower hereby consents and agrees in terms of section 45 of the Lower Courts Act, 1944 (as amended) that Sappi shall be entitled, but not obliged, to institute any legal proceedings against the Grower which may arise out of or in connection with his agreement in any Magistrate's Court having jurisdiction over the person of the Grower's claim might otherwise exceed the jurisdiction of such court.

11 ENTIRE CONTRACT

This agreement constitutes the entire contract between the parties hereto regarding the subject matter of this agreement, and the Grower has not been induced to either, or influence to entering into this agreement by any understanding, representation of statement not recorded herein.

Appendix 4

Table showing studies² on woodfuel use, demand, supply and shortages in different areas of South Africa.

Author	Document Title	Area of study	Year
Aron, J., Eberhard, A. and Gandar, M.	Demand and supply of firewood in the homelands of South Africa.	General	1989
Auerbach, R. Gandar, M. V.	Energy and small scale agriculture	General	1989
Bembridge, T. J. Tarlton, J. E	Ciskei woodlot survey and wood fuel strategy	Ciskei	1988
Best, M. G.	Consumption of energy for domestic use in three African villages	General	1979
Bennewith, D.	Fredville Area	Fredville	1989
Borchers, M. L. Eberhard, A. A	Household energy supply and price trends	General	1991
Eberhard, A. A.	Energy use, problems, and supply strategies for underdeveloped areas in Southern Africa	General	1984
Eberhard, A. A. and Gandar, M. V.	Energy, poverty and development in South Africa	General	1984
Eberhard, A. A.	Energy consumption patterns in underdeveloped areas in South Africa	General	1986
Eberhard, A. Dickson, B. Pouris, A.	Household fuel transition patterns in Bophuthatswana	Bophuthatswana	1989
Eberhard, A. A.	Energy consumption patterns and supply problems for underdeveloped areas in South Africa	General	1990
Eberhard, A. A. and Dickson, B. J.	Energy consumption patterns and alternative energy supply strategies for underdeveloped areas of Bophuthatswana	Bophuthatswana	1991
Eberhard, A. A. Gandar, M. V. Aron, J.	Fuel deficits in rural South Africa	General	1991
Energy Research Institute, UCT	Energy for underdeveloped areas – Conference	General	1984
Gandar, M. V.	Firewood in Kwazulu: Quantities and consequences	Kwazulu	1984
Gandar, M. V.	Comparison of the environmental impact of different energy sources	General	1987
Gandar, M. V.	The History and experience of woodlot for fuel wood production in Southern Africa	General	1988

² NB: This table is not a complete listing of all the studies carried out in South Africa on the subject. It is but just a collection of a few of those studies that the author had access to. It is also interesting to note that the heyday of these reports was in the 1980s and little was written after 1994. This was the time of the biomass initiative when there was a lot of interest in looking for solution to both wood fuel scarcity and environmental degradation, particularly, that accompanied by or as a result of deforestation.

Gandar, M. V.	Integrated energy planning for Natal/KwaZulu	Natal/KwaZulu	1989
Gandar, M. V.	Energy planning-position paper on integrated energy for Natal/KwaZulu	Natal/KwaZulu	1991
Gandar, M. V.	Domestic energy used by farm workers living on commercial in Natal and Transvaal	Natal and Transvaal	1992
Griffin, N. J, Banks, D; Mavrandonis, J; Shackleton, S.E; Shackleton, C.M	Household energy and wood use in a peripheral rural area of the eastern Transvaal lowveld	Eastern Transvaal	1992
James, B.	Mabibi Community- a socio-economic study	KwaZulu	1991
James, B.	Mabibi energy consumption patterns	KwaZulu	1993
Kennedy, H. M.	Energy audit of the rural community of Cottendale in Gazankulu	Gazankulu	1990
Kotze, I. A. and R. P. Viljoen.	An integrated energy provision strategy for the developing sector.	General	1992
Leach, G and M. Gowan.	Household energy handbook – World Bank Technical Paper No. 67.	General	1987
Le Roux, P. J.	Fuelwood requirements of rural populations in South Africa	General	1984
Lund, S.	Herschel energy study		1991
Marker, M. E., M. E. Gabarone, and T. H. Lichaba.	Fuel consumption in the Ciskei: a preliminary survey.	Ciskei	1979
May, J., Godijn, R. Luckin, L. and Nkala, B.	An indepth evaluation of fuel use by rural women in the Ingwavuma district - KwaZulu.	Ngwavuma - KwaZulu	1992
McCall, M. and M. Skutch.	Measuring rural energy consumption - with special references to domestic end-uses.	General	1989
McLintock, S.	Integrated rural energy strategy for the Upper Tugela location - KwaZulu.	KwaZulu	1988
Viljoen, R.	Gannalaagte/Kopela energy study.	Gannalaagte - Kopela	1992
Ward, S.	Review of rural household energy use research in South Africa	General	1995

Source: Compiled from various studies.

Transcript of a Discussion with Mr B. Gumede, the Manager of SAPPI's Project Grow at SAPPI-KwaMbo Offices the 12th of May, 2000.

I. What have been the major operational or focus changes in Project Grow since its inception?

There have been many changes. Increased demand from the community to grow trees has prompted better organization on the part of the company. Initially, the company envisaged participation of rural communities within 30 to 50 km around Mandini Mills. The increased demand forced the company to involve communities further afield, and currently the furthest grower is more than 300 km from Mandini, however they supply their timber to MONDI Park Mill which is nearer them (following an agreement discussed below).

There is something that one has to be clear about. Even at inception, the focus of the scheme was to assist communities and this is still part of the focus apart from running it profitably. People in areas of Kwambonambi and Sokhulu and other areas surrounding depots and mills had for long been involved in tree planting. SAPPI and GEMCO took advantage of this history and initiated social involvement and the idea of supported woodlots was muted. The company understood the poverty that harasses the people in the area. However, you cannot give money to solve people's problems, you rather give a chance to make money and help people solve their own problems. It is not true that the company promoted *Eucalyptus* growing by the communities so as to boost its supply of timber in its pulp and paper mills. At that time, in the early 1980s, the demand of timber was not very high and we had access timber and we were self-sufficient. SAPPI had just bought more properties and some of the plantations had started to be harvested.

This is why there was chaos later during the mid 1990s when there was a fall in demand of South African pulp on the Asian market as the prices of Chile and Brazil produced timber was priced much lower than what we could afford to sell at. In 1995/1996, demand went down, as never preceded before. The price of pulp went down when other competitors entered, Taiwan, Japan, Indonesia, Brazil and Chile. Taiwan for example, was supplying the market at about the equivalent of R400/ton, and this compared badly with SAPPI's pulp that was being sold at about R900/ton, which was more than double what the price of South African timber. However, even in these bad times we stood by our growers. In any case, by that year growers were not supplying any big enough quantity to cause a supply upset and to become a threat to plantation timber. We encouraged those who were not contracted to us so that we could buy their timber. This was only a way that we could come to know what exactly how much timber we had in growers' fields and in our plantations that was ready for harvesting, so that the harvesting process could become systematic.

It is true that growers went to the streets and to the press about unharvested or uncollected timber in this time. These were not growers contracted to SAPPI but to MONDI. SAPPI never had a problem with accommodating their growers' harvest. However, we were unable to take the timber of those who were not registered with us because we had not planned for their crop. We however encouraged them to join our scheme first before we could buy from them. We have a clear agreement and section 5.1 of our contract with growers clearly stipulates that SAPPI is legally bound to buy from the grower as when it deems the crop

mature enough for harvest. Even though the contract says that maturity will be determined by SAPPI, this does not mean that the company will manipulate this. Technically, *Eucalyptus* matures in 7 years, and by the 8th year they should be harvested, if they are not by the end of it, then it becomes a problem. I would assure you we do not have any woodlot that lived to the eighth year because by the time the seventh year is reached, the grower is already anxious to harvest.

The contract remains in force for two rotations, that is, for at least 14 years. We do not have cases of withdrawing growers yet, given that there is no other alternative besides sugar. Sugar is more labour intensive and demanding for the growers, so the coming of timber gave them at least a second choice.

2. **In terms of production costs what have been the major changes? Can one say, the changes are designated more to the profitability of the grower?**

There has been a 1 to 2 per cent increase in the production costs, to make up for inflation. 1986 people were prepared to work for R6/day, now no one can do that. Casual labour now costs in average between R 25 and R 30/day.

We however offer a *Voorskot*, that is, a bonus check we give at the end of each year to growers so as to encourage them to look after their plots well. This check's timing is made such that it coincides with Christmas holiday and families can have a treat. The check is given as a loan payable upon harvesting. It is a small way of encouraging the growers to look after the woodlots; weeding, firebreaks and so forth. It was found out earlier that lots were little cared for and this would increase the risk of fire.

Some of the changes include the fact that the loan has increased every year in line with inflation. Particularly because we do not give money in cash but buy fertilizer for them and charge it on the grower's account. The only money receive in cash is that which goes to pay contractors for work done on the plot. The price for the trees is determined by the market. However, when there is very high demand for pulp we adjust the price to the grower upwards. The company does not however, reduce the year's price in cases where there is a fall in the market in the course of the budget year. Price to the grower is also adjusted upwards for those much further away from either a depot, weighbridge or mill. This is the case in the north, KwaNgwanase area where timber is bought from the grower about R20 more than for the growers at Sokhulu or KwaMbonambi, for instance.

There is a very recent discovery and study done by specialists that has shown that with adequate land preparation, *Eucalyptus* trees do not need any fertilizers. Given that fertilizers were a substantial investment, withdrawing them would definitely mean reduced production costs therefore provide a chance for saving for the growers.

Talking about changes, there is yet another radical change that is in the pipeline. We are focusing on empowering associations to be able to run the schemes on their own without day to day forester involvement. This development is envisaged to work positively both ways. Firstly, by imparting managerial and operational knowledge to the rural communities constitutes capacity building which is a very essential investment into the rural economy. Secondly, for the company this means that it concentrate its small contingency of Project Grow foresters on knew growers and communities. Those who would have learnt would run

their own plots and just consult on special occasions. (**Does this not constitute of a tactful withdrawal plan?**) You may want to think its a withdrawal plan, but I assure you this is done in the best interest of the grower and of business. By concentrating on new growers and leaving old growers, this also means the company will save and at the same time the grower has acquired knowledge.

3 What are the main production complexities that work against the grower?

Timber growing is very adaptable to rural farming systems, however, felling and transportation remain a big problem. Some of the problems in harvesting and transportation are further compounded by the fact that the roads are so bad where they are provided and some of the trees are grown in very steep land. Accessing such trees and shorthauling them to roadsides for transportation to depots becomes a major draw on potential profit. We had approached the provincial government even before 1994 for the roads to be improved. Mr M. G. Buthelezi, then a Chief Minister in the former KwaZulu government, promised that once people were involved in income generating projects he would put in feeder roads as he "would not construct roads for monkeys to play in". These promises were never fulfilled by the former KwaZulu government. Even after the elected Government of National Unity (GNU), the provincial government and national government have continued to pay lip service to the provision of infrastructure which would facilitate rural development in this area. This is not still forth coming. At a meeting held in December 1999 with the growers attended by Honourable Minister Dr. S'bu Ndebele, in the Natal Midlands - Mapumulo district, promised to make the responsibility of road construction his own 'child'.

We are trying to encourage growers to form associations which in the mean time are chaired by the local chief within each village. The purpose of these associations is, among other things, aimed at saving money towards felling/harvesting technology and transport. Each village has its own association and chiefs are involved, largely because they are growers themselves. There a special case of Chief Mtiyane in KwaMbonambi village, who is not a grower but is actively involved in the association of that area. It was found that excluding him would make him feel excluded from his own people. There are only two chiefs who are not growers in all areas involved in the scheme. Initially, chiefs allowed their subjects to grow trees as they were not sure about the potential of trees and they were also not certain about the company's interest in their areas. As a result the first growers allocated small areas of their land to trees. The average woodlot by 1989 was about 0.5ha, but after the first harvest in 1991-1992, woodlots increased not only in number but in size and the average woodlot by 1995 was 1.5 ha and by 1999 it was close to 3ha. After the first harvest people went to the chief with little presents and some small amounts of money to thank the *iNdunas* and the *iNkosis* for having allocated them land to grow trees. This was done when they noticed that the schemes were profitable. Chiefs began to grow, putting a lot of land to trees. An *iNkosi* in Mbazwane for example, has above 80ha of land to trees for himself.

4 How has the company assured and promoted continued profitability of the scheme in the face of rising production costs?

It is difficult to prove this. We have however, tried our best in this regard by paying the market price for our growers. Trees grown under the scheme have slightly less production cost/tree when compared to trees from our plantation sector. So by buying trees from the different sources at the same price means that project trees earn higher profit. It is however,

important to note that market price does not always cater for inflation. We also pay relatively more than MONDI pays their growers. (MONDI pays R154/ton while SAPPI pays R163/ton).

5 How much emphasis do you put on tree production, as compared to high productivity in terms of tree growth?

I am not sure if I understand this question well, however, what I can tell you is that we also put great emphasis on the quality of our trees. However, our prices are not based on quality, but one should realize that good quality gives bigger volume. This means that in a way that one is likely to get more money from a small tree-area.

Growers are allocated different sizes of land so stock should be good quality for those with relatively much smaller pieces of land, to make the project worth their while. The Mill has its specifications so we cannot just buy any timber because the grower is contracted to us. We have had growers we have stopped from growing *Eucalyptus* because their land was not suitable for that venture. The affected growers are those near the University of Zululand in the area called KwaDlangezwa as its soil types and dry climatic conditions are not compatible with tree growing. These growers were bound to lose by engaging in tree growing. We do not just attract growers so we can claim large numbers. We also consider the returns from such ventures.

The land and climate can work very badly against the quality of timber. This also impacts negatively on us as we are forced to write off the debt accrued in investing into such areas. The growers in such areas have not even up to now, returned that land to anything else. The land is just not good for anything. What could be done on such land when the rains are good is to graze livestock. Forcing that land to tree production implies a much longer growing period, (9 to 10 years) which makes the venture a liability for both the company and the grower.

YEAR	GROWERS	AREA IN HECTARES
1983	3	8
1989	970	1380
1993	1645	3360
1999	3122	9469

Growers Register as at December, 1999.

After 1994 there was a new pattern in terms of grower land allocation for trees. More land began to be put to trees by a single grower than before. This meant that the average land per grower increased. This trend was a result of rising confidence after the first woodlots began to pay off. This continued until the end of 1998. In 1999, the emphasis and enforcement of the Permit System by the Department of Water Affairs and Forestry in conjunction with Environmental Affairs initiated a drop in number of growers. However, for us the impact was not as bad because we had already begun to apply for permits much earlier, as a result 1999 had the biggest ever area to be planted in a single year. If it was not for the permit requirement in 2000, we anticipated to double the figures from those of 1999.

6 Given that trees alone would not meet other needs of the rural people, and that the company has an interest in developing rural communities, has there been any effort in multiple land-use activities, (agro-forestry)?

We have done our best as a timber company in this regard. We have encouraged our growers to graze their livestock in the woodlots, at least, after the first 2 - 3 years of planting. *Eucalyptus* has an advantage for stock-owners unlike wattle, which can be eaten by cattle and goats. However, if the trees are narrowly spaced after the third year there will be little grass growing for cattle grazing. This, is so in theoretical terms, but in reality, grazing land is set aside and left without trees. As growers fence their woodlots for the sake of boundaries and other reasons, there is not much grazing that happen in the woodlots.

In other areas, woodlots or not, the grass that is there, the *Ngongoni* grass is very hard and stock farmers have discovered that it affects animal teeth. Allocation of land for tree growing has been very careful in those areas which have livestock farming as the main rural economic activities. These areas include KwaNgwanase and Mbazwane. Stock farmers who are not growers were not affected. There is however a very popular incident in the early 1990s where school students pulled out trees planted by MONDI on a block woodlot of about 200ha. This was not a result of reaction of stock farmers. This was a question of misunderstanding and lack of communication between the company and the village authorities. The chief had not been consulted as well as non-growers in the area. It is very unlikely that these young males were worried about the future of land availability for them as other commentators have made it appear.

We also encourage growers to plant beans, mealies, peanuts and sweet potatoes in between well-spaced rows, particularly in areas where there is water. This will also help in the controlling of weeds. Currently we are engaged in the process of learning and acquiring knowledge about more possible crop options that could be successfully and profitably mixed with *Eucalyptus*. Some research is under way on the possibility of planting mushroom which could be sold into the lucrative hotel industry and also provide food for the communities. Already we are encouraging growers to keep bees for their honey product, but we have not identified a market for it yet. Our other fear with the bees option is that unsustainable harvesting, by use of fire and smoke, could become a source of fire hazard to the woodlot. Besides, traditionally people think bees can just turn against you at any point and fight against you, so they can not be trusted. Thus there is also the challenge of convincing the growers on the economic potential as soon as more information on bee farming and honey markets become available.

We are however limited in this area as we are a pulp and paper industry and not an agriculture company. This is why we have sub-contracted a non-governmental and developmental organization, LIMA, to take care of Project Grow in southern Zululand. LIMA has done well in this regard. (*See discussion on the operation of LIMA below*). The company would be happy if anyone or the government were come and further assist our growers. We welcome any assistance that can be given to growers to improve their livelihood and standards of living.

7 Do you think promoting agro-forestry would in any way jeopardize the timber needs of the company?

Not in any way. Just as I have mentioned, we are interested in promoting sustainable livelihoods for these communities. We are doing our best in this regard and would welcome other positive engagement in this area. We are capable of providing enough timber for our mills from our plantations, we only wish to give an opportunity for communities to make a livelihood, so if they can make better livelihoods somehow, and somewhere else, we would have no problem with that. Criticizing us for not providing this facility is like rebuking someone for having not donated more than he or she did.

8 How does LIMA operate and relate to SAPPI?

Lima operates the same way as us. It is a branch of Project Grow that is being administered by an NGO. The main difference is that it maximizes its profits by using all other opportunities that come up and that have potential. They are more flexible in the sense that where they find that the land is more suitable and production per hectare of land would be higher and more profitable by introducing other agricultural crops than forestry, or fruit trees they do that.

9 How serious is fire as a problem and threat to Project Grow?

It is difficult to estimate the threat of fire to any tree growing economy. Fire is an imminent danger to Project Grow. We have diseases but fire is more dangerous and problematic. We have been lucky in both regards as we have never had any serious disease or fire outbreak. Diseases remain minimal and marginal here in KwaZulu-Natal. We have just learnt that some of our areas like Port Danford, for example, have more optimum growing conditions for *Eucalyptus* growing even when compared to Australia where they grow naturally as indigenous trees.

As regards fire, we have really been very fortunate. We have only experienced mild outbreaks. Very small fires but out of this area that you are focusing at. The fire affected a couple of woodlots just outside Eshowe at Mlalazi on the way to Ulundi. The loans were written off to the growers, and the company also moved in quickly to cut the crop that was almost ready before it was burnt. Affected trees were cut quickly and managed to coppice.

I think we can owe the absence of fire in the schemes to the rural authorities who exercise strict control over burning of fires by individuals. For one to burn weeds in the fields, it is mandatory that at least the *iNduna* knows and sanctions it. They will first make sure that you have taken enough precautionary measures without which one is subjected to a fine payable to the *iNkosi* even if no danger has been caused to forests. However, this should not be cause for complacency as the woodlots represent a lot of investment both on the part of the company and on the part of the growers. In KwaNgwanase where plantations are much bigger, a fire would cause untold harm.

10 Do you have situations where you had growers trees or woodlots affected by fire and under such circumstances how do you assist the grower?

On very few occasions, yes. Very small fires but out of this area that you are focusing at, and this was in 1992 when we had fire outbreaks in the Natal midlands. As stated earlier, very mild fire outbreaks also affected a couple of woodlots just outside Eshowe at Mlalazi on the way to Ulundi. The loans were written off to the growers, and the company also moved in quickly to cut the crop that was almost ready before it was burnt, particularly that which had been in the 6th year of growth and could be accepted at the mills. Those that were damaged were cut down for firewood and other domestic purposes such as building and construction. In any case, both the company and the growers lost. Loss can be counted in many ways including the investment in time, on the land and the input, among other things. It was unfortunate that no houses were gutted down as the fire was mild.

11 Are the growers insured against fire?

Growers in Project Grow are not insured against fire, and this is because insurance premiums are expensive.

12 If YES, how does the insurance system work?

Growers are not insured against fire as it is very expensive for the company to do.

13 What are the possible implications to the growers for not having insurance against fire?

The implications to the grower are regrettably and unfortunately obvious. They are involved in a risky business. Its like sitting on a time bomb. Trees are an asset and should be insured like any other valuable property. The risk of trees is even higher because of their nature as a burning substance and growing in a jungle where fire can start. Anything can happen before trees mature and get harvested. Like the incident I told you about when trees were burnt in their 6th year. Growers obviously need protection.

14. Do you find it difficult to insure individual growers against fire?

An insurance is very expensive and it would be difficult for the growers to individually finance it. Also, to qualify for a certain insurance cover there are demanding clauses that may not be in the reach of the rural communities. To be able to have a fire protection on a business project is different from insuring a house from fire. Once the woodlot is considered commercial it then make it come under the commercial ventures cover, which woodlots would not fully satisfy. There is need for the applicant of such insurance to have a fire fighter and tankers, besides other *paraphernalia* of fire equipment. Where these are not available the premiums of a fire insurance becomes very high.

15. What would be the financial implications to the company and how much would it cost the company to insure each grower, per hectare of land or per single or a number of trees?

In the meantime, the company has fire insurance against all its own plantations. It is investigating ways and implications of including Project Grow trees under its own plantation insurance.

The financial implications to the company for an insurance cover that caters for growers are obvious. This will be very expensive and probably counter-productive in terms of the benefits of the project to the company. It will become more of a liability than an asset. The spatial distribution of the growers, who are scattered throughout the province makes the task of a blanket insurance insurmountable.

Alternative available include consultation with the local regional council, in this case the Uthungulu Regional Council and the growers about a community fire insurance. In this case the growers (and also non-growers as a big fire out break would not discriminate) would pay into a common village pool money that would be sent to the Council for the insurance. This money would be in the form of a Fire Levy which for the growers may be paid by the company as part of the loan, repayable at harvesting. Making such an insurance a community responsibility would help to reduce the levy and therefore the loan. However, a blanket insurance system if highly subsidized by the company would imply loss of independence for non-member growers who would be forced by necessity to join the scheme.

16. Does your insurance policy work the same for Project Grow participants of Project MAP, the Middle Scale Farmers' Scheme?

These operate on very different basis. Also there is very little interaction as the majority of MAP growers are located in different area than Project Grow participants, (Vryheid, Natal Midlands, Mpumalanga and Piet Retief) and also the majority of MAP members are white middle scale commercial farmers who have individual property rights and their properties are insured individually.

17. How many weigh bridges do you have and how far are they from the growers and the mills?

(See also the discussion on the Timber Exchange Agreement below on the operation of weighbridges, depots and mills in accepting product from different growers). Kwambonambi and Sokhulu use the MONDI weighbridge which is nearer. Hlabisa, Nongoma, Eshowe, Upper Nseleni, Biyela will not have a depot, but a loading zone will be provided soon at a central location for short-hauling the timber from the fields. This is because organising a Depot involves a lot of overhead expenditures, and in any cases in places like Nongoma and Eshowe there are not enough growers to warrant such investment. Areas around Esikhawini can supply the MONDI-KwaMbonambi Depot which is in an area of 18 km away, which is nearer than the SAPPI depot with a distance of 30 to 32 from Esikhawini.

A depot had been planned for Mfekayi, but MONDI has already provided one so instead of the complication of constructing and running one we simply pay MONDI for stocking our timber.

18. Are all your schemes involving individually managed woodlots?

No, we have both individually owned and group owned woodlots.

19. If you have group managed woodlots, where are they located?

How many are they?

How many people are involved in each group?

What area in hectare do they cover?

Whose choice was it to have them in groups?

Or is it by choice or by default?

How are profits shared?

To what extent is the company and company officials involved in the day to day running of such projects?

Would the company prefer more of this type than the individually operated?

What would be the reason for company choice?

There is no pattern in this but the majority of these are in Mbazwane area. If we include those owned by schools we have a count of 6 group or association owned woodlots. Schools were encouraged to participate in the schools so that they can raise money for their school development projects. It was also aimed in a way that, they could teach children about the importance of trees at a much lower age and they would come to appreciate the importance of trees as "rural gold".

Non-school owned woodlots belong to three associations, with each having about 6 to 10 members, and covering a block area of about 20 ha in land. A good example is one in *Mandini* near our SAPPI-Tugela Mill at *Mandini*. The initiation of group woodlots differ in different areas. In KwaNgwanase, for instance, the group owned woodlots developed as a grower initiative. Other people were scared to use their own land for tree planting. It was conceived that by belonging to an association and planting block and core-owned woodlots, they stood a better chance to protect their land from the perceived company encroachment into communally owned land. The other aim was to get more land from the *iNkosi*, pool more resources, get more funding and pool labour resources.

The company welcome such initiatives as association owned projects are much easier to deal with, specifically, in terms of management and communication. In case of the outbreak of jealousy thronged attacks by non-growers covered in the pretense of depleted grazing land, association owned woodlots stand better chance from village attacks. In any case, block and association owned woodlots on communal land actually help to protect communal tenure as the land still remain un-attached to one individual during the planting period. Already there are feuds from those who adopted woodlots earlier and have larger land and late adopters who have relatively smaller land. We have approached the chiefs and advised them not to allocate more than five ha per household. There is reason to speculate that the chiefs will begin to charge a levy on those who own more than five ha for every hectare above the fifth. The chief expect to use the proceeds from such levies in the running of tribal courts. This may be necessary as some individuals own up to 50 ha of land planted to *Eucalyptus*.

20. What influences the gender distribution of growers?

Access to land is indeed an essential factor to the ownership of woodlots. However, the company is highly interested in promoting the development of women and may be by coincidence many rural families are effectively run by women with the male heads away working as migrant labourers. These women joined to schemes after noticing the benefits and about 8 out of every 10 growers are women. Notwithstanding that in Zulu culture, a man makes the final word in decisions affecting important issues such as land. This means even though many contracts are directly owned by women and the woodlots effectively worked by them, permission to participate was sought from male heads of these households.

There are however, few cases of men abusing the money that women have toiled to work. But such cases are very few. Zulu men are also by nature proud and they may not want to involve themselves with money that has been worked for by women.

It is however, a task to supply the details required by your table below off hand. One needs to sit down with the register, area by area and work out, luck enough our register indicate growers' gender.

The gender distribution of growers attached to Project Grow as at December 1999.

Growers	Number of growers	Areas covered in hectares
Female growers	2400	5 431
Male growers	800	1 934

21. What is your forester-grower, or forester-area, proportion, and how many female foresters do you have?

The ratio is very bad. There are very few foresters in relation to the growers. As stated earlier, this is also because the participation rate is much higher than what the company had anticipated and had prepared to handle. This also led to the sub-contracting of the management of the whole southern Zululand to a private organization, LIMA.

It is also a pity that growers are women, there is no women forester. As management we have however stressed to the foresters on the ground that they are involved in a business where growers should be respected as clients, and all dealings should be transparent for the maintenance of the integrity and image of the company. Love affairs between foresters and growers or their daughters are strictly prohibited. However, in this day and age of gender equality and women empowerment, the company acknowledges the need for women foresters.

22. Do you have any growers and permit holders who are employed somewhere else besides growing trees?

We do, though the number of participants who are engage in formal employment elsewhere is not very large. Screening such details could take time though and needs careful analysis by forester responsible for area by area.

Employment status of growers.

Growers	Unemployed	Employed
Female	2280	120
Male	640	160
Total	2 920	280

23. How many of the growers own contracts involved in woodlot projects and also resulting from their involvement in Project Grow?

We a number of contracts owned by growers. However we also have many contracts by non-growers. Workers have a higher chance to set up contracts as they have more income from their other services to buy the harvesting technology for instance. The company's policy however is to promote those contracts that are being put up by growers themselves.

Growers contract ownership by gender.

Contractors	Ploughing contract	Planting contract	Harvesting contract	Shorthaul contract	Taxi business	Tuck-shop	Road maintena
Female	0	2	3	0	0	0	0
Male	15	18	33	3	3	5	2

24. Are all contracts owned by growers?***Contract ownership.***

Contract or	ploughing contract	Planting contract	Harvesting contract	Shorthaul contract	Taxi business	Tuck-shop	Road maintena
Grower	14	20	36	3	3	5	1
Non-grower	1	0	0	0	0	0	1

25. Of those who are employed somewhere how many have contracts?***Tree-growing immigrant workers' contracts: Nil***

Contract ors	Ploughing contract	Planting contract	Harvesting contract	Shorthaul contract	Taxi business	Tuck-shop	Road maintena
Female							
Male							

26. Of those who are not employed anywhere and are involved in tree planting, how many have contracts?

Tree-dependent growers' contract ownership:

Contract ors	Ploughing contract	Planting contract	Harvesting contract	Shorthaul contract	Taxi business	Tuck- shop	Road maintena
Female	0	2	3	0	0	0	0
Male	15	18	33	3	3	5	2

27. Grower distribution by Areas:

Gender and geographical distribution of growers:

Area	Female growers	Male growers
Sokhulu	36	106
KwaMbonambi	44	138
Mbazwana	63	74
Nkandla	10	2
Mfekayi	41	98
Biyela	13	27
Hlabisa	79	119

28. What is the resource ranking of the areas?

Rank them as: 1. Very scarce 2. Scarce 3. Limited 4. Available 5. Abundant

Area	Water	Grazing land	Crop land	woodland
Sokhulu	5	4	4	1
KwaMbonambi	5	4	3	1
Esikhawini	4	3	4	2
Hlabisa	4	3	4	4
Nkandla	3	3	3	2
Mbazwana	3	3	3	2
Mfekayi	3	4	3	2

Notes to the table.

The information supplied by the table above have two fundamental problems or weaknesses. Firstly, it could represent company interest to paint the scheme in a positive way. Secondly, it does not show whether the scarce and limited resources are such as a result of tree growing in the area.

29. How have you dealt with problems such as defaulting on loans by growers?

Default is a problem we have constantly battled with. By not supplying the timber back to SAPPI to other alternative markets for gum trees either for pulp to MONDI and CTC and mining poles for Richards Bay Minerals, or for unspecified purposes to whites buyers, contracted growers are defaulting their contract with SAPPI. This normally happens when growers want quick money and decide to sell immature trees.

What also makes defaulting attractive to growers is the fact that the loan will only be deducted after they supply SAPPI. This implies that as long as they have not supplied SAPPI there is not other way in which the company can get its money. To avoid paying the loan growers choose to sell much of their crop to other buyers. Even if MONDI and other buyers' prices per ton of harvested tree products is lower, the opportunity costs is still greater for SAPPI growers who are regarded as independent by the buyer, and have the advantage that, firstly they do not have to pay any interest to MONDI and secondly that they do not have to pay their loan back to SAPPI.

In KwaNgwanase we learnt of this habit when some bogus white contractors loaded growers' timber and never appeared without having paid them. The growers became victims of conmen vices. Morally you would want to sympathize with them for losing a seven years work and investment without any returns, but at the same time these people have breached a contract to which SAPPI's loan becomes automatically due for repayment in full by the grower. But the grower has no money.

Having embarked on the scheme earlier than MONDI we were obviously more affected by this problem. We approached MONDI at management level in 1996 to initiate coming to a position of understanding on the matter. In 1997 we managed to agree to a system that was aimed at curtailing the problem. It was agreed that a Certificate of Timber Origin should be produced each time any grower, whether contracted or independent wanted to sell their crop to either of the companies. This certificate was to be signed by the *Induna* and preferably the *iNkosi*. This would help clarify which company the grower is affiliated to as both the *iNduna* and the *iNkosi* have all the details having allocated the land and also involved from the beginning, by virtue of having signed Annexure A of the Contract document(appendix 1) the grower under their jurisdiction.

The success of this agreement highly depends on the co-operation of the other buyers involved. MONDI for instance, has not shown any much commitment in making this system work as growers still continue to default and they continue to receive their crop. It is not easy to detect defaulters in the act, unless if you are very lucky to meet them cutting, or you happen to have information from others that so and so is growing. If you are the forester you may find that someone is felling trees but has not registered his or her intention to deliver, and that the plot is not yet seven years old. You start to ask yourself questions, and if you have time you can just set a trap, wait and see what will happen. However, there is no time for such games. Much default is noticed after the fact. You find that in your records a forest is still standing and when your records show you that its now ready for felling you go to find it already coppicing. However, after introducing the Certificate of Timber Origin system default rates have substantially fallen.

The importance of the role of local traditional authorities in the schemes can not be over-emphasized. We also hope to involve associations in reducing default rates. As envisaged, associations would encompass the felling and short-hauling of member trees. In this case, the felling and delivering of member trees will be organized through the chair of each association who in many cases who would be either the induna or inkosi. If any member grower decides to harvest on his or her own in default, these traditional authorities have the right to confiscate the trees and sell them on behalf of the community and commit the money into community development projects. Those found guilty of defaulting always cited difficult times as having forced them into defaulting. With associations in place, growers facing difficult situations that require urgent financial bailing would upon exhausting other channels approach the association leader, who is his or her village leader. The leader knows the grower's situation so will be able to negotiate for him with those members of his association who are on the felling list of that month to give him the chance to get money.

30. How does the Timber Exchange Agreement between you and MONDI work? In what ways if any, does it serve the grower constituency?

The Timber Exchange Agreement was initiated well before the scheme. SAPPI has a Mill in Mpumalanga where MONDI has lots of plantations, while in KwaZulu-Natal MONDI has a Mill in Richards bay and few plantations of timber to satisfy the Mill's demand. To strike a balance the two companies came to an agreement that SAPPI get timber from MONDI in Mpumalanga in order to satisfy its demand while MONDI in KwaZulu-Natal take in SAPPI timber. The system naturally works 50/50 and there has not been complains. In relation to small growers, this agreement helps reduce transport costs as those growers who are north of the Tugela Mill, (SAPPI at Mandini) go to MONDI Park Mill as part of the agreement.

31. What are you doing to make sure that the scheme is environmentally sustainable and sound?

At inception of the scheme, the issue of the environment was not considered with the great urgency and importance that it has now. Even when growers made mistakes like growing trees along river streams and in wetlands after obtaining seedlings elsewhere, we would just condemn the practice without acting. We left them grow instead of destroying the woodlots so that the growers notice how serious the issue was. Later on Environmental affairs came demanding that SAPPI destroys all such trees growing in environmentally unsustainable areas.

In the plantation sector SAPPI is up to date in terms of environmental practice. We conform to the ISO14001 demands, and an environmental audit is carried out regularly. For the scheme, an environmental audit has also been adopted by administering a Growers' Selection Checklist (appendix 2) which was designed to ensure environmental sustainability. The grower selection list is a recent development. It was carefully put in place between 1998 and 1999, and implementation began immediately towards the end of 1999. This was followed by an Annual Maintenance Checklist (appendix 3), which was compiled with the help of SAPPI's Environmental Department with the help of experts drawn from Nature Conservation, Parks Board and other stake holders. The Annual Audit Form (appendix 4) is completed every financial year. Its main areas of focus include; soil preparation, weeding

practice, fire protection, with the broader view of making sure that environmentally conscious practices are being followed.

Appendix 6

Interview with Mr Moffart Ncgobo, the first Community Forestry Extension Officer for KwaZulu-Natal and now responsible for the whole of southern KwaZulu, with offices at PMB.

Date: September, 1999.

Venue: @ DWAF-offices, Pmb.

Topic: Evolution of government community forestry programmes.

Government community forestry initiative in the province date as far back as 1976, and the main reason behind this was to provide rural communities with wood for fuel and also as part of an environmental drive aimed at donga reclamation. In some areas in Nqutu, as far back as the mid 1970's, already people had started to use cow dung for domestic energy purposes. It is in response to this energy shortage that the department decided then to intervene by planting trees for the people. It was soon noticed that planting trees for the people was not the solution but to involve people in planting their own trees on their own individual lots. We began to involve NGOs like Lima, in southern KwaZulu. Since the 1980s, a new model of community forestry came into being with the advent of private stake holders in the timber industry, encouraging rural farmers to grow trees on contract basis. This includes, Sappi's Project Grow, Mondi's Khulanathi project and SAWGU's small grower section. The main difference between the government community forestry initiative and that of the private farmers is that, on one hand, the government is interested in balancing out the resources available to rural communities, while on the other, the companies are interested in securing more timber and/or bark for their mills.

At the inception of the government projects, which began as mainly, community woodlots under the control of the Tribal Authorities, there was no full-time extension worker. The extension worker who was made available was a plantation worker who was only released on part-time basis to attend to community woodlots. Only later in 1980, was he permanently assigned to the development of community woodlots. He started with community woodlots promotion and the issues of wattle quarter permits (as people needed permits for debarking and supplying to the mills) and designing of committees, in each and every districts, to be able to look into their own development, as there was only one extensionist in the province, (myself) from 1976 to 1980.

I allocated bases and got more extension foresters from different places. This function fell under the auspices of the department of agriculture and the onus was upon this department to identify where the escalating necessity of trees was and this was done jointly with forestry.

We moved from Agriculture to Dwaf at amalgamation and the establishment of the GNU in 1997, April. Then there was a change in the approach, we were thinking of water conservation as

well as tree planting. So there was water and trees in the picture. It is now that we are issuing permits for people planting trees, to authorize them. Community forestry has just moved from demonstration projects to individual projects, as people began to appreciate the importance of planting trees and the possibility of utilizing these trees. We promoted trees for domestic use and it was discovered that people could not use all the timber they had planted as a result of successful promotion, so they decided selling timber to sappi, mondi and to other people who wanted it. It now dawned upon the people that they could make money out of selling trees.

After an application to plant trees, we would visit the site and inspect it. We are now designing annual business plans. The planter and owner of land, determines how much land he could put aside for trees and we help them grow trees in accordance with their interests. If at maturity a grower wants to sell, they approach us and we connect them with a potential buyer, preferably one who can buy them all, and in this case, sappi or mondi for *Eucalyptus* and SAWGU for wattle.

Appendix 7

Discussion with Growers and Contractors at Mondi's Sokhulu Weighbridge

Interviews were made at Mondi's Sokhulu Weighbridge, were contract-farmers or outgrowers from Mondi, Sappi and also those who do the projects on their own deliver their timber harvest and get payments calculated.

In carrying out the research process or the study, the researcher is faced with the challenge of what the intended interviewees and participants of the projects think about him and how he identifies himself. The history of the researcher's institution, he or she is representing and its reputation often affect the present even if he was not part of the events of the past. In some cases such events are negative, and still fresh in the event of the interviewee and make them not want to open up. Some of the challenges is that of facing interviewees who deliberately withhold information for fear of messing around with company policy and therefore getting victimised.

At this said place the researcher introduced himself as a government forester, in a study intended to build up a resource book for which government gets to know what people are doing, what challenges they face, and how best government resources can be harnessed to facilitate that development effort. This was of advantage as some wanted the government to hear their views and also anticipated government action in response, and also took advantage of finding out more about such government policy as they are not clear about.

Forester for northern region of KwaZulu Natal, responsible for the development of Community forestry pointed out that harvesting machines for stump chipping are expensive and the other disadvantage is that it compresses the soil. This makes it difficult for small growers to de-stump when they want to reclaim the land back to other food crop production activities.

Observations made at the Weighbridge were that, growers get contractors to cut and ferry their loads to the weighbridge. The phenomenon of contractors in cutting and ferrying of timber loads is one positive result of the contracts introduced by Sappi and Mondi in the area. People had an opportunity to buy tractors and lorries to carry small growers' timber to the weighbridge. This is an employment creation and has become a survival strategy. It is also interesting to note that those who have contractors to cut and ferry are also in their own right, growers, one that the researcher met and talked with who has been in the tree-growing business for the past fifteen years now, has more than 15 woodlots/ha for which he employed 18 people from his area for slashing, cutting and delivering of trees.

There was complaint raised against RBM mining company about the water that it pumps from its venture. Growers next to this mine stated that its water is toxic and poisonous to their plants. It kills any form of life and it has also invited crocodiles into the area because of the water body it has formed on the surface. There was an outcry that the company's activities be monitored by the relevant ministry and department so that it does not upset the livelihood strategies of the community.

Contractors are involved in slashing, cleaning of woodlots, transporting of harvested timber and so forth on growers woodlots, and are paid directly by the growers. In some instances the contractors buy the timber from the growers and pay for it before it is cut then they fell it and deliver it. Some contractors, particularly who seized early opportunities have bought up to 8 tractors to date for which they have employed other people to work for them. One enterprising middle aged contractor and small grower, Musawenkosi, adopted tree growing from his father who had about 7 ha of *Eucalyptus* and he has grown 15 ha. He grew this lot on his own as he argued that company contracts were not profitable. He cited his father's plight as very sad, stating that his father planted his 7 ha of gum about 7 years ago and to date has already accumulated debt of around R14 000, in terms of seeds, work done and interest and this debt increases yearly. According to him, by the time his father harvests this woodlot his profit will be very minimal and it would have defeated the purpose of his sweat. He also said he was aware of situations where some growers owed more than what their woodlots could pay and meaning that it all went to the company.

In terms of preference growers, seemed anonymously in agreement that Sappi conditions were easier and fairer as she did not levy any taxes upon the loans and only charged for seedlings and did not charge for the planting. This was however, a theoretical analysis as many of the growers in the Sappi projects claimed that they had not begun harvesting.

There seem to be a lot of discontent with the Mondi business and contract operations. The outcry was that Mondi, coming in after Sappi, promised people heaven and earth and left a lot of aspects of their contract unclarified to the people who ended up with the wrong impression. Growers asked if government could not monitor and police the operations of these companies. The majority of the people were in agreement, however, that the beginning of the contract system has ushered in a new era in rural livelihoods, yet there was need to control the activities for the benefit of them, rural communities. Many people are now working for other people in the area as a result of the projects, implying that opportunities for employment creation have been opened.

One visibly disgruntled grower asked other growers who had suggested that Mondi is doing a lot to help them and chanted, "Tell me, what good thing has Mondi ever done to people!?"

His complaint and reason or concern was what he called neglect and breach of contract and working relationship by Mondi. According to him when it came, it attempted to do a lot, giving the impression that it is the "messiah" of the poor, only to neglect the people when it was established. The other complained was that when Mondi began it gave contractors work even weekends and for more than 12 hours a day they were working. Now it has reduced working days to 4 a week with 6 hours each. This has crippled the business of contractors and reduced their profit margins greatly. The Mondi explanation to this is that it had to operate within the working hours as stipulated by the Labour Act.

At the weighbridge, 1 load/tonne is delivered at the cost of R139, 10, with one ha producing an estimated 15 load/tonnes, implying a total earning of about R 2 086. 50 per ha. This of course is before the subtraction of costs for which transport is greatest. It was should also be stated here that, the nearer a grower is to the weighbridge or point of delivery and the more a grower can deliver per load, the higher his profit becomes. A problem that was raised with payment was that, the original arrangement required Mondi to pay every delivery to the bridge done by 11 am of every Thursday, to be paid that Friday. Now this was not fulfilled as the last delivery day has been reversed to Wednesday. Some complained that they needed money to pay for their children's fees. the change of delivery stipulations for payment from Thursday to Wednesday were making life difficult. Hardest hit were contractors, whose complaints were that if the grower had not been paid, then he can also not be paid so he could be able to maintain his fleet and buy fuel.

In response to the overwhelming disapproval of the Mondi business strategies which they described as crooked and criminal at best, the researcher asked what they would do if Mondi was to pack her bags and leave the area. It was said that Mondi would not do that as she is benefiting from the projects more than the people, and one suggested that Mondi did not pioneer the project. When it came in Sappi was already in operation, so they would be content to do business with Sappi. The researcher observed that literacy levels were very low among the contractors and growers, as one confessed inability to fill in his questionnaire.

The lesson from that was that it is highly possible for the company to cheat the growers as they may not be able to follow their complicated calculations of costs, expenses and payable money. Many growers, stated that what make them accept company terms is that they want seedlings, otherwise they would choose to do it on their own as they now know what to do and how to go about growing trees. It was also stated that the companies are not doing and

encouraging any other non-tree development projects as done by Lima in the South Coast which has other non-tree agricultural projects and poultry projects to provide money during the time which growers are waiting for trees. "The companies just want trees. It is not for them about sustainable development or integrated development, but a source of timber for their mills". Contractors ferry trees at R40.00 per load, which was paid for directly by the grower.

Asked how they would respond to a suggestion of ending the expansion and continued production of trees for sale, it was overwhelmingly, agreed that trees had become the life-blood of the communities, taking over from sugar cane and other food items so no-one was going to accept that. One of the said:

... people will not accept to stop growing trees – instead government should teach us how to grow the trees and manage the environment so that tree growing has a longer future and remains sustainable ... Some have children going to universities from those trees. We cannot just stop.

It was also learnt that those people who settled in the Natural woodlands of the Dukuduku forestry did cut down trees and planted *Eucalyptus* woodlots and they have just begun harvesting. One pointed this out attesting to the fact that tree growing has become the in thing. It was stated that sugar which forerun tree growing has proven to be more labour intensive so has been abandoned for trees. People do not just do things without calculating their benefits. Trees have proved to have more money than sugar. Even though some are still doing sugar as well as bananas alongside trees, they see trees as the main line of business. The reason of integrating with bananas and sugar has been to be able to have a continuous trickle of money in the meantime as they waited for trees to mature. Some said since they are involved in transporting harvested timber for other people, it will give them money in the mean time as they wait for their trees to mature, so they did not need to worry themselves about integrating trees with other cash crops.

Asked whether they were not afraid that trees would take over all the land they need for food production they stated that this would not happen. They have the land that is suitable for food production and some which is not. However, one stated that what he needed was food. If trees give him enough money to buy food and do other things, then why should he worry himself growing that food. The important thing was he had that food.

Growers requested if government could monitor the activities of companies. Growers do not have an association to lobby for them from the companies concerned. They said the reason for this is that earlier and enterprising growers with larger land have been more successful

than others and the contract conditions work well for them. Some growers are nearer to the delivery point than others. The conditions of the growers are not the same, therefore the way and the extent to which they are affected by the various working and operational arrangements are different. Therefore, some are not for the idea of such an association. However, the majority of growers talked to felt that such an organization would help them to organize less and then be able to approach non-governmental as well as governmental departments and even the companies concerned for help in one voice.

The other request was for government to put in place a Fund from which small growers would borrow money at lower interest rates than levied by the companies. Small growers are aware of the requirements of the New Permit system under the New National Water Act 1998. It was explained to them why such requirement has become necessary when the tree business was beginning to thrive.