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**INSTITUTIONAL REFORM IN THE COMMERCIAL AGRICULTURAL SECTOR OF
SOUTH AFRICA:
An Institutional Review of Past and Present Structures, and an Assessment of Issues
and Options for Private Based Reform Initiatives.**

By

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ABSTRACT

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The changing political economy and present structure and performance of the commercial agricultural sector in South Africa necessitates change. An institutional approach is adopted to review the origin of past and present institutions and organizations in the commercial sector.

Private based reform initiatives are focussed upon as one of the possible processes through reform in the sector can be undertaken. The private based reform initiatives undertaken in the sugar sub sector are analyzed from a situation, structure and performance perspective in attempt to explain the origins and outcomes of these initiatives.

Successful lessons from the case study are examined with two other private based reform initiatives, namely, sharecropping and employee share ownership programs, in an attempt to assess their suitability for inducing institutional reform in other sub sectors and situations.

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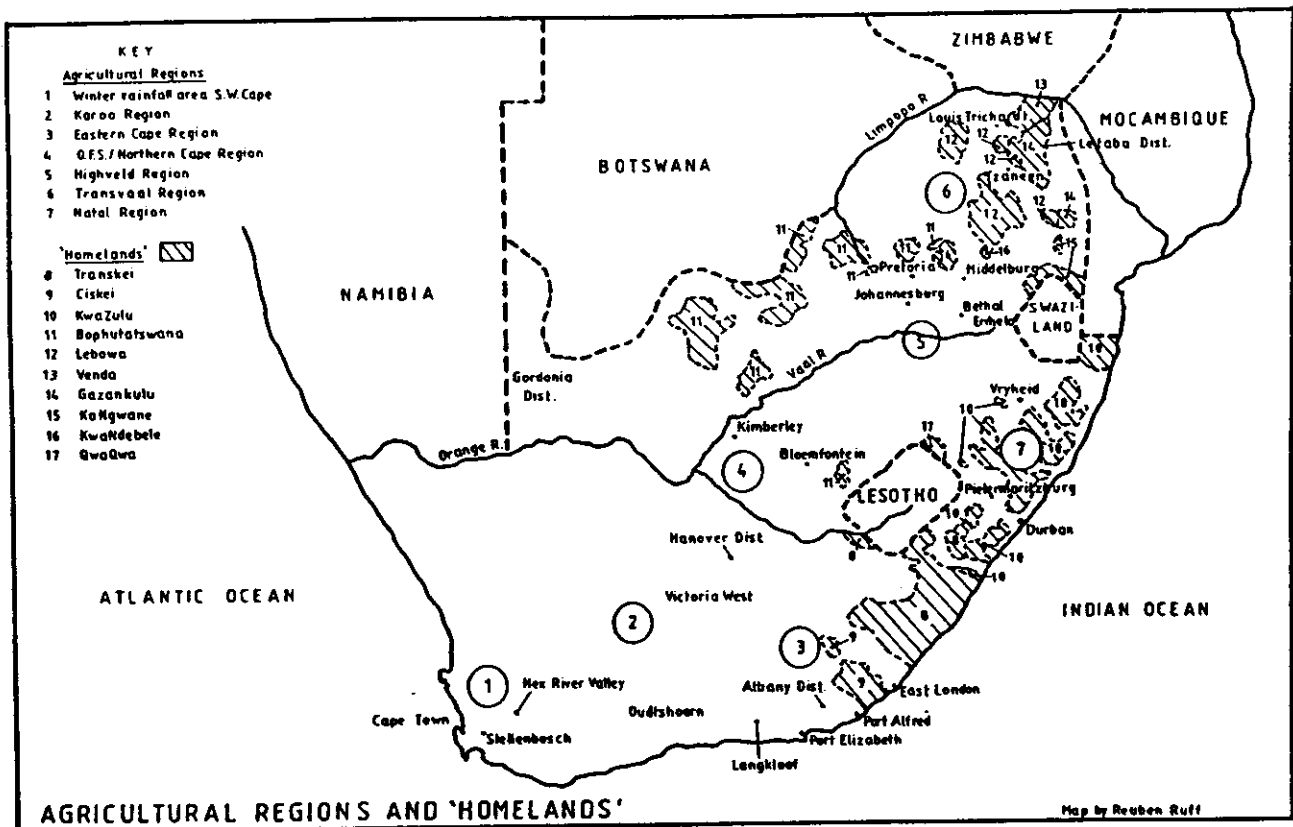
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MAP



CHAPTER 1

INTRODUCTION

South Africa is undergoing a fundamental change in its political economy. The impact of the changing political economy is likely to be varied and will be felt by most organizations and individuals living in South African society in one way or another. This paper focusses on the agricultural sector, especially private organizations in the commercial sector and the need for restructuring them in light of their existing situation and the impact they are likely to experience.

The structure and performance of the commercial sector has evolved over the years from a set of institutions and organizations, both governmental and private, to the relatively protected and subsidized sector that has restricted entry and participation at various levels to a favored few. Moreover, the performance of this sector has been sub optimal in many aspects (efficiency, equity and ethical) and is currently unsustainable in its current structure. The changing political environment will most likely result in changes in the "rules of the game" to the commercial sector's disadvantage, especially sub sectors that have relied heavily on direct governmental assistance and support such as the grain sub sectors.

The choice to address the private commercial organizations is based upon the dominant positions these organizations occupy in resource ownership and commodity production; the nature and level of government assistance they receive, and a lack of performance in areas of labor relations and progressiveness witnessed in certain sub sectors. In addition, the participants in the commercial sector - managers, foremen and laborers - provide the greatest existing and potential source of skilled and semi-skilled

labor resources required for a competitive commercial sector. Utilizing this capacity from within may provide a more stable and rapid method of redistribution without significantly disrupting production. Focussing on change from within the sector to improve existing conditions and human resource capacity, aims to address expressed aspirations of certain black communities. These black communities in different areas and circumstances have fought for widely differing goals, including in some instances, better wages and working conditions in preference to self-management or farming on an individual basis. (Claasens, 1990, p.13 cited in de Klerk, 1991, p.11).

An assumption is made that a core commercial sector consisting chiefly of efficient exporting sub sectors, and those not currently heavily dependent on government assistance, will continue to exist after an initial restructuring of property rights.

One might say that public or governmental institutions and organizations are more in need of evaluation and reform, which is true in certain aspects. However, research is being carried out on these aspects, such as land reform issues and, given the extent and complexity of these issues, it was felt that they would be beyond the scope of this paper. In addition, research and attention has been paid and is increasingly being paid to issues pertaining to the developing sector.

Research on the different sub sectors within the commercial sector has traditionally been predominantly associated with technical and financial issues, and to some extent, labor aspects. Limited emphasis has been placed on institutional issues in the commercial sector.

These latter reasons and a fundamental belief in a market driven economy based upon private initiatives under an appropriate institutional framework, have steered the focus of this paper to the study of private based reform initiatives in the sector. Private based reform initiatives are considered as those initiatives which arise from individuals

directly involved in the activity and who are grouped together in some organizational form albeit a household, a community, a firm, a cooperative, an association, a union or collectively as a sub sector, industry or sector. No initiative can realistically come to fruition on private initiatives only, as government regulation is always required in one form or another to regulate or protect certain property rights, hence the use of the term "private based initiatives". The use of the term also acknowledges that more often than not private actions/rights are not entirely private because of the difference between private and social costs arising from the technical, pecuniary and political externalities (Schmid, 1987). The source of such initiatives can be considered endogenous to an existing system or organization. The generation of such initiatives should be predominantly a bottom-up exercise which to a large extent requires the commitment and participation of those involved to ensure some degree of success and sustainability.

The dominant presence and influence of institutional forces in the South African economy in the past, present and future lends itself to an institutional approach. This approach is followed in the paper both in terms of describing the evolution of the commercial sector, its current structure and performance, analyzing the case study, and exploring reform initiatives which could be adopted by different sub sectors and firms in the commercial sector.

The paper consists of five main sections. A historical perspective of the evolution of the agricultural economy is provided to explain and situate the current structure and performance of the commercial sector. A descriptive analysis of the structure and performance of the commercial sector is dealt with in Chapter 3. The nature of the problem is addressed after Chapters 2 and 3. This was deemed necessary, given the importance of the background and orientation provided in the historical perspective and current situation sections, and which is required to adequately address the problem.

Chapter 5 explains the fundamentals of an institutional approach and further details the framework of analysis used in the case study. Reform initiatives in the sugar sub sector are analyzed as a case study in Chapter 6 to examine the underlying causes, nature and extent of reform measures and initial outcomes from the initiatives adopted in the sugar sub sector. Chapter 7 looks into the possibility of transferring any successful lessons from the sugar example, as well as addressing alternative private reform initiatives which could be adopted in other sub sectors, both at industry and firm level.

CHAPTER 2

A HISTORICAL PERSPECTIVE

History matters. It matters not just because we can learn from the past, but because the present and the future are connected to the past by the continuity of a society's institutions. Today's and tomorrow's choices are shaped by the past. And the past can only be made intelligible as a story of institutional evolutions. Integrating institutions into economic theory is an essential step in improving that theory and history (North, 1990, p.vii).

In addition to providing a historical overview of the agricultural political economy, this chapter attempts to highlight the effects that institutions and organizations have had on the structure of the agricultural sector and participants involved.

The above quote from Douglas North's most recent work, *Institutions, Institutional Change and Economic Performance* (1990), serves to illustrate the importance of looking back into the past in order to identify threads of causality and explanation. This process is considered important especially when considering a situation, like the political economy of the agricultural sector in South Africa. This chapter draws heavily on the work of Colin Bundy (1988), a South African historian, who deals with the history of peasant agriculture and its relationship with the political and economic markets, and the work of Francis Wilson (1971) which concentrates more on the evolution of white commercial agriculture and the nature and level of state intervention. Three main sub sections address the prominent themes: the competition for land; labor scarcity; and the commercialization of "white" agriculture.

2.1 THE EARLY YEARS AND THE COMPETITION FOR LAND

This period begins in the early nineteenth century and ends around 1866 with the discovery of diamonds and gold. Three themes are central during this period: (i) the expansion of the frontiers resulting in the interdependence between the indigenous and colonial peoples of southern Africa; (ii) the involvement of missionaries in African life; and (iii) the effects of colonial ideologies and policies. These are examined keeping in mind the effects they had on the agrarian economy, both in the black sector, which will be referred to as the peasant economy¹, and in the white sector.

The first half of this period witnessed Dutch and British expansion into the interior of the country from the Cape Colony in the south. Rudolph Daniels (1989, p.328) claims that, "South Africa's present day position as having one of the world's most disparate land distributions had its genesis in what has come to be known as the "Great Trek" - the immigration of Dutch farmers into the interior of South Africa." Dutch cattle farmers began their migration north in 1700. At first they clashed with the Hottentot and Bushmen people. The competition for land became more acute when Dutch farmers encountered the Nguni tribes and the Zulus in the eastern part of the country. The importance of land to these groups was not only economic, as Bundy (1988, p. 21) points out: "...the members of the society depended upon land not only for subsistence, but also for recognition as members of the social group: the allocation of land to an individual was a badge of his membership of clan or tribe."

Given the above, it was inevitable that conflict would occur due to the

¹ Peasant is used in the context of Bundy's *The Rise and Fall of the South African Peasantry*. Peasants are characterized as being more integrated into a complex social structure with economic and political obligations. They differ from capitalistic farmers in terms of the ability of the latter to accumulate, hire non-family labour, and to break with the material and ideological confines of the peasant society. Finally, he distinguishes peasant from rural proletarian, as the former retains access to the means of subsistence and sufficient control over the disposal of his surplus to feed and clothe his family through agricultural exertions (Bundy, 1988, p.11).

incompatibility of the use of the resources, growing scarcity of land with the influx of the new settlers, and lack of common civil institutions to mediate any exchanges. These conflicts for land continued for many years, forcing the Dutch settlers to move to the north western areas of the country (now the orange Free State and the Transvaal), in search of new grazing lands. By 1852, the British Parliament decided that the latter additional colonies were no longer economically advantageous, and thus concentrated their efforts in exercising authority in the Cape Colony and Natal (see map). Land acquisition continued after major clashes in the early 1800's.

Many of the Africans who lived in the Transvaal and Orange Free State were deprived of their rights to occupy land. This was sometimes accompanied by violence and war, but much more frequently it was a silent process. ... Possession meant different things to Europeans and to Africans. To the former it meant, physical possession, the right to property; to the latter it meant use (Wickens, 1981, p.106).

In 1836, the first reserve was established in the Cape, for the Mfengu people who had escaped annihilation in Northern Natal by the Zulus. This reserve served the dual purpose of accommodating the Mfengu who were perceived as a peaceful and industrious clan, and as a buffer zone between the more aggressive and hostile Xhosa and Eastern Cape colonial settlements. Although some of the motivations and level of appropriations were different in the Dutch and British colonies, Daniels (1989, p.331) mentions that, "...the Dutch and British shared at least one important similarity regarding Africans: they both viewed reserves as a solution to interracial conflict while avidly pursuing their own brand of manifest destiny in South Africa, which the Dutch settlers called the "natural policy".

By the mid 1800's, life on the frontier in the Cape was becoming more integrated, due to economic and political forces affecting the Nguni people. These included: (i) the stimulating effects of mission stations on the spread and adoption of agricultural

innovation and diversification, (ii) increased trade and bartering between the Xhosa and Mfengu communities and the Cape Settlers, (iii) the deliberate cattle slaughtering that occurred amongst the Xhosa people in 1857² and, (iv) the continued expansions of the Cape Colony that resulted in the annexation of Ciskei and parts of the Transkei.

By the end of the late 1800's it was evident that the peasant farming community was adopting new technology, producing and trading surpluses, and sharecropping or leasing with European land owners (Bundy, 1988). There were various factors responsible for this including the stimulus and diffusion process provided by mission stations, the incentives of trade with the Colony, the more pragmatic and more adapting approach adopted by the Cape Colonial government, and/or the rational adaptation by the peasant communities to the changing political and economic markets.

2.2 THE MOVE TOWARDS INDUSTRIALIZATION AND THE COMPETITION FOR LABOR

The years 1866 to 1913, incorporate the main forces of the discovery of diamonds and subsequently gold, increased demand for agricultural goods, the competition for labor, the Anglo-Boer War and finally the formation of the Union and the accompanying restrictive legislation.

Before the 1860's, Africans and Whites alike, were engaged in subsistence agriculture. However, spectacular diamond discoveries between 1867 and 1871 at Griqualand West, now known as Kimberley, rocked the agriculture-based economy, and set it on a course toward industrialization (Natrass, 1981, p.190). Resulting from this,

² In 1857 the Xhosa destroyed their cattle and crops in response to the urgings of prophets (especially the girl Nonquase), in a desperate attempt to halt or reverse the process of conquest. The aftermath of the cattle killing was famine and the loss of land, while perhaps 30 000 Xhosa lives were lost (Bundy, 1988, p.43).

amongst other effects, was an increase in demand for produce and foodstuffs in the mining areas due to the influx of prospectors, providers of support services, laborers, and others. This increased demand together with new infrastructure (railroads) opened the agricultural markets to local and foreign producers alike. Francis Wilson (1971, p.114) notes that, "The farmers, who could hardly have anticipated the mineral discoveries, were in no position to increase food supplies as rapidly as they were needed." Bundy (1988, p.67) on the other hand, gives evidence from different sources that there was a "virtual explosion of peasant activity in the 1870's that affected the lives of a great many Cape Africans." He goes further to add that, "...African peasants appear to have responded more effectively to economic change than white landowners. Many white landowners found it more profitable to leave their lands or to trade in African grown produce than to increase production of foodstuffs themselves."

Whether it was the limited access to land, or credit and inputs by black farmers, or slow adaptation by white farmers to increased demands, the country was no longer self-sufficient in basic food requirements. As a result, it was necessary to import maize, eggs, wheat, milk and butter in large quantities. Wilson (1971, p.114) notes two distinct factors that seemed responsible for the above. The rise in agricultural production was not sufficient to keep up with the growth of population, while the same railways that were ultimately to prove so important in the development of South African agriculture, enabled foreign producers to compete effectively for the new markets. In addition to foreign competition, Wilson (1971, p.115) mentions two further problems which became evident during this period, and which were to remain predominant difficulties for decades to come. The first was the "vicissitudes" of agriculture, and the second was the shortage of labor.

There are many accounts of natural disasters which struck the agricultural sector

during this period: severe droughts, horse sickness, red water disease, (which started in 1871 in Natal and spread through the rest of the country during the next two decades) and most devastating the "rinderpest", which appearing first in Somalialand in 1889, swept down southern Africa at the end of the century. In the Transkei, it was estimated that 90% of the cattle, which formed the real wealth of the people, were annihilated by the disease (The South African Native Races Committee, cited in Wilson, 1971, p.116).

The labor shortage was one of the many grievances that Whites, both in the mining and agricultural sector had, during this period. Other problems included: competition in the produce market; purchase of land in the Cape Colony and Natal; renting of land to natives by absentee landlords in the British colonies; locking up of land by land-holding companies which speculated on future land values and mineral discoveries; and the right to vote by Africans based on property ownership which was allegedly occurring in the Cape Colony until 1913 (Wickens, 1981, p.112). Wickens (1981, p.113) goes on to add, that the most important white grievance was the squatting by renters, which aggravated the labor shortage. This labor shortage was believed to undermine both white farming productivity and the industrial revolution as independent labor or cash tenants were unlikely to accept low cash or kind wages from white farmers or mining capitalists, who sought to maximize their profit margins (Daniels, 1989, p.332).

As a result, many laws were enacted in Natal (1855), the Orange Free State (1895) and the Transvaal (1895) in an attempt to limit the number of squatters on white farmland³, but there is evidence that these laws proved to be ineffective (Daniels, 1989, p.332 and Wilson, 1971, p.120). Evidently economic forces were not working in attracting labor, therefore the recourse to legislation. But, it is not clear whether

³ Farmland settled and developed by European settlers.

economic forces were not working due to an exaggerated backward bending labor supply curve, that some claimed, or due to the fact that the wages offered were not sufficient to induce employment into the formal agricultural and mining sectors. What is evident were the conflicting interests, both in white agriculture between those farmers who found it worthwhile to share or tenant farm⁴, and those who were seeking additional wage labor for their farms at low cost. There were also conflicting interests between the tenant farmers and industrialists and between those Africans who were more content with their existing situation, rather than in working as wage labor for commercial farmers or industrialists.

The beginning of the twentieth century saw the formation of the South African Union in 1910. As Daniels (1989, p.334) states, "among the first issues addressed by the parliament of the new union was labor shortage."

The Afrikaners, now with control over a unified parliament, could forge a new economic, social and political order through the enactment of extensive legislation. In 1911, the Mines and Works Act and Native Labor Registration Act were instituted, to address the continuing labor problem. In addition to the tougher legislation, African peasant farmers in the reserves were facing tougher and tougher odds in the form of land crowding that resulted in over grazing and a certain inability to adapt their farming methods and institutions to the changing conditions.

Although the question of adapting to these negative changing conditions is not really considered in Bundy's work, it is important to analyze both the formal and informal constraints within communities. Bundy's work indicates that there were

⁴ Tenant farming refers to leasing small units of land to many African families in exchange for either a certain amount of labor per year which was initially in the region of 90 days, or a cash rent.

adjustments to the positive stimuli within the different peasant communities but when the odds were against the peasant communities albeit through natural disasters, restrictive legislation or increasing competition over land, there is very little evidence of positive adjustments to these factors within the communities. This is not to say that the odds stacked against these communities were not significant, quite the contrary, but it does seem to reflect that little is known of how and if these communities tried to adjust to the setbacks they were facing in a positive and self reliant manner (Lipton, 1985, p.104).

The final blow to African farmers came in the form of the 1913 Land Act which was, the most complete and methodical means yet conceived in South Africa for dealing with the dual issues of the labor shortage and the ownership and distribution of land (Daniels, 1989, p.335). Wilson (1971, p.109) suggests that, the political pressure for the passing of the Land Act came, almost entirely it seems from those who wished to ensure a cheap supply of labor by eliminating squatters and by doing away with the system of farming-on-the-half⁵. The adoption of this act made it illegal to sell land outside the reserves to blacks and also ended squatting and sharecropping by blacks on white farms. Blacks who remained on white farms had the option of either staying on as wage labor and sometimes forfeiting their plot of land and cattle, or moving off either to find something better in the towns or reserves (Wickens, 1981, p.107-29; Selby, 1973, p.247; Jacobs, 1982; Marquard, 1967, p.38).

The end of this period marked the decline of the African peasantry and the rise of the white commercial agricultural sector. Bundy (1988, p.221) in his final chapter indicates that:

⁵ Farming-on-the-half refers to the practice of sharecropping.

The argument has been advanced that by that date (1913) African peasant areas showed serious signs of agrarian degeneration, and that their transformation into teeming rural slums or the process of their underdevelopment was well underway. Areas that had been able to provide for themselves, and in favorable seasons to export foodstuffs, were being reduced to a state of precarious self-reliance or already to a dependence upon imported food and the remittance of wages by migrant laborers.

2.3 THE COMMERCIALIZATION OF WHITE AGRICULTURE

This period is characterized by the establishment of a property right structure that channelled substantial aid and assistance to white agriculture. After the establishment of the Union, the empowerment of the Afrikaner through the political process and the fact that a large portion of their constituency was situated in agricultural areas resulted in legislation that not only dis-empowered the African agrarian class and restricted their access to land, but also produced institutions and organizations that were to strengthen the white, predominantly Afrikaner, farming community. As Kassier notes (1989, p.19):

During the first three decades or so of this century the main issue would appear to have centered around organizational aspects, especially regarding the establishment of the SAAU⁶ and its affiliates, and around the supply of agricultural inputs and outputs via cooperatives.

The Land Bank was established in 1912 to provide subsidized credit to the white farmers in the country. The significance of the Land Bank Act, not only made credit expressly available to assist farmers, but even more importantly, that henceforth farmers were to look increasingly to the State in future years to solve their problems Wilson (1971, p.136). The setting up of the SAAU and the cooperative movement, was closely linked with the establishment of the Land Bank which financed the establishment of the

⁶ South African Agricultural Union (SAAU) is the umbrella organization for white commercial agriculture and is collectively made up of the various cooperatives and regional organizations.

cooperatives. The initial moves to establish a healthy cooperative network failed however. In the words of Wilson (1971, p.136), "The early years of the cooperative movement in South Africa were disastrous and it was not until the Cooperatives Act of 1922, with its provision of limited liability, that the movement began to be effective in assisting farmers." The principle of compulsory co-operation was also adopted by the co-operative movement which contributed to increasing their membership. During the First World War the state intervened in the export agricultural sub sectors such as the wine sub sector with the establishment of the Kooperatiewe Wynbouers Vereeniging (KWV)⁷ in 1917.

"Orderly marketing" was the next aspect to be addressed by the government. Various marketing boards and organizations were set up in the twenties and thirties and the whole drive for "orderly marketing" came to a head with the establishment of the Marketing Act of 1937. This law, in effect, resulted in about 80 per cent of agricultural produce being controlled by the various implementing agents or control boards. Reasons for the establishment of this act vary, from the government claiming the need for "orderly marketing" and stabilization of prices and income, to ensuring that rural incomes were kept on a par with urban incomes (Wilson, 1971, p.140) and, to save the cooperative movement as the cooperatives became agents for the one channel marketing schemes under the new arrangement (Kassier, 1989, p.19 and Wilson, 1971, p.141). The democratic nature of many of these organizations left much to be desired as Kassier points out:

⁷ The Cooperative Winegrowers' Association still exists today and remains the only exporter of South African wine.

The strong conviction that unity should be achieved "at all costs", referred to earlier, has given rise to the entirely undemocratic nature of virtually all quasi-government organizations serving the farming community. There is no democratic representation by any group of farmers on their respective marketing organizations, since the Minister in every case has the final say as to who should sit on the Board.

Wilson (1971, p.138-139) gives evidence of various policies established to protect domestic products such as sugar, maize, meat and wheat and export subsidies for the wool, fruit and maize industries. An example of one of the policies and its effects is given below:

Although by 1928/29 the country was already exporting 86 000 tons of sugar, and despite the fact the high tariff barrier had encouraged an increase of sugar cultivation from 264 000 acres in 1927 to 336 000 acres in 1932, world prices were falling so far that in the latter year the government was persuaded to raise the tariff first to £12.10s. and subsequently in the same year, to £16 per ton. By 1933 South African sugar was being dumped on the international market at a price that was a fraction less than 1d. a pound. Already in that year the excess cost to South African consumers for this sugar control was estimated to be well over £1,000,000 and production was continuing in its meteoric rise.

The labor problem surfaced again in the 1930's after having been dormant for some time after the Land Act of 1913. The disparity between mine and farm labor (the former being double the latter in 1952) was such, that labor was being pulled to the industrial centers. The pass laws and the group areas laws prevented widespread movement of labor either within the agricultural sector or between sectors when locational changes were involved. Although there was evidence that some farmers did improve the wages of the laborers (Wilson, 1971, p.146 and Lipton, 1985, p.98-101), two other measures were turned to, in an attempt to improve the labor situation. One was stricter enforcement of the 1913 Land Act with regard to squatters and the establishment of a prison labor scheme (Wilson, 1971, p.152-153), and the other notable response to the labor problems was the process of mechanization in the agricultural sector between 1937 and 1966. In her work, *Modernizing Super-Exploitation*, Tessa Marcus (1989) illustrates the effects of

this increased mechanization on particularly the labor force. These include: a relative and absolute decline in the numbers employed in the commercial farming sector as labor tenants were evicted and full time laborers were in part replaced by part time and casual laborers; the emergence of a more differentiated and hierarchical ordered farm labor force; a decline in wage levels, deterioration of their social conditions and an intensification of their exploitation.

After the Second World War the institutionalization of different policies that in one way or another rendered assistance to the white commercial farmers, such as subsidies on fertilizers, transport, extension and credit, continued. The 1946 Soil Conservation Act, for example, aimed at improving soil conservation and management practices through different guidelines and subsidies to induce the adoption of these practices.

The modernization of the white commercial sector that took place during this century through the adoption of new farming practices and mechanization, one could argue, were largely induced through the favorable commodity prices set by the various control organizations and various subsidies. These had three main effects. Firstly, aggregate production increased substantially, sometimes and in some sub sectors at a high cost to the consumer and tax payer, as was and still is being evidenced by various surplus disposal schemes. The high incentives being offered also resulted in large areas of marginal land being put into cultivation, especially in the grain sub sectors. Secondly, there was a significant transfer of wealth that took place from not only the urban/industrial consumers and tax payers but also African laborers to the white commercial sector through direct transfer payments such as subsidies and indirect measures through high prices and low labor costs. The third effect, which forms the thesis of Tessa Marcus's work (1989) was the exploitation and dislocation of the rural

labor force and following Bundy's (1988) argument, the decline of the African peasantry.

However, there was also a process of technological and skill transferral that took place in the sector. Although limited, it is evident that those full time laborers that remained on White farms and were incorporated into the operation of the enterprise at a foreman or "bossboy" level, were exposed to modern farming methods and practices, albeit mechanization and irrigation. This was possible as the agricultural sector was the only sector in the economy to which the job bar⁸ never applied (Lipton, 1985, p.87). Even though it can be argued that this was not a general or widespread phenomenon, as participation at this level was limited, there are enough current examples of African foremen running farms of absentee landlords, and of African commercial farmers in the "homelands" who gained their skills on White farms, to realize that a process of skill transferral was and is still taking place.

⁸ "Job bar" refers to the reservation of skilled positions for Whites.

CHAPTER 3

THE PRESENT SITUATION

This chapter will provide an insight into the current situation that the commercial agricultural sector finds itself in today as a result of the shaping forces outlined in the previous chapter. The position and role of the sector within the broader economy will be addressed before describing the current structure and changing trends and forces that are likely to re-shape the structure of the sector in the future.

3.1 THE ROLE AND CONTRIBUTION OF COMMERCIAL AGRICULTURE IN THE SOUTH AFRICAN ECONOMY.

If one is to account for the contribution that a sector provides to a economy a starting point is its contribution to the country's Gross Domestic Product (GDP). The figure used in calculating this value consists of the gross income minus the value of intermediate goods and services used in the production of the agricultural output plus own construction (fixed investment) and change in stocks. In this regard the commercial sector together with forestry and hunting currently provide just under six per cent of the country's gross domestic product. As can be seen from Figure 1, agriculture's relative contribution has been declining at an average rate of 2.4 per cent per annum between the years 1950 to 1988. The decreasing relative importance of agriculture in the GDP which is generally found in industrializing economies is part of the structural transformation that takes place in an economy over time. Generally speaking, agriculture usually stimulates the rest of the economy or serves as a base from which other sectors develop. However, in South Africa the discovery of minerals in the late

eighteenth century can be said to have brought about a "premature" industrialization process in the country which to a large extent has driven or provided the resources for the development of the commercial agricultural sector. In this regard one could argue that the structural transformation has been somewhat reversed and has not followed a traditional or natural pattern found in other industrializing economies.

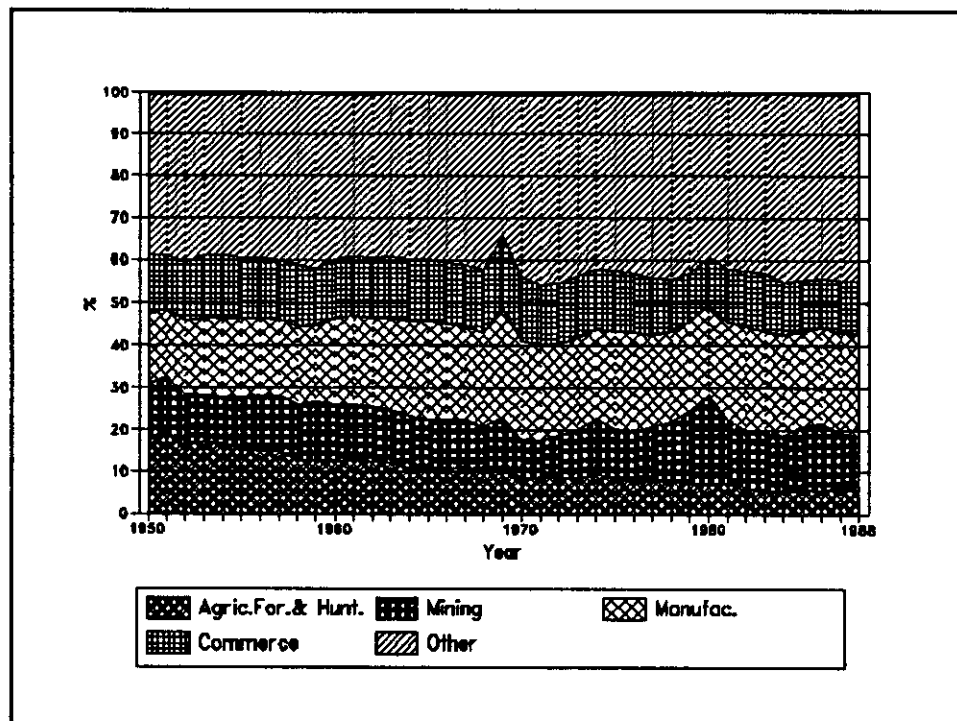


Figure 1: Agriculture's Relative Contribution to GDP in South Africa and South West Africa, 1950-1988.

Source: Adapted from Abstract of Agricultural Statistics, 1990.

In addition to agriculture's direct contribution to the GDP, it is also important to consider its multiplier effects and contribution towards foreign exchange earnings. Intermediate production requisites purchased contribute toward this multiplier as does employment within the sector and downstream activities such as transport, processing and other marketing activities. The value of certain main intermediate goods in relation to agriculture's direct contribution to GDP is shown below in Table 1.

Table 1: Value of Intermediary Agricultural Production Requisites.

Year	Average Direct Contribution of Agric. to GDP (R Million)	Average Value of Production Requisites (R Million)	Average Direct Agric. Contribution Toward GDP %	Joint Agric. Value and Production Requisites as a % of GDP. %	Value of Production Requisites as a % of Agric. Value %
1950-59	515.26	163.07	15.84	18.37	31.65
1960-69	734.55	303.10	11.30	14.12	41.26
1970-79	1970.99	1012.96	8.22	11.90	51.39
1980-85	4448.38	3196.32	6.24	9.82	71.85
1986-89	8051.03	5476.78	5.93	9.34	68.03

Source: Adapted from Abstract of Agricultural Statistics, 1990.

As can be seen from Table 1 including the value of intermediate agricultural production requisites in determining agricultural's gross contribution to GDP there is a significant increase. Of interest are the values of the intermediate products in relation to the direct agricultural contribution to GDP. The increase over the years is quite substantial which illustrates the cost-price squeeze predicament that the commercial sector has been finding itself in especially over the last ten years. There was a slight relief during the period from 1986-1989, which supports Christodoulou and Vink's (1990) finding that there has been an improvement in the cost-price squeeze in the last few years. In terms of agriculture's contribution to foreign exchange earnings it can be seen from Figure 2 that this has been decreasing as a whole, relative to other sectors, although certain sub sectors such as deciduous and sub tropical fruit and sugar have been consistently increasing over the period. The latter sub sectors are generally considered efficient exporters as they consistently export at a profit unlike other sub sectors such as the maize sub sector which has exported maize at a loss for 23 of the 30 years in the period

1954/5-1982/3, with profits of more than one million rand realized only in the intervening four year period 1973/4-1976/7 (Marcus, 1989, p.20).

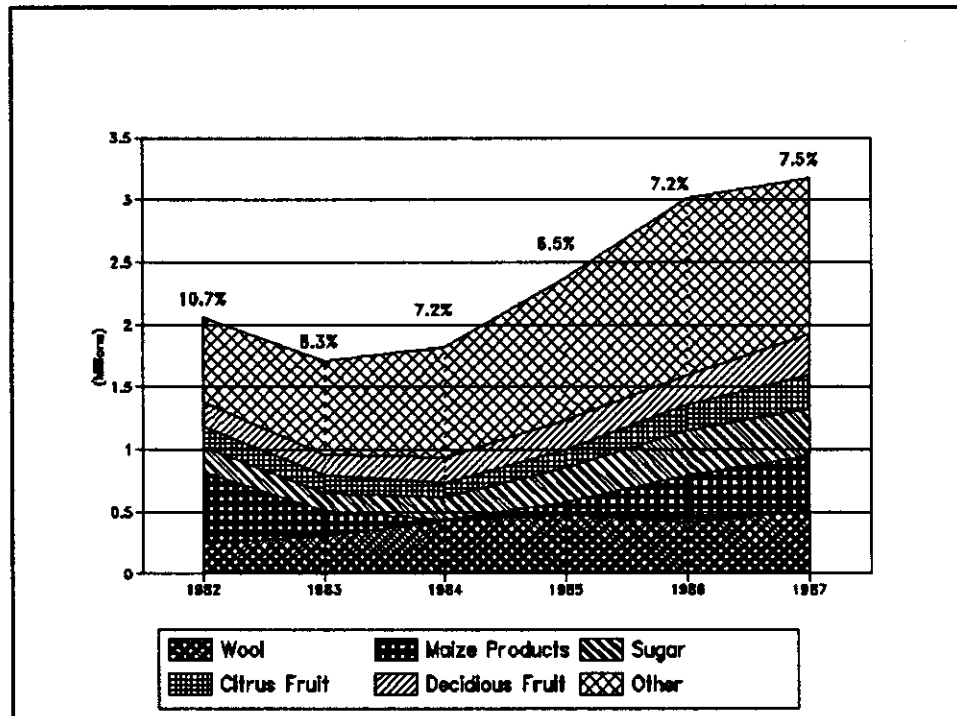


Figure 2: Nominal Value of Agricultural Exports in Relation to Total Exports, 1982-87.

Source: Adapted from Economic Trends in The Agricultural Sector, 1988.

It is worth noting that exporting sub sectors do receive government assistance, however, this is mainly in the form of tax reliefs. The absolute increase in the value of agricultural exports can be attributed to the declining value of the rand which decreased in value, in the region of 50 per cent from 1983 to 1988, and inflation which has averaged 15 per cent per year over the last five years.

The final value criterion that is useful to look at consists of the value of the capital assets in the agricultural sector. Figure 3 below gives an indication of the capital value of the commercial agricultural sector and places it in relation to the country's budget. The dramatic increase that is evident from Figure 3 below especially during the 1970s can be largely attributed to capital investment incentives that were available to the

commercial sector such as being able to write off capital expenditure in one year against taxable income and other incentives such as subsidies on credit and diesel.

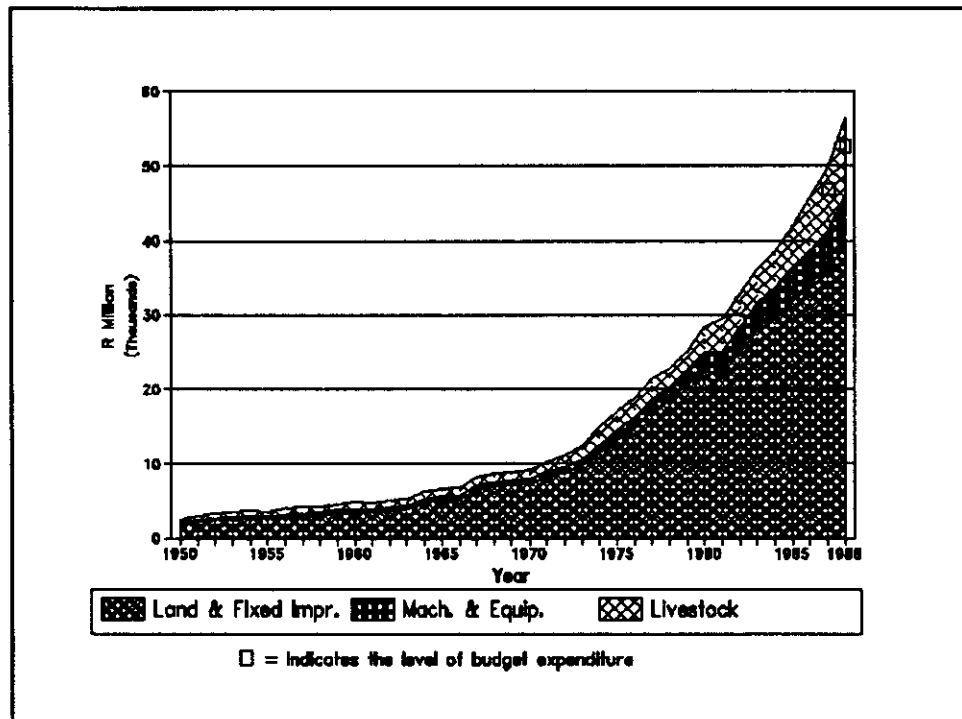


Figure 3: Average Nominal Capital Value of the Commercial Sector.
 Source: Adapted from the Abstract of Agricultural Statistics, 1990.

According to Christodoulou and Vink (1990, p.22) the values of the above official figures are widely recognized as an under-estimation. The Development Bank of Southern Africa's (DBSA) own estimate of the value of farm land including fixed improvements is in the region of R100 Billion, which is almost double the official figure.

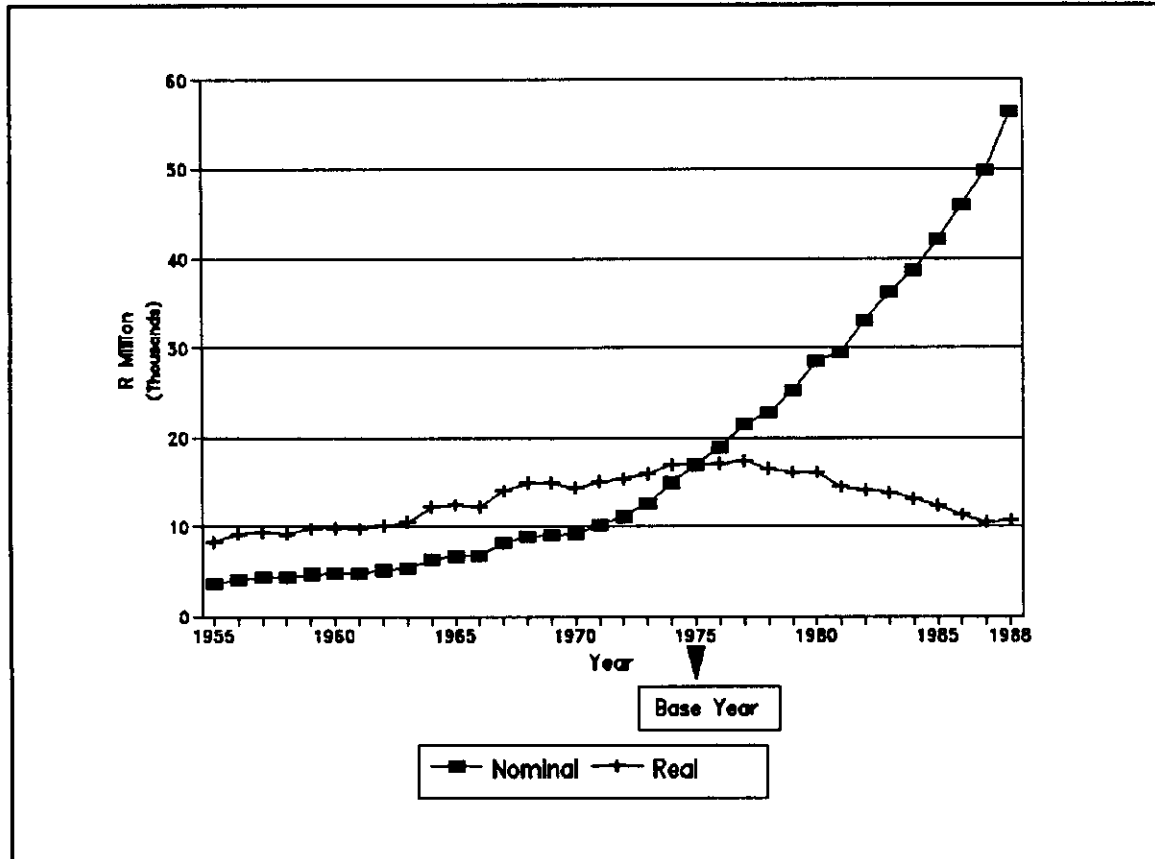


Figure 4: Real and Nominal Value of Capital Assets, 1950-1988.

Source: Adapted from the Abstract of Agricultural Statistics, 1990.

As can be seen from the above figure, the affect of inflation is substantial especially from the late 1970's onwards.

Another important criterion that has not been addressed in this section is the provision and creation of employment that the sector provides. It is evident that the sector has not faired too well in this regard both in terms of labor absorption and wage levels (Marcus, 1989 and Van Zyl *et al*, 1987). A general indication is given by the average annual cash remuneration, which grew in real terms up to 1981, but has declined since that time (Christodoulou and Vink, 1990, p.9). As a result of the latter and other research (Wilson and Ramphela, 1989) it can be argued that the sector has not provided the essential aspect of agricultural development that is, raising the levels of living of

those living in the rural or agricultural areas which in turn should stimulate demand for different goods and services.

In summary, it is evident that the agricultural sector has made a contribution to the economy, especially when certain multiplier effects are taken into consideration together with the capacity to earn foreign exchange. However, these benefits are skewed both amongst White farmers where it is estimated that the Gini-coefficient for income distribution is 0.67, and between the white farmers and the labor force. It can be argued, knowing the historical background, that this is largely a result of the property right distribution structure and institutional "favoritism" that has and continues to exist in the sector.

Disaggregating the sector into the individual sub sectors would provide important information regarding the relative contribution and efficiency of the individual sectors. From preliminary indications it seems evident that those sub sectors with limited or less government control and support seem to be more efficient from an exporting point of view than those more tightly regulated and receive more government assistance. This however, needs further research to clarify.

3.2 THE STRUCTURE⁹ OF THE COMMERCIAL SECTOR

Structure results from a certain institutional setting and in turn influences or shapes the setting. The historical overview has provided an account of the structural evolution and forces that have to a large extent accounted for the pattern and outcome. This section will bring the reader up to date with the current structure of the commercial sector in

⁹ Structure refers to the nature and extent of the ownership and distribution of resources as a result of institutional frameworks (i.e. policies and legislation) and organizations (i.e. control boards and cooperatives) all of which affect the allocation and mobility of resources within and between sectors of the economy.

South Africa. Three main areas will be addressed in this section: (i) land ownership and land use patterns, (ii) the financial situation and, (iii) government assistance and support. It should come as no surprise, after having read the section dealing with the historical evolution, to find that there are severe structural imbalances within the agricultural sector, between the commercial and developing sectors and between other sectors of the economy. This in essence was the finding by Fenyes *et al* (1988) who illustrated this aspect with reference to land tenure, ownership of assets, distribution of income, labor utilization and production performance.

3.2.1 Land Ownership, Distribution and Use

As a result of the Land Act, No.27 of 1913 and No.18 of 1936 the distribution of land is highly skewed with 14.4 per cent of the land surface being allocated to the so called "homelands" and the remaining 85.6 per cent falling under the jurisdiction of "White" South Africa. It is estimated that the rural population of the "homeland" areas is 10.6 million compared to 5.4 million rural inhabitants in the "white" rural areas, known as the "platteland". In terms of potential arable land, the "homeland" areas contain 11.3 per cent of the potential arable land in the country compared to 88.6 per cent that is available in the "platteland". When this is considered on a per capita basis it is evident that there is only 0.2 hectare (Ha) potential arable land available per capita in the "homeland" areas compared to 2.9 Ha in the "platteland". These patterns of distribution are illustrated in Figure 5.

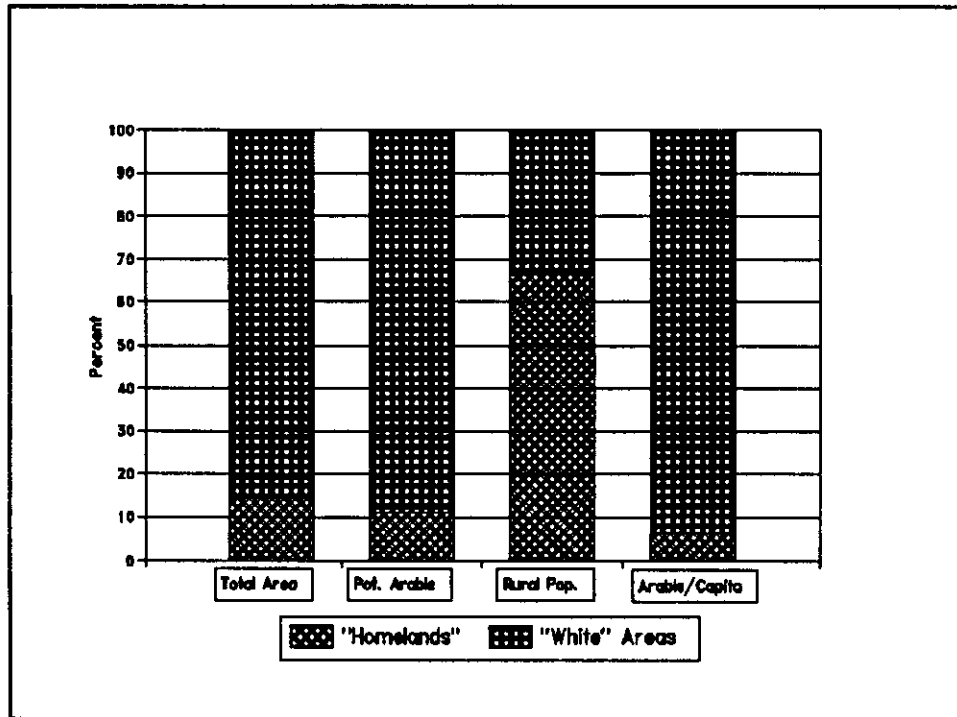


Figure 5: Land and Population Distribution.
 Source: Adapted from DBSA, 1990.

Information on the distribution of land within the commercial sector is somewhat confusing as indicated in Christodoulou's and Vink's recent paper (1990, p.7). There is a significant difference between the mean farm size (1280 Ha) and the median farm size (500 Ha) indicating a skewed distribution. The skewness is somewhat distorted as the figures do not distinguish between different farming systems. This is put into perspective when observing that those farms larger than 500 Ha which make up 93.4 per cent of the total agricultural land only produce 66.9 per cent of gross farm income and 71.6 per cent of gross margins. This relates to the reality that only 19.2 per cent of farmland is arable and large farms are mostly found in extensive grazing areas.

About 16 per cent of farmland in the "white" rural areas was owned by companies in 1983, but of this, only 3 per cent was owned by public companies, the balance mostly being incorporated individual farmers (de Klerk, 1991, p.11). If, as de Klerk mentions,

the object is to displace monopoly capital from agriculture, presumably only the former would be relevant.

The downward trend of the decreasing number of farms over the period from 1950 to 1980, seems to be reversing itself as is evident in the increase in the number of farms from 59 960 in 1983 to 67 010 in 1988 (Abstract, 1990). Findings from a recent survey conducted by the Department of Agriculture (cited in Christodoulou and Vink, 1990) indicates that there are 78 960 bona fide farmers in the "White" areas of South Africa and that each farmer owns 1.6 farms, given that there are 128 378 farms in total. According to the survey 12 per cent are part time farmers and 10 per cent rent land. According to van Zyl (1990, p.182-183), the percentage of part-time White commercial farmers increased from less than 12 per cent in 1965 to more than 20 per cent at present (1990). The estimated gross value of production attributable to these part-time farmers was 13.4 per cent in 1988/89. These farmers employed 183 000 farm laborers (1987) on 13 034 farms (1986) and contributed R1 245.7 million to the GDP and R608.8 million to net farm income (1988/89). In addition 14 per cent of the farms not permanently occupied, are visited at least once a week while 9 per cent are hardly ever visited. No figure is mentioned of the total number or proportion of farms not occupied. The different sets of figures does not provide any clarity to the "fuzzy" area of land ownership and distribution. This is mentioned in Christodoulou's and Vink's (1990, p.7) paper who indicate that, "it is evident that we don't really know enough about who owns how much land and where in South Africa."

The land use patterns and their changes from 1981 are shown in Table 2 below.

Table 2: Land Use Patterns in 1981 and 1988.

Crop	1981 (Ha)	%	1988 (Ha)	%	Increase/ Decrease	Growth (% p.a.)
Dryland	8721750	10.1	9367620	10.9	645870	1.0
Irrigation	851943	1.0	1290070	1.5	438127	6.1
Planted Pastures	1195512	1.4	2449845	2.9	1254333	10.8
Natural Veld	73453976	85.2	69742302	81.3	(3711674)	(0.7)
Forestry	151290	1.3	1510628	1.8	359338	4.0
Other	892638	1.0	1408065	1.6	515437	6.7
Total	86267109	100	85768530	100	(498579)	(0.1)

Source: Christodoulou and Vink, 1990.

The net increase in dryland under crops from 1981 to 1988 can be ascribed to both increases and decreases of certain crops. There has been a decrease in planted areas of: maize (1.52%) per annum from 1980 to 1989; groundnuts (6.84%) and tobacco (3.6%). There were, however, increases in wheat (0.96%), sunflower seed (3.03%), grain sorghum (3.31%), soybeans (7.66%) and cotton (7.39%). The area under pastures and forestry increased significantly over the same period.

Research (DBSA, 1989) indicates that there is little unutilized or abandoned land in the country although low cropping intensities are found in Regions E and F (eastern areas of the country) where the highest proportion of high potential arable land is to be found.

3.2.2 The Financial Situation

The financial situation of the commercial sector has deteriorated significantly over the past ten years. A variety of reasons have been responsible for this, such as over-capitalization due to certain incentives being offered which resulted in inflated land values. The cost-price squeeze together with drought periods and an increase in interest rates and inflation have also contributed to the escalating debt. A breakdown of the farming debt is given below in Figure 6. As can be seen from the figure the increase in debt has been dramatic especially since 1982/3. The total debt has increased by 237.4 per cent from R1.4 Billion in 1970 to R13.5 Billion in 1988, with debt held by the Land Bank (21.6%), cooperatives (25.1%) and commercial banks (25.6%) accounting for the major share (72.25%). Between 1980 and 1984, the average percentage increase in debt per annum was 23.3 per cent, the highest it has ever been. The increasing trend has levelled off and in some cases, private and other sources, have in fact declined slightly.

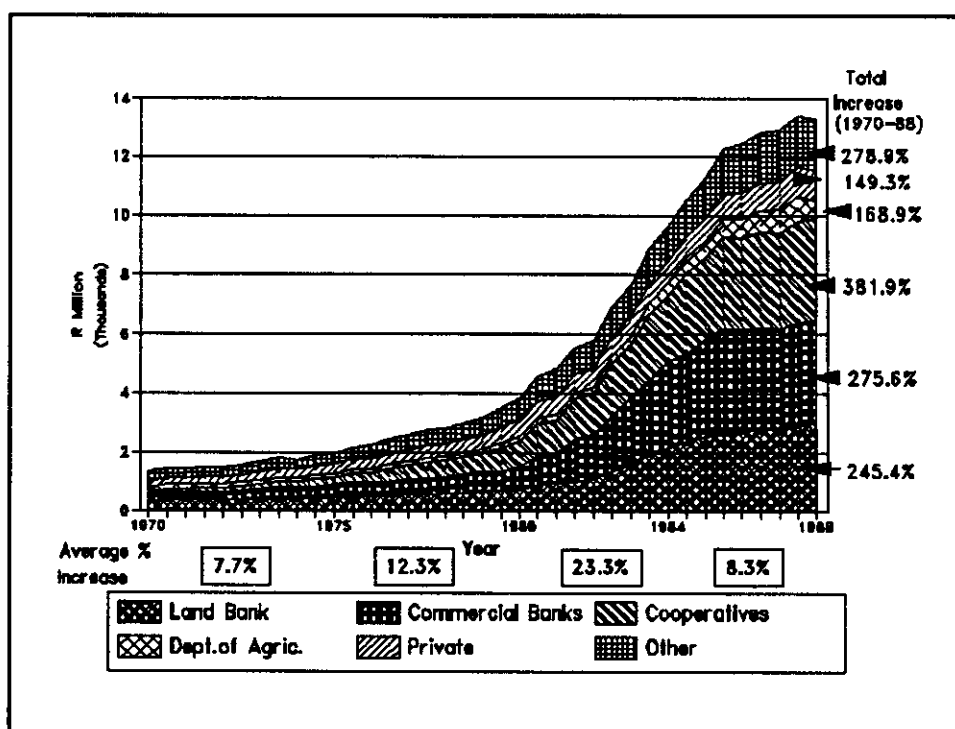


Figure 6: Nominal Value and Composition of Farming Debt, 1970-88.
 Source: Adapted from the Abstract of Agricultural Statistics, 1990.

The effects of inflation are illustrated in Figure 7.

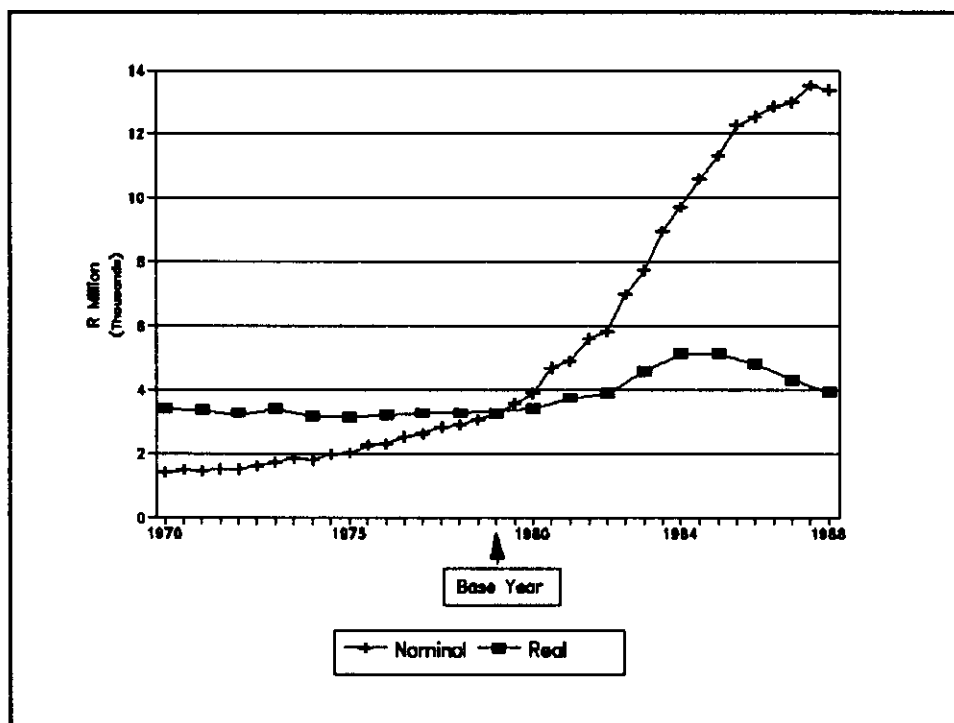


Figure 7: Real and Nominal Values of Farm Debt.
Source: Ibid, 1990.

In assessing the financial situation, it is also important to address the financial ratios, specifically the debt serving and solvability ratios which place the debt into perspective in terms of gross farm income and net worth of the commercial sector as a whole. Figure 8 indicates that the debt problem is indeed as bad as the aggregate levels indicate. The debt servicing ratios declined from 1981 until 1985 leaving very small margins between gross farm income, costs and debt. The solvability ratio started declining since 1975 and did so very steeply from 1980. Since 1986 there has been a slight improvement in this ratio, but it remains low, as do the debt servicing ratios.

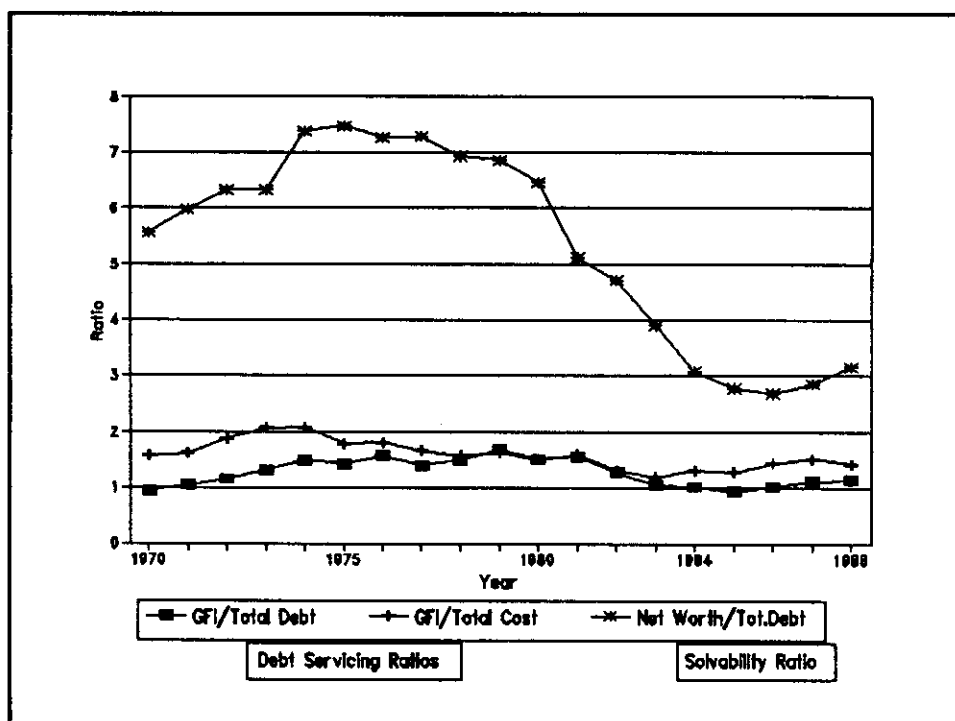


Figure 8: Debt Servicing and Solvability Ratios, 1970-1988.
 Source: Adapted from Abstract of Agricultural Statistics, 1990.

All the information provided is in aggregate form and as such conceals important information about the relative positions of the different sub sectors within the commercial sector. Information on which sub sectors and areas owe the debt, which would provide important additional information on the structure of the debt, is not available due to a certain degree of sensitivity surrounding the debt crisis. Again it is hypothesized that the debt levels are likely to be higher in those sub sectors which do not benefit from a comparative advantage, have had access and made use of cheap credit in the past, and have obtained proportionally higher government assistance and control, such as the grain sectors, meat and dairy sub sectors.

3.2.3 The Nature and Extent of Government Assistance

The State has played a major role in shaping the structure of the commercial sector over the years. Information on the specific nature and extent of government assistance to the commercial sector is limited. The information that does exist is in aggregate form and also does not account for many indirect forms of assistance. The extensive network of government control through organizations such as marketing/control boards, or through institutions via different policies and legislation, still largely exists. The nature and extent of this intervention is different between the various sub sectors. This is evident from the allocation of subsidies which is shown in Figure 9 below.

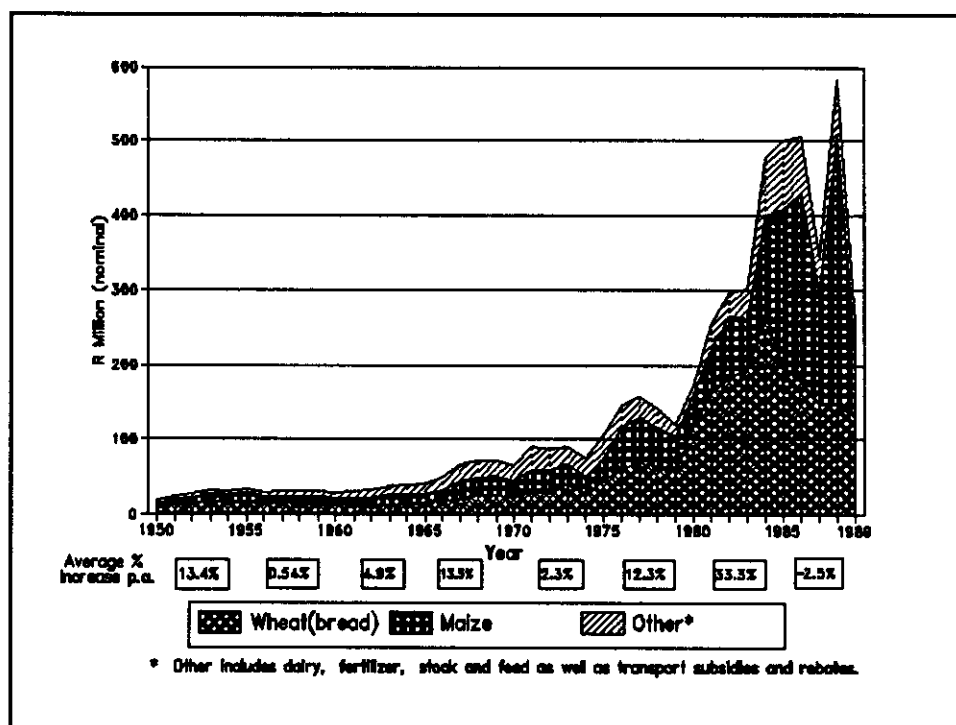


Figure 9: Nominal Value and Allocation of Subsidies And Rebates, 1950-1989.

Source: Adapted from Abstract of Agricultural Statistics, 1990.

As can be seen, the maize and wheat sub sectors obtain the largest portion of direct subsidies from the Department of Agriculture. There has been a dramatic increase (33.3%) in the level of subsidization between 1980 and 1985, which to some extent can

be related to the periodic drought experienced during this period, inflation effect, and the rapid deterioration in the debt situation.

There are, however, many indirect subsidies that are not taken into account in the above figure. These include tax reliefs, interest subsidies and debt relief. Due to the sensitivity of this information and its dispersal, it is generally hard to come by.

In addition to the granting of subsidies, the budget for farmers in South Africa has decreased in nominal and real terms since 1987. Figure 8 gives an indication of budget expenditure on farmers in South Africa and White farmers in the country.

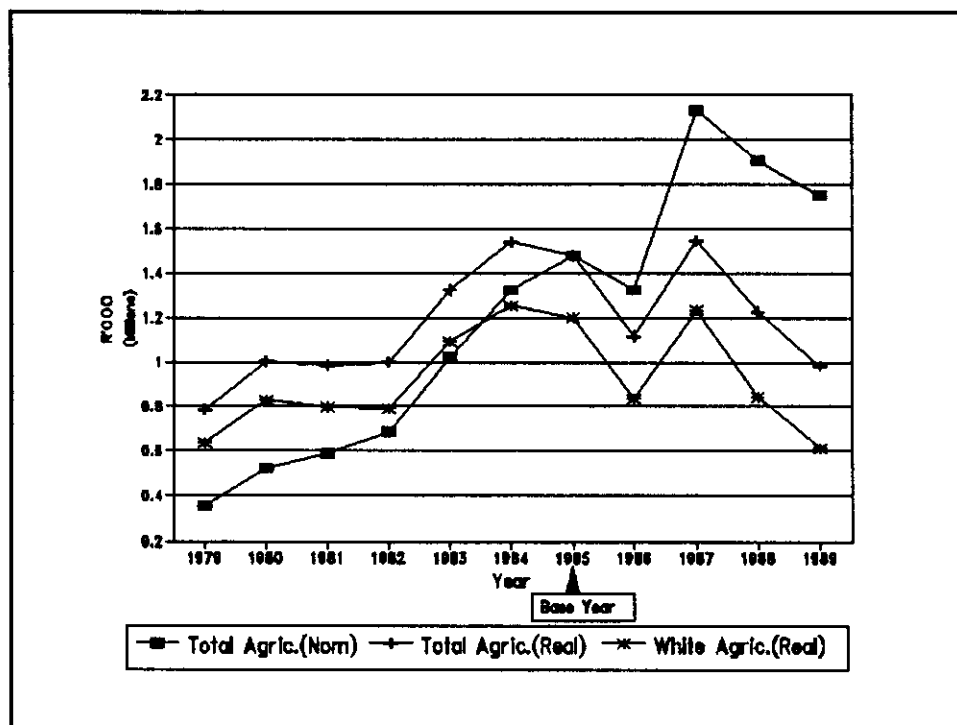


Figure 10: Agricultural Budget Expenditure Patterns, 1979-1989.
 Source: Adapted from Christodoulou and Vink, 1990.

It is evident that budget expenditure has been cut back from agriculture and "white" agriculture since 1985. The margin between agricultural expenditure and "white" agricultural expenditure has remained fairly constant over the ten year period. Declines in budget expenditure have partially materialized through declines in the real producer

prices of maize by 50 per cent since 1986, and wheat by 50 per cent since 1984 (Christodoulou and Vink, 1990).

3.3 EMERGING TRENDS AND CHANGES

The previous chapter and sections in this chapter have illustrated the evolution and present situation of the commercial agricultural sector in the economy. It should be clear that in aggregate there are structural imbalances and problems within the sector and between other sectors within the economy. In addition, the institutional framework has not only led to these structural imbalances but also caused costly distortions in the sector's conduct through limited access and inefficient allocation of resources, which in turn have resulted in a less than optimal performance, specifically in certain sub sectors.

The realization of the costly consequences, equity considerations and changes in the broad socio/political climate have resulted in certain emerging trends in the sector. In the financial arena, the margin between Land Bank interest rates and market rates has been declining over the past few years and are set to finally converge. In addition, the Land Bank in 1990, agreed to officially open access to its services to commercial African farmers. De facto, there are obviously certain informal constraints that still remain and will need to be addressed over time. The slowdown in total debt, has improved the solvability and debt servicing ratios slightly, although the overall financial situation is still in stress. Christodoulou and Vink (1990) claim that this is a positive response to certain recently introduced policy instruments to restructure agriculture.

There have also been a variety of measures announced by the Minister of Agriculture since the beginning of 1990 that aim at "freeing up" the market mechanism. These are mainly focussed on the restrictive control measures practiced by certain control boards such as the wheat, meat and oil seed boards. Christodoulou and Vink

(1990) list the changes, which in summary include the following:

- The restrictive registration of participants (producers, abattoir agents, butchers, general dealers, processors and importers) in the meat sub sector and in the wheat sub sector (millers and confectioners) has officially been stopped.
- Egg production control has been abolished.
- Quantitative import control measures on tobacco, oil seeds, oil cake and fish meal have been repealed. There is also a move to tariffication, namely, replacing remaining quantitative import restrictions with tariff measures.
- Transportation of meat from uncontrolled areas to controlled areas is to be eased.
- Single channel marketing systems for lucern hay and tobacco are to be discontinued.
- The bread subsidy will cease March, 1991, and will be replaced by a broader welfare/food stamp program.

Although not fundamental changes in themselves, they nevertheless indicate a freeing up of the tight control and restriction that certain control boards have and exercise in the sector. Again the underlying causes can be attributed to a composite mix of political and economic forces.

Significant private initiatives for reform within commercial agriculture have been largely limited to the sugar sub sector. The incorporation of some 30 000 small African growers into the sub sector has received attention from different groups. The origins and underlying causes and effects will be examined in Chapter 6.

The depopulation of the rural "White" areas - "platteland" - has emerged as an issue in the rural development agenda. Fenyés and van Zyl (1990) give evidence of the underlying forces and effects of the depopulation. They conclude that depopulation is mainly the result of economic forces although there are other interdependent causes such as social and security aspects that also play a role. Their investigation indicates that White rural depopulation, as well as the phenomenon of some farms functioning and producing in the absence of permanent White residents, will continue even if the underlying economic and climatic factors improve, due to the trend of increasing farm size and the number of part time farmers becoming involved.

The nature and extent of poverty and absence of food security continue to have serious consequences especially amongst rural settlements in the "homelands". The most detailed and recent account of the latter is provided in Francis Wilson's and Mamphela Ramphele's *Uprooting Poverty: The South African Challenge*, (1989). The seriousness of the latter is put into perspective when one considers that in aggregate, total food production outstripped aggregate food consumption (van Zyl and van Rooyen, 1990). The following self sufficiency indexes were calculated in the above study:

Field crops	- 134
Horticultural crops	- 152
Animal products	- 97
Total	- 130

The disparity between food self sufficiency and security (unbalanced food security equation) is founded in such factors as lack of access to income, food price policies favoring white commercial farmers (van Zyl and Coetzee, 1990) and the skewness and concentration of production in the "homeland" areas (van Zyl and van Rooyen, 1990).

The drive to start integrating the dual (developing and commercial) agricultural sector into one is gaining momentum. Policy makers and academics are transcending traditional boundaries that existed between these two sectors as it becomes evident that the political economy is becoming more concentrated and unified at a national level. The governments recent tabling of a white paper¹⁰ on land reform, with five accompanying bills which are scheduled to go to parliament, is a far reaching initiative, that has increased the inertia on this topic. The "points of departure" of the white paper include access to land as a basic need, which will be fulfilled by free enterprise and private ownership. The policy objectives include the following:

¹⁰ A White paper is the equivalent to a policy or position paper.

- **Broadening access to land rights to whole population:** This includes the abolition of all racially based restrictions on land rights and assistance to promote access to land rights.
- **Upgrading of the quality and security of the title in land:** Included in this objective are the upgrading of land rights and improvement of land registration systems, evolutionary conversion of tribal tenure systems to more individual ownership, and protection of the integrity of the title in land.
- **Utilization of land as a national asset:** Policy positions contained in this objective relate to the maintenance of the commercial agricultural capacity accompanied by open access to agricultural assistance, active promotion of rural development in the less developed areas, acceleration of the provision of land for urbanization and conservation and preservation of land for future generations.

The accompanying five bills are aimed at institutionalizing the above policy positions. In short, the overall position on opening access to both land and support services seems positive. However, reservations have already been expressed about the transformation of an existing "apartheid" structure, namely the South African Development Trust (SADT) into another organization, namely, the Rural Development Corporation. In addition, it is questionable whether free enterprise and private property rights will have the ability to achieve the stated objectives on their own. There is also concern that certain racial discrimination measures being removed may be replaced by economic discrimination. What is evident is the paper's explicit aim of maintaining the commercial production capacity, rejection of land nationalization, expropriation and/or confiscation. In addition, the paper also considers returning land to individuals and communities who were forced to give up their land on account of past policies, as not being "feasible". Although there has been no official comment from opposition groups to the paper, it is evident from the positions that these organizations have taken, that they will find the proposals insufficient, especially in the areas of land redistribution and affirmative action programs. The initiatives proposed in the White paper and accompanying Bills, are the most fundamental state reform actions that have taken place in the agricultural sector to

date. The consequences are bound to be far reaching in terms of opening up access not only to the agricultural economy but within the broader economic environment.

In conjunction with these initiatives, various policy proposals that aim to integrate African smallholders into the mainstream by opening access to support services and organizations through affirmative institutional action are being formalized. Central reform measures to reduce the inequities of the past will no doubt impact on the commercial sector albeit through land, support service or price policies. The national debate on land reform is likely to broaden its coverage to labor and organizational issues such as the future role and performance of marketing boards and cooperatives and the restrictive legislation associated with the latter organizations.

In summary, it is evident that forces are at work changing the underlying imbalances and problems in the agricultural economy. The first phase of dealing with the official or formal constraints is underway, and has already resulted in certain reforms. However, there remain two key processes that need to be dealt with: determining what institutional and organizational framework will best be able to deal with the remaining constraints, and how to deal with the many informal constraints, that will continue to exist even after formal constraints have been alleviated. With regard to the latter it is hoped and assumed that a change in morality will contribute to a change in behavior.

CHAPTER 4

THE NATURE OF THE PROBLEM

The current aggregate structure and performance of the commercial sector is neither efficient, equitable nor sustainable in its current form. The lack of performance and structural imbalances both within the sector and between other sectors in the economy necessitates restructuring. This is compounded by the recent developments in the political economy which will inevitably result in restructuring of institutions and property rights in the country and specifically the agricultural sector. The symptoms of the poor performance have been documented in the previous chapter and include the ailing financial situation, absence of food security, high level of dependence on state assistance and regulation, barriers to entry and inequitable distribution of benefits.

It is a hypothesis of this study that the overriding cause for the above is institutional failure. The term "failure" is a collective term for many different types of institutional problems ranging from the exclusive and discriminating national policies and legislation resulting from separate development ideology to the inability of micro level institutions and organizations to adapt to a changing environment. An efficiency view of institutions is too simplistic and fails to provide answers. Perhaps, a broader institutional view that rests upon a property right foundation might provide more meaningful explanations of the situation that has evolved. In general one could say that the social, political and economic costs of the existing situation have become so high both in monetary and non-monetary terms that change is inevitable. The need for institutional reform in the agricultural sector has been recognized by various individuals and organizations involved in the sector. Its appearance on the "agenda for action" and the

recent repealing of the Land Acts of 1913 and 1936, the Group Areas Act of 1947 as well as many other forms of discriminatory legislation, signifies this.

As is happening in Eastern Europe and other parts of Africa, so too is institutional and political transition taking place in South Africa. One difference though, is that the transition in South Africa is not one away from socialism to more market orientated and democratic based economies but rather a change away from "apartheid" capitalism¹¹ and selective socialism¹² to a broader based or opened mixed economy. Finding the right mix that will contain the incentives, rewards and competition of capitalism with the egalitarian ideals of socialism is going to be a challenge. The process is not necessarily one of the market versus the state but rather, as Schmid (1991) points out, determining the rules of the market and as North (1990) indicates obtaining the right mix of continuity and change.

The nature of the problem is one of institutional design and operation that in the future will need to take into account not only the characteristics of the situation and interdependencies that exist between the participants but also induce a certain behavior that will result in the desired performance. The restructuring that needs to take place in the agricultural sector, both the commercial and developing, should be seen in the context of the changes in the broader political economy. From this point of view, institutional restructuring is likely to take place at different levels and in different forms.

¹¹ The term "Apartheid" capitalism has and is being used in South Africa to refer to the unique type of capitalism that evolved from the apartheid system, namely a highly exploitive system in which the concentration of wealth thrived due to limited access and distribution of benefits. Wilson and Ramphele (1989, p.277) refer to this as "vulgar capitalism" which they indicate, has continued to flourish in South Africa in its particular racist form and in so doing has had no respect for workers as thinking, rational human beings.

¹² The term "selective socialism" refers to the high level of government and parastatal selective involvement in the economy resulting in employment and other economic opportunities being available to predominantly Afrikaans speaking South Africans.

The most far reaching and dramatic is likely to result from a new constitution and government that will inevitably redefine the property rights structure of society. In the agricultural sector one can only speculate at this stage on the nature of a future governmental agricultural reform program. The speculation is, however, based on an understanding of the history and present situation of the agricultural sector as well as certain initiatives that are emerging. The debate on the process and content of restructuring the agricultural sector is currently topical in South Africa with proponents of market based and institutional evolution options debating with those advocating more government directed options.

At a lower level there is potential for collective (sub sector) and individual (firm) private initiatives aimed at restructuring the sub sectors and firms within the commercial sector to improve their performance and adaptability to the changing political economy. This paper aims at examining opportunities for such private initiatives after having made some speculations on the possible nature and extent of a state reform program.

The choice to focus on private commercial organizations and initiatives that can be undertaken by them is based upon the following:

- The current modes of operation, participation, and ownership necessitate a more equitable modus operandi which from a social cost point of view may be more affordable than alternative restructuring options.
- In terms of necessity, organizations will have to adapt to the changing political economy if they are to survive and remain viable. This process of adaptation provides an opportunity for commercial sector organizations to become more responsible to stakeholders (labor, management, shareholders) and society's needs.
- An underlying belief in a market based economy which is based upon private

initiatives within an appropriate institutional framework. This belief in a market-based system can best be summed up by the potential of a market as indicated by the following quote from Shaffer (1980, p.315):

The genius of the market as a social institution is that it provides a mechanism for collecting and summarizing an enormous quantity of idiosyncratic information about the environment and preferences in an easily understood form (prices) which at the same time carries incentives to produce and conserve to the participants of the system. The political economic problem is to institute the regulatory system in such a way that price carries the information and incentive, as consistent as possible with preferences for system performance and the reality of the environment.

- The participants in the commercial sector - managers, foremen and laborers - provide the greatest existing and potential source of skilled and semi-skilled labor resources required for a competitive commercial sector. Utilizing this capacity from within may provide a more stable and rapid method of redistribution without significantly disrupting production.
- It is assumed that a core commercial sector consisting of those sub sectors with comparative advantages, who are efficient producers and exporters and are currently not heavily dependent on direct governmental assistance for their existence, will still exist after an initial redistribution of certain property rights.

Private based initiatives for the institutional redesign and organization within agricultural sub sectors and firms is one component that attempts to address the problem of institutional failure and its consequences in the commercial agricultural sector. The challenge is threefold. Firstly, part of the challenge lies in seeing and believing in institutional failure and more importantly being able to distinguish between system or market failures and institutional failures. In other words to what extent has capitalism per se been responsible for the current predicament versus the institutions that resulted

from a certain form of government, namely the pro-Apartheid nationalist government. Secondly, another part lies in realizing that institutional reform necessitates the understanding of the relationships and dynamics at play beyond the initial consequences or outcomes with alternative structures. Finally, a large part of the challenge lies in participants coming to terms with the underlying causes, acknowledging the immediate need for reform and having the vision and the fortitude to realize the benefits, both individual and collective.

CHAPTER 5

AN INSTITUTIONAL APPROACH

Conventional economical theory cannot explain many of the central aspects of institutions; to understand these we need a broader view, informed by sociological, psychological, and historical perspectives (Stiglitz, 1989, p.21).

The situation in South Africa lends itself to using an institutional approach. The variables that have resulted in the current predicament and are likely to transform the current structure are mainly institutional. Until very recently, there has been a void and possible reluctance to address problems in terms of an institutional perspective in South Africa although the need to change the paradigm of analysis has been stressed by various scholars (Kassier and Kleinhans, 1990; Schmid, 1987; Shaffer, 1980; Buchanan, 1991; Galbraith, 1991; Nelson, 1987; and Bartlett, 1990).

This paper will endeavor to bring the politics and economics together in addressing the problems in the commercial agriculture sector, which is in line with Galbraith's (1973, p.6) philosophy, namely, that economics does not become a part of political science, but politics does and must become part of economics. For without understanding the nature of the past, current and future interdependencies we are likely to miss the boat, as has happened in the past. In the concluding chapter to his book *Economics and Power*, Bartlett (1990, p.206) sums up the interdependence between politics and economics:

This is not an argument that economic analysis should be political. It is an argument that it inevitably is political. The political judgements implicit in theory should be made explicit. They should be spelled out for all to see. Power analysis is thus a danger to the comforts of our theoretical world. It implies a world of relatives. It denies absolutes. It requires actors and analysis to recognize that human interactions, with or without markets, may involve winners and losers.

The results of bad institutional experiments are all too evident in South Africa, the worst example being the institutions of "apartheid". More specifically in the agricultural sector, the ill effects of bad institutional designs and lack of adaptation can be seen in the lack of performance of certain control boards and the evolution of unsustainable structures in certain sub sectors particularly the grain sub sectors. Given the above and if, as Schmid (1981, p.76) points out, it is the character of social science experiments that we cannot run the world over again and again while changing the ingredients in the institutional mix one by one, it is important that we learn from experience and in doing so, extend the positive developments into new areas and avoid duplication of the detrimental effects. In addition, being conscious of the long term and often irreversible effects of institutions, requires that we need a theory to help us organize our experience to suggest new institutional variables and to predict their performance. This chapter will provide some insight into what is meant by institutions, the main components of an institutional approach, and develop a framework for the analysis of the case study.

5.1 INSTITUTIONS

This paper makes the distinction between institutions which are the rules, conventions and other elements of the structural framework of social interaction (Bardhan, 1989, p.3) and organizations. Organizations also provide a structure for human interaction at a micro level where groups of individuals are bound together by some common purpose (North, 1990, p.4-5). Viewed from another perspective, institutions which provide the

legal foundations for exchange in a market system, shape opportunity sets from which organizations and individuals react depending on their endowment of property rights. However, as North (1990, p.5) points out, which organizations come into existence and how they evolve, are fundamentally influenced by the institutional framework, which in turn influences how the institutional framework evolves.

Institutions reduce uncertainty by establishing a stable (but not necessary efficient) structure to human interaction (North, 1990 and Hodgson, 1988). As Schmid (1991b, p.7) points out, institutions matter above and beyond their role in reducing transaction costs, as human interdependence creates conflicts which need to be worked out. The politics of institutions is a reality which Bates (1989, p.90) sums up below based on his study of agrarian reform in Kenya.

Economic institutions become political institutions. While formed to secure greater gains, they provide arenas for subsequent distributional struggles. And those who dominate the process of their creation often become victims of their subsequent operations.

Bates makes the point that, for this reason, organizations once created, take on a life of their own.

This has been evident with the formation of the control/marketing boards in South Africa, which initially served a purpose in the 1930's, but then took on a life of their own with significant help from government and processors. Perhaps the lesson is that monopolies have their place, but one must know when to abolish them (Schmid, 1991a, p.7).

5.2 ELEMENTS OF AN INSTITUTIONAL APPROACH

"An institutional approach" is a broad term which encompasses many perspectives, all aimed at explicitly addressing the origin, nature and effects of social interaction involved

in the pursuit of economic activity. It is concerned with endogenizing the realistic behavior of people in society and the relationships that develop between individuals and groups of individuals. It is built upon four main pillars. These include: property rights; tastes and preferences of individuals which are collectively expressed through organizations and together with a property right structure shape opportunity sets; exchange and associated costs; and interdependence that arises from the latter and other characteristics of the environment.

For the purposes of this paper, the different institutional schools of thought have been grouped into two main areas. The first has gone under the name of the "old" institutional economics, but which I would prefer to term institutional foundations of individuals, society and economic activity. The moral, ethical and philosophical building blocks would be found in this area predominantly under property right and public choice perspectives. In addition, I would also include the works of the behavioral economists or Carnegie school of thought that would include works by Simon, Cyert, March and others. The behavioral economists have dealt with the unrealistic behavioral assumptions of main stream economics such as rationality, maximization hypothesis and independent utility functions. Many of the perspectives contained in this area address shortcomings in the main stream neoclassical paradigm, especially the assumptions on behavior, distribution of property rights and the presence of power. It also provides a more realistic basis for the origin, evolution and operation of institutions and organizations.

The second main area of institutional economics could be grouped together under the term "efficiency orientated new institutionalists". Generally this area involves incorporating certain deterministic institutional perspectives into the neoclassical paradigm. Transaction cost economics and theories of imperfect information are two main areas of emphasis that address shortcomings in the traditional neoclassical

paradigm such as the absence of transaction costs and the assumption of perfect information. When transaction costs are absent, the initial assignment of property rights does not matter from the point of view of efficiency, because rights can be voluntarily adjusted and exchanged to promote increased production. The latter being the essence of the Coase rule. However, when transaction costs are substantial as is usually the case, the allocation of property rights is critical. Under these conditions, Bardhan (1989, p.5) points out that:

One of the main pillars of traditional neoclassical economics - the separability of equity and efficiency - breaks down: the terms and conditions of contracts in various transactions which directly affect the efficiency of resource allocation, now depend crucially on ownership structures and property relations.

Certain behavioral characteristics (bounded rationality and opportunism) that have resulted from the behavioral economists also find their way into a lot of the work in this area.

There are links and areas of over-lapping that exist between these two main schools of thought. However, they still remain separate on certain key issues, such as the efficiency orientated versus distributive orientated perspectives. In this regard the strongest thread that links the two also keeps them apart to some extent. This is found in the interdependence that exists between what Bardhan (1989, p.11) terms allocative efficiency-improving institutional change and redistributive institutional change. A shift in the focus of attention from efficiency aspects of an institution to the distributive aspects inevitably confronts us with the question of somehow grappling with the aspect of power and whose preferences count (Bardhan, 1989, p.11 and Schmid, 1987). This becomes important when conditions for pareto optimality breakdown under circumstances of scarcity, interdependence and incompatibility that lead to conflict.

In summary, the institutional foundationalists define performance broadly to

include measures of equity, progressiveness or "growth", social disintegration, changes in power and such outcomes as unemployment. Regarding efficiency, they are of the opinion that efficiency is determined by the distribution of property rights and hence there are many different efficient outcomes in a given market situation, each corresponding to a different initial endowment of rights that determine opportunity sets. The new institutionalists emphasize efficiency as the central criteria of performance and believe economic efficiency determines or should determine the institutional setting, such as is found in Hayami and Ruttan's induced institutional innovation model that is based on the driving force of relative prices. The assumptions about behavior and conflict under a new institutional analysis limits the scope of enquiry.

The approach taken in this paper is to recognize the importance of both schools of thought by being aware of the political forces and behavioral realities that exist, as well as the more technical economic issues such as minimization of transaction costs and private governance structures which are applicable to firms and organizations. However, incorporating the moral, socio-psychological and philosophical aspects from the institutional foundations makes the analysis less deterministic due to the existence of structural uncertainty, from never really fully being able to deduce man's behavior under different circumstances and other sources of uncertainty such as brought about by the lack of information and information processing ability. The adoption of an institutionalist view of the formation and development of conduct does not imply an adherence to determinism (Hodgson, 1988, p. 139).

Finally, on the question of whose interests count under conditions of scarcity, incompatibility and conflict i.e when mutually beneficial outcomes become increasingly difficult to obtain, the philosophy of agreeing on the process and design of suitable institutions rather than on the final outcomes, as developed by Buchanan under the term

constitutional economics, is favored. This process may be easier to identify within the political arena than the economic arena, even though it is directly applicable to both given the interdependence that exists. However, herein lies the challenge to institutional economists, namely, making the process more transparent by being able to develop testable hypotheses about alternative institutional and organizational designs and governance and the effect on what Schmid (1989, p.23) terms substantive performance¹³.

5.3 SITUATION-STRUCTURE-PERFORMANCE (SSP)

In a world that has too little to go around and is populated by selfish individuals subject to ignorance, social influences, group determined rights, and inevitable conflict, there is no objective best (Bartlett, 1990, p.206).

Based on the above quote, Bartlett argues that it is a world of choices which are always situational. Namely, people's choices are made from opportunity sets that they are faced with which are products of an institutional setting, situational characteristics and the persons perceptions, tastes and behavior. This is the underlying basis of the (SSP) paradigm as developed and used by Schmid (1987) in his book, *Property, Power, and Public Choice*.

A combination of the environment-behavior-performance (EBP), and structure-conduct-performance (SCP) paradigm from the field of institutional economics will be utilized to examine the case study in the following chapter. This approach can be summed up by a quote from Shaffer (1980; p.311):

¹³ Substantive performance refers to assessing how a particular institution or set of rights affects whose freedom and whose view of efficiency and output will dominate when interests conflict.

The task is to classify strategic characteristics of the environment, classify the participants and their behavior, classify outcomes and develop meaningful hypotheses about their outcome.

5.3.1 Situation

This component contains the inherent characteristics or "ingredients" associated with certain situations. These situational variables arise from certain interdependencies between participants that exist due to the nature of the good or activity in question, conflicting interests, scarcity, uncertainty which one could collectively call the environmental setting. Interdependence is the occasion for both cooperation and conflict (Schmid, 1987, p.5). A distinction needs to be made between those situational variables that are of a permanent nature and are as such, fixed, such as the nature of the good (perishability) and those that are evolutionary in character and dynamic over time, for example changes in peoples values, beliefs and perceptions. According to this distinction, the nature of the good or production process is the only real variable that remains fixed over time. Both the origin/evolution and initial behavioral characteristics which will be affected by future outcomes are subject to change. This dynamic in institutions is illustrated in the quote below:

The situation of today shapes the institutions of tomorrow through the selective, coercive process, by acting upon's mens habitual view of things, and so altering or fortifying a point of view or a mental attitude handed down from the past (Veblen, 1899, p.190, cited in Hodgson, 1988, p.139).

Since individual-societal¹⁴ preferences about the structure of the economic game and its distribution of prizes are continually changing as preferences are molded by history

¹⁴ Individuals have different levels of preferences. They have preferences about the rules of the economic game and the distribution of prizes that it should generate (individual-societal preferences); but they also have preferences about how to maximize their own utility in the current economic game-no matter how much they dislike the economic game they are forced to play (private-personal preferences) (Thurow, 1973, p.63).

and culture, economic equity is not a static condition (Thurow, 1973, p.77). To account for these changes a feedback loop needs to be built into the performance and situation components, which makes the paradigm more dynamic through a heuristic (iterative or recursive) approach to the analysis. The ubiquitous threads of uncertainty and lack of information are incorporated in the different behavioral assumptions and institutional and organizational structures.

5.3.1.1 Origin and Evolution

The origin and evolution of institutions is a complex issue that has been explained by relative price movements, evolutionary Darwinism (those that survive are the best) and recently, North's (1990) dependency path theory. The first two, namely, efficiency driven institutions and evolutionary Darwinism, have problems and as such fail to explain successfully the origin and evolution of institutions (Hodgson, 1988, p.141). Even though North's dependency path theory relies fairly heavily on the two driving incentives of returns (prices) and tastes, he goes beyond the efficiency view of institutions to incorporate some of the institutional foundational theories. North's (1990, p.7) dependency path theory of institutional change is shaped by (i) the lock-in that comes from the symbiotic relationship between institutions and organizations that have evolved as a consequence of the incentive structure provided by those institutions, and (ii) the feedback process by which human beings perceive and react to changes in their opportunity sets. North goes on to add that because political and economic markets are not efficient due to the existence of transaction costs and information problems, inefficient property rights may result. However, the imperfect subjective models of the players as they attempt to understand the complexities of the problems they are confronted with, can lead to the persistence of such inefficient property rights (North,

1990, p.8).

This explanation of the institutional change or lack thereof through the persistence of inefficient property rights lies at the heart of South Africa's institutional failure. Extensive examples and outcomes of the causes of persistence of inefficient property rights were given in Chapters 3 and 4.

The incorporation of this section acknowledges the relevance of taking an evolutionary perspective rather than a mechanical equilibrium view when dealing with institutions. If it is accepted that institutions and organizations carry both the good and bad of the past with them in their "genes" or DNA as Hodgson (1988, p.142) indicates, then examining the origin and evolution of institutions are important, given their continued influence and molding on our lives.

5.3.1.2 Nature of the Good or Operation

This section addresses the inherent characteristics associated with the production process of a certain goods (agricultural commodities) and use of certain resources, such as land, labor and capital. Knowing these inherent characteristics is essential in identifying interdependencies and devising alternative structural designs.

The main source of interdependence under this category is **incompatibility uses or users**, namely, when one person's use of a resource precludes the availability of the resource for use by another - the traditional example being the "tragedy of the commons". This type of conflict is controlled by factor ownership, which defines who gets what to participate in resource use decisions and who is excluded, whether implemented by so called private property or government regulation (Schmid, 1981, p.79). In agriculture, a large portion of the goods, services and activities contain this source of interdependence. The main examples being land, credit, quotas and subsidies,

and the allocation of rural infrastructure. Chapters 2 and 3 illustrated how the allocation of property rights, specifically factor ownership patterns, have resulted in the current structure of the agricultural sector. Factor ownership also directly affects bargaining power. For example, when you have opportunities and the other person has few alternatives, you can extract a very favorable price for your factors (Ibid, p.82). Changes in factor ownership rules, for example land ownership, will no doubt influence and balance future exchanges and allocation of scarce resources such as credit, other support services and ultimately income.

High exclusion cost goods, such as communal natural resources (air, land and water) create free rider problems due to the difficulty in determining demand, detecting use or high costs associated with policing. Schmid (1987, p.48) distinguishes between two types of free riders, the gambling free rider and the unwitting free rider, the former being consciously opportunistic and the latter not. Curtailing free rider problems through mandatory measures such as taxes can give rise to another problem in the form of "unwilling riders". Key factors in dealing with high exclusion cost situations include, the size of the group, nature of the transaction (bargained versus administrative), production of multiple products, and type of ownership (freehold versus communal).

Economies of scale provides another source of interdependence. In a situation of decreasing costs, the rights conflict is over who gets to be regarded as the marginal consumer who may be entitled or required to pay the marginal cost. These rights are important when considering pricing policies. There are two other features associated with economies of scale, namely, super ordinary economies of scale and peak load pricing. If the output of the plant with the lowest cost per unit output is equal to the size of the industry, super ordinary economies of scale are said to exist (Ibid, p.69). Examples of these so called "natural monopolies" are often found in the supply of

utilities and water. In these situations, pricing (dual or average) and franchise bidding, as discussed in Williamson (1985) are important in determining the distribution of rights and the resulting consequences, in terms of who pays how much for what.

Joint-impact goods provide another source of interdependence. The characteristic of a joint-impact good lies in its ability to contribute to one persons utility irreducibly. In other words A can utilize the good without subtracting from the quantity of the good available for B. This situation arises when the marginal cost of another user is equal to zero. In this case, the issue is cost sharing, namely, who pays for the high fixed cost and who benefits from paying a negligible marginal cost. The aspect of avoidance (optionality) when determining the quantity and pre-emption when dealing with the quality of the good are two important characteristics that need to be considered when dealing with this source of interdependence, especially where differences in tastes exists.

A common characteristic found amongst economies of scale and joint-impact goods, overhead costs and team production is their "lumpiness" or indivisibility (Schmid, 1987, p.93). This makes it difficult to determine the cost or use of individual inputs or attribute output to specific inputs due to the inseparability that exists. As a result all of these situations require a pricing rule to allocate the advantages of doing something together. Given this situation of inseparability, the pricing rule should be determined from a public choice perspective rather than from a production function orientation (Ibid, p.93).

The existence of **transaction costs** (Coase, 1937 and Williamson, 1985) albeit in the form of contractual, information or policing, creates interdependence in terms of who

bears these costs¹⁵. The principal dimensions with respect to which transactions differ are asset specificity, uncertainty and frequency (Williamson, 1986, p.179). Asset specificity, albeit due to site specificity or certain physical characteristics, influences to what degree assets are redeployable and in turn the difference between the acquisition and salvage value. The latter gives rise to sources of interdependency. Both primary or the structural form of uncertainty and secondary/parametric uncertainty affect transaction costs and structures and according to Heiner (1983) may result in predictable behavior. The nature and frequency of transactions influences governance structures which have accompanying transaction costs. Markets and firms may well minimize transaction costs (Coase, 1937; Williamson, 1985; and Hodgson, 1988), but, property right structures still influence who has to pay these costs. This becomes more clear when considering what an exchange entails. According to Hodgson (1988, p.148):

Exchange involves more than just a two-way transfer of goods, services or money between agents; it involves a transfer of property rights as well. ... Consequently the existence and exchange of property is tied up with a number of legal and other institutions.

Minimizing transaction costs is important but so to is acknowledging whose transaction costs are being minimized and identifying sources and allocations of transaction costs.

Situations that give rise to the generation of **economic rent** albeit **producer or consumer surplus**, provide a further source of interdependence. This can materialize in conflict between producers and consumers as well as amongst consumers and amongst producers. Mechanisms to collect these rents, include market segmentation and price differentiation in case of extracting consumer surpluses and access and ownership when it comes to extracting producer surpluses. Employer-employee situations also give rise to

¹⁵ For further detail on the nature and extent of the different costs under these three categories, see Schmid (1987, Chapter 7).

the generation of surpluses which has tended to be allocated to employers and the owners of capital rather than employees or owners of labor. The distribution of this surplus given its relative scarcity and inseparability creates potential for conflict. This aspect is discussed further in Chapter 7.

5.3.13 Participants and their Behavioral Characteristics

A man who can be both malevolent and benevolent, is a product of his genes, family and society, and has needs and unsatiated wants, poses problems for mainstream economics, especially when many such individuals make up society. Where does this leave us? We have no option but to include the sociological and psychological aspects into economics where applicable just as we have to include political aspects into economics. This means that rigid behavioral assumptions, such as, utility maximization and rationality, need to be replaced by more realistic behavioral assumptions, such as, bounded rationality, interdependent utility functions, opportunism and trust.

The challenge lies in identifying participants and their behavioral realities given a certain environment and structure in order to restrict malevolent behavior and enhance and reward benevolent behavior that would, ideally, be self-enforcing. These behavioral realities which Hodgson (1988, p.116) refers to as non-contractual elements of exchange and considers essential in any system of exchange, are subject to change either through a Skinnerian operant-conditioning and contingent reinforcement or the evolution of customs, norms and values. In addition to individual behavioral realities, collective behavior albeit through a firm, association, union or ultimately, government takes on an additional dynamic which Bates (1989) claims, adopts a life of its own. It is therefore, important to identify individuals and stakeholders in a certain situation to determine their respective preferences and behavioral characteristics. In addition to identifying the

individuals directly involved in the organization, attention should also be given to associated groups such as the immediate community, farmer associations, labor unions and commodity associations.

Behavioral realities of individuals and organizations are many given the different situational and structural combinations. Those identified below are currently considered to be the more important behavioral realities that should be considered in any analysis where people are involved. On the benevolent side of the spectrum, **trust** is important in improving cooperation and can be economically rewarding when associated with commitment (Frank, 1988); the role of **loyalty** amongst clients and workers as developed by Hirschman (1970) is important to carry organizations through periods of organizational slack. Being aware of man's limitations in the form of being basically a **selfish** being (Bartlett, 1990, p.204) who has **private-personal preferences** (Thurow, 1973) and is subject to **bounded rationality** (Simon and Williamson, 1985), either in information processing ability or communicating ability and **satisficing** behavior, is required for a more accurate assessment of likely behavior under certain circumstances. The more malevolent characteristics include Williamson's (1985) **opportunism** - self interest seeking with guile, and the malevolent use of asymmetrical information (**information distortion**) (Stiglitz, 1985).

If we accept that all of the above exist then we have to identify under what situations they may appear and what consequences we may expect under different structures.

5.3.2 Structure

The structural component of the paradigm can be subject to change by either certain macro- or micro-determinants, some of which are mentioned below. Alternative

structures are possible under a given situation but may result in different behavior and performance. These could be grouped under (i) boundary aspects, which stipulate conditions for participation (ii) scope, which determines allowable actions and outcomes (iii) distribution of authority (iv) aggregation aspects associated with joint decisions (v) procedural rules linking decisions together, and (vi) sanctions and payoff rules (Kiser and Ostrom, 1982, p.193-194, cited in Schmid, 1987, p.40). The key is to determine the relationships between different structural alternatives and the resulting performance. In this regard the structural component will be divided into two sub components in an attempt to identify key determinants.

5.3.2.1 Macro-Structural Determinants

The most fundamental changes to the commercial sector are likely to arise from the socio/political externalities that are likely to arise from changes in the political economy. As Schmid (1987, p.182) states, "when the public changes its mind costs are shifted."

Macro-structural determinants that are likely to have the most profound effect on the structure of the commercial sector and which were identified in Section 3.3 include the areas of land reform and the rebalancing of state assistance and support, which includes the so-called affirmative action programs, and labor legislation. With the reality of a new constitution becoming more evident, the pace of debate and action associated with land reform has increased, fairly dramatically, both in the academic and political arenas. The government's recent tabling of a white paper on land reform, with five accompanying bills which are scheduled to go to parliament, is a far reaching initiative, that has increased the inertia on this topic. In summary, the proposed bills accompanying the government's white paper on land reform, already provide certain macro structural determinants. Namely, the opening of access to land and support

services, a system based on private property rights and options for transferring communal land rights to individual land rights. In addition, future land reform initiatives are likely to contain explicit elements of redistribution, directly - where individuals and communities with legal right were forcibly removed and in areas where land crowding and hunger is severe, and through indirect measures most likely in the form of a land tax.

The opening of access to land and support services such as credit and inputs and extension, which in all likelihood will result in a reduction in current levels of assistance to existing farmers in the commercial sector and increased competition, will have significant repercussions especially on those sub sectors which continue to rely heavily on governmental assistance in various forms, such as the maize, wheat, meat and dairy sub sectors. The dramatic decrease in wheat and maize producer prices over the last five years, has already resulted in certain structural shifts in those sub sectors especially the maize sub sector. The speed of opening up access and rebalancing state assistance will determine the nature and level of the impact on the existing farmers, as will farmers dependence levels. A revision of the existing Subdivision of Agricultural Land Act, which currently restricts access to agricultural land especially by subsistence farmers would be included in this section, since larger rather than smaller units must be acquired (Budlender and Latsky, 1990, p.175) and the rules and regulations are applicable to part-time farmers (van Zyl, 1990 and de Klerk, 1991).

Expanding labor legislation to the rural areas specifically the agricultural areas has been identified as a priority issue given the socio-economic predicament that a large portion of the agricultural labor force finds itself in. Extension of the Basic Employment Conditions Act to the agricultural areas together with increased bargaining for higher wages and better living conditions will be first felt, as is already the case on the larger

commercial estates, specifically company owned farms. The impact of these actions is likely to be significant given the relatively higher intensity of labor use in the commercial agricultural sector. Improving living, health and schooling conditions on commercial farms is a necessity, that should not be sacrificed with the advent of higher wages. In other words, structures need to be established that will ensure that certain minimum conditions in the above social services are not only achieved but also maintained. Collective bargaining should also not focus demands entirely on higher cash wages, but rather a package of cash, social services, capital as well as increased participation and management options. Institutions not only need to repeal all existing discriminatory legislation, and provide new rules for improved labor conditions but also provide incentives for the adoption of these rules especially those concerned with improved social conditions. This is important, because if existing farmers are not financially able to meet the new requirements, unemployment in the rural labor force is likely to increase as new farmers are less likely to be able to afford the adoption of the legislation.

5.3.2.2 Micro-Structural Determinants

Private based structural initiatives are considered micro-structural determinants. These determinants are to a large degree derived from the more macro orientated determinants, which delineate boundaries and set the main "rules of the game". Micro-determinants could be considered the equivalent of getting a team of players together and devising a strategy for the game.

This section addresses possible alternative structural designs that either currently exist in the commercial sector which could be adapted or new initiatives that could be adopted. Micro level includes anything from a sub sector down to an individual firm or community.

Given the macro level structural alternatives that are likely to materialize in the near future there are certain structural transformations that firms and sub sectors will need to adopt in order to adapt to the changing macro structure. At a firm level, the area of labor relations (conditions, wages, participation, joint management and ownership) will need attention as will the firm's reliance on governmental assistance, both directly and indirectly. Land use and associated productivity will need to be evaluated in the light of pending land tax legislation. Options for spreading the burden and risk associated with the pending changes should be explored. This could include investigating potential for sharecropping and other forms of leasing, restructuring existing debt if restrictive and in doing so look into broadening the capital ownership. These two latter options will be investigated in more detail in Chapter 7.

At a sub sector level, potential exists for establishing initiatives for the sub sector as a whole. Marketing, research and extension, which are predominantly organized for specific sub sectors, provide opportunities for restructuring their operations and broadening their client base. Examples of this are addressed in the next chapter. However, for these type of initiatives to materialize, the balance of power in these organizations especially the control/marketing boards will have to be addressed so that producers, large and small as well as existing and new, can have more input into the process. This is particularly valid for certain control boards, such as the meat, oilseed and maize boards.

At a firm level, issues that will be covered include organizational form, ownership and control, incentive structuring and leadership/management style. The design and management characteristics of an organization are fundamental to the behavior and relationships between individuals and as well as between individuals and the firm, which translate into different performance levels.

5.3.3 Performance

Performance or the lack thereof is the outcome of the aggregated behavior of participants acting within the constraints of their opportunity sets (Shaffer, 1980, p.312). The important dynamic provided by performance lies in the altering effect it has on the environment and the signals it provides. A fundamental problem associated with this signalling role of performance is that individuals and organizations are only exposed to a small portion of the aggregate opportunity set and only to some of the consequences of specific behavior (Ibid, p.312). An objective of the SSP paradigm is to try and make the relationships between the given situation and behavioral realities, and the different structural alternatives more clear so that lines of causality can be identified and made more explicit.

Performance involves two main elements. The first being the process involved in establishing and deciding on appropriate performance criteria where the aspects of jurisdictional boundaries and rules of representation (whose preferences count) come into play. The second element relates to the content, i.e. establishing the "right" performance criteria and appropriate indicators to measure them.

Most performance measures are usually expressed in absolute terms which both Shaffer (1980) and Schmid (1987) point out as being too vague and narrow. Examples include the concepts of efficiency, freedom and growth. An example is the performance objective of minimizing transaction costs (Williamson, 1985), which at a certain level is important but fails to consider whose transaction costs are being minimized and who receives the resulting benefits. It is for this reason that Schmid (1987) measures performance in substantive terms, namely, who gets what and whose costs count when there are conflicting interests, and advocates that performance criteria should deal with personal distribution of wealth and opportunity among specific interest groups. This type

of performance definition is considered appropriate and relevant for the South African situation.

A breakdown of the different interest groups and their likely performance objectives is provided in an attempt to illustrate the conflicting interests that exist. Farm labor, seen as individuals as well as collectively through unions, would like to improve their basic living conditions (housing, health and education), wages and participation in the various farming enterprises. Farmers would like to maintain their current position and hopefully improve thereon both in income and capital terms. Collective organizations such as cooperatives, marketing boards and farmer unions would all wish to maintain their existence and expand their operations if they could. At a state level, the current government would like to maintain the production capacity of the commercial sector to provide reasonably priced food in a stable manner. The aspects of conservation and preservation of land for future generations would be important as would labor absorption. A more open situation for participation, without major disruption, has also recently become an objective. Opposition political groups, such as the African National Congress (ANC), see the commercial sector and its disparate systems of ownership and production as blatantly indicative of past and to a lesser extent current policies. Removing "monopoly" capital and bringing about land redistribution in the commercial sector stands high on their current agenda as an important tangible and national measure to directly and indirectly meet the rising expectations of their constituents. These groups would also like to make the state and parastatal institutions involved in the sector more representative of the population of South Africa. Those left out would obviously like to be "in". Their performance criteria would be strong equity considerations in terms of opening access and providing affirmative action programs to facilitate their integration.

It should be clear that with all the groups of participants and their ideals and performance objectives there can be no single best solution. It is highly unlikely that there can be a situation of where the losers are compensated by the winners. The question then is who compensates the losers when the government "changes its mind and shifts the costs"? If it's going to be state compensation the questions of should they be compensated and if so by how much, arise. This becomes a moral problem, which Robinson (1963, cited in Schmid, 1987, p.250) mentions, " ... is a conflict that can never be settled. Social life will always present mankind with a choice of evils." It is an issue of public choice. Schmid (1987, p.251) accounts that conflict is inevitable and notes that:

It is not in the realm of science to abolish conflict. Differences there will always be. But we are capable of understanding conflict. So much human conflict over proposed rule changes is simply uninformed. People have little or no warranted knowledge of the range of real performance consequences of alternative rules.

In summary, performance criteria associated with the aspects of redistribution of income are and will become increasingly important in the commercial sector in the near future. Being able to achieve these while maintaining a feasible degree of production stability, reasonable food prices and the continued generation of export earnings by the sector is the broad performance that should be the goal to strive for.

The initiatives in the sugar industry as well as the two private based options addressed in Chapters 6 and 7, are the initial attempts at achieving such performance.

CHAPTER 6

ANALYSIS OF REFORM INITIATIVES IN THE SOUTH AFRICAN SUGAR SUB SECTOR: Progressive Private Based Initiatives or Market and non-Market Realities?

This chapter focusses on a real public choice situation, namely, opening access to small black cane growers in the sugar industry. This case study has been selected as it contains some useful public choice issues inherent to the agricultural situation in the country, and it is the only example to date of a predominantly private based initiative to open access to small scale commercial black farmers. The sugar industry has been receiving attention for their "progressive" initiatives and many are enquiring whether other sub-sectors could follow their example.

The case study will be analyzed from the situation-structure-performance (SSP) paradigm, detailed in the previous chapter, in an attempt to determine whether some of the public choice and other institutional theories associated with this paradigm can explain the origins, results and relationships that have evolved in this sub-sector. If there are certain hypotheses that can be explained through this paradigm, there may well be some important lessons that could be applied cross sectionally within the agricultural sector, between different firms in a sub-sector or different sub-sectors.

6.1 SITUATION

6.1.1 Origin and Evolution of the Small Scale Sugar Industry¹⁶

The opening of access to small scale cane growers has taken place in the two "homelands" of Kwazulu and Kangwane which are situated in the provinces of Natal and the Eastern Transvaal respectively (see map).

In the past, access to the sugar industry has been limited and prior to the 1970s white owned land was invariably given the first opportunity to establish additional sugar cane acreage during times of expansion. By the mid-seventies there was little additional white-owned land within economic distance of existing sugar mills to compete with the claims from the tribal areas adjacent to the mills to establish sugar cane (Ardington, 1990). Ardington goes on to mention that by 1974 approximately 250 000 tons per annum were being produced by small scale growers in Kwazulu.

The sugar industry experienced a sharp increase in black participation in the Natal/Kwazulu sugar industry in the mid-1970's when revolving credit became available to prospective small black growers through the Small Growers' Financial Aid Fund (FAF), which is administered by the South African Sugar Association (SASA). In 1987 there were approximately 22 000 small growers, cultivating 18.7 per cent of the Natal/Kwazulu hectarage. In that year they produced 1 800 000 tons of cane (Center for Social and Development Studies, University of Natal, n.d., cited in Vaughn, 1990). In 1989 a figure of 2 000 000 tons was cited (Ardington, 1989). It is estimated that the total number of growers currently registered, is in the region of 30 000. The increase in the number of black farmers in the industry has constituted a shift in the current structure of production rather than an aggregate increase i.e. the share of "black"

¹⁶ A significant portion of this section is based on Anne Vaughan's paper, "Ways of Working the Land: Small Cane Growers and Working the Land". (See bibliography for further details.)

production has increased over the years while the share of "white" production has decreased. The process has however, been limited as small growers have been restricted to approximately 8 per cent of total production by the inequitable allocation of production quotas to date (DBSA, 1991, p.3).

In Kangwane, the growth of the small scale sugar industry has been significantly slower and has lagged behind Natal/Kwazulu. The existing area under production is only a mere 720 hectares.

There have been distinct differences between the way certain aspects, such as land acquisition and allocation as well as credit provision, were treated in the two "homelands". The relationships with the large sugar mills are common to both areas. These differences are detailed in the following section.

6.1.2 Nature of the Goods and Inherent Characteristics

South Africa is a member of the International Sugar Organization and a signatory to the International Sugar Agreements, which together with other factors, has made the industry a controlled one. As a result, it is subject to various institutions that are designed to protect the industry in one way or another. For example in the situation where the average world price of sugar is below the cost of production due to various subsidization programs in the EEC and US, as has been the case for the last decade, different forms of protection have been in place in South Africa. In the past this has comprised of both quantitative (quota) and tariff protection. This has recently been revised to only include an ad valorem tariff. As a result the domestic sugar price will continue to be below the world price.

The sub sector is administered in terms of the provisions of the sugar act 1978 (Act 9 of 1978) and the Sugar Industry Agreement of 1979. In terms of the latter, the

sub sector has controlled quantitative protection by means of production quotas, a centrally regulated price setting mechanism, stipulated wholesale and retail margins and the sharing of sub sector proceeds on a return on capital basis between growers and millers. It should be evident that with regards to the latter institutions, SASA needs governmental legislative approval and backing in order to maintain control of the different aspects in the sub sector. This point is made to illustrate the fact that although this paper focusses on private based initiatives within the sugar sector it should be realized that the industry is itself dependent on governmental legislation and assistance. Therefore, although the effects of governmental institutions are not dealt with explicitly in this paper, their significant impact on shaping the current structure and performance of the commercial sector are significant and should be kept in mind. The approach taken in this chapter is to take the basic conditions (situation) as fixed, and concentrate on different private institutions and the effects of alternative private structures. In other words, given a certain fixed exogenous situation what can be done from a private initiative point of view to make the sector more equitable¹⁷.

The following goods and inherent characteristics associated with small scale cane growers will be examined within the SSP framework:

Land - The acquisition and allocation institutions differ in Kwazulu and Kangwane. In Kwazulu, development has taken place within the existing tribal/traditional modes of land holding and allocation. This has resulted in land size holdings being small and remaining small. In one area the range of size holdings ranged from 0.5 to 36 hectares compared to the average size of 100 hectares in the "white" commercial sector. As a result it has become evident that farming on these plots cannot generate sufficient

¹⁷ Equitable is used in the sense of improving income distribution through opening access to participation in the sector.

income to sustain household subsistence, resulting in other ancillary activities taking place in order to sustain a certain level of living. In contrast Kangwane has not accepted existing land distribution as a starting point in light of its policy of establishing economically viable farming units. Resulting from this, the average size of the land holdings is larger than that in Kwazulu but fewer people are accommodated, and as a result, not everyone can be a farmer.

Capital (credit) - Capital involves two components, investment capital for processing facilities and credit for the growers. The capital requirements for the sugar mills are substantial and given the asset specificity plus the inherent uncertainty that prevails, investors look for safeguards to at least cover their fixed costs and make a reasonable return on their investment. The level of investment required, together with certain inherent characteristics associated with the investment in specific assets, results in certain situational variables that have a strong influence on the type of structure that inevitably materializes.

Credit provision, which has provided a major impetus has also been instituted in a different manner in the two areas mentioned. In Kwazulu, FAF has been instrumental in drawing small cane growers into the commercial sector in the last decade and a half. In excess of 23 000 individual loans totalling more than R35 (\$14)¹⁸ million have been granted. FAF was established for this very purpose, namely, to provide small potential growers who did not have collateral in the form of land, as existing commercial and governmental financial organizations did not provide credit to this group at the time. Research for two growing areas in Kwazulu, show that the FAF system of credit provision has had an ambivalent impact on farmers. On the one hand, credit availability

¹⁸ At an exchange rate of R2.50 to \$1.00.

has enabled Kwazulu growers to participate in commercial production, yet, the provision mechanisms, specifically the automatic deductions¹⁹, has had a constraining effect, inhibiting the entrepreneurial development of farmers (Vaughen, 1990).

In Kangwane, credit is also provided at favorable rates (i.e. below market rates), but as the source of credit comes from the para-statal development agency (Agriwane) which rejects the automatic deduction principal, the principles of self-responsibility and free agency are adhered to regarding their credit arrangements (Vaughen, 1990).

Nature of the Good, Production and Processing Process - The type of commodity, in this case sugar, is subject to certain exogenous forces (fluctuating demand and supply) as a world export commodity, and has specific production requirements such as quotas and processing requirements to refine the cane. A problem arises in terms of determining and monitoring quality as the sucrose level can only be assessed once the cane has been refined and as a result there are both ex post and ex ante problems. Quality cannot be determined when a farmer delivers his cane to the mill, so there is no way of paying higher prices for higher quality cane to individuals. Ex ante, the mill should be in a position to judge what the average sucrose content is. However, there is no way of disaggregating this figure and as a result individual incentives for producing high quality cane are not possible and the possibility for statistical discrimination arises.

In addition, the situational feature of specific relevance, is the nature of the processing activity. Sugar mills require huge amounts of investment for their start-up costs (fixed costs), if they are to achieve economies of scale advantages. This specific investment, together with locational aspects make the good highly asset specific, both in

¹⁹ Automatic deduction refers to the practice of the deduction of debt amortization payments from the sucrose proceeds at the sugar mill. Each transaction is followed up by an invoice to the grower. Thus the farmer only receives his proceeds from his/her cane after the debt payments have been deducted by the mill.

physical and site terms. The economies of scale feature, however, requires a high volume of cane throughput. The high investment costs and asset specificity are key determinants to many of the resulting structures and performance seen in the sector.

With each of the goods and their inherent characteristics mentioned, there exists a set of situational variables or "ingredients" that range from being fixed, such as the asset specificity to being more flexible or subject to change over time, for example when capacity is reached with a good that exhibits economies of scale up to some capacity. These situational characteristics determine the nature and level of interdependence between the different participants, and as a result provide important information required to determine what structures may be required to deal with the relationships.

The summary table below provides a breakdown of some of the more important situational characteristics associated with the different goods in question.

TABLE 3: GOODS, THEIR INHERENT CHARACTERISTICS AND SITUATIONAL VARIABLES.

GOODS	SITUATION
<p style="text-align: center;">LAND AND CREDIT</p> <ul style="list-style-type: none"> - Scarcity considerations; - Security, incentive and collateral aspects; - Form of tenure; 	<p style="text-align: center;">INCOMPATIBLE USE GOOD (IUG)</p> <p>Due to the inherent scarcity associated with all these goods, IUG is the dominant characteristic of importance.</p>
<p style="text-align: center;">NATURE OF THE COMMODITY AND PROCESSING REQUIREMENTS</p> <ul style="list-style-type: none"> - World commodity price - Production process <ul style="list-style-type: none"> - quantity and quality requirements - incentives for quality produce - Nature of the processing <ul style="list-style-type: none"> - investment requirement <ul style="list-style-type: none"> - proximity (site) - scale considerations - permit arrangements 	<p style="text-align: center;">FLUCTUATING SUPPLY AND DEMAND</p> <p style="text-align: center;">TRANSACTION COSTS</p> <ul style="list-style-type: none"> - Contractual costs - High information costs <p style="text-align: center;">ECONOMIES OF SCALE (EOS)</p> <p>The nature of the processing requirements, necessitates large scale sugar mills which possess EOS features at a regional level.</p> <p style="text-align: center;">ASSET SPECIFICITY (AS)</p> <p>The nature and level of investment in sugar mills has very definite asset specificity aspects (physical and site) which gives rise to quasi-rent.</p>

6.1.3 Participants

It is important to recognize the participants and organizations involved. The necessity can be summed up by Robert Bates (1989, p.82) words:

Although created for reasons of efficiency, economic institutions provide the locus for political struggles. For while agents in an industry share an interest in maximizing the value of production their interests concerning its distribution conflict.

In this regard behavioral assumptions need to be made regarding their underlying motivations and interests. These assumptions could range from the elements of opportunism to loyalty and trust, and are a function of society. Risk aversion is assumed due to the ubiquitous threads of uncertainty and a lack of information. This is especially true when dealing with emerging small farmers. In this regard Samuel Popkin (1988,

p.251) mentions that, "Much of the peasant society is non-market but not non-economic". Table 4 provides a breakdown of the different participants and some of their assumed behavioral realities and underlying interests.

The major organizations involved in the sugar sub sector which are based in Natal/Kwazulu, the main production region, include the following:

SASA is the governing body of the sugar sub sector and comprises of equal elected representatives from both the growers and sugar millers/refiners. Under its Constitution of Association, the affairs of the Association are administered by a council consisting of a chairman, vice chairman and councilors who are elected annually. Provision is made for an executive committee as well as various standing committees. Some of these committees include: the planning and advisory committee, which considers and makes recommendations on new projects; the financial planning committee, which considers the current and future financial position of the industry; the cost and division of proceeds committee, which establishes the rules and procedure dealing with the division of sugar proceeds between millers, growers and SASA's overheads, and calculates the sucrose price based on returns to capital invested.

The Small Growers Financial Aid Fund (FAF) administers a fund created by SASA to provide financial assistance to small scale growers who deliver less than 150 tons sucrose per annum. The fund currently revolves around R 22 million (\$ 8.8 million). They currently handle 26 000 accounts and have a bad debt record of below 1 per cent (DBSA, 1991). It is believed that the automatic deduction together with the careful screening and tight monitoring and control functions performed by FAF are responsible for minimal bad debt.

A summary of the main participants and their behavioral realities are outlined in Table 4 below.

TABLE 4: PARTICIPANTS AND ASSUMED BEHAVIORAL REALITIES.

PARTICIPANTS	BEHAVIORAL REALITIES
Potential Small Cane Growers	<ul style="list-style-type: none"> - Stability and security is important due to risk aversion and being on the margin of society
Existing Commercial Growers	<ul style="list-style-type: none"> - Threatened if locked-in - Improve their income and capital position
Sugar Mill Owners (Conglomerates) Input Suppliers	<ul style="list-style-type: none"> - Secure throughput over time to at least recover capital and make a good return on investment
South African Sugar Association and Financial Aid Fund	<ul style="list-style-type: none"> - Maintain and expand operations - Stable and viable industry with opportunities for growth - Responsible to registered producers
Local Institutional Governance Structure <ul style="list-style-type: none"> - tribal authorities - non tribal/traditional systems e.g. "homeland" governance structures 	<ul style="list-style-type: none"> - Equitable provision of use rights - Retaining status quo - Feathering own nests, enlarge influence of control
Other Exogenous Participants <ul style="list-style-type: none"> - world sugar market participants - other agricultural sub-sectors e.g. timber 	<ul style="list-style-type: none"> - Instability due to uncertainty - Producer (conglomerate) power and influence - Relative profitability

6.2 STRUCTURE AND PERFORMANCE

The structural component deals with underlying property rights, specifically the nature and allocation of these rights. Structure is shaped by both macro (government institutions) and micro determinants. As mentioned at the outset, this paper is focussing on the micro determinants, in this case, private initiatives. This section will discuss alternative structural options found in the sugar sub-sector in Kwazulu and Kangwane and ascertain whether they can be explained in terms of public choice and transaction cost theories. In addition, a brief mention will be made of the performance associated with the different structural alternatives.

Land and credit both contain **incompatibility of use** characteristics, land more so

than credit. Factor ownership is a key structural variable associated with incompatibility and it determines whose interests count and whose are foregone. In the case of Kwazulu where factor ownership is communal²⁰, plots for sugar production are allocated through the tribal authority. In addition to the small units being allocated, this system also allows favorable allocation to those in authority, and as such maintains the status quo. Vaughen (1990, p.35) points out:

Retention of tribal land allocation practices implies retention, also, of undemocratic procedures, and of whatever inequities in land distribution arises from them.

Credit also had to be supplied by a specific institution (FAF) as the lack of collateral did not enable potential growers to obtain credit from commercial organizations. However, having to go through FAF for credit, the small farmers were locked into their terms and conditions such as the automatic deduction policy. In the case of Kangwane, however, land allocation was not made through the existing tribal authorities and as such potential farmers were able to obtain an economically viable unit. The size of the unit together with the calibre of the farmer were instrumental in the development agency allowing farmers to manage their own financial affairs by not having the automatic deduction clause. The relationship between factor ownership and credit provision and size of land units is evident in the latter situation.

Regarding performance, it is evident that in the case of Kwazulu many growers have been accommodated (30 000) through this structural system. However, as research has pointed out (Vaughen, 1990), the income earned by the individual growers is really only supplementary and as such, is not sufficient to support a family. The minuscule

²⁰ Communal refers to a situation where all members of a community have use rights to the land consisting both of arable and grazing rights. These rights which are allocated by the chief of the tribe, cannot be capitalized or exchanged but can be passed down intergenerationally through the paternal line.

holdings tend to exacerbate the deep dependency of farmers' relations with the development agents, the millers and FAF (Vaughen, 1990, p.35). In Kangwane, access is reduced through the size of the units and the selection criteria that potential farmers should fulfill, such as capital and experience. The latter, namely, determining the number of farmers that should be accommodated and their potential income, is a public choice decision.

In the case of the nature of product (sugar cane) and its production and refining processes that are required, there are four inherent situational variables of relevance (fluctuating supply and demand, transaction costs, economies of scale, and asset specificity).

Fluctuating supply and demand is been predominantly dealt with through administered transactions and regulations, such as production quotas and fixed pricing. The sugar price which is based on the cost of production and return to capital, is extrapolated back by various cost formulas to a pool pricing system for sucrose, the product for which growers are paid. There are two prices, the A pool price for sucrose is determined by the prevailing domestic price of sugar and the price of committed exports. The B pool price is determined by the prevailing and expected world sugar price. Each commercial grower who produces more than 150 tons of sucrose per annum has an A and B pool quota. The former can be bought and sold on a willing buyer willing seller basis. Small growers (less than 150 tons per annum) obtain an A pool price for sucrose. The division of the proceeds is based on a return to capital invested and valued at the replacement value. Millers on average receive a return in the region of 14 per cent on invested capital compared to 7 per cent for growers. Alternative structures that could be considered are vertical integration and different forms of contracting (Williamson, 1985).

Transaction costs arise from both contractual and information costs. The aspect of high information costs and the problem of quality determination is of interest in this analysis. One available option, is two-stage pricing, where an initial basic price is paid to the grower upon delivery and a supplement price is paid once the quality level has been determined. The problem with this price is its average nature. Another option is suggested by Bates (1989, p.77) in his Kenyan analysis:

Under such circumstances, it may be cheaper to monitor and control inputs into the production than to develop a spectrum of prices based upon quality of the outputs. Bureaucratic controls may replace market mechanisms.

It is not known exactly to what extent the latter is being practiced in the sugar sub sector but it is suspected that there may well be an element of "controlled" farming, given the current structure of the sub-sector and input suppliers and millers involvement in Kwazulu. For example sugar millers generally support extension and training, research and development and in some cases, provide capital grants for establishment costs (DBSA, 1991, p.6). Concern has also been expressed in certain instances on the aspect of sugar companies "farming" rural areas belonging to small African growers (DBSA, 1991).

There are various significant structural effects associated with **economies of scale** (EOS). The sugar mills can be viewed as EOS on a super ordinary scale within a certain region, resulting in a monopsony situation. The presence of **asset specificity** is frequently linked to EOS and as such will be dealt with in conjunction with EOS. In addition, it should be remembered that capital and investment considerations are also largely tied up with the two latter situational variables. The initial decision involves determining the scale of the mill given the existence of EOS. Secondly, given the prevailing uncertainty and possibility of fluctuating demand and supply involved with

fickle world agricultural commodity prices and local crop choice and weather conditions, investors want some guarantee or additional incentive to invest the vast amounts of capital that are required. As a result, various forms of administrative transactions and regulations are instituted to ensure a regular and sufficient throughput. The existence of controlled prices set by SASA and production quotas, is an example as is FAF and its method of providing credit and the nature and level of support services rendered to Kwazulu growers.

With regard to pricing of the milling services there are two issues (i) if a monopsony situation materializes due to super ordinary economies of scale being present, some form of administrated transaction or franchise bidding to SASA or the government is required to avoid monopsony pricing (ii) having established the latter, determining who pays the fixed costs (intra marginal costs) which are substantial, and the marginal costs which are relatively minor in comparison, is of importance. Or should average costing be implemented? If average cost is implemented who reaps the benefits of lower costs associated the additional throughput, and who picks up the shortfall of the additional costs associated with a decline in throughput? In the case of Kenya and South Africa it seems that processing costs are allocated into the processors margin, and if prices are controlled and relatively fixed, a decline in throughput increases costs which depletes the margin. As a result of this there is an additional incentive to keep throughput up. Could this explain why small growers from Kwazulu were brought into the picture?

An additional EOS feature, EOS in transportation, may help to answer this question. Bates (1989) points out in his study of the sugar industry in Kenya that there are EOS associated with transporting the harvested cane from the fields. The closer the fields are and the fewer stops that have to be made, the lower the transportation costs.

He uses this to explain the alliance that develops between the processor and large producers. What about small producers in Kwazulu? As Ardington (1990) pointed out, the proximity of the Kwazulu growers to the mills was an important factor in their incorporation into the industry. It may also explain why emphasis was placed on establishing small local contractors to carry out the transportation function due to all the stops that have to be made. Evidence on the performance of these small contractors suggests that they are battling financially with many going out of business (Cobbett, 1984). Vaughan (1990, p. 27) concludes a section in her paper on this issue by stating:

In a nutshell, the contracting business in the area seems unstable and uncertain, with a number of contractors, who are local people using local labor, setting up and going out of business over a relatively short period.

This should not come as too much of a surprise since there is no competitive equilibrium with economies of scale (Baumol, 1979 and Bittlingmayer, 1982; cited in Schmid, 1987, p.72). In the case of the contractors, the economies of scale feature relates to the amount of hours that need to be spent performing infield operations such as ploughing, establishment, harvesting, stacking and infield haulage per unit of equipment. For example, hauling 5 000 tons per annum over a 200 day cycle is the break even point for a contractor and an assistant with a tractor and a 5 ton rear loader cane trailer. The same team with a Ford 5 610 tractor and a U bell rear loader could handle up to 10 000 tons over the same cycle (DBSA, 1991, p.22). As a result if there are too many contractors, the break even or EOS point will not be reached and thus many, if not all the contractors if they are the same size, are likely to go out of business. Equilibrium is not reached through the latter. As a result some form of collective action is necessary to avoid instability and suicidal price wars (Schmid, 1987, p.72). However, the nature of this collective action may also need monitoring, as the example below indicates:

The smaller scale growers are often disadvantaged and tend to rely mainly

on local contractors. The latter are usually more numerous and have more equipment than the work load warrants. Consequent contractor cartels charge exorbitant rates (DBSA, 1991).

The above quote also illustrates that even though an equilibrium is reached it is not a competitive one. The same would apply if a monopoly situation arose.

Of interest, is the fact that the Inanda Growers, an independent community of small growers who finance themselves through a farmers' association and employ outside transport contractors with broader commercial bases, seem to be better off than those growers who have to rely on local contractors who have emerged from the local community with the aid of Kwazulu Finance Corporation's financial assistance (Vaughen, 1990). Further research would be required to determine the reasons for the differences in performance.

Another interesting feature concerns the allocation, ownership and transferability of sugar mill permits. In this regard, the issues of ownership and organization are important in influencing certain outcomes. Bates (1990, p.90) in his Kenyan study mentions that:

Strategic possibilities of large investors are constrained by their subsequent economic immobility, while those of small actors are not.

The situation in Kwazulu seems to be contrary to the above observation. In this regard most of the sugar mills in the country are owned by large corporations rather than producer organizations. There have been cases of threatened closure of mills due to declining viability caused by a reduction in throughput brought about by "white" commercial farmers switching to timber production for improved profitability²¹. The sale of the mills was possible as the permit or license could be transferred thereby

²¹ Approximately 30 000 Ha sugar producing land is estimated to have been lost from the sugar industry. It is further estimated that approximately 6 000 Ha is currently being converted to timber production annually (DBSA, 1991, p.4).

allowing the buyers to open another mill in another region, in this case the Eastern Transvaal. The transferability of the permit is of benefit to the sellers as it reduces the difference between salvage value and acquisition price. There is obviously a risk to small growers who cannot move into timber and take advantage of the improving profitability of this sub-sector because of land, capital and other constraints. As one of the local newspapers noted, "Small farmers are sadly, ground between government and economics" (Natal Mercury, 4.18.88; cited in Vaughen, 1990). The threatened foreclosures did not materialize due to the possibility of an ethanol project and the improvement in the world sugar market. Were it not for the latter, there would be many small cane growers out of business today. Luckily the exogenous shock was positive but it does highlight the necessity for fair and relatively complete contracts. A summary of this situation-structure-performance analysis is given in Appendix I.

6.3 CONCLUSION

The favorable coverage that the sugar industry has been receiving for its progressive private initiatives to introduce small scale "black" farmers into the industry, should be tempered by the market and non-market economic realities that prevail in the industry. Regarding the underlying motives and causes, one may ask the questions: (i) "Has the economic power of the market transcended political boundaries and therefore triumphed?" (ii) "Is there a genuine sense of progressiveness and equity developing, signalling the beginnings of a new form of racial altruism?" (iii) "Have non-market realities been responsible for shaping an inevitable outcome?" In my opinion, there are elements of all three, with the possibility of the forces of the market and non-market economic realities associated with certain situational characteristics accounting for a larger share of the underlying causes for the developments. It is also important not to

underestimate conglomerate power, which in this case transpires through ownership of the mills and input suppliers, in a concentrated economy like South Africa's.

What lessons can be learnt from this short case study? Small black farmers do respond to initiatives with the assistance of support services such as credit, input and extension provision. Guaranteed buyers and relatively stable and favorable prices do seem conducive to integrating small farmers because of their risk adversity. Sugar is well suited to small scale contracting (Binswanger, *et al.* 1989, p.10) largely because it does not require large amounts of capital and it does not really have a long establishment period.

The initial impact in terms of participation in production seems to have been dramatic, but, the sustainability of the contractors, the stability and expansion of the growers, and their participation and representation in the organizations servicing them, seems not to have materialized in any significant way (Vaughen, 1990). Even though there maybe certain instances of small scale black farmers "out-producing" their white counterparts, this seems to be limited, as the average differential between small scale and large scale production is in the region of 15 tons per hectare. The average rainfed yield for a small farmer is 37.5 tons of cane per hectare a year, compared with 54 tons of the commercial farmer (DBSA, 1991, p.15). The reality of this is supported when one considers the allocation of quotas under the new expansion program. Even though small growers within a 30 km radius of an existing sugar mill will have free access to the sugar industry resulting in another 24 000 to 30 000 Ha (approximately 30 000 tons) of sugar being brought into production, the majority of acreage is being granted to white large scale farmers in Natal/Kwazulu. About 21.3 percent of the expansion acreage, in the eastern Transvaal (32 000 tons), is being granted to small scale black producers in Kangwane (DBSA, 1991). In total of the 300 000 tons additional envisaged under the

expansion program only 62 000 tons (20.6 percent) will be sourced from small growers.

Where does this leave us - disillusioned, or wiser? Hopefully wiser in understanding the real underlying dynamics of change and the interdependence that exists as well as the conflict of interests. This should place us in a better position to examine ways of improving structural options in an attempt to improve the substantive performance for certain groups.

APPENDIX 1

TABLE 5: SITUATIONAL CHARACTERISTICS, STRUCTURAL ALTERNATIVES AND PERFORMANCE POSSIBILITIES.

SITUATIONAL VARIABLES	STRUCTURAL ALTERNATIVES	PERFORMANCE POSSIBILITIES
<p>INCOMPATIBLE USE GOOD (IUG)</p> <p>Due to the inherent scarcity associated with all these goods, the dominant characteristic that is of importance, is that of IUG.</p>	<p><u>Allocating mechanisms of land and quotas:</u></p> <ul style="list-style-type: none"> - Traditional/tribal authority; - Government structures; - Bargained transaction (highest bidder), (not dealt with in paper). <p><u>Credit Provision Mechanisms:</u></p> <ul style="list-style-type: none"> - Formal (FAF); - Informal (farmer association). 	<p><u>Allocating mechanisms of land and quotas:</u></p> <ul style="list-style-type: none"> - Maintain status quo and nepotism - Opens access to broader range of participants - Small units whose size remains fixed - Locked into formal credit (FAF) - Fewer farmers accommodated on larger units - Selection criteria and allocation mechanisms subject to influence - Credit flexibility - Allocation to most productive use - Limited access to institutions makes competition "unfair" (fat cats win). <p><u>Credit Provision Mechanisms:</u></p> <ul style="list-style-type: none"> - Subsidized rates and equitable access if registered, but inflexibility constraining entrepreneurial ability. - Market rates and flexibility that encourages entrepreneurial ability.
<p>FLUCTUATING SUPPLY AND DEMAND</p>	<ul style="list-style-type: none"> - Administered transactions (agreements and quotas); - Private contracting. - Vertical Integration 	<ul style="list-style-type: none"> - Reduce instability - Guarantee short run supply of cane for processing - Lock-in effect
<p>TRANSACTION COSTS</p> <ul style="list-style-type: none"> - Contractual costs - High information costs 	<ul style="list-style-type: none"> - Two stage pricing; - Indirect administrative transactions; - Growing/input requirements - Collective action. 	<ul style="list-style-type: none"> - Cash flow and aggregation problem (free rider possibilities) but if collectively organized may provide flexibility. Benefits the mill. - Improves support services but at a cost to the small farmer. - Monitor and maintain quality and reduce free riding.
<p>ECONOMIES OF SCALE (EOS)</p> <p>The nature of the processing requirements necessitates large scale sugar mills that possess EOS features up to design capacity at regional level, and which include indivisibility.</p> <p>ASSET SPECIFICITY (AS) & UNCERTAINTY</p> <p>The nature and level of investment into sugar mills have very definite asset specificity aspects (physical and site), which gives rise to quasi-rent.</p>	<ul style="list-style-type: none"> - Franchise bidding for permits; - <u>Safeguards for the Investor:</u> <ul style="list-style-type: none"> - Contracting; - Diversification; - Integration into production; - Sale or transferability of permit. - Farmer provides hostage e.g. production quota and operating loan. - <u>Safeguards for the Growers:</u> <ul style="list-style-type: none"> - Sunk cost hostage; - Contracts; - Diversification; - Integration into processing. 	<ul style="list-style-type: none"> - Ex ante competition which may result in lower costs but also ex post surprises. <p><u>Safeguards for the Investor:</u></p> <ul style="list-style-type: none"> - Guarantee throughput which can assist in determining optimal scale. - Leaves a door open in the event of unforeseen exogenous shocks e.g. improved timber profitability. - Guarantee throughput and reduce risk by improving control. - Reduces acquisition/salvage value differential, which benefits mill owners but reduces the value of the hostage to small growers. <p><u>Safeguards for the Grower/Producer:</u></p> <ul style="list-style-type: none"> - Provides potential bargaining tool. - Security and stability for producers. - Reduces risk at an individual level if opportunities and resources are available. - Limited due to size of farmers, investment requirements and institutional constraints.

CHAPTER 7

OPTIONS FOR PRIVATE BASED REFORM INITIATIVES

Sound economic growth in a free-market democracy can be attained only when the production of goods and services increases in response to the needs and wants of people, when their earning power rises spontaneously as production expands, with a minimum of reliance upon friction-generating income distribution (Kelso, 1986, p.45).

The purpose of this chapter is to examine lessons that can be useful from the case study in the previous chapter as well as explore other possible private based reform options that could be adopted under certain situations found in the commercial sector, rather than the developing sector. In other words, the possible options to be addressed in this chapter are aimed at the commercial sector in its current form, specifically in the grain sub sectors and more capital intensive sub sectors such as the fruit sub sectors. The options to be examined, namely, sharecropping and broadening capital ownership, are however, not limited to dealing with the situations found in the latter sub sectors only.

The underlying principles of two-factor economic theory as summed up in the above quote, and capital democracy as developed and applied by Kelso (1958, 1967 and 1986) will be central when examining the different options.

7.1 PRINCIPLES OF ECONOMIC DEMOCRACY

The nature of the problem as identified in Chapter 4, namely that of institutional failure, necessitates a closer examination of the underlying forces of political and economic democracy that have been absent in the past. Both forms of democracy are required to empower people. In a political democracy greater economic equality may be necessary

to preserve political equality, if economic power can be translated into political economy (Thurow, 1973, p.73). The interdependence between economic power and political institutions has been illustrated in Chapter 5 and as such the options to be examined will be assessed from both political equality and economic equity considerations. The emphasis will however, be on the latter, namely, economic equity considerations.

The fundamental challenge lying before the country and specifically the commercial sector is one of restructuring institutions and organizations in such a way as to bring about a much needed process of redistribution and improving performance in its broad perspective without the impact being significantly detrimental to economic growth and productivity. There are two mechanisms that are considered important to the process, namely, (i) that of opening access and in so doing to create equality of opportunity to participate in the broader political economy, and (ii) the empowering and equipping of individuals to take advantage of the opportunities. This empowerment can either be in the form of affirmative action or capital empowerment. The need for affirmative action programs is acknowledged and different options proposed by Christodoulou and Vink (1990) are considered important. However, the principle of capital democracy, achieved by opening access to capital markets and broadening the capital base is supported and examined under the different options. Kelso (1986, p.115) provides the following reasoning for this.

In the distribution of social power, whether it be political power or economic power, all things are relative. The essence of economic democracy lies in the elimination of differences of earning power resulting from denial of equality of economic opportunity, particularly to capital credit. Differences in economic status resulting from differences in advantages taken and uses made of economic opportunities are natural, proper, and desirable. But all differences based on inequality of economic opportunity, particularly those that give access to capital credit to the already capitalized and deny it to the non- and undercapitalized, are flagrant violations of the constitutional rights of citizens in a democracy.

This is in line with Thurow's reasoning that the emphasis should lie on establishing an equitable distribution of market rewards before, rather than after, taxes and transfers (Thurow, 1973, p.79).

Kelso's (1986) hypothesis centers around the increasing productivity of capital relative to labor in industrializing economies. Affluence is directly associated with having access to capital, specifically industrial capital, given its higher productivity. Viewing workers as both labor and capital workers²² and consumers is what Kelso refers to as the two factor theory. Because of the declining productivity of labor, the only means of improving an individual's wealth is by creating access to capital in the form of credit. The concentration of capital which has the tendency to feed on itself (the rich get richer phenomenon), not only deprives others, namely, the undercapitalized individuals in society, from partaking in the returns associated with capital investment due to the incompatibility of the good, but also results in what Kelso terms morbid capital²³. Kelso considers such excess productive power a violation of common law limitations inherent in private property, because without benefitting its owner, it beggars others by depriving them of adequate economic opportunity - economic autonomy. In addition, denying access to improved affluence of a large portion of the population, the consumption side of the equation remains undeveloped due to a lack of purchasing power resulting in lower economic activity. This is all too evident in the South African economy, where high economic and capital concentration and relative deprivation of a large part of the population particularly in the rural areas of the country coexists. As

²² Being able to utilize both labor and capital resources to "work" and earn a return.

²³ That part of a capital holding or estate of an individual or family that produces income over and above that desired and used to defray the costs of the individual's or family's self chosen standard of living (Kelso, 1986, p.168).

Thurow (1973, p.57) points out:

If income and wealth are not distributed in accordance with equity principles, individual preferences are not properly weighted. The market quite efficiently then adjusts to an inequitable distribution of purchasing power.

Kelso's solution lies in opening capital access to the undercapitalized through certain institutional innovations and creating avenues for productive investment opportunities initially and primarily in the activities which they are directly involved in.

The myth of increasing labor productivity in an industrialized or industrializing economy that unions claim, is refuted by Kelso. In addition he indicates that in the United States specifically, minimum wage legislation, job reservation and other union methods have not only been inflationary, resulted in higher unemployment especially amongst the younger generation but have led the labor force down a dead end street (Kelso, 1986, p.145). He stresses that unions need to change their emphasis away from the perceived prime factor of labor to the actual factor of capital. In doing so they should use their collective bargaining skills in improving their members access to capital.

If there are in reality two ways for people to participate in production and earn income, then tomorrow's producer's union must take cognizance of both (Kelso, 1986, p.145).

Employees/workers have traditionally in the past had limited access to investment capital mainly due to a lack of required collateral. Asset-based finance, as conventionally practiced, is one of the great obstacles to changing the way consumers participate in the production process itself (Kelso, 1986, p.43). Kelso also argues that employees should be able to claim some of the organizations collateral, specifically that portion associated with the difference between the asset/capital value and the going concern or market value. The difference between the two being the aggregate value of the specific skills and organizational fabric that exists and results in the synergistic productivity of the

labor force and management.

There are two aspects that Kelso seemingly fails to deal with in any detail, if at all. First, who determines what "enough" or "too much" capital per individual or household is? Kelso indicates a principle of level of capital sufficient to accommodate a self chosen standard of living with the limitation principle coming into effect when the capital becomes morbid. The vagueness of the latter makes it insufficient in determining what a "fair" or "just" distribution of resources should be, and as Thurow (1973, p.57) indicates, one way or another, we are forced to reveal our collective experiences about the "just" distribution of resources. The problem lies, however, in specifying economic equity, which is simply difficult and to which there is no universal answer. He proposes the following directions from which economic equity can be specified:

- Reliance can be placed on process and procedures²⁴. An economic game is specified as fair or equitable when individuals agree on the rules of the game, and any outcome of that game is thus considered just.
- Individual preferences can be considered the key criterion. If the outcome of an economic game is in accordance with the individual preferences of the citizens of a country, the outcome is equitable. Equity is achieved when society reaches the distribution of economic resources that generates the most agreement.
- Merit, however defined, can be used to specify equity. The person who contributes most gets most.
- Equity can be related to the common good, however defined. Substantively, the problem then devolves into one of determining the common good (Thurow, 1973, p.58).

Any specification of equity can and probably will contain elements from all of the above facets of equity. An extension of the equity problem lies in determining the differences between wants and needs and which combination should be used as a measure. There are two doctrines that deal with the issue or difference between wants and needs. In the "superabundance" doctrine, equity decisions do not need to be made, as economic wants

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This is in line with the reasoning that constitutional economists, such as Buchanan, follow.

will be satisfied as everybody gets richer. Proponents of this doctrine would indicate that to eliminate the problem of economic equity, society should concentrate on economic growth without worrying about the current distribution of resources. However, as Thurow (1973, p.65) points out:

Unfortunately, our demonstrated ability to create new wants has eliminated the possibility - for both Marxists and conservatives - of ever being able to satiate everyone's wants. The problem of unsatiated wants is always with us. This means that the problem of specifying economic equity is always with us.

In the doctrine of satiated needs, wants cannot be satisfied but needs can be. Economic equity is achieved when the minimum economic prize is large enough to satiate the poorest man's needs. The problem comes in defining needs. Are they simple and physiological or are they a combination of physiological, sociological and psychological needs? Thurow (1973, p.67) proposes examining and using the sociological concepts of relative deprivation and reference group determination and comparison. The happiest people seem to be those who do well within their own reference group rather than those who do well across the entire population (Ibid, p.67). The latter concept links in with the concept of wage contours.

As mentioned earlier, the approach favored in this study relates to concentrating on the process and procedures as a first step and because it is easier to obtain agreement on this than the level and distribution of the outcome.

The second issue that Kelso does not adequately address deals with the aspect of what incentives there are for organizations, specifically, existing stockholders and management to support and undertake such capital broadening programs that Kelso proposes, besides that of a moral or ethical obligation that Kelso seemingly calls for. This is especially crucial, given the power and wealth associated with capital ownership, especially when concentrated. In short, it is felt that only when costs exceed the benefits

of maintaining the status quo to those in positions of power in the organization or the economy as a whole, will changes occur. These costs can be associated with increased strikes and boycotts, sabotage and theft, reduced productivity and consumption.

In effect this is what is happening in South Africa. The increased cost on individuals and organizations through higher crime, inflation, strikes and boycotts together with low economic growth and international pressure through capital deprivation and other sanctions is and will increasingly result in the development of institutions and mechanisms to broaden the political and economic base of society. This is currently less evident in the agricultural sector compared to the manufacturing and mining sectors where organized labor has had a significant effect. However, as organized labor gains momentum in the agricultural sector and the prospect of a change in certain institutions that have been advantageous to the sector in the past, materialize, these costs will become more of a reality.

There are opportunities that exist in the commercial sector for opening and improving participation in labor, management and capital activities. The two specific initiatives that will be examined include the more informal arrangement of sharecropping and the more formal initiative of employee stock ownership programs in more capital intensive sub sectors.

7.2 OPTIONS FOR PRIVATE BASED REFORM INITIATIVES

There are numerous actions that individual farming enterprises, cooperatives and sub sectors can undertake to improve the distribution of income amongst participants and improve their performance. Analyzing certain initiatives undertaken in the sugar sub sector, illustrated the impact of opening access to small farmers and providing certain key support services such as credit. However, it was also evident that limitations still

exist in the form of continued formal and informal constraints. Both traditional tribal and formal institutions have limitations. The initiatives seem to have been widely spread in terms of increasing participation (30 000), however, the depth of the initiative to empower these participants seems limited. A reform package should contain both certain breadth and depth measures. Breadth to make it far reaching and accessible to as many as possible and depth to provide measures for economic empowerment and growth potential.

The need for improving the situation of farm labor does vary from sub sector to sub sector, region to region and even farm to farm. Those at the lower end require an improvement in their basic needs such as housing, health, education, and access to land. Government measures would be required to facilitate this process either in the form of coercive mechanisms such as meeting basic minimum standards or incentives for investing in the required social infrastructure. The need also exists for improvement in the economic welfare of the labor force. This would include focussing on wage levels, opportunities for sharecropping and leasing, greater participation in the enterprise and supporting organizations such as cooperatives as well as establishing mechanisms to broaden the ownership either through new ownership or shareholding.

The two options considered, sharecropping and shareholding, are both aimed at broadening the capital base and improving access to and participation in the commercial sector. The strengths of these options include: making use of existing skills and resources, resulting in a shorter adaptation period; avoiding large disruptions in production; avoiding inflation by improving individual wealth not only with wages; providing an opportunity for debt restructuring; and being able to achieve a balance between continuity and change.

The changing structures which are emerging, specifically with regards to land

reform and opening access to support services, provide an opportunity for the realization of the proposed initiatives. Even though the situation emerging within the commercial sector is such that enterprises are already adopting certain reform measures, it is speculated that a package of coercive measures (push factors) and incentives (pull factors) will still be required to facilitate the adoption of these and other reform initiatives.

7.2.1 Informal Initiatives - Sharecropping

de Klerk (1991, p.3) mentions that sharecropping is a possible option to facilitate participation in the sector, especially if a pre-dominantly free enterprise market option is adopted to land reform i.e. remove all discriminatory restrictions to access and let the market do the rest, as has been proposed in the recent white paper on land reform. Reasons for this include a growing need to replace direct supervision with productivity incentives as well as sharing risks especially amongst part-time farmers; a history of sharecropping; the emergence of sharecropping in certain areas (Gcabase et al, cited in de Klerk, 1991, p.4); and a means of easing the cash cost squeeze. According to de Klerk (1991, p.5) there are, however, certain factors that are likely to have an inhibiting effect. On the demand side, these include: the absence of tenants' rights legislation; and the low income and high risks of agriculture relative to urban/industrial employment which makes farming unattractive to both household heads and family members. These factors are compounded by the strongly negative image that many blacks have of agricultural tenancy because of its abuse in the past by white landowners and government policy. On the supply side the Subdivision of Agricultural Lands Act and race prejudice on the part of the landowners may limit supply of opportunities.

The theory of sharecropping has explained certain reasons for the existence of

this perceived inefficient institution. These include: sharing of risks between landlords and tenants especially in situations where insurance markets are absent; savings in transaction costs (Cheung); providing incentives; and serving as a self selection device (Stiglitz, 1988, p.21).

The rationale for risk sharing is explained by the compromise between risk and incentive effects. In the case of rental contracts that provide perfect incentives, the tenant has to absorb all the risk, while with wage contracts, where the landlord absorbs the risk, there are no incentives to work unless workers are closely monitored.

Both Stiglitz (1988) and Singh (1988) support a shift in focus from the risk-sharing benefits of sharecropping to the incentive role of sharecropping, given the monitoring costs associated with labor under conditions of moral hazard.

Sharecropping as a mechanism for screening potential tenants has also received some attention. The basic idea behind this explanation is that the landlord cannot directly observe some characteristic of potential tenants that affects productivity, such as entrepreneurial or other abilities. Then by offering a menu of contracts, including share contracts, the landlord can get individuals of different ability to select different contracts. Tenants are then "screened" according to ability. Singh (1988, p.56) indicates that this version of the sharecropping model explains certain facts.

First, it explains the coexistence of sharecropping with fixed-rent and wage contracts. Second, it fits with the observation that share tenancy is often associated with lower productivity than fixed-rent tenancy, since the model predicts that the more able (and more productive) tenants will choose fixed-rent contracts and the less able will choose sharecropping. Third, and related to the second point, the model seems to agree with the agricultural ladder hypothesis²⁵.

²⁵ The agricultural ladder hypothesis is based on the observation that, as agricultural workers gain physical and human capital, they progress from wage labor to sharecropping, then to renting, and finally to owner-operation.

Cost sharing and capital constraints have also been incorporated into sharecropping models in an attempt to explain the existence of sharecropping. However, Singh (1988, p.68) suggests that, "... while capital constraints and cost-sharing are important and can both be usefully incorporated into models of sharecropping, they do not explain the institution itself."

Singh (1988, p.68-69) concludes that sharecropping is a response to uncertainty and asymmetries in information, as well as to different types of market-failure, in labor, credit and capital markets. This aspect best explains the emergence of sharecropping in the early 1900's in South Africa and its possible resurgence as restrictive legislation is repealed and agricultural markets start adjusting. Distortions in land, capital and credit markets will remain for some time while both formal and informal constraints are removed. During this interim period it can be hypothesized that sharecropping could serve as a useful intermediate mechanism for improving socio-economic conditions in certain areas and provide the lower rungs for the so-called "agricultural ladder". It is also hypothesized that seasonal and annual labor intensive crops, such as maize, sugar, cotton and vegetables provide the best potential for sharecropping given the labor intensity, reduced mechanization and management requirement and existing production skills associated with these crops.

7.2.2 Formal Initiatives - Employee Share Ownership Programs (ESOPs)

Certain sub sectors in the commercial sector are relatively highly capital and management intensive such as orchard crops (deciduous and subtropical fruit, nuts, coffee and timber) and as such sharecropping is not really suited to these conditions. In addition economies of scale are associated with many of these enterprises and as a result breaking up the production or processing units would lose the benefits associated with

economies of scale. Given, this situation, especially the higher capital productivity relative to labor productivity, ESOPs are considered as a potentially appropriate mechanism for broadening the capital base of these enterprises and in so doing improve the distribution of wealth and improve participation in the different enterprises.

The basic fundamentals associated with Kelso's capital democracy theory have been outlined in the first section of this chapter. This section will endeavor to outline some of the important workings and practicalities associated with this option. The essence of the ESOP is summed up by the quote below.

When properly designed and used, the ESOP is a capital device for using a corporation's credit simultaneously to finance its own growth and asset acquisition, while enabling its employees, who are its natural stockholders, to buy its stock and to pay for it out of the wages their newly acquired capital rather than out of the wages of their labor, as has been the case historically (Kelso, 1986, p.51).

The history of ESOPs goes back to the fifties when Louis Kelso, after having spent sometime thinking about a method to enable people to buy capital out of the firm's income stream instead of out of their inadequate savings and paychecks, found an opportunity in 1956 to test his hypothesis and in 1958 published his first work, *The Capitalist Manifesto*²⁶.

Kelso (1986, p.59) indicates that two basic characteristics should be present to induce a situation of embarking upon the establishment of an ESOP. First, the organization should be in an expansionist mode and as such would want to expand its capital facilities (and labor if need be). Second, management and shareholders should have accepted the philosophy of capital democracy²⁷ and be in agreement to

²⁶ For more detail on the history and evolution of Kelso's hypothesis and especially the ESOPs, see Kelso, 1986, p.52-55.

²⁷ Conduct your business so that, while protecting your existing stockholders' property in capital, you raise the earning power of employees and offer all of them who perform well the opportunity for lifetime employment.

embarking upon such a program. Problems with the latter condition or requirement were pointed out in Section 7.1, where it was concluded that relying on management's and shareholders' morality would not be sufficient to bring about such an adoption due to the immoral influences of selfishness and power. It was argued that a package of both coercive and incentive measures would be required in a situation of rising expectations and pressure from the work force, if these programs were to be adopted. Thus, it is hypothesized that only in a situation where the costs of maintaining the status quo threaten the economic future of the operation, through strikes, boycotts, theft, sabotage and union pressure, and where government facilitating incentives and the presence or possibility of expansion exist, will a company embark upon an ESOP program.

Kelso (1986, p.61-65) mentions several important practicalities and benefits of ESOP financing. A summary of these is provided below.

- i) The establishment of an ESOP trust is required that would qualify as a tax exempt employee constituency trust. Such a trust would normally cover all employees of the organization and would be managed by a committee. This committee, appointed by a board of directors, may comprise of one or more rank-and-file members of the organization. Formulae are required to apportion the relative interests of employees in the stock acquired through the ESOP to their relative annual compensations from the employer over the period during which each financing is to be paid off.
- ii) A loan is made to the ESOP, rather than directly to the company or corporation. The committee then uses the proceeds of the loan to purchase newly issued stock from the corporation at its current fair market value. If the stock is not traded in a public market, then a fair value determined by a professional appraiser is used.
- iii) The trust gives the lender, a commercial or investment bank, its note for the loan.

Collateral is either provided by the company or by the new stock which is only provisionally released as the loan is paid off. The company may also be required to guarantee that adequate dividend payments will be made to repay the loan.

- iv) An important aspect of designing the terms and conditions of the agreement lies in structuring all loan terms so as to assure that the pre-tax yield on assets represented by the stock purchased by the ESOP will amortize the principal and interest on the financing, and that any temporary asset dilution of other stockholders will be promptly restored before dividends are paid through the ESOP to the employee shareholders.²⁸
- v) Being able to pay the interest and capital portions of the loan and obtain simulfinancing, reduces the earnings cost of capital acquisitions in part because of the ESOP's access to pre-tax corporate earnings and also because of savings in social security taxes. In addition to the tax saved by the company there is an additional cost saving through reducing the expenditure on pension and profit sharing plans.
- vi) All income taxation of employees on the value of ESOP-acquired stock is deferred from the time the ESOP pays for the stock until the time the employee retires or separates from the employer. There is also potential for higher motivation amongst the employees under such a program, provided they understand the logic of the program and how it works for their benefit.
- vii) Once the loan has been repaid, beneficial ownership passes to the employees. They then have the right to vote on the stock. Dividends are then paid out to

²⁸ A certain amount of flexibility and fine tuning to the specific situation would be required, given lag times between investment and the generation of net income as well as a the presence of a certain amount of uncertainty that is bound to exist.

the trust into the prospective individual trust holder accounts depending on their proportional investment. These dividends are able to be paid out of pre-tax dollars in the United States of America due to the Employee Stock Ownership Act of 1984. This means that dividends have the same tax deductibility as wages. Upon retirement employees can have the option of selling the stock or keeping it and benefitting from the dividend payments (so-called life time employment option).

- viii) Once stock of the employer corporation has been bought and paid for through the ESOP, the portfolio can, if the ESOP committee wishes to do so, be diversified by selling company shares and purchasing other suitable investments. There are obviously arguments for and against such a strategy. Kelso (1986, p.159) indicates that at least initially, investment should be predominantly directed in the employer company stock to establish an acceptable level of concentration. Once an ESOP has been successfully established a large part, if not all the future capital growth should be financed through it.

This capital democratic initiative not only relies on existing stockholders and management sanctioning the "deal" but also governmental institutional support mechanisms required to constitutionalize/legalize certain procedures and rules. Important institutions Kelso mentions are certain tax incentives, legitimization of contracts required between parties, guarantee mechanisms and capital insurance underwriters most of which, he adds, involve redefinition of the role and functions of existing organizations performing other tasks.

As indicated in Section 7.1, labor unions need to refocus their direction and in so doing explore options of broadening capital ownership such as the ESOP. The possibility still remains, however, that unions may take some time in redirecting their emphasis as

is illustrated by the quote below.

Labor unions, it seems, would not make an issue of concentrated capital ownership as long as management would distribute much of the wages of capital to labor, load the rest of labor's and management's rising earnings on consumers and taxpayers, and maintain strict, if mysterious, silence about labor's and management's dwindling productive roles (Kelso, 1986, p.144).

Kelso makes the point that ESOPs do not replace the need for unions, neither do they replace management functions. They do, however, broaden capital ownership and participation in a meaningful manner as employee stockholders become the most knowledgeable stockholders, for they are in a position to appraise each others performance as well as the performance of management (Kelso, 1986, p.161).

ESOPs can also be used for buy out options, for instance, when existing shareholders wish to sell a company as a unit. The relevance of this in the South African situation, lies in the possibility of buy out and debt restructuring programs in the commercial sector. There are many farms in financial stress that are burdened with debt levels that cannot be serviced by the productive capacity of the farm. In addition to this, the possibility of communal ownership of farming units is closer to becoming a reality with the submission of the recent white paper on land reform, and the five accompanying bills that are to be tabled in parliament, which amongst other things, allows for the communal ownership of farm land, under certain circumstances. Given these two situations, the possibility exists for investigating buy out and debt restructuring options which could broaden ownership, either through the transfer of ownership or the establishment of partnerships.

It is believed that given the changes taking place in the political and economic structures (macro determinants), and currently emerging trends, sharecropping and ESOPs provide viable and equitable opportunities to introduce private based reform

initiatives in different sub sectors (maize, cotton, vegetables, sugar for sharecropping, and deciduous and sub tropical fruit, coffee, and timber for ESOPs).

CHAPTER 8

SUMMARY AND CONCLUSIONS

This paper has focussed predominantly on the commercial sector as a whole, especially reviewing the historical situation and describing the current structure. Although an indication of the underlying structures and changes taking place in the sector was provided, there was little detailed information on the specific structure and performance attributes of individual sub sectors, besides the sugar sub sector. The case study of the sugar sub sector provided some insights into the dynamics of change that have been taking place in that sub sector.

The need for restructuring in the commercial sector has been illustrated. This restructuring has to be undertaken at different levels in different sub sectors and through different institutions and organizations. The paper identified certain private based initiatives that could be undertaken in certain sub sectors in an attempt to initiate some sort of reform and in doing so improve performance through improved distribution of income and by opening access. There are however, many other opportunities for addressing reforms in other sub sectors both at the producer and marketing levels. These can be investigated from different levels and perspectives (i.e. state and private initiatives applicable to the commercial and development sectors).

8.1 AREAS FOR FURTHER RESEARCH

8.1.1 Sub Sector and Industry Performance, Reform and Adjustment

The approach adopted, was described as being applicable especially for the situation in South Africa given the dominance that institutions have had in structuring social and economic activity. Utilizing this approach to investigate the structure and performance of other sub sectors in the agricultural sector as well as the different industries further down the vertical chain (marketing activities) within the sector would provide important information on the relative performance of the different sub sectors and industries in the commercial sector. The existence of concentrated control on specific industries in the vertical chain of different sub sectors that is evident in South Africa, also necessitates research to determine the effects of this concentration on performance. An example of this can be found in the red meat industry, where three big organizations control and influence various industries in the red meat sub sector.

In addition, further detailed analysis of the suitability and adoptability and possible consequences of the proposed reform measures should be undertaken at firm level in an attempt to determine the feasibility/acceptance, viability and sustainability of these initiatives. This more micro orientated approach assesses the impact of proposed structural changes from the firm point of view where one individual is related to another, a corporate group or a mixture of the two. Schmid (1987, p.195) indicates that the SSP paradigm could be useful for this purpose.

... in some situations, application of the paradigm must develop a similar model to investigate how the choices of individuals within organizations result in a composite or organizational choice.

8.1.2 Organizational Reform

Organizational reform or transformation is an important component of institutional change that needs further research in South Africa. This is particularly evident in the commercial sector where the existing support organizations which have been shaped and structured by past separatist policies are in need of reform. These support organizations include amongst others the Departments of Agriculture, Land Bank, marketing boards and associations and cooperatives. While it is becoming increasingly evident that these organizations are in need of change, debate continues on the method of reform. Should a process of transformation and adaptation be followed or should these existing organizations be abolished and substituted with new organizations? Marcus (1989, p.191) argues that reform of existing institutions is not possible and as such suggests the establishment of new organizations. Trends that are emerging indicate that government and the status quo associated with these organizations prefer a transformation of existing organizations to maintain some sort of presence, control and continuity. There are many examples of this with the most recent example being the transition of the government's rural/"homeland" development arm, South African Trust Corporation (STC), to a Rural Development Corporation, as proposed in the white paper of land reform. Whether this process should be viewed as an adaptive process that is attempting to meet the challenges of a changing society or a survival strategy is difficult to say, as it is believed to contain both elements. Deciding on the underlying forces for such transformations and whether these organizations are representative and will be equipped and structured to effectively deal with problems and challenges facing them should be part of a public choice process, where the application of Thurow's (1973) equity criteria as outlined in Section 7.1 could serve as a starting point. In addition, structures are easier and quicker to change than the values, beliefs, and perceptions of those individuals who make up a

structure and as a result, the continued existence of informal constraints may well affect future performance of such organizations.

What is likely, is that the outcome of the current debate and existing structures will largely be determined by the outcome of a new constitution and the resulting balances of power. However, further research into these organizational aspects, whether it be the transformation of existing organizations or formation of new structures, remains an important component of institutional reform in the commercial sector.

8.2 CONCLUSIONS

The paper set out to describe the origins and evolution of institutions in South Africa and how these forces shaped the commercial agricultural sector. After a broad analysis of the current structure and performance of the commercial sector, the nature of the problem was identified as being one of institutional failure. The current lack of performance, specifically in certain sub sectors, structural imbalances together with the changing political economy necessitates institutional reform in the commercial sector.

The underlying theory and elements of an institutional approach were illustrated in Chapter 5. This approach is considered appropriate for addressing the nature and underlying dynamics of the problem, whether it focusses on institutional impact or institutional change aspects. The SSP paradigm was outlined to familiarize the reader with the workings and applications of this paradigm.

The paradigm was used to assess the origins and impact of certain private based reform initiatives embarked upon to open access to small growers, undertaken under different structures, in the sugar sub sector. What was evident, was that market and non-market forces played a large role in bringing about these reform initiatives. However, what was different in the reaction of this sub sector to these changing realities

was the adoption of private based reform initiatives rather than state based options, that many other sub sectors have called for and relied upon to cushion and protect the sub sector from changing forces or certain impacts. The success of the initiatives adopted in the sugar sub sector lies in the broad and quick impact that the initiatives had in opening access and facilitating participation by small growers into mainstream production. However, there remain certain problems associated with a lack of depth in the reform initiatives, and existing structures that are likely to constrain economic empowerment and organizational participation²⁹ within the sub sector of small growers.

In addition to the positive aspects associated with the private based reform initiatives in the sugar sub sector, two other private based reform initiatives were identified as being potential mechanisms through which to induce improved income distribution, participation and broaden capital ownership within the commercial sector. The suitability of these mechanisms (sharecropping and ESOPs) to different situations and workings were briefly described in Chapter 7.

Given the underlying assumption of the continued existence of a core commercial sector, it is felt that the adoption of the positive lessons from the sugar sub sector initiatives as well as the use if the institutions of sharecropping and ESOPs in certain situations could contribute to improving income and wealth distribution as well as access and participation in different sub sectors without detrimental impact on output and the government budget. These initiatives would require the support and backing of government in order to provide the required regulation (sanctions and incentives) to facilitate the adoption of these private based initiatives.

²⁹ This term refers to participation in the different support organizations that exist and influence production, processing and marketing relations in the sub sector.

It is believed that these initiatives provide opportunities to individuals and organizations in the different sub sectors to embark upon programs of reform from within the sector to adapt to the changing circumstances. Employing such mechanisms to bring about meaningful change in the commercial sector could reduce the possibility of being trapped between the rising expectations of labor and those excluded from participation, and political externalities associated with structural changes in the political economy.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Ardington, A.J.** (1989) "The South African Sugar Industry - A Look Ahead". Address to the Annual General Meeting of the Fertilizer Society of South Africa. Unpublished Paper.
- Ardington, A.J.** (1990) "Private Sector and Other Possible Initiatives in Promoting Rural Development". Development Southern Africa, Vol 7. Special Issue, October.
- Bates, R.H.** (1989) Beyond the Miracle of the Market. The Political Economy of Agrarian Reform. Cambridge University Press, New York.
- Bardhan, P.** (1989) The Economic Theory of Agrarian Institutions. Oxford University Press.
- Bartlett, R.** (1990) The Economics of Power: An Enquiry into Human Relations and Markets. Cambridge University Press.
- Buchanan, J.M.** (1991) "Economics in the Post Socialist Century." The Economic Journal. Vol 101, No 404.
- Budlender, G. and J.Latsky** (1990) "Unravelling Rights to Land and to Agricultural Activities in Rural Race Zones. South African Journal of Human Rights, Vol. 6, Part 2.
- Bundy, C.** (1988) The Rise and Fall of the South African Peasantry. Second Edition. James Currey. London.
- Christodoulou, N.T. and N. Vink** (1990) "The Potential for Black Smallholder Farmer Participation in the South African Agricultural Economy." Paper Presented at the Conference on Land Reform and Agricultural Development. Newick Park Initiative, United Kingdom.
- Cobett, M.** (1984) "Sugarcane Farming in Kwazulu: Two Communities Investigated. Development Southern Africa, Vol 1, 3-4.
- Daniels, R.** (1989) "The Agrarian Land Question in South Africa in Its Historical Context, 1652-1988. American Journal of Economics and Sociology. Vol.48, No.3.
- DBSA** (1989) "Land Use, Agricultural Productivity and Farming Systems in Southern Africa" Assignment Completion Report, Johannesburg.
- DBSA** (1991) "Sugar Perspective" Position Paper on the Sugar Industry and Small Scale Grower Participation, Johannesburg.
- de Kiewiet, C.W.** (1941) A History of South Africa: Social and Economic. London.

- de Klerk, M.J. (1990) "Issues and Options for Land Reform in South Africa" Paper Presented at Michigan State University. Based on the Paper - "Opening Access: An Assessment of Market-Based Options for Land Reform in South Africa." Presented at IAAE/Agrecona Interconference Symposium, Swakopmund, July, 1990.
- Fenyés, T.I., J. van Zyl and N. Vink (1988) "Structural Imbalances in South African Agriculture." The South African Journal of Economics, 56.2 and 3.
- Fenyés, T.I., and J. van Zyl (1990) "The Occupation/Depopulation of the 'White' Rural Areas". Development Southern Africa, Vol.7, Special Issue, October.
- Frank, R.H. (1988) Passions Within Reason. The Strategic Role of Emotions. W.W. Norton and Company. New York.
- Galbraith, J.K. (1973) "Power and the Useful Economist," American Economic Review, March.
- Galbraith, J.K. (1991) "Economics in the Century Ahead" The Economic Journal. Vol. 101, No. 404.
- Hirschman, A.O. (1970) Exit, Voice and Loyalty. Responses to Decline in Firms, Organizations and States. Harvard University Press. Cambridge, Massachusetts.
- Hodgson, G.M. (1988) Economics and Institutions - A Manifesto for a Modern Institutional Economics. University of Pennsylvania Press, Philadelphia.
- Jacobs, M.S. (1982) The Law of Expropriation in South Africa. Juta, Cape Town.
- Kassier, W.E. (1989) "Change in Agricultural Political Market - Implications for the Future. Agrekon.
- Kassier, W.E. and T.E. Kleinhans (1990) "Die Risiko van Irrelevansie Genoodsaak n Alternatiewe Paradigma vir die Suid-Afrikaanse Landbou-Ekonoom." Agrekon. Vol 29, No 1.
- Kelso, L.O. (1958) The Capitalist Manifesto. Ballinger Publishing Company, Cambridge, Massachusetts.
- Kelso, L.O. (1967) Two-Factor Theory: The Economics of Reality. Ballinger Publishing Company, Cambridge, Massachusetts.
- Kelso, L.O. and P.H. Kelso (1986) Democracy and Economic Power. Ballinger Publishing Company, Cambridge, Massachusetts.
- Langlois, R.N. (1986) "The New Institutional Economics: An Introductory Essay," Economics as a Process, Cambridge University Press.

- Lipton, M. (1985) Capitalism and Apartheid: South Africa, 1910-84. Rowman & Allanheld, New Jersey.
- Marcus, T. (1989) Modernizing Super-Exploitation: Restructuring South African Agriculture. Zed Books Ltd. London.
- Marquard, L. (1967) Peoples and Politics of South Africa. Oxford University Press, London.
- Natrass, J. (1981) The South African Economy: Its Growth and Change. Oxford University Press. London.
- Nelson, R.H. (1987) "The Economics Profession and the Making of Public Policy." Journal of Economic Literature, March.
- North, D.C. (1990) Institutions, Institutional Change and Economic Performance. Cambridge University Press, New York.
- Popkin, Samuel L. (1988) "Public Choice and Peasant Organization" in Toward a Political Economy of Development. A Rational Choice Perspective. Edited by Robert H. Bates. University of California Press, Berkeley.
- Republic of South Africa (1991) White Paper on Land Reform. Government Printers, Pretoria.
- Republic of South Africa (1990) Abstract of Agricultural Statistics, Government Printers, Pretoria.
- Samuels, W.J. and A.A. Schmid (1981) Law and Economics: An Institutional Perspective. Martinus Nijhoff.
- Schmid, A.A. (1987) Property, Power and Public Choice - An Inquiry into Law and Economics. Second Edition. Praeger, New York.
- _____ (1991a) "Legal foundations of the Market: Implications for Formerly Socialist Countries of Eastern Europe and Africa". Staff Paper No. 91-19. Department of Agricultural Economics, Michigan State University.
- _____ (1991b) "Institutional Law and Economics: A Survey." Staff Paper, No. 91-27. Department of Agricultural Economics, Michigan State University.
- Selby, J. (1973) A Short History of South Africa. George Allen and Unwin Ltd, London.
- Shaffer, J.D. (1980) "Food System Organization and Performance: Toward a Conceptual Framework." American Journal of Agricultural Economics. May 1980.
- Singh, N. (1989) "Theories of Sharecropping" in The Theory of Agrarian Institutions Edited by: P. Bardhan. Clarendon Press, Oxford.

- Stiglitz, J.E. (1985) "Information and Economic Analysis: A Perspective," Economic Journal Vol. 95, Supplement to Royal Economic Society Conference Papers.
- Stiglitz, J.E. (1988) "Rational Peasants, Efficient Institutions, and a Theory of Rural Organization: Methodological Remarks for Development Economics," in The Theory of Agrarian Institutions Edited by: P. Bardhan. Clarendon Press, Oxford.
- Thurow, L. (1973) "Toward a Definition of Economic Justice." The Public Interest, Spring.
- van Zyl, J. and C.J. van Rooyen (1990) "Agricultural production in South Africa: An Overview. Draft paper read at the IDASA "Rural Land" workshop, Cape Town.
- van Zyl, J. and G.K. Coetzee (1990) "Food Security and Structural Adjustment: Empirical Evidence on the Food Price Dilemma in Southern Africa." Development Southern Africa. Vol.7, No. 1.
- Vaughen, A. (1990) "Ways of Working the Land: Small Cane Growers and Employment Creation". Paper Delivered at the Biennial Conference of Development Society of Southern Africa, September 1990.
- Wickens, P.L. (1981) "The Native Land Act of 1913: A Cautionary Essay on Simple Explanations of Complex Change." South African Journal of Economics. 49.
- Wilson, F. (1971) "Farming, 1866-1966" in The Oxford History of South Africa, Volume II (1870-1966). Edited by: Wilson, M. and L. Thompson. Oxford University Press.
- Wilson, F. and M. Ramphela (1989) Uprooting Poverty: The South African Challenge. W.W. Norton, London.
- Williamson, O.E. (1985) The Economic Institutions of Capitalism. The Free Press, New York.
- Williamson, O.E. (1986) "The Economics of Governance: Framework and Implications," Economics as a Process, Cambridge University Press.