

CHAPTER 1

INTRODUCTION

1.1 Background

South Africa is currently undergoing a significant transformation in her political, social and economic structure. The political dimension of the transformation process has been remarkably and successfully completed as marked by the first all-race elections in April 1994 and the subsequent elections in 1999. The government has made considerable progress in peeling away the legacy of racial segregation through legal and regulatory reform and redistributive public investment programmes. Benefits have accrued to both rural and urban poor. However, it is generally perceived that there is still an element of urban bias in both policy and programme implementation. Against this background, many support a strong need for social redress since poverty in the country is most prevalent among rural blacks¹.

This process of change has called attention to the issue of reintegration of the previously marginalized black rural inhabitants into the mainstream economy. Of particular interest is the role that black smallholder agriculture could play in facilitating such a process, and specifically its role in providing needed rural livelihoods under such a dynamic environment.

In line with the general climate of reform, significant changes have also been taking place in the South African agricultural sector since the beginning of the political reforms of the early 1990's. The institutional arrangements of the old order, which favoured large-scale commercial, mainly white farms above small-scale, mostly subsistence and mainly black farms, have been changed. The agricultural sector as a whole is now exposed to international competition. However, smallholder agriculture, in particular, faces special

¹ The words 'black', 'African' and 'native' are used interchangeably, as are 'white', 'European' and 'settler'.

challenges owing to the legacy of repression to which it was exposed. The impoverishment of the African rural areas puts enormous pressure on this sector to provide livelihoods for the inhabitants.

Some of the recent research on South African agriculture is sceptical regarding the ability of smallholder farming to create significant additional rural livelihoods (see for example De Klerk, 1996; Eckert, 1996; Kirsten, 1996; Lyne and Ortmann, 1996).

However, it could be argued that for the potential role of smallholder agriculture to be adequately and fairly determined, two other considerations need to be taken into account. The first is that historical developments and the powerful effect they had on the demise of smallholder agriculture should be taken into account if the potential role of this sector in the rural economy is to be accurately assessed. The second argument is the overwhelming international evidence that points towards the ability of smallholder agriculture to act as an engine for rural growth (Delgado, 1997). The first argument is expanded on in the next section. This discussion refers to South African history in general, but with special emphasis on the Eastern Cape as the area focus of this study. Chapter 2 is devoted to the second argument.

1.2 South African Agriculture: Precolonial Era to the Present

A tremendous amount of work has been done by economic historians in tracing the history of economic development in South Africa with special reference to agriculture. Notable contributions include those of De Kiewiet (1957), Wilson and Thompson (1969 and 1971), Davenport and Hunt (1974), Beinart, *et al.* (1986), Lipton (1986), Bundy (1979), and Terreblanche (1998), among others. This section draws heavily on these and other influential scholarly work in this genre.

1.2.1 From Hunter-Gatherer/Herder to Peasant²

The European merchants' first encounter with southern African communities from about 1500 was with the Khoi (Hottentots) herders and later with the San (Bushmen) hunter-gatherers and Nguni/Xhosa mixed farmers. They established a barter relationship with the natives whereby, for instance, African sheep and cattle would be exchanged for European iron.

When Jan van Riebeeck and his group of Dutch settlers finally established a permanent station in the Cape in 1652, their activities under the direction of the Dutch East India Company included supplying passing Netherlands ships with refreshments. As a result of a growing need for more supplies for their expeditions, the Dutch settlers gradually established farms and acquired cattle (sometimes through seizure). Conflicts inevitably broke out between the Khoi and the settlers, as the Cape population grew and the demand for more farming supplies rose. A pattern soon developed whereby the Khoi were progressively displaced by more intensive settler pastoralism. These developments forced them into nomadism and wage labour, and even migration out of the Western Cape.

By the late eighteenth century the European settlers who had now become commercial nomadic pastoralists or *trekboers*, as they were commonly known, had covered an area of about 700km towards the east and 200km towards the north. During the same period the limits of the Xhosa settlement were slowly moving westward. This convergence of two communities, with the Khoi caught in the middle, sparked a series of conflicts that continued until the early nineteenth century.

The Xhosa were mixed farmers living in dispersed village settlements, each of which supplied most of the economic needs of its inhabitants. When mission stations were established towards the end of the 1700s Xhosa peasant communities began and spread

² Useful references include Worden (1994), Elphick and Giliomee (1989), Bundy (1979), Denoon and Nyeko (1984), Wilson and Thompson (1969 & 1971), Katzen (1969), Union of South Africa (1955).

quickly. Bundy (1979: 8) comments on the influence of mission stations in effecting African 'peasantisation':

"There was a basic similarity between the missions of different denominations; on all of them 'families were urged to settle; hunters were pressed to become herders; the herders were taught to cultivate; the cultivators were taught to use a plough and irrigate; and all came into much closer relationship with the outside world'" (citing Wilson, 1971).

He also gives a comprehensive definition to characterise the typical African "peasant" as derived from various sources (Bundy, 1979: 9):

"An African peasant was a rural cultivator, enjoying access to a portion of land, the fruits of which he could dispose of as if he owned the land; he used his own labour and that of members of his family in agricultural or pastoral pursuits and sought through this to satisfy directly the consumption needs of his family; in addition he looked to the sale of a portion of what he raised to meet the demands (taxes, rents, and other fees) that arose from his involvement in an economic and political system beyond the bounds of his immediate community" .

1.2.2 A Burgeoning Black Peasantry

Denoon and Nyeko (1984: 75) present a concise chronicle of the evolution and development of African peasantries as interaction with settlers grew. They lay out a number of factors responsible for the growth of peasant communities on the eastern Cape frontier. The demand of settlers to buy cattle, hides and ivory played a major role in the expansion of frontier trade. In exchange, settler merchants would offer, among other things, guns and horses, which boosted the power of Xhosa chieftaincies. Africans sought to expand their production and thus improve market opportunities as greater demand for their stock arose.

The progress of African "peasantisation" was inevitably accompanied by internal differentiation as chiefly families enjoyed better opportunities to acquire land for

production as compared to common families. Notwithstanding this apparent internal inequity, market opportunities continued to rise and African peasantisation followed its growth trend.

Bundy (1979) describes various events underlying African peasant expansion during the period before the mineral revolution. He identifies four main features that characterise this period. Firstly, the steady spread of agricultural innovation and diversification mostly among mission-oriented Africans as indicated above. Secondly, the cattle-killing event of 1857³ accompanied by Governor George Grey's dual policy of land expropriation and civilisation, served to speed up integration of Africans and the settlers. Thirdly, the eastward shift of the frontier and the annexation of Ciskei and large part of Transkei brought about more land expropriations. On the other hand, however, this brought about an influx of traders into the Ciskei and Transkei, which meant increased sales of farming products by African peasants. Peasants on the eastern frontier thus effectively adjusted to the changing circumstances. Fourthly, the large tracts of land, confiscated by settlers, became too unprofitable to employ without developed commercial agriculture. As a result, land speculators and large scale land owners found a more profitable alternative in leasing the land out to tenants for cash, in kind or in return for labour.

The economic recession of the 1860s affected African peasant production. However, the discovery of diamonds in Kimberly in the 1870s led to an increase in demand for farming produce, prompting a rise in agricultural produce prices. African peasants responded well to these opportunities afforded by the mineral revolution in the 1870s, according to Bundy (1979) and Wilson (1971).

³ An event whereby most Xhosa destroyed their entire herds of cattle in keeping with a prophecy or vision. It was erroneously believed that such sacrifice would result in prosperity for the Xhosas as well as military triumph against the English.

This marked the beginning of a significant period of peasant success. Bundy (1979) samples various accounts of the rise of African peasantry:

"...African peasants appear to have responded more effectively to economic change than white land owners. Many white 'farmers' found it more profitable to leave their lands or to trade in African-grown produce than to increase production of foodstuffs themselves" (p. 67).

"...In unit terms peasants were more productive farmers than settlers: large ploughed fields had a lower unit yield than careful hoe cultivation of selected soils" (p. 113) (citing Palmer and Parsons, 1977: 8).

"... 'The native can live by agriculture, but not the white man'... 'Europeans cannot compete with the natives. The labour kills them'" (p. 114) (citing Johnstone, 1976: 27).

According to Terreblanche (1998: 19), the technological breakthrough for the peasant farmers during this period was the adoption of the ox-drawn plough. "By using the plough and with the support of all the members of his extended families, an African peasant was often more successful in bringing about the shift from pastoralism to cultivation than his white counterpart" (p. 19).

Keegan (1982 and 1986) has written extensively on the experiences of black tenants and sharecroppers further north in the arable Free State and the southern Transvaal areas for example (see also Trapido, 1978). This highly commercialised form of production arose in response to the emergence of markets in Kimberley and the Rand (Keegan, 1982: 196). Keegan (1982: 86) notes that African producers did indeed thrive "at a time of unprecedentedly rapid capitalisation in the rural economy" of that region. It was the partnerships between the whites owning land and the blacks possessing productive resources, capital and managerial skills, that were crucial in the rural economic expansion in the region (Keegan, 1986: 86).

1.2.3 The Repression and Demise of the Peasantry

According to the now commonly accepted historical view, the central theme of the South African history lies in the country's unique process of industrialisation. The discovery of diamonds and later gold "has transformed human relationships throughout the sub-continent, and if the gold [and diamond] had not been present, southern Africa would have experienced quite a different kind of history during the past hundred years". The development of the diamond fields in Kimberley and the gold mines at the Rand created new demands for cheap permanent labour and agrarian produce - thus impacting rural societies throughout southern Africa (Legassick, 1974: 264; Yudelman, 1983: 19; Denoon and Nyeko, 1984: 96; Worden, 1994: 57; Terreblanche, 1998: 19).

From 1890 an important policy introduced in the agricultural sector became the mainstay of the South African economy for the following quarter of a century. Terreblanche (1998: 19) refers to this as the 'labour repressive system'. The main thrust of this system was to solve the problem of labour shortage in the mines and the commercial agricultural sector. Various measures were enacted to ensure sufficient labour supply to both the white commercial agricultural sector and the mines. The Glen Grey Act of 1894, for instance, was passed in the Cape Colony due to pressure from large settler farmers to limit African competition. Through this Act a labour tax was levied on all men living in the Native reserves, and sale, rental or subdivision of land banned - ultimately introducing communal tenure in these areas (Vink and Van Zyl, 1998: 63; Terreblanche, 1998: 20; Bundy, 1979: 135).

In an attempt to solve the desperate labour shortage in the mines after the South African War, Lord Milner appointed the South African Native Affairs Commission (SANAC). The Commission recommended curtailment of Africans' access to land and farming to induce adequate numbers to enter wage labour. SANAC's recommendations culminated in the promulgation of the Natives Land Act No 27 of 1913 through which over a million peasants of the five million total African population were effectively proletarianised. Of all the restrictions introduced to restrict independent black farming, the Land Act was the

most serious (Davenport, 1986: 392). "The act supplied both mining industry and large farmers with the needed cheap and obedient African labour, while additional land became available for both large and small (and mainly Afrikaans speaking) farmers" (Terreblanche, 1998: 20-22).

After the establishment of the Union in 1910 a series of other legislative measures were introduced. These set the scene for segregation of agriculture and a comprehensive programme of support to white farmers. Keegan (1985:397) reports that such measures were aimed at supporting an otherwise 'unsustainable [and] cynical' capitalisation of white agriculture. Support measures included the Land and Agricultural Bank Act of 1912, which served to merge the colonial land banks and offer soft loans to white farmers. The Cooperative Societies Act of 1922 and its subsequent amendments secured inputs and supplied marketing services for white farmers, resulting in lower transaction costs for this sector. The Marketing Act of 1937 provided for production and marketing of more than 90 percent of all agricultural production in the white commercial farming sector. Through its various restrictions the Marketing Act also inhibited African farmers in the reserves from marketing their products.

Other support services such as research and extension, subsidies, tax concessions and special credit facilities were offered almost exclusively to white farmers. Their introduction effectively widened the gap between African subsistence and white commercial farming (De Kiewiet, 1957: 253; Wilson, 1971: 143-53; Kassier and Groenewald, 1992a: 332-33 and 1992b: 86-87; Brand, *et al.*, 1992: 355-56; Mbongwa, *et al.*, 1996: 42; Vink and Van Zyl, 1998: 64-65).

As a result of the Land Act of 1913, about 7.8 percent of the country's farmland was 'scheduled' for inclusion in the reserves. Outside the reserves, blacks owned only 0.7 percent of the land and lived on another 3.6 percent, made up of state and European-owned lands. In effect, therefore, the total land for African use was 12.1 percent of the total land in the country (Mbongwa, *et al.*, 1996: 45).

By the 1920s the industry sector and the urban workforce had been growing and commercial agriculture strengthening, but all at the expense of black peasants and sharecroppers (and white *bywoners*) (Worden, 1994: 57). By the time the territorial segregationist Land Act came into effect the reserves had been showing 'serious signs of agrarian degeneration'. From a prosperous status of self-sufficiency and even exportable surpluses, many peasant areas had, by this date, deteriorated into a state of dependence on imports and migrant wage remittances (Bundy, 1988: 221). As a result of population pressure on land and overstocking, soil erosion in the African reserves had become a serious issue by the 1930s (Davenport, 1986: 394, citing Union of South Africa, 1932). Macmillan (1930) pointed out:

"Much of the land is, indeed, so grossly overcrowded that with every year that passes the soil is becoming less and less capable of supporting the present population, let alone even a natural increase; and even if the Reserves were larger there would still be enormous difficulties in the way of their development" (p. 201).

Macmillan (1930) mentions a number of other social and economic ills that plagued the reserves: poverty, ill health, starvation, disease, infant mortality and utter dependence on migrant wage earnings. A survey of Victoria East, a district regarded as typical of the whole of Ciskei, showed falling financial returns from African peasant production by up to 46 percent between 1875 and 1925. Concurrently, the population engaged in agriculture during the same period had more than doubled (Bundy, 1988: 223, citing Henderson, 1927). During the 1930s declining yields, an increasing scarcity of resources and rising competition for them, and 'a migrant labour level so high as to seriously deplete the agricultural workforce', all typified the worsening conditions in the African reserves. By the 1940s, the effects of pressure on resources, declining per capita real incomes and falling crop production in the reserves were also manifested in deficiencies, diseases and deaths (Bundy, 1988: 224-25).

The Natives Trust and Land Act No 18 of 1936 was introduced as 'a device to combat the serious dangers of soil erosion and overstocking' (Davenport, 1986: 392). It was born of

the recommendations of the Beaumont Commission appointed under the provisions of the Land Act to 'organise' the reserves. As early as 1916, the Commission recommended that additional land be released to the reserves, as the original scheduled land was only sufficient for about half the African population. However, it was not until 1936 that more land was released to the 1913 scheduled reserve areas, increasing the size of the reserves to 13.7 percent of the country (Mbongwa, *et al.*, 1996: 46).

1.2.4 Separate Development and The Making of the Bantustans/Homelands

"The natives will be free to go to work in the white areas, but as far as possible the administration of the black and white areas will be separated, and such that each will be satisfied and developed according to its own proper lines" (Jan Smuts, quoted by Cell, 1982: 225).

The above statement represents the policy implication of the ideology of 'protectionist segregation' formulated by Hertzog and Smuts, and officially enacted under their 'African legislation' of 1936 and 1937. Through this policy Africans were also deprived of their franchise in the Cape and Natal (Giliomee, 1985:45; Worden, 1994:78; Terreblanche, 1998:29).

When the National Party came to power in 1948, it introduced a new policy of more rigid racial separation for blacks, and more power and wealth for whites, especially Afrikaners. Employing this policy, known as "grand apartheid" the National Party government went further than previous segregationist authorities by also segregating African ethnic groups from one another. What "apartheid" set out to achieve in South African agriculture, which it did successfully, was 'to retain the black agrarian structure established by the Land Acts, to continue white land settlement, and to advance the white agrarian economy by establishing large commercial farms' (Mbongwa, *et al.*, 1996: 51).

Inter-racial and inter-African ethnic segregation became part of national legislation through such Acts as the Natives Authorities Act of 1951, and the Promotion of Bantu Self-Government Act No. 46 of 1959. These two Acts artificially created eight national

units out of the Pedi, Sotho, Tswana, Swazi, Tsonga, Venda, Xhosa and Zulu ethnic communities. The first homeland to become self-governing was Transkei in 1963, after which nine others followed. Similar Acts were passed forcing Africans to be citizens of some homeland, and placed control of Africans, regardless of where they lived, under Bantu Affairs Administrations Boards (Mbongwa, *et al.*, 1996: 52; Cobbett, 1987: 64; Giliomee, 1985: 46).

Agriculture in African areas had fallen under the Department of Native Affairs and not under the Department of Agriculture since 1910. Black agriculture had, since then, been administered and financed separately from white agriculture. The earlier was administered under the 'native' policy, rather than 'agricultural policy'. It was on this broader national policy platform that development policies such as 'betterment planning' in the homelands were introduced (see for example Yawitch, 1981 and De Wet, 1987).

'Betterment' or 'rehabilitation' was implemented in the mid-1950s in a quest to combat erosion, conserve the environment and improve agricultural production in the black areas through improved land use (De Wet, 1987: 85; Beinart, 1984: 76). It involved the movement of large numbers of families into centralised, village-like residential, arable and grazing areas. In short, betterment policy failed to achieve its objective of 'creating a viable resource base in the reserves'. It... "could not deal with the problems of 'native agriculture' for what they really were: that is, political and agricultural problems, rather than administrative ones" (De Wet, 1987:121-22).

The concept of betterment, though conceived long before the 1930s, was only implemented decades later against the backdrop of the publication of the Tomlinson Commission report (formally 'The Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa'). The Tomlinson report represented an outcome of the first exhaustive inquiry into the homelands. Its recommendations on seeking remedies for poverty in the reserves were made within the framework of a broader homeland strategy (Kirsten, 1994: 22). According to Vink and Van Zyl (1998: 66), the Tomlinson Commission saw the creation of small commercial farming as part of strategy for development in the African areas. However, the government rejected

specific recommendations regarding funding to make such a strategy possible. This thus ruled out prospects for any viable small commercial agriculture, especially given the limiting effect that population growth had on land. "The betterment that was implemented was therefore not as envisaged by the Tomlinson Commission" (Vink and Van Zyl, 1998: 66, citing De Wet, 1989).

Based on the legislative framework set up under the Promotion of Bantu Self Government Act of 1959, homeland governments were given responsibility for agricultural development, among other things. This culminated in the establishment of agricultural departments in each of the homelands. In addition, the Act on the "Promotion of Economic Development in the Homelands" (No. 46 of 1968) provided for the establishment of the Bantu Investment Corporation (BIC) and other homeland-based development corporations. The BIC's function was to channel government development funds into the homelands (Kirsten, 1994: 29).

Kirsten (1994: 29) discusses further developments in agricultural policy towards Africans as experienced during the 1970s and the 1980s as a result of institutional changes in the late 1960s. He points out some changes and adjustments to previous policy as outlined in a 1970 document of the Department of Bantu Administration and Development. These changes, following the failure of betterment to achieve any increase in production in the homelands, included the following:

- Decentralisation of all agricultural development initiatives to homeland governments under the ultimate supervision of officials from the 'republic' (i.e. South Africa excluding the homelands).
- Maintenance of the traditional land tenure system except where farming was proving unsuccessful, in which case transfer of land to more successful farmers would be allowed.
- Provision of agricultural credit through cooperative channels for purchase of agricultural inputs and erection of infrastructure.

Commercial agriculture in the homelands was virtually non-existent. This was incorrectly ascribed to lack of entrepreneurial and managerial ability among African farmers. It was therefore considered necessary to second white management personnel to establish modern large-scale irrigation, dryland and livestock projects. Such an approach was also in line with development thinking of the 1960s, which emphasised such models. Starting out with little community participation, the model was adjusted to later accommodate selected labourers to settle in the 'schemes' as 'project farmers' (Brand, *et al.*, 1992: 356).

Consulting engineers who favoured technologically sophisticated developments with a high capital requirement did the planning of the schemes. In the Eastern Cape this was justified by the dual function of the planned projects to offer both economic benefits through increased income and social benefits in the form of food security for recipient communities. These objectives were to be achieved by subdividing the schemes into a purely commercially oriented entity on the one hand and a food security oriented one on the other hand (University of Fort Hare, 1997).

It is widely documented that the farmer settlement approach of the 1970s and early 1980s resulted in large-scale losses (Bromberger and Antonie, 1993 and Van Rooyen, 1995). Van Rooyen and Nene (1998:45) argue that a number of considerations were responsible for the failure of the project approach. These include, first, the fact that systems were not directed towards promoting a class of self-employed farmers. Second, little was done to improve farming methods for smallholders outside these schemes or to solve their farming problems. Third, owing to their 'high investment and operational costs, entrepreneurial establishment [and] fiscal [un] affordability', the settlement schemes could no longer be relied upon for upliftment of adjacent communities and overall rural development (Bembridge, *et al.*, 1982).

An acknowledgement of the limitations of the project settlement approach led to a search for an alternative strategy. The establishment of the Development Bank of Southern Africa (DBSA) in 1982 marked a significant move towards integrated rural development. The DBSA acquired a mandate to achieve this goal through entrepreneurial support for

broad-based beneficiary participation. This led to the introduction of the farmer support programme (FSP) through which access to support services would be provided for a large number of smallholders (Van Rooyen, 1995: 4; Kirsten, 1994: 34). Thence, a number of studies have been conducted to evaluate the economic impact of the FSP approach towards attaining its intended objectives (see for example Ortmann and Lyne, 1995; Kirsten, *et al.*, 1995; Kirsten, 1994; Van Rooyen and Botha, 1998). The general conclusion seems to be that it was doubtful if the FSP would be sustainable in the long term, at least in their 'piecemeal' format, reminiscent of its predecessor 'project settlement' strategy (Kirsten, 1994: 312; Lipton, 1996: 419).

1.3 A Remnant of African Smallholders and General Distribution

"...Somewhere amidst the swollen population of the Bantustans, amidst the poverty of areas that have suffered from apartheid policy, there are families which have been able to cling onto sufficient land and resources to maintain some smallholding agricultural production." (Vaughan and McIntosh, 1993: 440, citing Beinart, 1988: 142).

There exists sufficient empirical evidence to show that some African smallholders in South Africa have shown enough resilience and tenacity through many years of repression to maintain commercial production. Such production has often been enabled through tenancy arrangements, through land acquisition facilitated by intermittent state intervention, and through the private sector and neighbouring white farms. Other notable African smallholder 'survivors' could be found in the remnants of the ineffectual project settlement schemes of the late 1970s and early 1980s.

African farmers have actively participated in the KwaZulu/Natal sugar industry since the 1950s, albeit in insignificant measure in terms of output (Richardson, 1986 and Vaughan and McIntosh, 1993). The turning point was the establishment of the Small Cane Growers' Financial Aid Fund (FAF) under the auspices of the South African Sugar Association (SASA) in 1973. With the advent of FAF, a source of revolving credit for small cane growers, the stage was set for a regeneration of peasant production in KwaZulu/Natal (Minnaar, 1990: 18; Vaughan, 1991: 318). To date there are about 45, 000 small scale sugar cane growers yielding gross revenue ranging between R3, 000 and

R15, 000 per grower per annum and constituting about 18 percent of total cane output in KwaZulu/Natal (Tucker, 1999).

In Mpumalanga a notable case of black small farmer regeneration is that of the former homeland of KaNgwane. The KaNgwane farmer regeneration process was influenced by a slightly different series of historical developments to that in KwaZulu/Natal in a number of ways (Vaughan, 1991; Vaughan and McIntosh, 1993; McIntosh and Vaughan, 1995). First, unlike other Bantustans, betterment planning in KaNgwane was to ultimately provide subsequent formation of 'economically viable farming units' for the rural population as envisaged in the Tomlinson Commission Report. Second, state farms in the homeland created a good basis for implementation of the economic farming units. Third, certain key officials and agencies in the region heavily influenced government policy towards establishment of independent farmers in the Bantustan. The integration of DBSA's Farmer Support Programme (FSP) in KaNgwane also gave the small farmers a little boost as seen in the resulting relative increase in crop yields (Kirsten, 1994: 219).

Naledzani (1992:108-12) mentions other forms of smallholder farming found in the Northern Province of South Africa. These include:

- Central or core unit projects: Here a parastatal supplies support services to African smallholders settled around a state-owned "service centre", which own agro-industrial services such as processing, packaging, marketing and mechanisation.
- Settlement projects, whereby smallholders are settled on economic units with net income corresponding to their level of entrepreneurial skill. Such settlement projects have also been implemented in the Lebowa area as part of the FSP approach. Implemented by the Lebowa Agricultural Corporation (LAC), these projects were set up with the aid of DBSA finance. A number of success stories have been recorded from these projects (Kirsten, 1994; Kirsten, *et al.*, 1995).

Table 1.1: South African Farming by Province and Sector (1991)

Province	Total farmland			Small-scale farmland						
	Total farmland (ha)	Total arable land ^a (%)	Total grazing land ^b (%)	Total small-scale farmland ^c		% of total farmland ^d (%)	Potential arable land ^e		Grazing land ^f	
				(ha)	(%)		(ha)	(%)	(ha)	(%)
Western Cape	11466956	14.0	73.3	0	0.0	0.0	0	0.0	0	0.0
Northern Cape	29094172	1.6	83.6	0	0.0	0.0	0	0.0	0	0.0
Free State	11674811	36.2	68.4	232200	1.4	2.0	34900	0.8	153200	67.0
Eastern Cape	14518725	8.1	87.4	5175400	30.2	35.6	529400	45.1	3472456	27.4
KwaZulu-Natal	7168844	16.7	59.9	3617400	21.1	50.5	360700	30.1	2729212	63.6
Mpumalanga	5595618	31.0	21.9	677500	4.0	12.1	137898	7.9	354609	29.0
Northern Province	9016621	18.9	74.7	3612400	21.1	40.1	530700	31.2	2863818	42.5
Gauteng	774265	56.7	25.3	0	0.0	0.0	0	0.0	0	0.0
Northwest	9628749	34.9	66.1	3807900	22.2	39.5	951975	28.3	2360898	37.1

Sources: *Development Bank of Southern Africa (1991), South Africa (1997). (Also adapted from Ngqangweni, et al., 1998).*

Notes:

^a Percentage of farmland that is potentially arable per province.

^b Percentage of farmland that is for grazing per province. "a" and "b" do not add up to 100% as other land uses exist.

^c Distribution of small-scale farmland by province (In this definition 'small-scale' farmland refers to the former homeland areas. Current data still do not reflect smallholders outside the former homeland areas)

^d Percentage of farmland under small-scale farming per province.

^e Percentage of small-scale farmland that is potentially arable per province.

^f Percentage of small-scale farmland that is under grazing per province.

Apart from an extensive database built up by the DBSA there is still a general lack of data regarding the current importance of the smallholder sector within South African agriculture. The former homeland areas in which small-scale agriculture is based were for long excluded from the national statistical databases for ideological reasons and because of complexity of measurement.

Recent surveys in the African farming areas reveal a number of informative observations. For instance, a document by the DBSA (1991) reports that the ratio of arable land to rural population in African smallholder farming areas is 0.2 ha per capita compared to 2.5 ha per capita in the white farming areas. These statistics indicate the severity of land shortage in the smallholder farming areas. Table 1.1 presents additional information on provincial distribution of smallholder farmland. Among the nine South African provinces, KwaZulu/Natal, Northern Province, North-West and Eastern Cape provinces have the most land under smallholder agriculture. However, it is common knowledge that a large proportion of this land is under subsistence farming⁴. It must be noted that Table 1.1 assumes that "small-scale" land is found in provinces with homelands. Hence the zero total small-scale land in Gauteng, Western Cape and Northern Cape provinces.

1.4 Background to the Problem of Poverty and Inequality in South Africa

“...The present has grown out of the past, and so if the future is to be different it is essential to understand the way in which the present has been formed, in order that we may act to overcome the past and, hence, reshape the future.” (Wilson and Ramphela, 1989:190).

In the above statement, the authors refer to what they term “the burden of the past”, that is, the legacy of conquest and colonialism, and the more recent policy of apartheid, which they trace as the roots of South Africa’s current poverty and inequality. They identify a number of processes through which this ‘burden’ was entrenched.

⁴ Due to lack of data the exact proportion of land under subsistence production in these areas is not specified.

The first could be traced back to the long process of conquest by European settlers that culminated in the Land Act of 1913, through which the settlers ensured “that the land won by conquest should not be lost through the market” in the new emergent industrial society (p.191). The second, which followed the conquest, was slavery through which the distribution of land between blacks and whites was determined. The third process was the systematic repression of the industrial labour movement that resulted in, among other things, the low level of black wages. The fourth relates to the allocation of South African public expenditure. The allocation of state expenditure to education, housing, health, agriculture, job-creation, and energy was biased in favour of whites.

The authors maintain that the existing unbalanced pattern of wealth and income distribution is rooted in the development of the South African economy, particularly its industrial revolution. They observe that it is the dimension of deliberate policy of impoverishing people that makes poverty in South Africa different from that in many other parts of the world. However, they also admit that South Africa’s poverty is not necessarily different to that of other poverty-stricken countries with respect to other more universal non-political forces. The background to the political dimension of poverty has been sufficiently traced in the previous sections of this chapter. Attention will now shift to the more ‘universal’ dimensions of poverty as they apply to South Africa.

South Africa is essentially an urbanised industrial economy. A large number of people have migrated from the land-based economy in the rural areas to seek work in the cities. Inevitably the poor have been increasingly subjected to the structural weaknesses of the economy, notably inflation and especially unemployment. Before getting to these more ‘universal’ aspects associated with poverty a general picture of the distribution of poverty in South Africa is given.

1.4.1 Measurement and Distribution of Poverty in South Africa

There is no official or commonly agreed poverty line for South Africa. Pillay (1996:37) suggests that the “poor” can be defined as the poorest 40 percent of households and the bottom 20 percent can be defined as the “ultra poor”. He contends further that in terms of expenditure levels, the cut-off point for the poor can be considered to be a R300 per month ‘adult equivalent’ below which people are considered poor. For the ultra poor this cut-off point is approximately R171 per month. Using this poverty line to measure the extent of poverty, 52.8 percent of the population in South Africa can be considered to be poor while 28.8 percent are ultra poor (Pillay, 1996:38, citing World Bank, 1995). Table 1.2 below shows the extent of poverty in South Africa using other poverty lines.

Table 1.2: Comparison of Selected Poverty Lines for South Africa, 1993

Type of Poverty Line	Cut-Off	Population Below Poverty Line (%)
Min. per capita caloric intake (@ 2500 Kcal/day) (monthly)	R143.2	39.3
Min. caloric-adjusted per capita intake (@ 2500 Kcal/day) (monthly)	R185.4	42.3
Min. Living Level (MLL) (monthly)	R164.2	44.7
Supplemented Living Level (monthly)	R220.1	56.7
World Bank’s ‘International Poverty Line’ (daily)	US\$1.00	22.1

Source: Adapted from Pillay (1996), citing the World Bank (1995)

The first four criteria in Table 1.2 show that the proportion of population under the poverty line in South Africa varies between 39 and 57 percent. The World Bank’s rough

international measure of one US Dollar a day shows 22 percent of the population in severe poverty in South Africa.

Who and where are the poor in South Africa? The Project for Statistics on Living Standards and Development (PSLSD) survey showed that most of South Africa’s poor live in rural areas. The poverty share, that is, the percentage share of the poor in the rural areas, is three-quarters of the total poor. The rate of poverty in the rural areas in general was found to be 74 percent. Approximately 42 percent of the poor in South Africa are found in Eastern Cape and the Northern Province combined (see Figure 1.1).

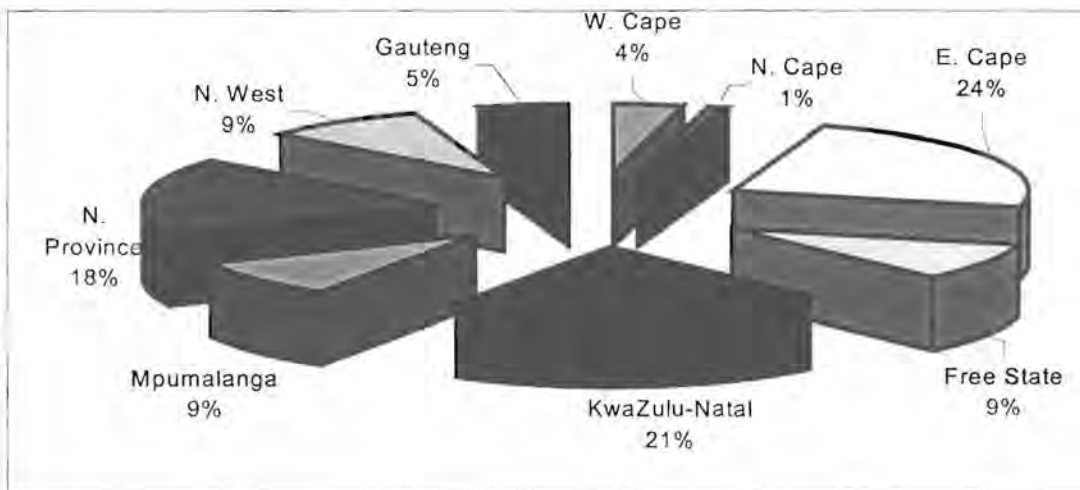


Figure 1.1: South African Provincial Poverty Shares

Source: Adapted from Pillay (1996)

Poverty and inequality are indicated in various other ways. The following sub-sections will dwell on some of the most common ‘universal’ indicators of poverty namely, unemployment, human development aspects (literacy, life expectancy and personal income), and income distribution.

1.4.2 Unemployment

The devastating effect that unemployment has on people's lives is a consequence of the loss of their main source of income and also the psychological feeling of uselessness (Wilson and Ramphele, 1989). Unemployment is therefore one of the most obvious and important indicators of poverty (Pillay, 1996:32).

In Figure 1.2 below South Africa's unemployment rate is compared with that of seven other upper-middle income countries. Its aim is to illustrate the gravity of the problem in South Africa. Of the seven upper-middle income countries chosen for comparison, the Czech Republic has the lowest unemployment rate at 3 percent - 90 percent lower than South Africa's figure. In other words, South Africa's unemployment rate is eleven times that of the Czech Republic, one of its upper-middle income counterparts. Of the countries analysed, the next lower rate of unemployment after South Africa is that of Argentina at 18 percent. South Africa's unemployment rate would have to fall by 45 percent to catch up with its counterpart Argentina.

Pillay (1996:33) reveals that approximately 4.7million people, that is, one third of South Africa's labour force, are unemployed (citing the October Household Survey, 1994). This figure includes 26 percent of the men and 41 percent of the women in the labour force. Among Africans 4million people, or 41 percent, are unemployed. The situation is even worse for African women-2.2million or 50 percent are unemployed, making them the group most affected by unemployment.

In an urbanised industrial economy like South Africa, non-agricultural employment becomes increasingly important as rural people continue to leave their land in search of urban employment. Sadly, however, as illustrated in Figure 1.3 below, total employment in the non-agricultural sectors, including the public sector, has been decreasing. This figure uses data released by the South African Reserve Bank in June 1999. More interesting is the fact that total public sector employment has particularly been on the decrease between 1991 and 1998.

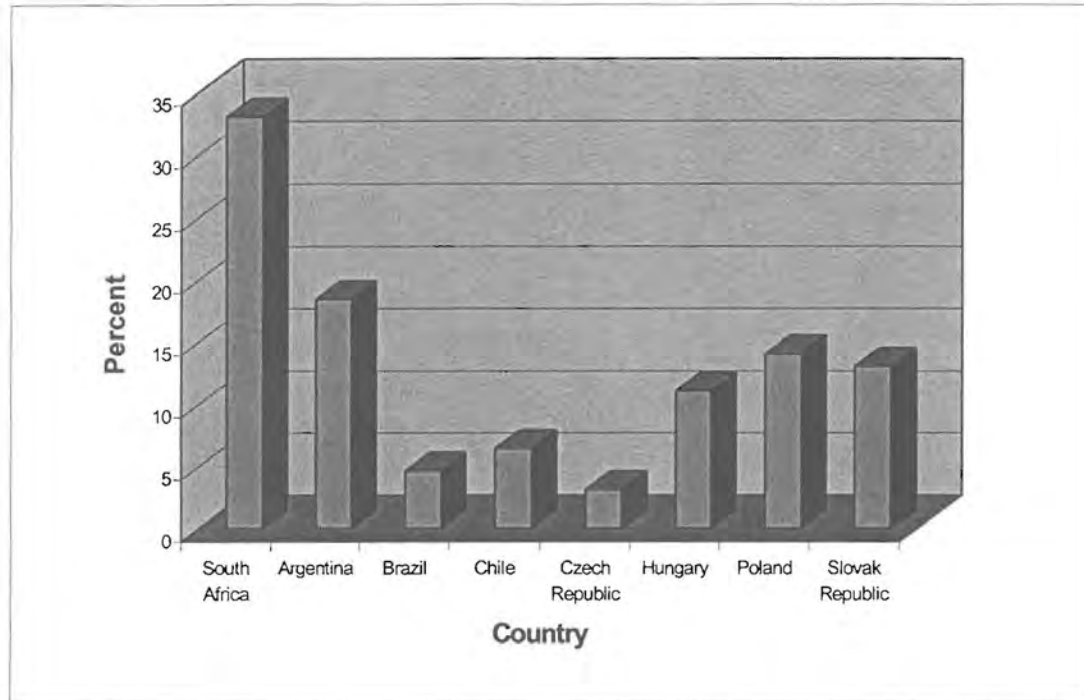


Figure 1.2: Unemployment in South Africa and Selected Upper-Middle Income Countries

Note: South African figures for 1994, and the rest of the countries for 1996

Source: Adapted from Pillay (1996) and the World Bank (1998)

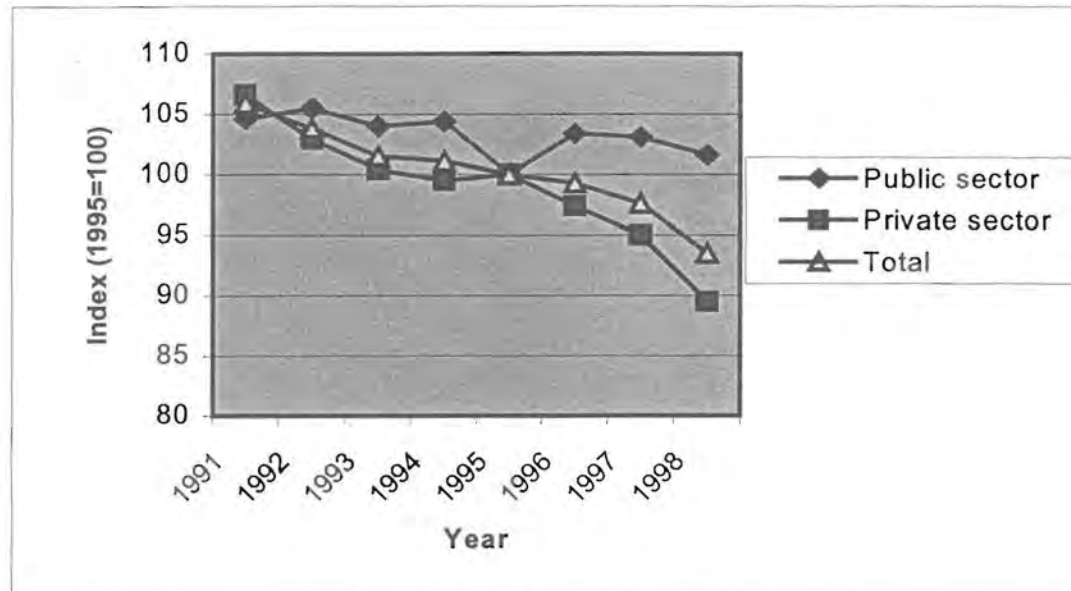


Figure 1.3: Employment in the Non-Agricultural Sectors in SA, 1991-1998

Source: Adapted from South African Reserve Bank (1999)

1.4.3 Human Development

The United Nations Development Programme (UNDP) devised a macro-indicator of poverty called the Human Development Index (HDI). An underlying principle of the HDI is that people must have basic human capacities and a range of opportunities to be able to make informed choices. The HDI is based on life expectancy and adult literacy as indicators of capacities and income as indicator of opportunities. An index of 1, the maximum value, indicates a high level of human development. According to the Development Bank Southern Africa (1995), South Africa's HDI is 0.69, showing a 'medium' level of human development, in the same league as that of countries such as Libya and Lebanon.

However, there are noted inequalities in the level of human development between provinces. The Western Cape ranks with Brazil and the United Arab Emirates with its high HDI while the Eastern Cape's low index is comparable to that of countries like Rwanda. These figures are only averages, which also conceal huge disparities within the population. Looking at income distribution gives a better picture of which segments of the population are affected by the different levels of human development.

1.4.4 Income Distribution

With a Gini index⁵ of 58.4 (World Bank, 1998), South Africa, an upper-middle income country, has one of the most unequal patterns of income and wealth distribution in the world.

⁵ Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditures) among individuals or households within an economy deviates from a perfect equal distribution. An index of zero represents perfect equality while an index of 100 implies perfect inequality (World Bank, 1998).

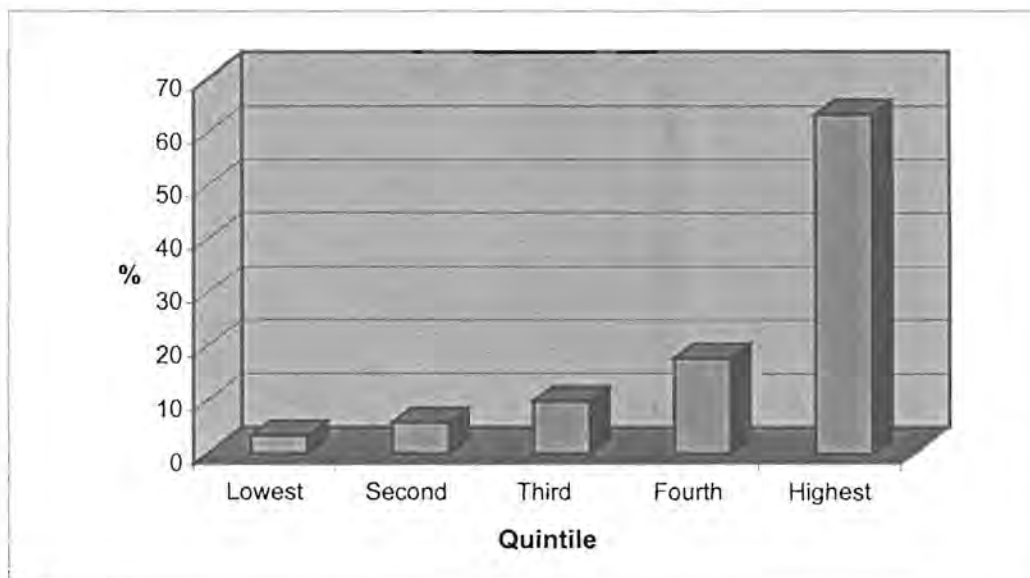


Figure 1.4: Percentage Share of Income or Consumption in South Africa (%)

Source: Adapted from the World Bank (1998)

This concern was also expressed in the Poverty and Inequality Report (PIR) submitted to the office of the vice-president and the Inter-Ministerial Committee for Poverty and Inequality in 1998 (May, 1998). Figure 1.4 plots World Bank (1998) data to illustrate this pattern of distribution. It reflects the percentage of income or consumption accruing to segments of the population, ranked by income or consumption levels. For example, the segment ranked lowest by personal income receives a mere 3 percent share of total income in South Africa.

Figure 1.5 plots some figures reported by Pillay (1996) based on the 1993 PSLSD data. These data reveal another aspect of South Africa's income distribution, that is, racial inequality. The PSLSD data reveal that white household income is over 6 times that of African households, over 3 times that of Coloured households and 1.6 times that of Indian households. Analysis of household per capita data shows ratios of the same degree (see Figure 1.5 for an illustration). A recent analysis done by McDonald and Piesse (1999) emphasises the need to take into consideration the racial and spatial (rural-urban) components of income.

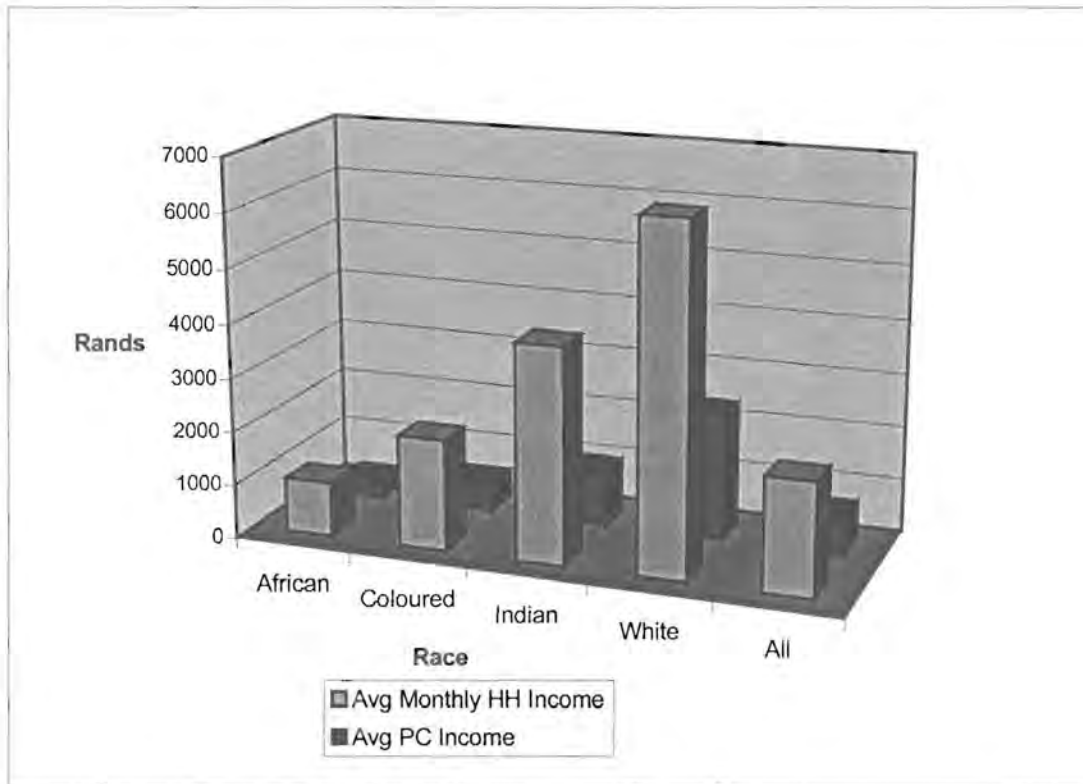


Figure 1.5: Average Monthly Household and Per Capita Incomes in South Africa (in Rands)

Source: Adapted from Pillay (1996)

1.5 Introduction of the Research Problem

Sweeping political changes in South Africa have been effected successfully if not miraculously through a negotiation process culminating in the first all-inclusive national elections of April 1994. However, the challenges of poverty and inequality affecting large sections of the population still remain. Fighting these ills is the next major challenge to the nation. In the words of Terreblanche (1998:46):

“From an economic point of view, the South African transformation will not be complete before a new symbiosis has been forged between (the black controlled) state and (the mainly white controlled) capital. To be in line with today’s world, South Africa has no choice but to

develop an appropriate and sustainable system of democratic capitalism to replace the previous system of racial capitalism.”

The road to the much-needed economic reform and the idealised state-capital symbiosis will be particularly rocky. The re-introduction of the South African economy into the global system comes with its challenges especially for those affected by poverty, many of whom are black and reside in rural areas. Over a third of rural households continue to engage in (smallholder) agricultural production. If one considers those farmers involved in smallholder farming on part-time basis this figure goes up markedly. Almost half of the agricultural population (2.5 million) is estimated to work at least part-time on smallholder operations (Delgado, 1998:165, citing Simbi, 1998).

One of the government’s policy strategies is to maintain limited state intervention in agriculture to correct market imperfections (South Africa, 1995) especially for the benefit of the underdeveloped smallholder sector. As it is, the smallholder agricultural sector is unlikely to effectively compete with its more advanced large-scale counterpart in the quest for a stake in the newly globalised market without some form of government intervention. At least in principle the current government seems to acknowledge this fact:

“Experience has shown that unqualified reliance on market forces to allow the benefits of economic growth to ‘trickle down’ to the poor is not effective where the underlying institutional context has remained the same” (May, 1998:1)

It is therefore the challenge taken up by this research to try to assess smallholder comparative advantage and potential linkages from successful smallholder production activities. This will then serve to inform policy makers of possible avenues to support the emergence of smallholders and to exploit such opportunities as the search for better solutions to rural poverty alleviation continues.

1.6 The Statement of the Problem

Creation of employment and alleviation of poverty among the majority of impoverished black South Africans has been receiving increasing attention in government policy. Since the government of national unity took over in 1994, the national economic policy focus has shifted accordingly towards the issue of growth with employment and wealth redistribution. Notably, recent research in agriculture has been devoted to the specific issue of creation of rural livelihoods, and the role of African smallholder agriculture therein (Lipton, *et al.*, 1996a and Lipton, *et al.*, 1996b). The question is what could be done to create and maintain a viable source of livelihoods for the 16 million black rural residents, and a further one million employed on white commercial farms (South Africa, 1996).

The apparent insignificance of African commercial smallholder farming has engendered general scepticism about the sector's potential to generate needed rural livelihoods. Such scepticism is based mainly on evidence from negative consequences of the repressive nature and faulty design of past agricultural policies to support African smallholders. According to Lipton, *et al.* (1996: x), worldwide evidence has shown that 'poor people do not neglect opportunities that enable them to improve their living standards'.

This study takes on the challenge of showing whether South African smallholders have any role to play in providing a source of livelihoods for the impoverished African rural population. Specific questions raised in this study can be stated as follows:

- Do small-scale agricultural producers in South Africa have a comparative advantage in any commodities? Or should they rather abandon their agriculture and opt for wage employment outside agriculture?
- What impact will increases in smallholder agricultural incomes have on overall rural income and employment growth?

A closely related issue is:

- What are the policy-related and non-policy forces behind any comparative advantage in smallholder agriculture, and how can policy affect these forces?

1.7 The Hypotheses

The hypotheses for this research are as follows:

- Smallholder farmers can produce certain agricultural commodities both profitably from the view of the farm, and also efficiently from the view of society in general.
- Improved smallholder production will boost overall rural incomes in two ways. First, directly through increased smallholder agricultural incomes, and second, indirectly as such income is re-spent on local non-agricultural goods and services that otherwise might not have a market because of lack of effective demand for them.

1.8 Definition of Operational Terms

The central focus of this study is a group of farmers referred to as '**smallholders**'. This term is used interchangeably with 'small farmers', 'small-scale farmers', and 'peasants' throughout the text. The context in which 'smallholder' is used here is threefold. First the definition by Lipton, *et al.* (1996: viii) of 'small farm' has been adopted in the use of the term: "It depends on the quality of land: its capacity to produce net farm income. Half a hectare of reliably watered peri-urban land, suitable for vegetable farming, is a 'bigger' farm than 250 hectares of low quality grazing land in the Karoo". The second context in which this term is used in this study is based on the fact that smallholder farmers in South Africa have been historically black, hence the occasional reference to 'African' and 'black' smallholders in the text. Thus, for the purposes of this study, whenever 'smallholder' or its above-mentioned variants are used in the text, they refer to those of black or African origin⁶. Thirdly, this study is only concerned with a specific type of African smallholder: rural farmers with access to a piece of land, employing family labour and sometimes hiring additional labour to produce crop and/or livestock items whose surplus is marketed.

⁶ Refer to footnote no. 1 (p. 1) for an explanation on how reference to race is treated in the text.

Another term frequently used in this study is '**comparative advantage**'. An agricultural item produced in a specified location under defined technological and market conditions is said to have a 'comparative advantage' if the opportunity cost of domestic resources used in producing it is less than the corresponding earned revenue. In other words, such an item uses the domestic resources efficiently to earn revenue. Although the concept of 'comparative advantage' is usually employed in the context of international trade, it could also be applied within a country, provided the commodity in question is 'exported' or 'imported' across specified regional boundaries. The terms 'social profitability', 'efficiency' and 'economic efficiency' are also freely used throughout the text to refer to the same concept.

1.9 The Research Process and Methodology

This study is based in five of the 43 magisterial districts of the Central Region of the Eastern Cape province, namely Mpofo, Middledrift, Keiskammahoek, Zwelitsha and Herschel. The research process consisted of two main phases. The first phase was carried out to compute indicators of comparative advantage of smallholder farmers in seven selected crop and livestock activities using the Policy Analysis Matrix (PAM) as a tool. During the second phase, one of the five districts was chosen to estimate growth multipliers as indicators of potential growth in overall local rural income and employment through growth in smallholder agriculture.

The objective of the first phase was to identify which of the most common smallholder activities have a comparative advantage. It needs to be established whether or not smallholders have a comparative advantage in any agricultural activities. If they do, then such a comparative advantage should be fully exploited. It follows then to investigate what impact would a promotion of efficiently produced smallholder commodities have on rural incomes and employment. It is therefore the objective of the second phase to measure potential linkages from tradable smallholder agriculture.

1.10 Outline of the Thesis

Chapter 2 of this report reviews international evidence on smallholder agriculture's role in general agricultural and economic growth and development, dwells on some of the challenges facing smallholders throughout the world and also discusses these issues as they relate to South Africa. Chapter 3 describes the study area and aspects of smallholder agriculture in the Eastern Cape province. Chapter 4 discusses the theoretical foundations of the concept of comparative advantage and presents the results of its empirical application in the study area. In Chapter 5 the concept of growth linkages is dealt with together with its application to the study area. The results from both phases of empirical investigation are synthesised in the final chapter (Chapter 6). Chapter 6 also wraps up the study by presenting general conclusions and policy recommendations.

CHAPTER 2

SMALLHOLDER AGRICULTURE IN ECONOMIC DEVELOPMENT

2.1 Background

The world is as equally painted with contrasts and paradoxes in politics, society, and economics today as it has been since time began. One of the most conspicuous of these phenomena is the unequal distribution of the benefits of growth in consumption experienced since the beginning of the 20th Century⁷. Despite the unprecedented scale in which the standards of living have increased since the commencement of the century, more than a billion people are still deprived of basic consumption needs. Almost a third of the population in developing regions of the world live below the common international poverty line of one US Dollar a day. The 20 percent of the world's population in highest-income countries account for 86 percent of total private consumption expenditures while the poorest 20 percent account for just over a mere one percent

These stark contrasts are experienced both between and within regions/countries. All industrial countries, though characterised by high consumption, still experience poverty and deprivation. Up to 17 percent of the population in industrial countries is poor. These poverty concerns are accompanied by similar worries about such thorny issues as sustainability of the environment. Again the poor are the most hit by the costs of environmental degradation. For example, 80 percent of the estimated 2.7 million deaths caused annually by air pollution are from among the rural poor in developing countries.

⁷ These dynamics are comprehensively reported in the United Nations Development Programme (1998) and the World Bank (1998). This section draws heavily on these sources.

Leading up to the inauguration of both a new century and new millennium, the future of development has been put on the dialogue table by governments under the auspices of the United Nations, largely as a result of alarm over the above-mentioned observations. The common view that emerges from such discussions is that there is a need for a renewed commitment to eradicate poverty and to protect the environment, among other things.

Yet, before any future development strategies can be charted, one major consideration has had to be noted, as it applies to developing countries and to Africa in particular. One of the defining characteristics of most developing countries is that a high percentage of the labour force is engaged in agriculture and other rural activities⁸. In Africa, this is even more pronounced. Agriculture in sub-Saharan Africa⁹ accounts for 70 percent of total employment, 40 percent of merchandise exports and one-third of Gross Domestic Product (GDP) (Jaffee, 1992:62; Delgado, 1996:151). Since most of Africa is evidently at an earlier stage of development than Latin America and Asia, 'getting agriculture moving' (after Mosher, 1966) is required to steer the continent's economic development (Eicher, 1992:79; Rukuni, 1994:1). In their book on agrarian transformation, Tomich, *et al.* (1995) advocate and justify the central role that smallholders in particular would have to play in advancing transformation in most developing regions including Africa. The next section discusses documented conventional wisdom associated with smallholders and their role in development.

2.2 Smallholder Agriculture in Development: Conventional Wisdom

"In farming bigger does not necessarily mean better..." (Tomich, *et al.*, 1995: 114).

Many of the missed opportunities for increased agricultural productivity and the accompanying costly mistakes by developing countries have been due to emphasis on the notion that large-scale farming is superior (Tomich, *et al.*, 1995:114-115). Peasant or small-scale farming has been considered an inadequate foundation for development.

⁸ Tomich, *et al.* (1995) coined a catchy acronym for such countries namely, CARLs (countries with abundant rural labour).

⁹ Sub-Saharan Africa in this context excludes South Africa and Namibia.

Bates (1988:507) reports that a common view held in these countries was that, owing to their commitment to subsistence, small farms produced 'a highly variable level of marketable surplus, thus imposing risks upon consumers and the state'. Large-scale farms on the other hand, believed to produce a more reliable flow of marketable surplus, were relied upon. Small farmers were considered 'subsistence-minded' and restricted by such factors as tradition, fatalism, lack of innovativeness, low aspirational levels, limited time perspective and lack of deferred gratification (Rogers, 1969: 115; Tomich, *et al.*, 1995: 115).

Other historical factors have combined to influence the notion of superiority of large farms. According to Bates (1988:507), commentaries on the rivalry between the 18th century super-powers France and England influenced a common conclusion about the merit of large-scale farms. England's economic superiority attributed to her agricultural productivity, was believed to be linked to the greater technical and economic efficiency of her large-scale farmers. France's economic backwardness, on the other hand, was blamed on insufficient technical progress and diminutive farm size. This view further influenced subsequent assertions against small farms by Karl Marx and Vladimir Lenin, which were later reinforced by Kautsky among others (Hayami, 1998:301, Ellman, 1981:981).

Marxist-Leninism, which underpinned the Soviet agricultural strategy, played a major role in shaping the view of the inadequacy of small-scale farms in driving development. This particular idea advocated prevalence of economies of scale in agriculture and was subsequently implemented through Stalin's 'collectivisation' programme in the former Soviet Union between 1929 and 1935 (Tomich, *et al.*, 1995: 115, 291). Another view, strengthened by the advent of the Green Revolution, was that large farms had adopted new technologies, while small farms remained backward and inefficient (Berry and Cline, 1979:ix).

The issue of whether or not small farms are more productive than large ones has been a source of major controversy among scholars over the decades, and deserves further

discussion in this chapter. The next section therefore introduces the farm size-productivity debate, traces its beginnings and discusses its controversies. It will also attempt to reconcile the different views and search for common ground on the subject.

2.3 The Farm Size-Productivity Debate: From Controversy to Convergence

This issue is about whether there exist increasing or decreasing returns to scale in agriculture. The publication of the results of the Indian Farm Management Studies in the 1950s, showing an inverse relationship between farm size and productivity, has engendered decades of research efforts on this subject, particularly on Indian agriculture¹⁰. Quite a number of similar studies have also been conducted in other parts of the world¹¹. These follow-up studies mostly exposed shortcomings to the generalisations of the initial Indian investigations to widely differing natural and climatic conditions found in developing parts of the world (Cornia, 1985:514-515). After a systematic literature review Tomich, *et al.* (1995:125) assert that, in general, there evidently seems to be a 'decline in output per unit area as the total area of a farm increases'. In spite of a few qualifications to the 'inverse relationship' phenomenon such as those related to land quality and technological change (Deolalikar, 1981), such a relationship still holds in many developing countries.

Information on the existence or non-existence of economies of scale in agriculture is required to justify land reform programmes and to guide policy choices on optimal farm size in low-income countries (Cornia, 1985:514; Berry and Cline, 1979:1-2 and Tomich, *et al.*, 1995:119).

¹⁰ See for example Bardhan (1973), Ghose (1979), Lau and Yotopoulos (1971), Mazumdar (1965), and Sidhu (1974), among others.

¹¹ Cornia (1985) did a comprehensive study in fifteen developing countries; Berry and Cline (1979) conducted earlier pioneering work that combined evidence from a number of developing countries.

Since low productivity is the root of poverty (Tomich, *et al.*, 1995:17), rapid economic growth in low-income countries is strongly warranted for rural poverty to be alleviated. In their study on tropical Africa, Anthony, *et al.* (1979) profess that such economic advancement would largely depend on the improvement of smallholder agriculture. In the face of a prevalent view that smallholders behaved 'uneconomically', Theodore Schultz (1964), supported by Myint (1965) and Lewis (1970) promoted more positive thinking about smallholder decision making. Schultz "...convincingly argued that peasants in traditional agriculture are rational and efficient in resource allocation, and that they remain poor not because they are irresponsive to economic incentives but because only limited technical and market opportunities are available to which they can respond" (Hayami, 1998:303).

Jones (1980) goes back to early history in an effort to dispel the myth of subsistence production in African agriculture. He holds that it has been erroneously believed that African societies of pre-colonial times were "characterised by highly localised economies" that ensured internal self-sufficiency. It was commonly held that Africans had few economic contacts with one another and that individual families were self-sufficient entities with no need to specialise for trade (cited by Lofchie, 1980:2). His opening statement (p.10), "Agricultural trade in tropical Africa is ancient and complex", is the crux of his findings to dispute the myth of the 'uneconomic' behaviour of African smallholders.

Smallholders are responsible for most farming activities in large part of Africa and other developing regions of the world. Berry and Cline (1979:128) concluded in their study on economies of scale in agriculture that: "...agricultural strategies focusing on small farms start with a major advantage: the demonstrated capacity to achieve high productivity of what is usually the scarcest resource, land...largely through greater application of the abundant resource, labour" (see also Eicher and Baker, 1982:51). Japan followed this 'land-saving, labour-using' or 'unimodal' strategy (Tomich, *et al.*, 1995) during its early development. Taiwan (Japan's former colony) repeated the same pattern but in an even more impressive manner. According to Johnston and Kilby (1975:242) Taiwan's rates of

increase in output and total factor productivity were both higher than in Japan. As will be discussed below, Africa, on the other hand, has experienced mixed fortunes and varying levels of success with smallholder productivity.

2.4 Smallholder Agricultural Productivity in Africa¹²: Historical and Contemporary Perspectives

Research on African smallholder activities began in earnest in the 1960s prior to which agricultural scientists focussed largely on export cropping and commercial farming. Since the beginning of the end of colonialism there has been a 'boom' in studies of smallholder agriculture¹³ (Reardon, 1998: 444). For the purpose of this review, the focus will be on selected cases where smallholders have played a major role in fostering economic growth and development in Africa. The magnitude of such an exercise will unavoidably lead to the omission of significant material. However, to remain concise, this review must be highly selective.

It is widely accepted that smallholders or peasants not only dominate crop production in Africa and other developing areas, they have also been and still are today the majority of mankind (Hayami, 1998:300; Holden and Binswanger, 1998:50). Eicher and Baker (1982:47) describe smallholder farming in sub-Saharan Africa as a system in which farmers rely primarily on family labour, a small stock of capital and abundant land relative to Asian countries. It is on the increasing productivity of these farmers that the alleviation of widespread poverty in developing areas of the world depends (Eicher and Staatz, 1998:ix; McCalla, 1998:52).

Over the past few decades, African smallholders have had to cope with various kinds of pressures, giving rise to a few 'paradoxes' and 'contrasts'. In the face of these shocks,

¹² Africa in the context it is used here refers mostly to sub-Saharan Africa; north Africa and the Republic of South Africa are excluded unless otherwise mentioned.

¹³ Eicher and Baker (1982) carry out a systematic review of literature on sub-Saharan African agricultural development.

Delgado (1997:147) holds that, contrary to what is presumed by outsiders, production growth in African smallholder agriculture has been generally impressive.

The declines experienced in land and labour productivity in 1970s, have been steadily reversed in the 1980s and 1990s. Block (1994:622) estimates total factor productivity (TFP) growth of 1.63 percent per annum from 1983 to 1988 in sub-Saharan Africa. Thirtle, *et al.* (1993:474) report an even more stellar performance in Zimbabwe - over 4 percent annual TFP growth in communal farms during the 1980s. However, the observed 'progress' in African smallholder agricultural productivity seems to have done little to counteract what Byerlee and Eicher (1997b: 4) call a 'downward spiral of poverty and malnutrition' in the continent. As Johnston (1980:69) also laments: "...there are clear and disturbing indications that the expansion of food production has failed to keep pace with the growth of population in a number of sub-Saharan countries". Despite these challenges, Africans could still brace themselves for recovery as long as the few observed agricultural production successes are sustained and replicated to the rest of the continent.

A number of significant success stories have been recorded in various parts of Africa. These provide a 'ray of hope' for stepping up food production (Byerlee and Eicher, 1997b: 4) so as to better cope with undernourishment of the magnitude highlighted by Alexandratos (1995)¹⁴. One of the most informative pieces of research to this effect is that by Byerlee and Eicher (1997a). The volume in question focuses on maize, the most important food crop for sub-Saharan consumers, and synthesises historical and current experience on the maize "revolution" in Africa. A few other individual country studies are worthy of mention. For instance, in their recent book, Rukuni and Eicher (1994) review Zimbabwe's maize- and cotton-based "agricultural revolution" during the 1980s.

¹⁴ Alexandratos (1995) estimated that "...even if economic growth resumes, sub-Saharan Africa will have 300 million undernourished people by the year 2000, nearly half of the world's total" (cited by Byerlee and Eicher (1997b: 3)).

A number of smallholder success cases are also recorded in Bates and Lofchie (1980). This review proceeds by tracing historical developments in smallholder productivity, beginning with the post-independence high of the 1960s, then the mid-70s decline, and winding up on the recent era of recovery initiated during the 80s. It concludes by looking at lessons from other parts of the world and future prospects for an African agricultural renaissance.

2.4.1 The Independence Movement and the Rise of Smallholder Farming in Africa

Between 1955 and 1965 most African countries gained independence from their colonial masters. The year 1960 is generally approximated as the watershed year (Acharya, 1981b: 113). This ‘turning point’ came with renewed commitments by the governments of the newly independent countries to stimulate economic development. Consequently the post-independence period was characterised by intensive government intervention, especially in the agricultural sector. The focus in agriculture was towards accelerated commercialisation of the sector (Hinderink and Sterkenburg, 1987).

Eicher (1992:79) recalls the great optimism of the 1960s when colonialism fell and independence was launched in sub-Saharan Africa. He cites Young (1982:71): “It is difficult to recapture the sense of exhilaration that attended African liberation at its high-water mark in 1960 when no fewer than sixteen states achieved independence. The crumbling of colonialism seemed but a prologue to other triumphs”. The ‘boom’ in studies of smallholder agriculture identified by Reardon (1998:445) is a reasonably good pointer to the fact that smallholder agriculture was not excluded in the euphoria of this period. In fact, as Pardey, *et al.* (1997) established, spending on African agricultural research grew in the 1960s and early 1970s. They point out that in the decades since independence, investment in public national agricultural research systems (NARSs) has more than quadrupled (see also Byerlee and Jewell, 1997:127-8).

Eicher and Baker (1982:69) note that African smallholder research was not limited to NARSs, but that since the mid-1960s, a tendency developed whereby research ties between local African and American and European researchers were increasingly forged. Investment in research and extension, infrastructure, institutions and other support services and innovations have been central in strengthening smallholder capacity to contribute to the growth and transformation of African economies. The trend at the time was that of rapid expansion of cropped area accompanied by rapid expansion of smallholder farming. Cash crops like cotton, groundnuts and horticultural products could be introduced rapidly owing to two main reasons. Firstly, unused land was available for planting of these crops. Secondly, their introduction did not aggravate the main constraints in the farming system of that time namely, seasonal labour bottlenecks, since their labour profiles differed from that of base cereals (Delgado and Mellor, 1984).

Kenya is often cited as a shining example of successful smallholder promotion in sub-Saharan Africa (Heyer, 1981, Johnston, 1981 and Tomich, *et al.*, 1995, Bigsten and Collier, 1995). Much of the success has been attributed to a favourable policy environment (Heyer, 1981:90; Tomich, *et al.*, 1995:377), and to an extent, good weather (Baynham, 1989:225). Whatever way it has been viewed, Kenyan smallholder success had its foundation on strong research programmes that were instituted shortly before independence among large-scale European farmers (Migot-Adholla, 1979:158; Johnston, 1986:165). One of the most significant was the comprehensive maize research programme launched in 1955 (Hassan and Karanja, 1997:81). The maize and other research programmes acted as a firm base for smallholders to exploit profitable innovations thus made available as European farmers gave way to African smallholders (Johnston, 1981:74).

The Swynnerton Plan¹⁵, published in 1954, marked the beginning of a definite policy of government encouragement of Kenyan smallholder production for urban and export markets¹⁶. However, as Heyer (1981: 102) observes, the Plan “was based very

¹⁵ “A plan to intensify the development of African agriculture in Kenya” by R. Swynnerton (1954).

¹⁶ See Thurston (1984) for more detailed information on the Swynnerton Plan.

consciously on the controlled development of an élite group of ‘progressive farmers’” especially on coffee, tea and pyrethrum. This plan introduced individual tenure in African agriculture and promoted cultivation of export crops by Africans, thereby ‘revolutionising African agriculture’ (Migot-Adholla, 1979:157). Large-scale farms were subdivided, leading to an expansion of small farm area. This resulted in an increase in small farm output. Heyer (1981:106) notes that by 1967 the proportion of marketed output coming from smallholders had reached 50 percent. An exodus of European farmers gave rise to further expansion of the small farm area in settlement schemes, after Independence in 1963. During the first decade following independence an increase in smallholder cultivation was noted as a major stimulant of the impressive economic growth experienced during that period – an annual growth of almost 7 percent! (Baynham, 1989:225).

One of the most significant products of the Swynnerton Plan was the gradual shift of tea, coffee and exotic dairy production from plantations/estates to smallholders. De Wilde (1980:127) reckons that these ‘new’ smallholder cash commodities were highly profitable compared to previous smallholder activities. According to Tomich, *et al.* (1995:380) by 1966 smallholder coffee production had overtaken estate production (citing Kenya, 1974). Smallholder tea and coffee expansion has continued to be a major source of farm cash incomes and foreign exchange earnings in Kenya (Tomich, *et al.*, 1995:380).

Tanzania has often been compared with Kenya, as their similar basic conditions make them convenient cases for comparative investigations (Barkan and Okumu, 1979). They “...have been perceived as prototypes of capitalist and socialist development and as such, have been viewed as a pair of concrete examples of what is likely to happen, and not happen, when an African country chooses one or the other of these two approaches to development” (Barkan, 1979:4). Tanzania’s peasant production has its roots in the work of missions who introduced cotton and coffee¹⁷. As in the case of Kenya successive colonial authorities made extensive investments in research. Such investments, made

¹⁷ This part of the section benefited from insights from Ruthenberg’s (1964) comprehensive study on agricultural development in Tanganyika (now mainland Tanzania).

possible by foreign aid, led to visible progress in improving the output in African farms. Shortly after independence in 1961, Tanzania's agriculture performed impressively (see Tomich, *et al.*, 1995:367). During the early 1960s, small farm production of pyrethrum, coffee and most major export crops as well as food crops like millet, sorghum and root crops dominated mainland Tanzania's agricultural picture (Ruthenberg, 1964; De Wilde, 1980). However, as discussed below, the 'take over' of Tanzanian agriculture by smallholders was short-lived.

Malawi's African smallholder agriculture, on the other hand, has had a consistent colonial experience of mixed fortunes. Tod (1984:8) characterises this sector as one that "has been promoted and dropped, favoured and discouraged". By independence smallholder agriculture in Malawi was still largely subsistence oriented, with only trickles of export output. However, after Independence the sector became the object of acclaim as its performance surpassed that of the estates. By 1964, smallholder crops accounted for 55 percent of agricultural exports while estates accounted for the balance. Acharya (1981a) praised Malawi (along with Kenya and Ivory Coast) for having sustained the most favourable environment for private peasant agriculture.

Ivory Coast has been considered one of the outstanding post-independence examples of rapid expansion of cash cropping (Delgado, 1997:147). Export of agricultural products was the main engine of the so-called 'Ivorian economic miracle' (Lee, 1980; Handloff, 1988). Total agricultural exports grew at almost the same rate as GNP, or just over 7 percent per annum, between 1960 and 1975 (Lee, 1980:607). Because of the successful agricultural development strategy of the 1960s and 1970s Ivorian agriculture was able to diversify out of agriculture. By the early 1980s rural Ivory Coast had a much higher level of electrification, piped water and schooling than most of its neighbours.

Notwithstanding the prevalent post-1960s trend of 'growth without equity' in some of the above-mentioned African country examples, nothing should be taken away from the agricultural miracles experienced in these countries during that period. In spite of the well-documented shortcomings of the post-independence growth trends, many

achievements were also noted (Delgado, 1995). If the 1960s witnessed isolated success stories, the 1970s were generally characterised by stagnation in most of Sub-Saharan Africa. This is discussed in more detail in the next sub-section.

2.4.2 Period of Stagnation: What Went Wrong?

As portrayed above, the 1960s period boasted increases in total agricultural production and food production. However, during the 1970s agricultural production did not keep pace with population growth rates. The picture drawn from numerous research publications is that of stagnant agricultural production and decreasing food production per capita during this period (Byerlee and Heisey, 1997:10). This crisis situation negatively affected farm incomes and increased Africa's dependence on food imports. The scenario, however, varied from one country to the other. Employing FAO statistics, Hinderink and Sterkenburg (1987:94) sketch an informative picture of sub-Saharan Africa showing only Sudan, Ivory Coast, Malawi, Swaziland, Rwanda, Burundi and Cameroon with a consistent increase in agricultural production during the 20-year period between 1961 and 1981. In addition, Kenya, Zambia, Zimbabwe and Central African Republic managed to recover from an initial post-1960s period of stagnation and decline. The rest of sub-Saharan Africa (excluding South Africa and Namibia) experienced either a consistent decline in agricultural production since the 1960s or a sudden decline after an initial post-independence boom.

Byerlee and Eicher (1997b: 3) contend that Africans bear the brunt of the world food problem today because the food balance sheet for Africa shifted from positive to negative in the early 1970s. They point out that food production in Africa grew at half the rate of population growth from 1970 to 1985. According to Johnston (1980:69), "there are clear and disturbing indications that the expansion of food production has failed to keep pace with the growth of population in a number of Sub-Saharan countries." He presents FAO regional indexes of per capita food production for Africa as compared to Asia and South America from 1972 to 1976 (Table 2.1). These clearly show that Africa's food sector did

not only perform poorly during this period, but also lagged behind that of other developing regions.

Table 2.1: Food production per capita in Africa, South America and Asia (1961-65 = 100)

Region	1972	1973	1974	1975	1976
Africa	99	92	98	96	97
South America	101	101	104	103	111
Asia	103	106	105	109	109

Source: Johnston (1980:69)

There has been a continuous search for solutions to the resultant problems such as dependence on imports, poverty and degradation of natural resources. A closer look at policy paths pursued by different countries after independence would help in answering the big question often asked, “What went wrong?”

Hinderink and Sterkenburg (1987) draw a neat account of development pathways taken by Sub-Saharan African countries after the advent of independence¹⁸. However, they point out that contrary to common belief, there were only limited inter-country differences in agricultural policy in Sub-Saharan Africa. Common general characteristics of policies have emerged and are summarised as follows (Hinderink and Sterkenburg, 1987:69):

- **One-sidedness:** Policies were biased towards production increases and not towards the wider rural development approach which includes improvement of living conditions of agricultural producers.
- **Export-orientation:** More emphasis was on export crops to the detriment of food crops for the domestic market.

¹⁸ This part of the sub-section draws on Henderink and Sterkenburg (1987).

- **Interest groups:** In their choice of policies, governments have tended to serve the interest of interests groups rather than agricultural producers themselves.
- **Limited research priorities:** Low research priority was afforded to the agro-climatic and socio-economic circumstances under which smallholders operate.
- **Low agricultural investment:** Priority was for the expansion of manufacturing industries. Agricultural investment took only a limited proportion of total government expenditure.
- **'Projects' as form of intervention:** There was emphasis on large-scale projects as a dominant form of external intervention. New smallholder-based innovations were largely ignored.
- **External influence:** External agencies and donors had some influence in the formulation of agricultural policy.
- **Role of the price mechanism underplayed:** Policy-makers paid insufficient attention to the price mechanism as a means of stimulating smallholder production.
- **Land policy:** Land policy played an important part in agricultural policy in general. Land transfer and individualisation of land rights particularly received ample attention.
- **Mediocre support services:** The insufficient provision of agro-support services acted as disincentive to smallholder output increases.
- **Lack of continuity in policy:** Agricultural policies continuously changed in many Sub-Saharan countries since independence.

To round off the stagnation question, Hinderink and Sterkenburg (1987:69) warn that agricultural policy formulation in Sub-Saharan Africa during the 1970s occurred in an unfavourable external environment. Such an environment was characterised by a sharp decline in the terms of trade of non-oil exporters, increasing debts and debt servicing as well as rising prices of imports - especially oil and fertiliser. Another unfriendly factor was the decrease in foreign aid below set targets together with reduced imports by industrialised countries in association with world stagflation. These authors are, however, quick to admit that such unfavourable external conditions were often aggravated by poor agricultural policies.

2.4.3 Prospects for Recovery?

Block (1994: 619) presents some evidence of a notable recovery of African agricultural productivity initiated during the 1980s. Delgado (1997:147) reckons that the 1970s declines in smallholder agricultural productivity had been reversed in the 1980s and 1990s (see Block, 1994 for statistical records). In this regard, Zimbabwe is quoted as the star of the 1980s with respect to smallholder contribution to agricultural production. Smallholders in Zimbabwe defied all negative beliefs about lower productivity and proved that 'peasant farming is not inherently unproductive' (Weiner, 1988:68). After introducing smallholder support programs following independence, a second maize-based green revolution was launched in Zimbabwe as maize production doubled between 1980 and 1986 (Eicher and Kupfuma, 1997:25).

A broader view of Zimbabwe's recent smallholder 'revolution' is documented in Rukuni and Eicher (1994). The smallholder production boom of the 1980s was mainly focussed on maize, sorghum and cotton. Muir and Blackie (1994:198) note that the smallholder share of marketed grains and cotton jumped from less than 10 percent before independence to around 50 percent by 1986. This was facilitated partly by the commitment of the new majority-ruled government to concentrate on improving research, extension and credit facilities for smallholders¹⁹.

A few studies have, however, warned against over-glorification of the smallholder sector in Zimbabwe, owing to a number of reasons. Stack (1994:258) reveals that all segments of the smallholder sector have not benefited from the impressive performance. She reports three findings to qualify her warning. Firstly, since independence, maize production and sales in communal areas have been highly concentrated in favourable areas with adequate rainfall. Secondly, households with greater farm level resources contributed most to aggregate growth in maize production and sales in the 1980s. Lastly, she points out that net maize sellers are primarily located in favourable growing areas.

¹⁹ See accounts by Mashingaidze (1994), Mariga (1994), Cole and Cole (1994), and Ndlovu (1994) about the maize, cotton, tobacco and livestock sub-sectors respectively.

This puts into question the equitability of general agricultural policy in Zimbabwe. Cliffe (1988) has also come out strongly against generalising about the Zimbabwean smallholder 'success story' for the whole country. He contends that the benefits of better access to credit, inputs and marketing were confined to a minority of regions and 'better-off' peasants. He adds that such gains have not eased the problems of poverty faced by the majority of rural dwellers.

Eicher and Kupfuma (1998:565) appropriately label the Zimbabwean smallholder agricultural experience as a 'compelling but qualified African success story'. They emphasise that the strengths of the smallholder-led food production 'model' of Zimbabwe should be viewed with equal appreciation of its limitations. Most importantly, African countries seeking to replicate Zimbabwe's smallholder revolution should carefully study its mixed record in reforming support institutions for smallholders. Notwithstanding these mixed fortunes, the Zimbabwean experience provides a ray of hope for African economic recovery, and re-establishment of smallholder agriculture in the forefront of such a process. It demonstrated how a favourable environment could enhance the realisation of smallholder potential to act as an engine of economic growth. This has also been illustrated in the experience of many other countries, which are currently at a more advanced stage of agricultural transformation. The next section elaborates more on these experiences as it attempts to build a foundation of lessons for South Africa.

2.5 The Role of Smallholder Agriculture in Development: Lessons from Outside Africa

Many countries in East and Southeast Asia have generally been regarded as pioneers of rapid growth. They maintained a steady pace of rapid economic growth for thirty years (Timmer, 1998: 540), and agriculture has been at the forefront of that growth. Their governments have traditionally placed a high priority on agricultural growth to achieve a range of other broader national objectives (Australia Department of Foreign Affairs and Trade, 1994). In countries such as Indonesia this growth was transformed into a remarkable record of poverty reduction (Timmer, 1998: 545). Such developments bear

great lessons for countries seeking rapid economic transformation. The next subsection therefore revisits the East and Southeast Asian experience. The central question in this review is, “How did they do it?”

2.5.1 The East- and Southeast-Asian Growth Experience

According to Timmer (1998: 540), “Rapid economic growth was invented in East Asia”. Citing World Bank (1992) statistics, he qualifies his statement: Between 1965 and 1990, only ten countries with populations larger than two million experienced per capita income growth of 4 percent per year or more; and all but two were in East or Southeast Asia. These eight countries and their growth rates are China (5.8%), Indonesia (4.5%), Thailand (4.4%), Malaysia (4.0%), South Korea (7.1%), Singapore (6.5%), Hong Kong (6.2%) and Japan (4.1%). Timmer (1998) carries out an informative discussion of the Indonesian economic development experience. The Indonesian policy objectives were set out to be growth, stability and equity. The potential trade-offs between these three objectives were successfully avoided by putting agriculture at the centre of the development trilogy, and using the rural economy as a positive contributor to growth. The following figure illustrates this process.

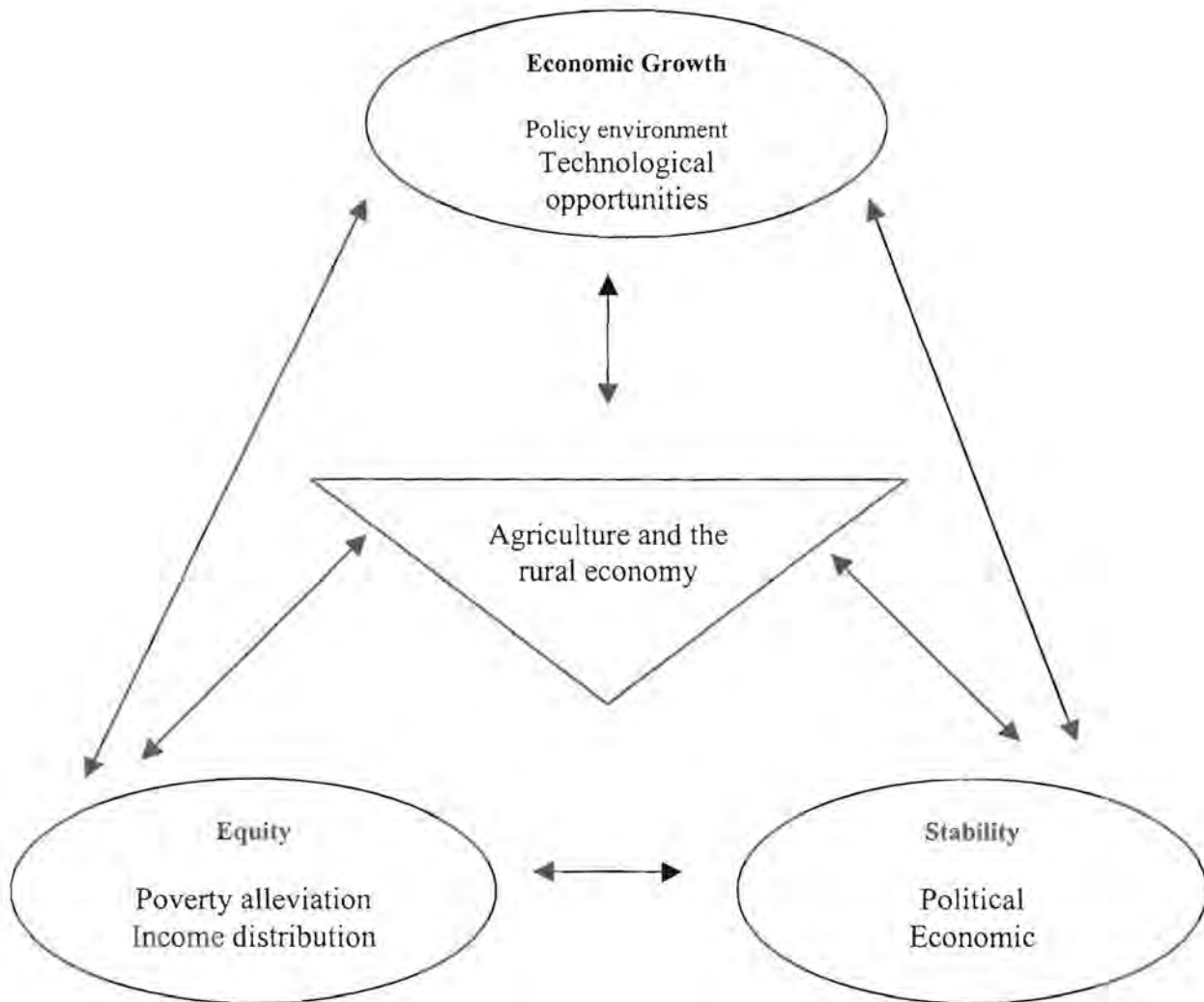


Figure 2.1: The Development Trilogy in Indonesia

Source: Adapted From Timmer, 1998

Agriculture has played a major role in many countries by stimulating growth in non-agricultural sectors through various means. In a comprehensive volume edited by Mellor (1995) various authors review a total of eight country case studies on how agriculture has fared in stimulating growth in non-agricultural sectors²⁰. In his conclusion the editor

²⁰ This section benefited significantly from the findings presented in Mellor (1995).

identifies three ways in which agriculture in these countries has grown to effect this influence - through area expansion, intensified output mix and technological change. These are elaborated on below.

2.5.2 Agricultural Growth Pathways

2.5.2.1 Growth through Area Expansion

Thailand, Argentina and Costa Rica are identified as countries which depended on area expansion for enhancement of agricultural growth. Siamwalla (1995:150) reveals that from about World War II until 1980, Thailand was in fact the only Asian country whose agricultural growth was dominated by an expansion in cultivated area per agricultural worker. The resultant state of land abundance gave rise to a strong comparative advantage in Thai agriculture. Fortunately, policymakers became aware of this phenomenon and sought to exploit it by putting correct policies in place. A more liberal trade and exchange rate regime was made the cornerstone of Thailand's approach. The Thai government also invested heavily in transport infrastructure throughout the 1960s and 1970s. Although prompted mainly by security considerations, the road-building programme benefited agricultural growth in Thailand.

Argentina also experienced growth in arable land per capita of the total population. However, it did not exploit the comparative advantage as reflected by its unfavourable public policy towards agriculture (Mundlak and Domenech, 1995). Agriculture also played an important role in the Costa Rican economic growth (Celis and Lizano, 1995). As in the case of Thailand, the government exploited agricultural comparative advantage, as brought about by area expansion, by promoting favourable macro-economic policies.

2.5.2.2 Growth through Intensified Output Mix

One of Mellor's (1995) major findings from the synthesis of eight case studies was that high rates of agricultural growth could only be sustained if the composition of output was

changed. This was demonstrated in the case of Costa Rica, Colombia, Taiwan and the Indian state of Punjab (see Celis and Lizano, 1995; Berry, 1995; Mao and Schive, 1995; and Bhalla, 1995). In these countries, a change in product mix and a shift to some 'high-value' commodities made a significant contribution to production and factor productivity. Mellor (1995) warned however, that a shift to some specialised exports could result in other sectors being left out, as was the case in Costa Rica for example.

2.5.2.3 Growth through Technological Change

Taiwan, Punjab and the Philippines introduced major technological improvements along with appropriate institutional infrastructure, to increase commodity production on the existing land base (Mellor, 1995:311; Mao and Schive, 1995; Bhalla, 1995; and Bautista, 1995). Taiwan's main strength was the huge contribution by both private and public institutions, with the government playing the major role of getting development going (Mao, 1995:31). The development of small-scale irrigation and use of fertilisers and pesticides in Punjab greatly enhanced expanded use of new crop varieties and therefore achievement of high yields (Bhalla, 1995). The research breakthroughs at the International Rice Research Institute (IRRI) gave rise to rapid technological change in the Philippines (Bautista, 1995). A major shortcoming, however, was the lack of a strong indigenous Philippine capacity to serve national technological needs, which IRRI couldn't meet.

A closer assessment of the experiences of Indonesia and the Philippines provides very interesting material for any country in its early stages of transformation. A striking aspect of the Philippine experience is its illustration of the fact that rapid agricultural growth is not enough. Mellor (1995:317) emphasises that accelerated growth should be accompanied by poverty reduction. This is achieved through a reduction in relative food prices as a result of expanded food supplies or an increased capacity to import food financed by agricultural exports; increased employment in agriculture itself; and increased employment in non-agricultural employment, particularly in rural areas. Timmer (1998) provides an exhaustive discussion of this process of search for equity, as

observed in the case of Indonesia. The bottom line is that agriculture, especially smallholder agriculture, cannot be ignored. In fact, it should be at the centre of the government's focus to achieve equitable and sustainable growth.

2.6 Enhancing Smallholders' Role: Conclusions

“The most important lesson is to use the agricultural sector and the rural economy to provide the foundation that permits the development strategy to pursue growth, stability and equity simultaneously and to pursue them in a complementary rather than a competitive fashion” (Timmer, 1998: 542-43).

From the preceding discussion it was clearly shown that the above statement is easier said than done. The painful lessons learnt by different countries whose experience was reviewed in this chapter are evidence of this. Successful achievement of growth, stability and equity is a wish and ideal for all countries. Unfortunately, a myriad of internal and external factors has combined to shape development paths that have failed many countries. Each country has a unique set of conditions. Therefore, there is no single set of prescriptions for all countries to follow in order to attain the required success. However, much has depended on how well and timeously countries have seized development opportunities made available to them (see Tomich, *et al.*, 1995).

One of this chapter's points of departure is that the benefits of growth in consumption world-wide since the beginning of the 20th century have been unequally distributed. This is seen in the persistence of poverty both between and within rich and poor countries alike. This challenge is even more magnified in developing countries that have to cope with underdeveloped economies. In such economies, agriculture is the mainstay of a large proportion of the population. It only makes sense therefore that agriculture should form a foundation for development in these countries. The economic development path of Indonesia, which Timmer (1998) so powerfully traces, again is an illustration of how to use agriculture as a foundation for economic development. Figure 2.1 above shows how this process works. Agriculture is placed at the centre of the development trilogy, and the rural economy used as a positive contributor to growth. The problems of poverty,

economic and political stability, and rapid economic growth are then addressed simultaneously.

Another point of departure for this chapter is that many of the missed development opportunities by different countries have been due to the downplaying of the role of smallholders in particular, as an integral part of their economic strategy. According to Timmer (1998: 548), an essential implication of using the rural economy as a positive contributor to growth is that the productivity of rural labour would have to be raised. In most settings such a strategy would inevitably require agricultural development with a focus on small farmers. This is what Tomich, *et al.* (1995) term a 'labour-using, land-saving' strategy. They argue that this strategy is better suited to areas with abundant rural labour but scarce land. The immediate objective should therefore be to increase productivity among a large and growing number of small farms. Mellor (1995) argues that such a strategy goes further than achieving higher productivity of small farms through technological change. As much as it effectively exploits comparative advantage, such an improvement leads to increased effective demand for non-agricultural goods, which in turn leads to additional growth in rural income. This concept is the focus of this thesis, and is further explored in the next chapters. To be complete, however, this chapter must also discuss some constraints facing smallholders in accomplishing the needed task of kick-starting an economic transformation process in developing economies.

2.7 Constraints Facing Smallholder Agriculture in Developing Economies

Schultz (1964) showed convincingly that small farmers in traditional agriculture are "poor but efficient". In this view smallholder farmers remain poor because they have to contend with lack of technical and economic opportunities to which they can respond. It is also believed that if these constraints are removed, these farmers would generally be capable of making rational economic decisions. Van Rooyen, *et al.* (1987:213-14) group the constraints facing smallholder farmers in traditional areas into two categories, namely:

- **System constraints:** these include natural risks affecting farming in general; limited supply of marketing services; poor physical and institutional infrastructure; inappropriate legislation and policies; restrictive administrative and social structures; and other constraints associated with land tenure and acquisition of agricultural resources.
- **Allocative constraints:** these are those factors which directly affect the farmer in making optimising decisions, and over which the farmer has some control. These include liquidity problems, labour shortages, lack of skills, knowledge and education.

According to Delgado (1997:148), economic conditions, especially in Africa, are thought to be challenging and have sometimes resulted in non-prosperous outcomes for smallholders. He identifies three structural challenges that African smallholders have had to face namely, the environmental-demographic nexus, missing markets, and transaction costs.

2.7.1 Environmental-Demographic Constraints

After the Earth Summit held in Rio de Janeiro in 1992, concerns about local, subnational, national and global sustainability intensified (Staatz and Eicher, 1998: 30). One of the issues identified at the summit was the pressure that population growth exerts on fragile lands, and therefore on agricultural production. Delgado (1997: 148) points out that demographic growth rates in Sub-Saharan Africa are of the same magnitude as those of agricultural production. If such a trend continues unabated, it is feared that smallholder behaviour under limiting demographic conditions would lead to falling agricultural productivity, major food crises and increased rural poverty.

Evidence since the 1930s reveals a decrease in the size of the average farm across the continent (Delgado, 1997:148). Johnston (1980:68) argues that countries that used to be considered land-surplus can no longer live up to their reputation because of the fragility of their farming systems. Delgado (1997) gives an example of East Africa and the Sahel (Reardon, 1998). Their capacity can no longer sustain the increases in food production

required to meet the needs of a growing population. Eicher (1992:86) also testifies to this fact. He points out that a new class of 'resource-poor' farmers has emerged in Africa as a result of rapid population growth and declining farm size. Morris and Byerlee (1998:458) also observe an emerging trend in Asia of what they describe as a dramatic slowing of expansion in the area planted to cereals, traditionally a major source of production gains.

Countries like Kenya are facing the challenge of a clouding of rapid agricultural growth by a fast population growth rate. Mellor (1995: 313) argues that agricultural growth per capita can be significantly improved by restraining the rate of population growth. Argentina has proven this possibility by converting its dismal rate of agricultural growth, particularly in relation to its resource base, into at least a positive per capita rate.

2.7.2 Missing Markets and Transaction Costs

Markets are said to be missing when they do not exist in their conventional institutional forms or are poorly developed (Delgado, 1997). De Janvry, *et al.* (1991) provide an insightful explanation into the concept of missing markets. They state that missing markets are an extreme example of market failure. Market failure is defined as a condition whereby the cost of a transaction through market exchange creates disutility greater than the utility gain that it produces - as a result the market is not used for the transaction. Under such a condition either a surrogate institution will emerge to enable execution of the transaction, or the transaction will not occur at all.

Due to the fact that many areas of Sub-Saharan Africa are at the early stages of agricultural transformation, small and large farm households do not necessarily have access to the same technology, information, asset base, input supplies, or market outlets. As a result, different farm households are likely to face different transaction costs for selling the same output mix. Broadly speaking, transaction costs affecting the exchange of agricultural commodities in developing countries include spoilage; costs from wide differences in quality; costs of overcoming lumpiness of initial investments in production,

processing, and marketing; costs from inflexibility and lags in production plans; costs in dealing with seasonal variability in output in thin markets with poor storage; search costs; costs of screening trade partners; bargaining costs; monitoring costs; and costs of contract enforcement (Delgado, 1997:149; Bardhan, 1989).

According to Delgado (1999:168), most high value-added agricultural products are typically subject to high transaction costs to final value because of the high degree of processing involved in such products (citing Binswanger and Rosenzweig, 1986). He also points out that due to these high transaction costs, poorer farmers are excluded from participating in potentially remunerative commodities. In addition, poor smallholders face barriers to entry into markets for activities produced by other better-off small and larger operators. Alternative avenues for smallholder market participation include vertical integration with processors and marketers of commercial quality activities such as aquaculture, export quality green vegetables, cotton, tea and cut flowers. However, lack of assets, information, and access to services will hinder smallholder participation in these potentially lucrative markets as well. These and other constraints facing smallholders necessitate deliberate reforms and innovations for their removal.

Delgado and Siamwalla (1997) advocate the need for governments to increase access of poor farm households to information, infrastructure and institutional development for collective action. This would help alleviate constraints associated with semi-openness of most of African economies, i.e. as a result of high transaction costs.

2.8 Conclusions: Relevance to South Africa

Most of Africa is still at the early stages of agricultural transformation. A significant segment of the population still derive their livelihood from agriculture. A large section of the African population is still rural and actively engaged in agriculture. Smallholder farmers in particular are said to be a dominant type of farmer in Africa and other developing countries. There is thus some consensus in the literature that a smallholder agriculture-driven process of growth in Africa is required for economic progress to be

achieved. There is also a common finding in the literature that countries that ignored or underplayed the role of agriculture in their policies, missed important economic growth opportunities. Misguided notions about the inferiority of small farms to their large-scale counterparts has played a role in the implementation of such policy choices.

It was also shown in this chapter how, during the past few decades, different countries took advantage of the growth prospects offered by smallholder agriculture. During the post-independence period, many lessons have been learnt. Smallholder agricultural productivity in many countries increased impressively, at least for some time. Kenya, Ivory Coast, Malawi and Swaziland are among some of the African countries whose agricultural production consistently maintained an impressive growth record from the 1960s until at least the 1980s. In some African countries agricultural production has simply refused to pick up. In others it has been a story of mixed fortunes. Notwithstanding these experiences, stories such as the recent Zimbabwean and East Asian miracles and their limitations, only serve to inform countries seeking to revolutionise their economies through smallholder agriculture of important pointers for achieving this goal. The Zimbabwean and East Asian experiences demonstrate the importance of ensuring an enabling environment for a more meaningful smallholder-based agricultural transformation process.

South Africa is normally considered somewhat different from most of the African continent in that smallholders do not dominate agricultural production. It is on large-scale commercial farms that most of the food and fibre is produced both for the local and export market. Furthermore, it has been shown that land shortage in South Africa might not be such a big issue as it is in the rest of Africa (Lyne, 1991; Lyne, *et al.*, 1991). South Africa and the rest of Africa are only brought together in this study because of their common history of repression of Africans by Europeans, the traditional institutions (e.g. chieftaincy) in black areas, and the subsequent efforts to redress past inequalities through such programmes as land reform. However, even in South Africa, as already pointed out, the smallholder agricultural sector is home to a significant number of different types of operators in the black rural areas. Like their African counterparts, smallholder farmers in

South Africa are subject to some pressing constraints that pose a special challenge to any agriculture-based economic development process. Deliberate focus should be directed towards lifting these constraints, thereby creating an enabling environment for smallholders to exploit growth opportunities. This study attempts to give proper direction for such focus. An important reasoning in this study is that the development of smallholder agriculture in South Africa, unlike in much of Africa, is not essential to industrialisation or growth of the main cities. Such development, however, is essential to growth, including non-agricultural growth in the less-developed former homeland areas as it is elsewhere in Africa.

CHAPTER 3

THE SURVEY AREA AND SMALLHOLDER AGRICULTURE IN THE EASTERN CAPE PROVINCE

3.1 Introduction and Background

Encompassing the former Eastern Province/East Cape, the Border and north-eastern Cape areas, as well as the former homelands of Transkei and Ciskei, the region today known as the Eastern Cape was for many years during the colonial period, an area of dispute between different groups. A number of frontier wars were fought between the Xhosa tribe and the European settlers for control over the territory. Until the mid-1800s when the Xhosa were eventually defeated, the Eastern Cape had been their home. A series of important developments, such as the founding of the Union of South Africa, the promulgation of the Land Acts, and the system of separate development, led to the eventual designation of the former Transkei and Ciskei as Xhosa homelands in the 1970s. In the context of these developments, they became "independent" entities in 1976 and 1981 respectively. Even after independence, these two homelands were still politically and economically dependent, with a considerable chunk of their budget provided by South Africa. For example, over 90 percent of Ciskeian household incomes were earned in South Africa by migrant labourers²¹. Since 1994 the two territories were incorporated into the new South African boundaries as part of the Eastern Cape Province.

The main purpose of this chapter is to present an overview of the study area and describe the smallholder farming environment in the Eastern Cape Province. It will first give a general view of the Eastern Cape, then carry out a description of the survey area.

²¹ These and other facts are reported in a document by the University of Pretoria's Post Graduate School of Agriculture and Rural Development (1998).

3.2 The Eastern Cape Province: Overview²²

Map 3.1 The Eastern Cape Province within South Africa



3.2.1 Basic Facts

The Eastern Cape province (see Map 3.1) is the second largest of the nine South African provinces in terms of surface area. With the third-largest population (7.1 million in 1994) after KwaZulu-Natal and Gauteng, it covers about 14 percent of South Africa's total surface area. Physically, the province is often referred to as an area of contrasts. It borders with the warm Indian Ocean responsible for the sub-tropical coastal belt climate in the east, and the Karoo semi-desert in the west. The province is divided into three regions namely the Central, East Griqualand and Western. These are further divided into

²² The three main sources for this overview are Erasmus (1998), Scogings and Van Averbeke (1999) and some Central Statistical Service (1997) figures.

five subregions. This study is based in five of about forty districts of the central region (see Map 3.4).

The Eastern Cape's population density of 38.2 persons per square kilometre is higher than the average of 33.8 for the whole country. Over 43 percent of the provincial population are under the age of 15 and over 54 percent of the adult population are female. The Black population in the province forms an overwhelming majority, that is, 87 percent of the inhabitants, 83 percent of whom use Xhosa as their home language. Afrikaans is spoken by 8.3 percent, English by 3.5 percent and other languages spoken by the remaining tiny proportion of the population. The population has the second lowest life expectancy (60.7 years) of all the provinces in the country. This contrasts with the national average of 62.8 years. Its adult literacy rate of 72.3 percent is well below the average of 82.2 percent for the country.

In 1994 the total unemployment rate was 45.3 percent, the second highest in the country. The per capita income for 1993 was approximately R4, 151(US \$690) compared to the country average of about R8, 704 (US \$1,450). The main contributor to the Gross Geographic Product (GGP)²³ is manufacturing, with community, social and personal, general government and other services also contributing significantly. Most of the province's economic activities are centred in the metropolitan areas of Port Elizabeth/Uitenhage and East London/Kingwilliamstown, which together contribute close to 75 percent of the GGP. Some of the urban concentration occurs around the cities of Queenstown and Umtata.

²³ The Gross Geographic Product (GGP) represents provincial or regional contribution to the Gross Domestic Product (GDP).

The Eastern Cape has the lowest annual average household income of all the provinces—R24, 000 (US \$4,000). A significant proportion of rural blacks in the former homeland areas lives below the poverty line. A recent estimate from all the former homelands, of population living below the poverty line is 84 percent (Kruger, 1995, cited by University of Pretoria, 1998). Slightly less than a third of all dwellings in the province have running tap water. About 41percent of these still use wood as their main energy source for cooking, with paraffin and electricity as their second and third sources respectively. According to recent surveys the main source of income for the population in the province is regular wages followed by pensions, unemployment insurance, food aid and other welfare payments (see Figure 3.1). The number of people involved in formal wage employment in the Eastern Cape is low compared to the national figure (60 percent).

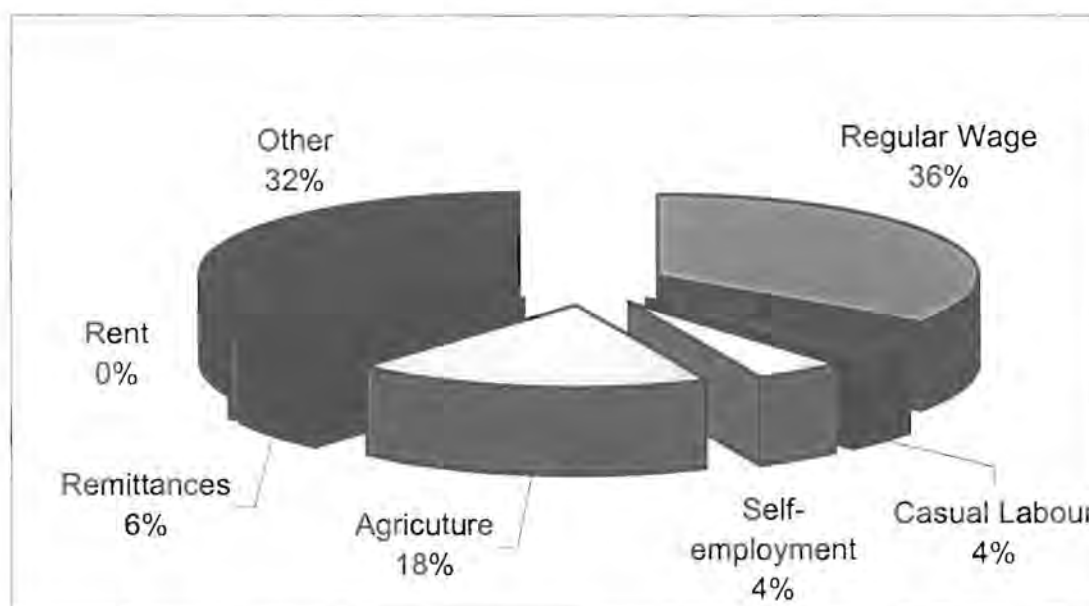


Figure 3.1: Main Sources of Income in Eastern Cape Province, 1994

Source: Adapted from Davies (1996)

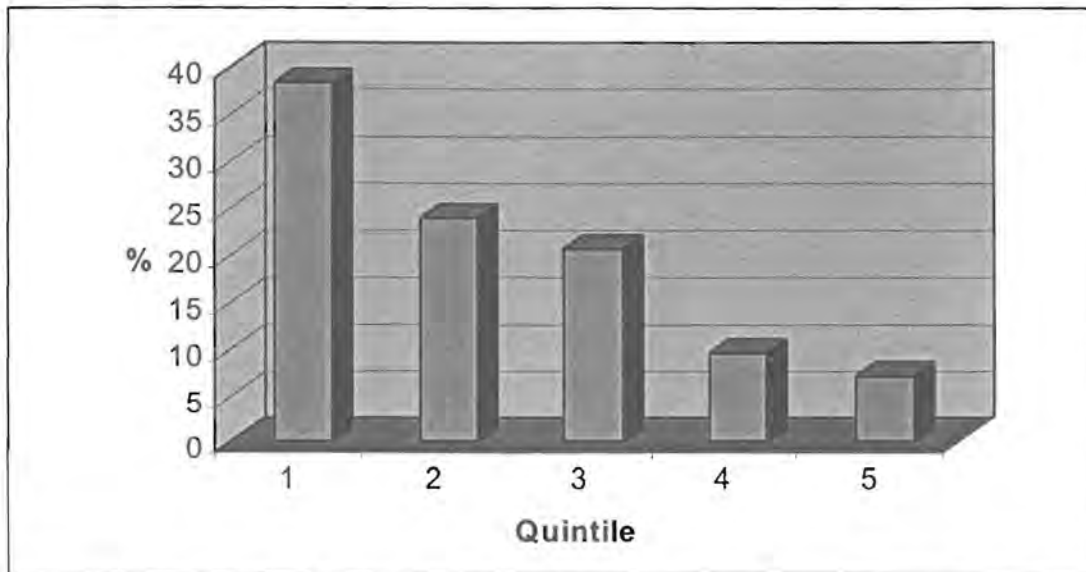


Figure 3.2: Income Distribution by Quintile (%) in Eastern Cape, 1994

Source: Adapted from Davies (1996)

In a recent publication on poverty in South Africa, Davies (1996) expressed concern that not only is a significant proportion of the population in the Eastern Cape poor, but there are also intra-provincial disparities in the distribution of income and wealth. Figure 3.2 plots some of the data on income distribution within the province. Almost two-thirds of the households in the Eastern Cape fall into the two lowest income distribution quintiles and more than 80 percent are in the three lowest quintiles.

The Eastern Cape has two economically distinct areas: the mainly white-inhabited East Cape/Border/north-eastern Cape; and the former homeland areas of Ciskei and Transkei. Table 3.1 illustrates some of the differences between the former homeland areas and the Eastern Cape as a whole.

Table 3.1: Differences between the Former Homeland Areas and The Eastern Cape Province

Indicator	Former Ciskei	Former Transkei	Eastern Cape
Average Household Size	7.8	6.5	5.2
Labour Absorption Capacity	30	16	45
Percent of HHs Earning <R1000/month	87	97	71
Personal Monthly Income Per Capita (R)	83	128	1358
Total Fertility Rate	5.5	6	4.6
Infant Mortality (per '100)	50	90	58
Life Expectancy	65	55	60

Source: Adapted from Davies (1996) (citing DBSA, 1990 and 1991; Kruger and Buthelezi, 1994; Mpambani, 1994).

Table 3.1 clearly portrays the impact of the apartheid policies on inequality between previously white areas and the former Bantustans/homelands. The case of Transkei, for example, illustrates this. The labour absorption capacity of only 16 percent shows the state of economic desperation in this area. This is further reflected in the percentage of households that earn below R1000 per month (97 percent), and the level of personal monthly income per capita (R128).

3.2.2 Land Use and Tenure

About 7 percent of the land in the Eastern Cape province is potentially arable. Just over a tenth of the arable land is irrigated. Grazing land comprises 81 percent with forestry and natural conservation comprising 1 percent and 4 percent respectively (see Figure 3.3).

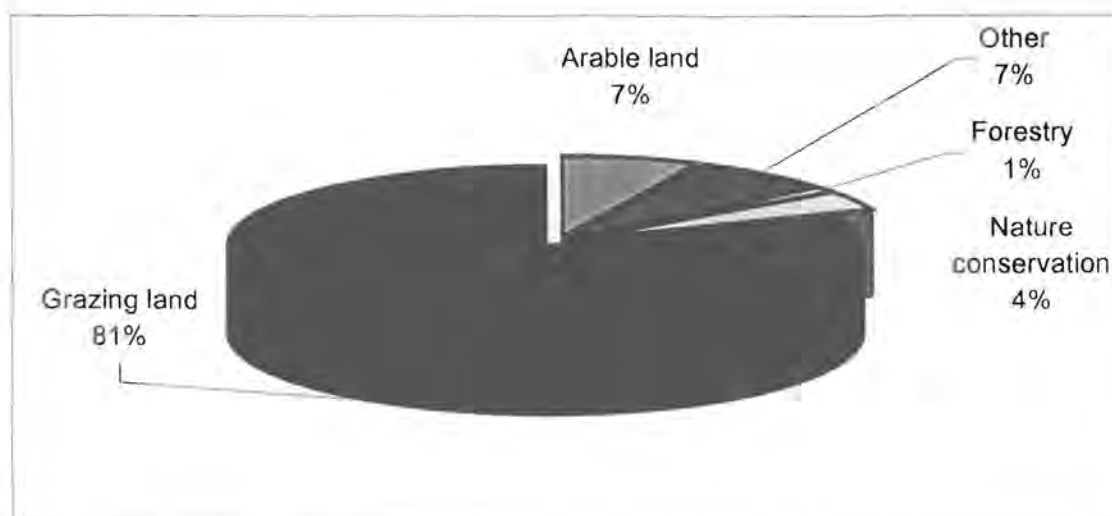


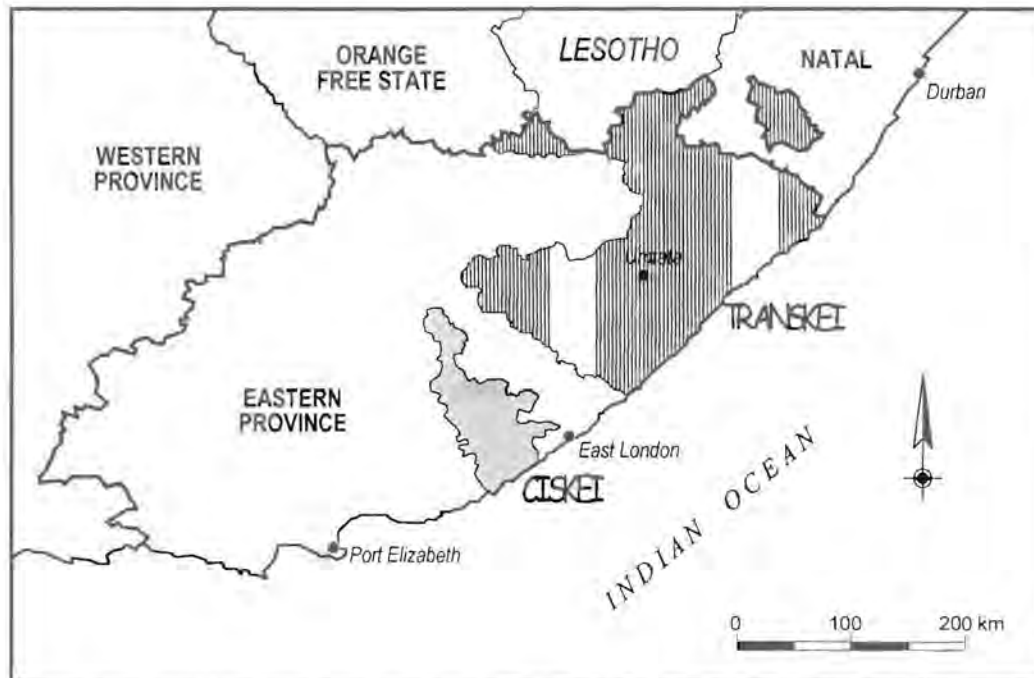
Figure 3.3: Eastern Cape Land-Use Pattern

Source: Erasmus (1998), citing Central Statistical Service, 1988

The coastal areas of the province are especially suited to intensive farming owing to their reliable winter rainfall. The interior is relatively drier and is therefore conducive to more extensive farming with goats, sheep and cattle.

Land tenure in the Eastern Cape Province is very diverse, due to historical socio-political factors. Political developments in the past gave rise to a dichotomous system whereby development was carried out separately for 'white' and for 'black' areas. In the Eastern Cape province, whites have historically inhabited the East Cape portion whereas the two former homelands of Ciskei and Transkei accommodated mainly blacks.

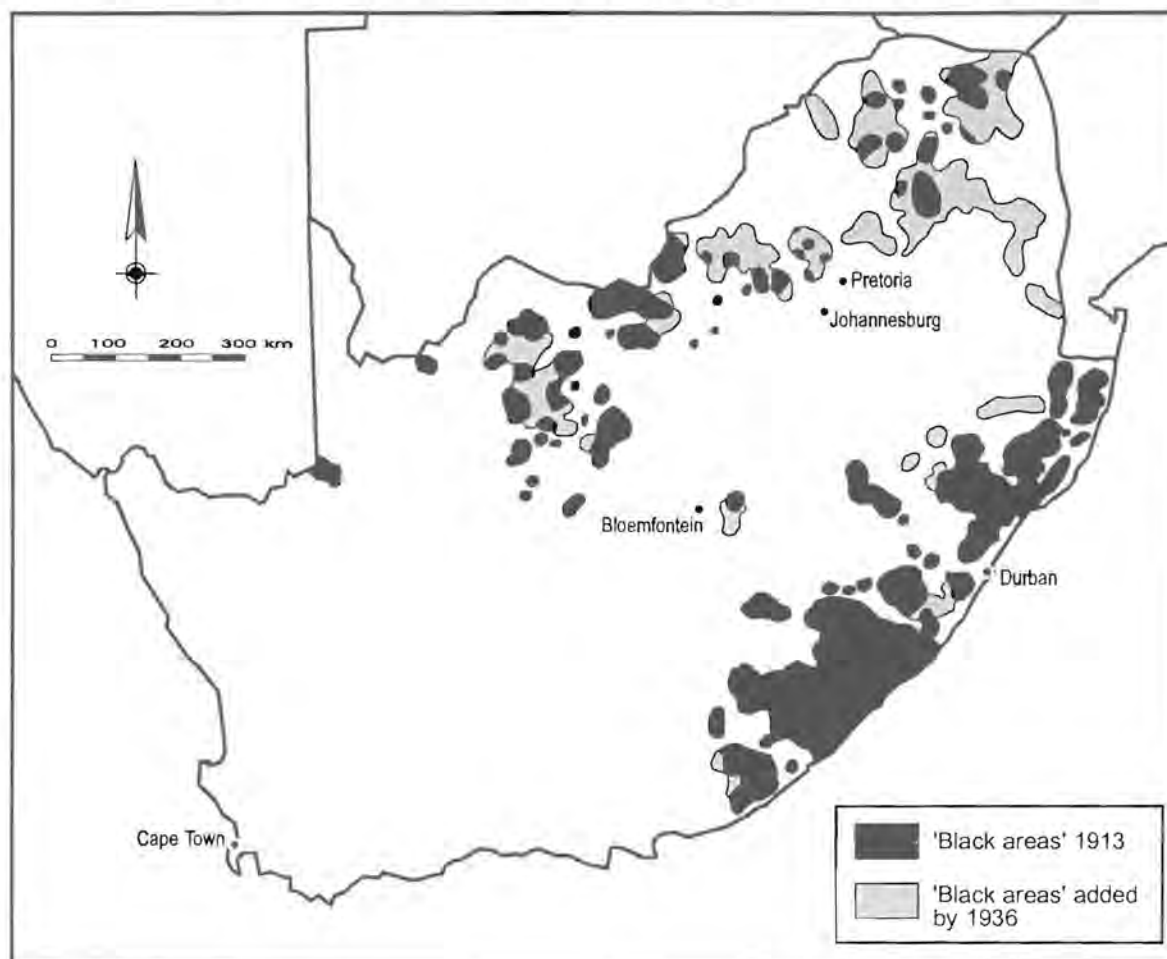
Map 3.2: The Former Homelands of Ciskei and Transkei within the Eastern Cape



3.2.2.1 The Former East Cape

In the former East Cape area most land is held under freehold tenure. Of the 11 million hectares of the East Cape, approximately 2 percent is public land, consisting of municipal and state lands. Much of the state land is under forest or protected area. Municipal land consists mainly of commonages that were established under the former Cape Colony. These commonages were created to accommodate towns people’s farming needs. Initially quite large (up to 10,000 hectares), these commonages were gradually reduced in size as their importance decreased and as they were increasingly seen as environmentally destructive. The East Cape land tenure system also includes what was called “black spots”. These were small pockets of land in the East Cape occupied by Africans who had resisted forced removals under the Apartheid system. Land in these areas was held under quitrent title. (see 'Black Areas added by 1936" in Map 3.3).

Map 3.3 The Black Areas designated under the 1913 and 1936 Land Acts



Source: Denoon and Nyeko (1984)

3.2.2.2 The Former Ciskei and Transkei

According to Tapson (1984), cited by Madikizela (1997:51), land seems to be viewed as having four main functions in the homelands, namely:

- A security system for its occupants and an essential component of their physical and psychological well-being;
- An economic support system for a greater economy which is hereby relieved of major costs such as family housing, infrastructural development and pension plans, which it would otherwise have to bear;

- A political resource used to gain political strength through the granting of favours;
- An agricultural resource, but only after satisfying the first three roles.

As a result of the influence by colonial interventions (see Scogings and Van Averbeke, 1999:14-15), the overall distribution of land tenure systems in the former Ciskei is fairly complicated. During the nineteenth century, chiefs of African tribes loyal to the colonial governments granted three forms of tenure to their people namely: unsurveyed communal tenure; surveyed quitrent; and freehold tenure. A fourth tenure system, Trust Tenure, was established on freehold land that was once allocated to white settlers in the Cape Colony. Since the Land Acts of 1913 and 1936 restricted whites from owning land in the Native Reserves, such land was acquired by the South African Native Trust who then leased it to landless Africans. The four tenure systems in the former Ciskei occur in close proximity to each other. However, in the Transkei, there is considerable homogeneity in land tenure with most land held under communal tenure. The four types of land tenure in the two former homelands are discussed below.

Freehold Tenure

Under this system the owner is accorded full ownership and freedom to alienate and use the land at will, but subject to statutory restrictions. African freeholders are not allowed to sell their land without state approval. They are also prevented from accommodating any other person on the land outside their immediate families.

Quitrent Tenure

A grantee of a quitrent title is allocated a surveyed residential site, a surveyed arable plot of about 4 to 6 hectares, and user rights to a commonage. One of the main differences between freehold and quitrent systems is that in the latter an annual rent is payable. The Upgrading of Land Tenure Rights Act of 1993 makes provision for the holders of quitrent land to convert their tenure to freehold free of charge.

Communal Tenure

This system of tenure, often referred to a “traditional land tenure system”, is formally rooted in the system of betterment planning explained in Chapter 1. Under this system, a headman empowered to allocate land belonging to a “Tribal Authority”, replaced the village chief. Under communal tenure, members of a settlement share certain rights in the land attached to their settlement. They hold the land under conditions of usufruct, as opposed to private ownership. Access to a residential plot is acquired through a “certificate of occupation”. In addition to an arable land allocation, the bearer household is entitled to raise livestock on the commonage and to harvest wood and water from it. The ownership of the crop harvest rests with the individual grower household, but the crop residue becomes communal property.

Since the advent of the national political changes of the early 1990s, a village chairman has now replaced the headman in the handling of matters of common interest to the community, including land matters. Through the Communal Property Association Act of 1993 communities or groups can hold a registered title to land (as in freehold tenure), while allowing them to make their own decisions on the allocation of ownership and user rights to the land. Beneficiaries of the land redistribution programme of the national government have thus far used this new system.

Trust Tenure

Land under trust tenure consisted of formerly white-owned land situated in proclaimed native areas, which was eventually made available to the South African Native Trust through the Native Trust and Land Act of 1936. This land was subsequently allocated to Africans on a system of leasehold tenure.

3.2.3 Agriculture

Agriculture contributed between 7 percent and 9 percent to the Eastern Cape Province's Gross Geographic Product (GGP), and recorded 0.4 percent real growth between 1980 and 1991. The most economically important sub-sector in the Province is livestock, with 76 percent contribution to the gross value of agricultural production, followed by horticulture with a 21 percent contribution. The least important sub-sector is field crops, accounting for only 3 percent of agriculture's gross income (Eastern Cape Province, 1995). It appears that agriculture still constitutes only a minority share of the income of the farm-based Eastern Cape population. On aggregate, approximately 90 percent of the value of agricultural production in the former homelands of Ciskei and Transkei is not marketed, leaving a mere 10 percent for the market (Eastern Cape Province, 1995).

The Eastern Cape province covers a total surface area of 17 million hectares of which 24 percent, mostly in the subtropical half, is inhabited by Africans practising mixed farming on communal lands. This part of the province has a population density of 90 people per square kilometre compared to 20 people per square kilometre for the rest of the province. The rest of the province, i.e. the western and northern parts, has been used mainly by white commercial livestock farmers for the last two centuries. Only recently has a trickle of emerging black commercial farmers established themselves on some land leased from the state.

3.2.3.1 'White' Farming in the Former East Cape

Scogings and Van Averbek (1999) report that the dry western areas of the East Cape are characterised by extensive small stock farming mainly for wool, mohair and mutton. The high rainfall areas in the northern and central parts boast commercial beef and dairy with some ostrich and poultry. An estimated 6,429 commercial farming units in the Eastern Cape cover a surface area of about 10 million hectares, which is about 12 percent of the total farmland area of South Africa (South Africa, 1997). The livestock sub-sector, found mostly in the northern and central districts and characterised by comparably larger farming units (averaging 1,400 hectares), occupies most of this land. The smaller coastal farms averaging 586 hectares boast mainly higher-value products such as pineapples, chicory, wheat and irrigated citrus and vegetables. Figure 3.4 below illustrates the distribution of income gained from the three agricultural sub-sectors in the East Cape area namely, field crops, horticultural crops and animal products. This figure highlights the dominance of the livestock production sub-sector. This sub-sector is also the largest employer of labour in the agricultural sector in the Eastern Cape as a whole. The gross income from the livestock sub-sector surpasses that of the next important sub-sector, namely horticulture.

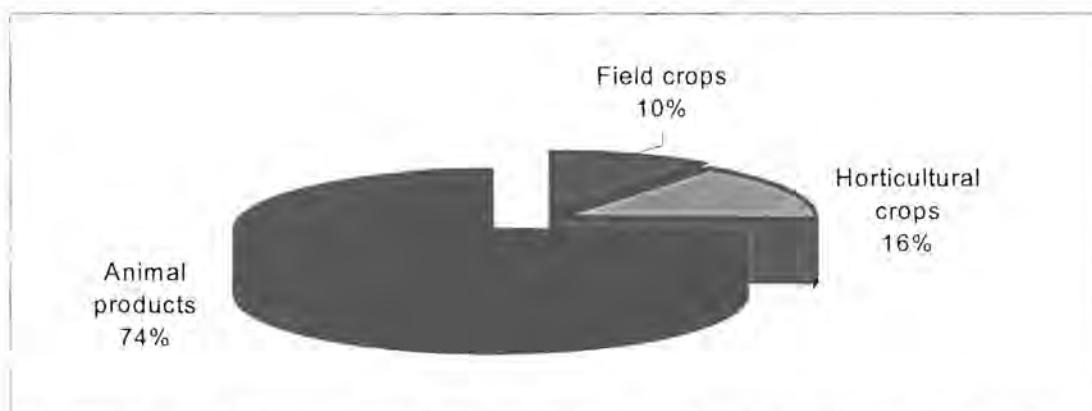


Figure 3.4: Percentage Distribution of Income Gained from Three Agricultural Sub-Sectors in the Former East Cape, 1995

Source: Adapted from Erasmus (1998), citing Directorate of Agricultural Information (1995)

An observed occurrence during the past few years has been a shift of production focus away from pure domestic production towards game farming or, in some cases, a mixture of the two enterprises. There is now a spread of game farms, game ranches and conservancies. Commercial livestock production in the East Cape is carried out on natural veld, but with mineral supplementation during times of fodder deficiency in the veld. Farmers here direct their production management at improving the herd or flock by means of selection or culling and regular entry of superior genes, i.e. breeding.

Field crop (maize, wheat and fodder) production has been consistently decreasing owing to factors such as lower profitability of maize production, financial position of farmers, the price-cost squeeze effect, withdrawal of marginal cropping land, and the erratic nature of rainfall. Citrus and vegetable production, on the other hand, continues to be the mainstay of the horticultural crop industry. The citrus crop is export-oriented with the local market also slowly gaining ground.

3.2.3.1 'Black' Farming in the Former Ciskei and Transkei

In the former homelands Ciskei and Transkei, the Xhosa practise mixed farming in three main components namely, livestock, crop production on one or two fields, and vegetable production in home gardens. The land settlement pattern, which directly affects the farming pattern, is based on the betterment planning system introduced in the homelands more than two decades ago. This system involved separation of land belonging to a village community into three categories namely, residential, arable and rangeland.

It is estimated that 87 percent of the planned area in the former Ciskei is under some form of range management. For decades the communal rangelands in the homeland areas have had to cope with a number of livestock which is more than would be recommended for similar vegetation types in the adjacent white commercial farms. Hence the problem of land degradation is rife in these areas. Part of the reason for this degradation is the lack of methods for assessing carrying capacity of livestock in the former homelands.

Livestock production in the former Ciskei and Transkei is semi-commercial. Livestock in these areas has other important functions besides a tiny contribution to the cash economy. These include draught power, milk, manure, status, investment, bride price, ceremonies and subsistence. In these areas, management of livestock is largely extensive with only one or two major forms of intervention, notably kraaling and dipping. In a few cases when there are emergencies such as drought, cattle owners supply supplementary feeding to their stock. Figure 3.5 below illustrates the relative importance of the three sub-sectors namely, field crops, horticulture and animal products in the economy of Ciskei and Transkei in terms of income contribution.

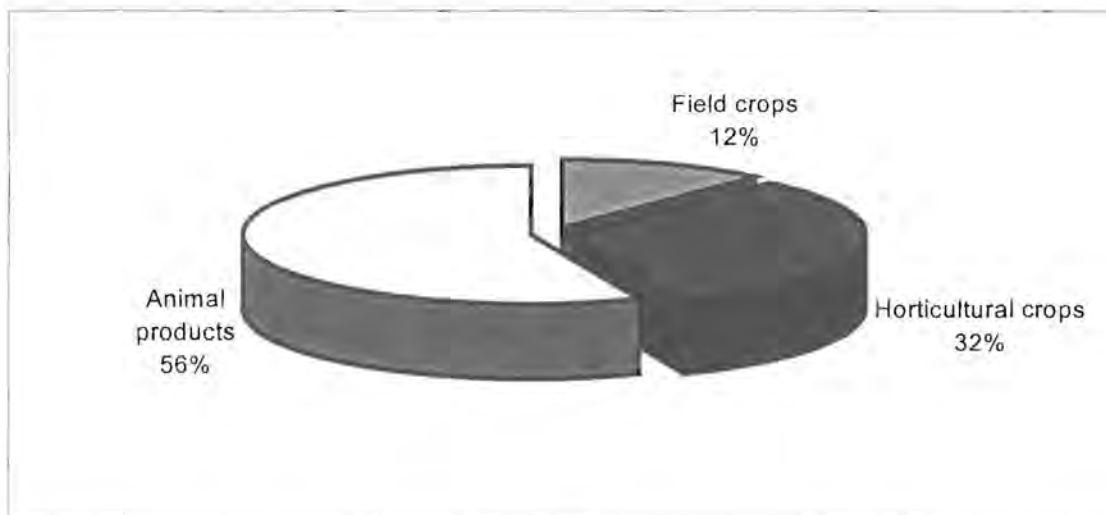


Figure 3.5: Percentage Distribution of Income Gained from the Three Sub-Sectors in the Former Ciskei and Transkei, 1995

Source: Adapted from Erasmus (1998), citing Directorate Agricultural Information (1995)



Map 3.4: The Districts in the Study Area

3.3 The Survey Area

Map 3.4 shows the area covered by this study. The study was conducted in five districts as highlighted, namely, Mpofu, Keiskammahoek, Middeldrift, Zwelitsha in the southern part of the central region (sub-region 2) and Herschel further north (sub-region 3). The first four districts fall under the former Ciskei homeland territory and the fifth district forms part of the former Transkei. Below the districts are compared with respect to some basic demographic and socio-economic indicators.

3.3.1 Socio-Economic Indicators

The first indicator to highlight is the human development index (HDI). Developed by the United Nations Development Programme (UNDP), the HDI uses life expectancy and adult literacy as an indication of people’s capacities, and income is used to suggest the opportunities available to them.

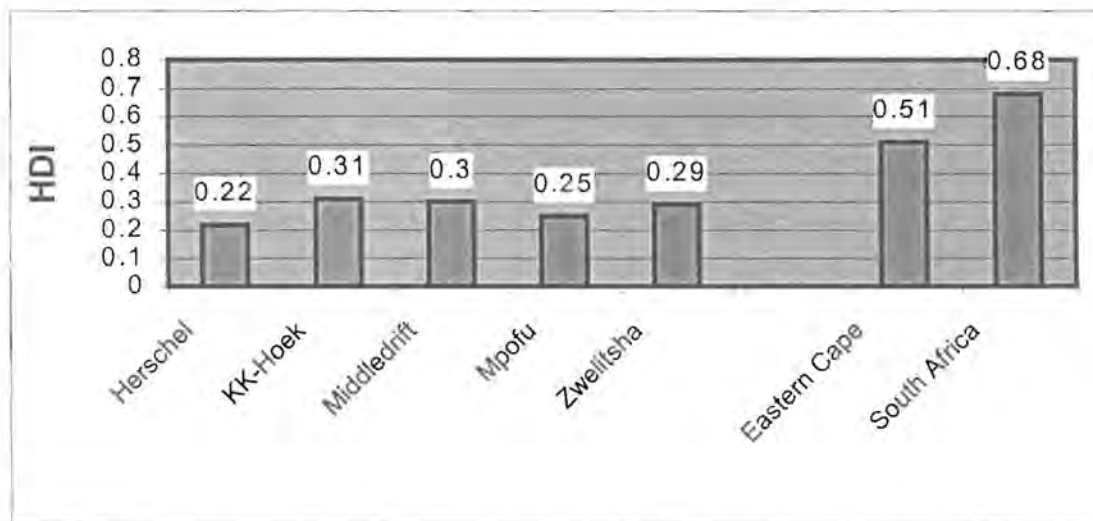


Figure 3.6: Human Development in the Study Area by District, 1991

Source: Adapted from Erasmus (1998), citing Whiteford, et al. (1995)

This is based on the premise that human development in a country is measured by people's freedom to choose and act upon their choices. Therefore in order for people to make informed choices, they must first have some basic human capacities and a reasonable range of opportunities. In Figure 3.6 an indication of the level of human development in the study area is highlighted through an inter-district comparison.

The HDI for South Africa in 1991 was estimated to be 0.68 (out of a possible 1), which falls within a medium range when compared to other countries. This figure has neither dropped nor improved according to the latest data published by the United Nations Development Programme (1999). South Africa therefore compares with countries like the Philippines, Peru and Uzbekistan. The Eastern Cape's HDI is slightly below the country figure at 0.51. This figure is comparable to that of Papua New Guinea and Cameroon. It is the second lowest figure among all the South African provinces. Only the Northern Province fares worse. According to a SALDRU (1994) survey, over 710 000 poor households or 4.1 million poor people in the Eastern Cape - which is the most sensible explanation of the low level of human development in the province (cited by Erasmus, 1998:4).

A closer look at the districts included in this study is particularly informative. The values plotted in Figure 3.6 above refer to Africans only. The HDI in the five districts studied ranges between 0.22 and 0.31. All five districts have a low level of human development among the African population—lower than Rwanda and just above the worst of all countries, Niger. These figures are considered dismal when compared to figures ranging between 0.9 and 0.96 among the white population in the Eastern Cape.

The next indicator is the level of growth of GGP from agriculture, forestry and fishing, the major primary economic sectors in the Eastern Cape province. Figure 3.7 below compares levels of growth in GGP from agriculture among the five districts studied.

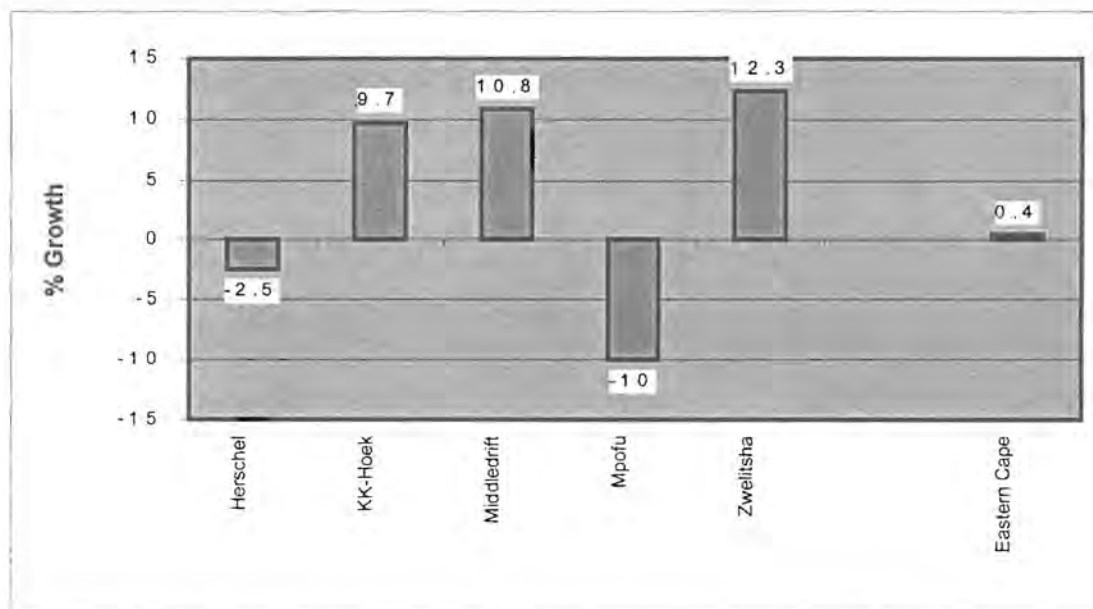


Figure 3.7: Average Annual Growth in GGP from Agriculture by District, 1980-1991

Source: Adapted from Erasmus (1998), citing Meintjies, et al. (1995)

Although the contribution of agriculture to Eastern Cape's GGP decreased due to drought and other factors, the real growth in GGP from agriculture was positive at 0.4 percent. Of the five districts included in this study, Zwelitsha had the highest positive rate of growth in GGP from agriculture between 1980 and 1991 at just over 12 percent per annum, with Keiskammahoek and Middeldrift not too far behind. Herschel pulled a disappointing showing at -2.5 percent while Mpofu was worst at -10 percent. It is interesting to note that these figures appear to correlate closely with the levels of human development in the districts. This suggests that factors affecting agricultural performance have had something to do with the depletion of development opportunities and therefore generally worsening levels of human development.

3.3.2 The Survey Area for the First Research Phase

As explained in Chapter 1, the goal of the first survey phase was to study production practices of smallholders so as to assess their comparative advantage in selected crop and livestock items. To achieve this goal, the survey had to be conducted among case study *commercially oriented* smallholders. Smallholder commercial farming in the former homelands of Ciskei and Transkei is largely restricted to large-scale irrigation, dryland and livestock projects introduced in the 1970s as part of a broader strategy to develop these areas; the rest of farming is mainly for subsistence purposes. Even though this set-up no longer exists in its original form, some farmers have remained behind on the land and continued with their farming operations. In 1996, the Eastern Cape Provincial government together with the National Department of Agriculture and Land Affairs developed a new policy for these schemes. It was decided that they should be privately transferred to land right holders and farmers. In this study it was decided therefore that the survey should be done among this group of private commercial smallholders.

Initial development took place on municipal land and land expropriated from large white farmers. Parastatal corporations promoting use of hired labor from surrounding homeland villages managed these farming enterprises. This system was later adjusted to settlement of some community members as 'project farmers' operating under the control of corporate project management (Van Rooyen, 1995). Small-scale farmers were allotted land on which to farm, but with virtually no powers of decision-making. The central management comprising parastatal officials made all the major farm management decisions. Small farmers were by and large treated as labourers in these estate-type schemes (Sonandi and Van Averbeké, 1995). The ultimate aim was to privatise the individual plots to these small farmers after they had learned the required technical skills. This was implemented in the early 1990s when the 'project farms' were made available for privatisation through a progressive process. It started out by leasing the plots out to qualifying individuals. The implementation of such projects has left only a few former homeland farmers benefiting from resulting 'pockets' of development (Richter and Tapson, 1995). These schemes have failed to address the general problem of

underdevelopment and poverty prevalent in the rural areas. They are largely viewed as unsatisfactory because of factors such as high investment and operational cost; lack of focus on independent entrepreneurship development; fiscal unaffordability; lack of impact on adjacent communities; and failure to promote overall rural development (Van Rooyen, 1995).

3.3.2.1 Background to the Establishment of the Agricultural Schemes

The commercialisation drive in the former Ciskei and Transkei was facilitated through the establishment of two parastatals, the Ciskei Agricultural Corporation (Ulimocor) and the Transkei Agricultural Corporation (Tracor). The Ciskei Agricultural Corporation was established in 1983 through the Ciskei Corporations Act of 1981. Its main tasks were overlooking planning, financing and executing all agricultural, forestry and related projects. Since then, Ulimocor has been involved in the running of pineapple, citrus, livestock, dairy, vegetables and maize projects throughout the former Ciskei on land transferred from the then 'republic' of South Africa to the former homelands, which subsequently became property of the South African Native Trust as stipulated by the Natives Trust and Land Act of 1936. By 1994, its provision of services was effected through more than 20 service centres catering for over 1700 smallholder farmers in the former homeland who were mostly based in the development schemes (Ciskei Agricultural Corporation, 1994). Services provided by the parastatal included assistance in training and extension, technical support (machinery hiring), marketing, and until 1993 management of production.

During the late 1980s Ulimocor "commercialised" its support services to farmers as a step towards its eventual withdrawal from direct operation of the schemes. Farmers then had to pay a nominal fee for services received from the parastatal. Following the political changes in South Africa, the new Eastern Cape provincial government became continuously faced with the financial burden of subsidising operations in these schemes. This eventually resulted in the government opting to completely withdraw from these schemes, thus marking the end of the parastatal institutional system in the Eastern Cape.

The commercialisation strategy in the Eastern Cape's former homelands of Ciskei and Transkei, bears some resemblance to the "commercialisation *via* cashcropping" development paradigm as applied to West African smallholders, beginning as early as 1910. Delgado (1995) identifies this as the dominant development paradigm beginning under colonial rule and intensifying after World War II. This strategy was primarily aimed at growth in areas of comparative advantage through technical assistance, extension and capital transfers from abroad. Under this paradigm, agriculture's role was limited to provision of resources for industrialisation.

Delgado (1995) notes general success of the commercialisation *via* cash cropping strategy in West Africa in the 1960s and early 1970s. In the case of the Eastern Cape and the rest of the former homeland areas from the 1980s through the early 1990s, this strategy has not been successful. The tradition of independent farming by smallholders was quite different between West Africa and the Eastern Cape in the time periods concerned. However, another main difference in the commercialisation *via* cash cropping between West Africa and the former homelands of South Africa lies in the fact that in the Eastern Cape in the 1980s, the strategy was not based on a deliberate move to exploit known comparative advantage of cash crops. Furthermore it was a top-down strategy with limited community involvement. Finally, in most cases, the farming system introduced was foreign to participant farmers (University of Fort Hare, 1997).

3.3.3 The Survey Area for the Second Phase of Investigation

For the second phase of the study one of the districts in the study area, namely Middledrift, was chosen for a more intensive focus. The survey was conducted in two of the villages in the district. The two villages surveyed differ in a number of aspects with respect to land use, infrastructure and general socio-economic characteristics. The first village, Ann Shaw, bears features that are attributed to a "small town" while the second one, KwaNdindwa, is regarded as a remote rural location. The fully electrified Ann Shaw town is situated two kilometres from the main tar road while the same road is approximately 20 kilometres from the KwaNdindwa village, which is without electricity.

The central business area of Middledrift district, which is two kilometres away from Ann Shaw, has a post-office with public telephone facilities, a supermarket and a number of food and agricultural input stores. KwaNdindwa inhabitants, on the other hand, have to travel at least 20 kilometres to get access to comparable facilities. According to the survey data for this study, an average household in Ann Shaw boasts R3, 808.30 (US \$635) worth of household assets such as televisions, radios and refrigerators compared to R1, 544.00 (US \$257) for an average household in KwaNdindwa. This indicates a significant difference in life style between the two villages. Table 3.2 below gives a summary list of some commercial enterprises in the two sample sites.

Table 3.2: Listing of Formal and Informal Commercial Enterprises in KwaNdindwa and Ann Shaw, Middledrift, Eastern Cape

Small Town Ann Shaw	Rural KwaNdindwa
<p><u>Formal activities:</u></p> <ul style="list-style-type: none"> • General dealer (food, clothing, butchery) • Supermarket • Fast food restaurant • Small café • Brick maker <p><u>Informal activities:</u></p> <ul style="list-style-type: none"> • Shebeen (liquor hawker) • Fruit and vegetable hawker 	<p><u>Formal activities:</u></p> <ul style="list-style-type: none"> • General dealer • Brick maker • Small grocery store <p><u>Informal activities:</u></p> <ul style="list-style-type: none"> • Paraffin, sweets, cigarette hawker • Fresh vegetable hawker • Handicraft hawker • Fresh-cut pork hawker • Home-sewn clothing hawker • Shebeen (liquor hawker) • Livestock (cattle, sheep & goats) seller

In other respects however, the two villages share some common features. Maize, vegetables and livestock are the main agricultural commodities produced throughout Middledrift district. On average a household has access to 0.08 ha of cropland per capita, which comprises a small backyard vegetable plot and a larger crop field situated a distance away from the main dwelling. There is no clear direction as to who administers

land issues under the current local government set-up. In the past a traditional authority headed by an area chief or a village-based headman would handle such matters.

3.4 Summary

The main aim of this chapter was to present an overview of the Eastern Cape province and a description of smallholder farming in the province and in the study area. The Eastern Cape encompasses the area formerly known as the East-Cape/Eastern province, the Border and the north-eastern Cape, as well as the former homelands of Ciskei and Transkei. During the colonial period this was an area of disputes between different groups. Since then a number of significant economic, social and political developments have taken place leading to eventual designation of the Ciskei and Transkei territories in the 1970s. The two homelands subsequently became "independent" though still fiscally dependent on South Africa. Following the 1994 democratic elections the two territories were formally reincorporated into the new South African boundaries as part of the Eastern Cape Province.

Of the nine provinces of South Africa, the Eastern Cape has the second-largest surface area and the third-largest population. It is divided into 43 districts that make up its three regions. The province is characterised by high population density, low life expectancy, low adult literacy, high unemployment, and low household income. A significant proportion of the black population lives below the poverty line. There is also a noted disparity in the distribution of income and wealth, thus negatively affecting the black population.

Only a small percentage of the land in the Eastern Cape is potentially arable. Most of the agricultural land is under grazing. In the mainly white 'East Cape' part of the province, most of the land is held under freehold tenure. In the mainly black former homeland areas of Ciskei and Transkei land is held under freehold, quitrent, communal and trust tenure. Livestock is the principal agricultural sector in the province.

The survey area for this study covers five of the 43 districts in the province namely, Mpofu, Keiskammahoek, Middeldrift, Zwelitsha and Herschel. All the five districts have a low level of human development - dismally lower than that of the adjacent white districts.

The adjacent Middeldrift district was the main focus of the second phase of this research. The survey was conducted in two villages, namely Ann Shaw and KwaNdindwa. Ann Shaw is considered as a typical "small town", while KwaNdindwa is a remote location. Quite a considerable amount of non-agricultural commercial activity takes place in both villages.