Reviewing 15 years of resource poor small-scale agriculture in South Africa: Is there any way forward?

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Abstract

This paper reviews the various attempts at fostering resource poor small-scale agricultural development in South Africa from 1994 to the present and discusses some of the constraints encountered. Despite the lack of a concerted policy for support and development of this group of farmers and given the incomplete datasets about this group and their number, an attempt will be made to define them and their circumstances. By use of case material and observations over the past 15 years some suggestions are made in order to illustrate a way forward. As a result of the inadequate focus on resource-poor farmers they need to be placed more specifically on the agenda of government agricultural and poverty alleviation strategies. The primary focus of such strategies is the food security needs of this group rather than on their immediate contribution to the economy.

1. Introduction

During the period leading up to the democratic elections in 1994 there seemed to be a belief that as soon as the homelands were reintegrated into South Africa there would be an overwhelming number of Black farmers who required the existing support of the previously white commercial sector oriented research and extension services. The myth, underlying this belief, was that Black farmers in the homelands were historically commercial farmers whose inability to perform adequately was curtailed by the Apartheid legislation. Their active exclusion from the mainstream commercial agricultural sector and its state support services was believed to be the reason why these areas had not produced successful commercial farming operations under Apartheid. The solution was considered to be the introduction of modern agricultural technology. Subsequently, following the elections of April 1994 the state and parastatal research and extension services were given the mandate to transfer technology to the farmers in these areas in order to enable them to fully develop their commercial potential and to enter into the national and international markets. Except in a few rare cases, this has not materialised. This discussion considers why this is the case. In order to do so it is at first necessary to look at South Africa's existing agricultural landscape and the historical path of agriculture in the homelands and the current agricultural actors in those rural areas. It is then argued that despite initial attempts to address the needs of resource-poor farmers it was soon considered more realistic to focus on the more commercially focused members of this group, those who are now referred to as emerging farmers. Following a discussion of the support provided to date and the constraints encountered it is concluded that a pro-poor agricultural approach is required to address the plight of the resource-poor farmers.

2. South Africa's Agricultural Landscape

There are approximately 100 million hectares of agricultural land in South Africa of which only 14 million receive sufficient rainfall for viable arable farming. The remainder of the land is used for extensive grazing (72 million hectares), nature conservation (11 million hectares), forestry (1 million hectares) and 'other' (7 million hectares) (Feynes and Meyer 2003: 24). Of the available

arable land between 1.35 million (DoA 2002) and 1.6 million hectares (Nell and Van den Berg 2001) are irrigated and in 2001 produced about one third of the total agricultural output.

According to the 2002 agricultural census (Stats SA 2005), there are about 46 000 commercial farm units in the country, the overwhelming majority of which are white-owned farmers in former 'white rural South Africa', i.e. the 87% of rural land excluding the former homelands. In contrast and despite the land reform initiatives since 1995 the estimated 3.4 - 4.8 million smallholders are predominantly settled in the former homelands and produce on the remaining 13% of the agricultural land or 17 million hectares (Feynes and Meyer 2003: 24). Ortmann and Machethe (2003) suggest that there are approximately 240 000 Black farmers in South Africa who provide a livelihood for more than a million of their family members, and are thus probably more commercially focused. A 1998 survey by ESCOM indicated that there were approximately 2.1 million small-scale and emerging farmers in South Africa (Coetzee 2003). The NDA (2001) has estimated that there are approximately 3 million small-scale farmers who produce food primarily to meet household consumption needs. The results of the 1997 Rural Survey and the ongoing Labour Force Survey suggest that this figure is more likely to be around 4 million (Aliber 2005). Given this information we can assume that there are about 4 million Black farmers who produce food primarily for household needs and about 240 000 Black farmers who are more commercially focused. We can also assume that most of these Black farmers are located in the former homelands.

Land holdings in the former homelands are generally very small (Groenewald and Nieuwoudt 2003: 267, 275) and are mainly used for semi-subsistence purposes. Most small-scale farmers are aptly described as semi-subsistence for they do not produce enough to meet all their household needs, even in terms of food. Most rural households purchase the largest proportion of their food. According to Feynes and Meyer (2003) the majority of rural inhabitants in the former homelands are the aged, women and children who reside on land more for social security purposes than for agricultural production and they estimate that arable land in the former homelands is between 11% and 16% of the total area. They further stress that cultivation of this land fluctuates significantly with between 40% and 80% being cultivated in any given year. The Water Research Commission (1996) noted that only 3.7% or 47 486 hectares of the total irrigated land in South Africa is used for food plot and small-scale farming on irrigation schemes across the country and typically in the rural areas of the former homelands. Total irrigation potential for these former homeland areas is estimated at approximately 200 000 hectares and while many are situated in the eastern part of South Africa which obtains significantly better rainfall than the western parts the steep terrain reduces the amount of arable land available and this is further exacerbated by the increases in soil erosion brought about by this terrain (Feynes and Meyer 2003: 26). While the veld grazing in these areas is of high potential, current stocking exceeds the carrying capacity of the land in most of these areas. Subsequent overgrazing has severely affected the quality of arable land and in many areas it is no longer suitable for crop production (ibid).

3. Agricultural underdevelopment in the rural areas

Following the rise of industrialisation in South Africa, along with subsequent accumulation and dispossession of rural land, the promotion of separate development policies and the establishment of quasi-independent homelands, agriculture has always been a safety net for the majority of the rural poor. Beinart and Delius (1986:1) describe the former homelands as areas "...in which even those with plots rarely scraped more from the land than an inadequate supplement to migrants' wages." Agricultural activities were largely carried out by household members remaining in the homelands while their spouses and family members migrated to work

in the towns and on the mines and farms. The strong economic contribution made by Black farmers in the 19th century had largely been curtailed by the 1930s (Beinart 1994; Beinart, Delius and Trapido 1986). As late as the 1920s African small-scale farmers in the reserve areas (later to become the homelands) and on white-owned farms produced 25% of maize and owned almost half the cattle in South Africa (Beinart 1994:33). In the 1850s the former Transkei area was exporting food and in the 1930s the former Transkei was only importing 10% of its food needs (ibid.); a situation greatly changed from today.

During the 19th Century Lesotho provided resources and agricultural produce to the Cape Colony and the Boer Republics. In fact it was a main exporter of wheat and maize during the latter part of the century 19th Century (Wilson and Thompson 1982). However, since the 1970s it has been classified by the World Bank and the Organisation for Economic Cooperation and Development (OECD) as a Least Developed Country (LCD), attributed with having a traditional or peasant economy. However, given the agricultural success of Lesotho a century before, there is nothing traditional about the current economy. Lesotho's agricultural deterioration first started in the latter part of the 19th Century when its prime agricultural land south of the Caledon River, in the current area of Lady Grey, Sterkspruit (Herschel District) reaching as far as Aliwal North, was expropriated by the British colonial power and the Boer Republics following the latter's independence and the subsequent wars with Moshoeshoe (Bundy 1980; Wilson and Thompson 1982). This expropriation meant that the kingdom of Lesotho lost its prime arable land. Conquest and dispossession had a similar effect on other areas of South Africa (Beinart 1994).

While a number of rural areas in South Africa were prosperous during the 1850s they are no longer so and areas such as the former Transkei are currently cited as being amongst the poorest in South Africa. The current situation is a result of numerous factors. Evidence from a range of scholars (Historians, Social Anthropologists and Economists) indicates that interaction with, rather than exclusion from, the national and global economy resulted in the existing situation (Marks and Atmore 1980). It is the nature of this interaction that is important determinant, as evidenced by the work of various scholars such as Bundy (1980), Slater (1980), Wolf (1982) and Beinart, Delius and Trapido (1986). Factors that have contributed to the current status quo of smallholder black farmers in South Africa include the following:

- The direct dominance and indirect subjugation of the local people encountered as a result of policies of colonialism, and more recently neo-colonialist or imperialist exploitation:
- Previous state policies relating to apartheid and separate development;
- Current government policies that ignore the historical situation and which seem to be based on the illusion that these poor areas still contain a strong group of agriculturalists who remained up until 1994:
- Overpopulation in rural areas and diminished resources;
- Erosion and the expropriation of land;
- Climate change;
- Declining interest in agriculture amongst the youth;
- The HIV/AIDS pandemic which directly affects a household's ability to produce agricultural produce and often removes the primary source of income;
- The persistence of educating research and extension personnel in outdated principles and quick-fix solutions.

The people that we most often encounter in the former homelands are by and large those elderly men and women who are concerned with producing food for household consumption, occasionally selling some surplus if this is available. They are still producing crops to

supplement the income derived from the remittances of migrants and old age pensions. In most areas these people are poor and are not the potential commercial farmers that it was assumed were residing in the homelands before 1994. Consequently, their poverty and circumstances make it difficult for them to make use of the largely spillover technologies provided by the state and parastatal research and extension services since 1994. Similarly, their reasons for farming are much different to those of commercial producers. In these homesteads agriculture provides a safety net.

4. Defining Small-Scale Producers in South Africa

Because most of the surveys conducted to date have not focused specifically on Black smallscale agricultural producers no comprehensive statistics on African, Coloured and Asian agricultural producers in South Africa exists. The oft cyclical nature of their activities also complicates statistical accuracy. Consequently, we rely on the estimates derive from the various national surveys listed above to generate some understanding of this group. Our understanding is further informed by the numerous smaller and often purpose specific studies that have been done across the country by various provincial departments of agriculture, science councils, universities and a handful of non-governmental organisations (NGOs). While this lack of comprehensive information for this sector is a concern the available data permits a very simple and general picture of farmers¹ in South Africa, irrespective of race or gender, generally falling somewhere along three axes2: size of land and farming operation; access to resources and inputs; and primary purpose of production. Firstly, farmers fall somewhere on a continuum between large-scale and small-scale. Secondly, they fall along a continuum of resource-rich and resource-poor. And thirdly, they fall along a continuum of commercial production and semisubsistence³ production. This means that a small-scale farmer might be resource-rich, resourcepoor or somewhere in between (resource-medium). Such a farmer could also be either involved in commercial production, semi-subsistence production or somewhere in between the two (producing primarily for household consumption but selling any surplus where possible). Furthermore these characteristics are all relative. Movement within or across these categories is not a fact of evolution, progress or a result of modernisation. Rather, location within any category and mobility to another is determined by an individual farmer's physical environment, socio-economic and biophysical circumstances, personal choices and a host of external factors, including political, agricultural and development policies. Most farmers in developing countries are identified as being resource-poor (Chambers et al. 1989), but in South Africa farmers fall somewhere within a grid composed of all three of axes we described. For ease of this discussion Black South African farmers are categorised into small-scale, communal and emerging farmers.

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¹ "Farmers" include peasant/family smallholders, pastoralists, forest dwellers and artisanal fisherfolk among others. The term "farming" is used in a wide sense to refer to the activities of all people who produce and/or harvest from plants, animals and aquatic resources.

² Other important criteria would include age, gender, education level, equity aspects, infrastructure, input and output markets, etc. For the sake of simplicity we confine ourselves only to three criteria.

³ Subsistence is used incorrectly in the South African context as very few farmers to whom this term is applied rely exclusively on agriculture to subsist. Table 1in this section, derived from the Labour Force Survey, provides a picture in recent trends of those Black South Africans who are engaged in some form of agricultural activity. Migrant and wage labour, state pensions and grants, remittances and other livelihood strategies enable such households to survive. To this end agriculture supplements household income/food supply. In its pre-1994 form, agriculture in the homelands and coloured rural reserves was shaped by European colonialism and later a manifestation of the apartheid migrant labour system and separate development policies – in essence a consequence of industrialization and the political economy emerging in South Africa during the late 19th and 20th Centuries.

Based on the various surveys and micro studies small-scale farmers are those who have access to very small pieces of land sometimes only a couple of hundred square metres, such as home gardens and food plots, they could possibly access between 3 and 5 hectares. They are responsible for own financing and marketing. Their use of external inputs is very limited and predominantly they rely on local inputs including seed, manure and green fertilisers. Those involved in livestock husbandry might only access village commonage and share this access with other village residents. Communal farmers tend to be a subgroup of small-scale farmers and generally farm on small-sized projects initiated or supported to varying degrees by the provincial departments of agriculture's extension services. They tend to farm their own small plots on these projects and sometimes get help from the extension services in terms of technology transfer, access to inputs such as plant material, agrochemicals and irrigation. Often this support is inappropriate due to local natural and other resource constraints (Hart and Vorster 2007). Occasionally they might get local market access through the extension service. Most of these groups are dominated by females and the elderly, and generally receive technology support in the form of conventional inputs and practices.

Emerging farmers are those who produce on farmland that is larger in scale - possibly 20 to 100 hectares. They might be land redistribution and CASP beneficiaries or they might not. A few may have received farmland as a result of nepotistic practices during the Apartheid era. The main distinction is scale of operation, greater emphasis on external inputs and intention to sell the bulk of their produce. Often they are supported by state, semi-state or private sector organisations for technical (and more recently business) support, inputs, finance and market access. Clear ownership of land makes access to credit easier and better resources enable the use of conventional technologies.

5. Current Small-scale Farming Trends

Whilst not focusing particularly on agricultural production or on the rural landscape the introduction of the Statistics South Africa (StasSA) bi-annual national Labour Force Survey in September 2000 provides some interesting information regarding individuals' reasons for engaging in agricultural activities. This information is provided in Table 1 below. From 2000 to 2004 the survey distinguished between urban and rural people. From 2005 onwards urban people engaged in agriculture were not distinguished from their rural counterparts. During the period of the survey the sample of respondents who were engaged in any form of agriculture ranged from around 3.4 million households to 4.8 million people (specifically those 15 years or older), encompassing roughly 2 million households. Over the seven year period from September 2000 until September 2007 the survey illustrates some interesting trends.

The number of people engaged in agriculture as the main source of household food supply has decreased significantly, from 33% to 8%, reaching a low of 5% in September 2003. Therefore, very few people continue to rely on agriculture as a main source of household food. On the other hand those who engage in agriculture to derive an extra source of household food has increased from 55% to 88%, reaching 88% in March 2004 and dropping to 81% in September 2007. This peaking and then decline is more clearly represented in Chart 1 below and might reflect the manner in which people make decisions on when to engage in or disengage from agricultural production. Some possible reasons for these decisions might be a new source of off-farm income, death of the person responsible for production, loss of labour and time for production, loss of alternative or previous sources of income along with a host of other reasons. The LFS does not look into the reasons and merely provides the trends. In his analysis of agricultural transition trends in four provinces Aliber (2005) speculates that the movement from

agriculture as a main source of food to an extra source of household food seems to be associated with an increase in household income, in particular from social grants. Additional non-farm income probably means that households can buy more of their food requirements. Other studies (Adey 2007; Hart and Vorster 2007) suggest that some pensioners use part of their pension to purchase inputs, while others may stop farming if both senior household members have pensions and the household size is small.

The number of people engaged in agriculture as the main source of household income has decreased slightly from 3% to 2%. Few individuals rely on agriculture as a main source of household income. Those people engaged in agriculture as an extra source of household income has fluctuated significantly in number during the period, moving from 5% in September 2000, dropping to 3% for a number of years and then rising to 6% in September 2007.

The number of people engaged in agriculture as a leisure activity or hobby has followed a similar pattern, moving from 4% to a low of 2% and then returning to 3% in September 2007.

It is clear from the LFS that since September 2000 until September 2007 more than half of those who practised agriculture did so to derive an extra source of food and that this figure has generally followed an upward trend from 55% in September 2000, reaching 81% in September 2007. The survey also indicates that relatively small percentages of Blacks who practice agriculture do so as a main or extra source of income. While these percentages were small at the outset they have fluctuated over the seven year period. Unfortunately, reasons were not sought for these trends. Many of the trends illustrated in the LFS coincide with the findings of micro studies on small-scale agricultural practices and purposes (Adey 2007). It is evident that involvement in small-scale agriculture and the purpose of this involvement fluctuates depending on households' circumstances.

Table 1: Reasons that Black households to engage in agricultural activities

Survey Dates	As a main source of food for the household	As an extra source of food for the household	As the main source of income/ earning a living	As an extra source of income	As a leisure activity or hobby
2000,Sept	33%	55%	3%	5%	4%
2001,Feb	24%	67%	3%	4%	3%
2001,Sept	19%	73%	2%	4%	2%
2002,Feb	14%	80%	2%	3%	2%
2002,Sept	11%	81%	2%	3%	2%
2003,March	11%	82%	1%	3%	2%
2003,Sept	5%	87%	2%	4%	2%
2004,March	6%	88%	1%	3%	2%
2004,Sept	8%	82%	3%	4%	4%
2005,March	7%	85%	1%	3%	3%
2005,Sept	15%	77%	2%	3%	3%
2006,March	8%	85%	2%	3%	2%
2006,Sept	6%	83%	2%	5%	4%
2007,March	9&	82%	2%	5%	2%
2007,Sept	8%	81%	2%	6%	3%

Source: Labour Force Survey, Statistics South Africa

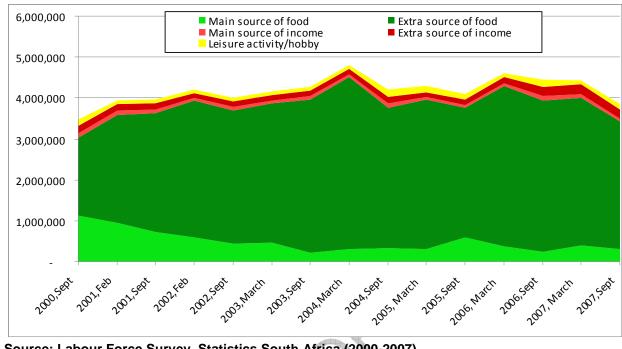


Chart 1: Area Chart of Reasons that Black households to engage in agricultural activities

Source: Labour Force Survey, Statistics South Africa (2000-2007)

As for who are these people practising agriculture at some scale, it is worth pointing out the gender dimension. Chart 2 shows trends in the numbers of Black women and men over the same period as in the previous chart, again based on the Labour Force Survey. The chart reveals two things: first, there are approximately 50% more Black women engaged in agriculture than men; and second, women's and men's participation in agriculture have been growing at roughly the same rate.

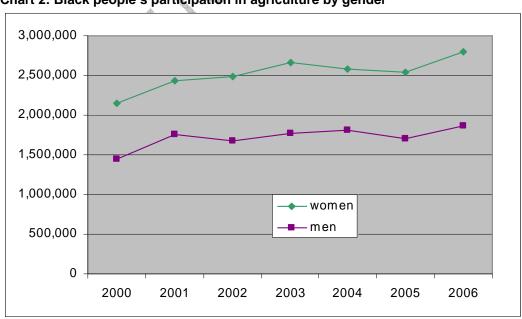


Chart 2: Black people's participation in agriculture by gender

Source: Labour Force Survey, Statistics South Africa (2006)

Chart 3 takes this one step further by comparing Black women's and men's main reasons for engaging in agriculture, based on the LFS data from September 2006. What it shows, not surprisingly, is that the large gap between the overall numbers of women and men engaged in agriculture can be largely attributed to the much larger number of women who practice agriculture as a means of deriving an extra source of food. In respect of the other possible main reasons, women and men are largely on a par, and this includes those who practice agriculture as a means of securing an extra or main source of income.

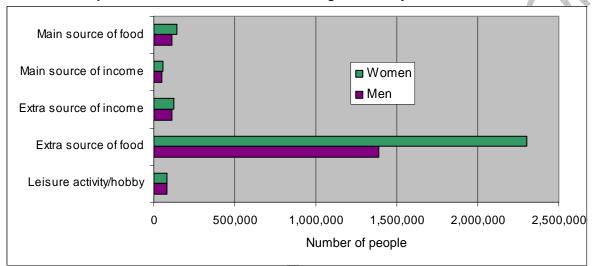
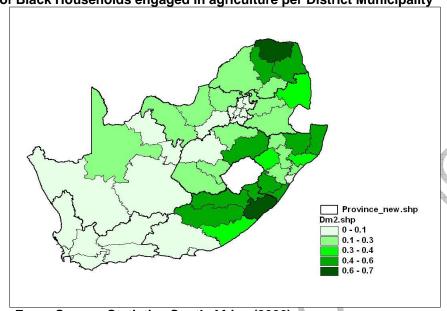


Chart 3: Participation of Black women and men in agriculture by 'main reason'

Source: Labour Force Survey, Statistics South Africa (2006)

Map 1 indicates the percentage of Black households engaged in agriculture per municipal district and shows that between 30 and 70% of these are found in the former homeland areas with the bulk being in the former Venda, Transkei, Ciskei, QuaQua and Zululand. This reinforces the notion that many people in these areas still engage in agriculture to supplement income from other livelihood sources.



Map 1: Share of Black Households engaged in agriculture per District Municipality

Source: Labour Force Survey, Statistics South Africa (2006)

Recent research in southern and South Africa, supports the contention that rural livelihoods are generally diversifying away from agriculture due to numerous constraining factors, such as: labour capacity being eroded by HIV/AIDS and out-migration; poor agricultural knowledge transfer between generations, also partly due to HIV/AIDS and a lack of interest in agriculture by the youth; changes in gender relations and cultural changes; the pursuit of alternative income generating activities perceived as more effective; lack of access to agricultural inputs; lack of financial support; poor agricultural returns and adverse biophysical conditions; lack of extension support; competition between the formal and informal agricultural sectors; (e.g. Bryceson 1996; Bryceson 2002; Misselhorn 2005; Misselhorn 2006; Bryceson and Fonseca 2006; Aliber et al. 2006; Drinkwater, 2005). The implications of the Labour Force Survey are that very few of South Africa's Black farmers can actually be labelled as subsistence farmers, i.e. households that satisfy household needs through agricultural activities. Even fewer Black farmers can actually be termed as emerging farmers. In a recent micro-study of two settlements in Limpopo Province it was evident that for most households agriculture is one of a number of livelihoods and commonly supplements the household food supply by allowing cash to be spent on other food and non-food goods and services, rather than agriculture generating a cash income for the household (Hart and Vorster 2007). A recent study by Kirsten et al. (2007) provides a valuable analysis of the role of small-scale agriculture in poverty and food security and suggests that while many households participate in transitory or cyclical agriculture (Coetzee 2003), agriculture has a dual role in livelihoods strategies, providing a buffer against poverty for the most poor, while also being used as a wealth creation strategy by households with higher incomes. The former role is generally the contribution most overlooked and under supported by policy makers, although practised by most resource-poor farmers. The later role is the most supported although often inadequately so.

6. Support and Constraints to Small-Farmer Development in South Africa

South Africa's agricultural sector is complex. Vink and Kirsten (2003:3) indicate that the three most important features are at present: (1) its dualistic nature (vibrant commercial and

fluctuating semi-subsistence sectors); (2) the various attempts to deracialise the sector from 1994 through Land Reform initiatives of the Settlement/Land Acquisition Grant (SLAG) introduced in late 1994, Land Reform for Agricultural Development (LRAD) introduced in mid-2001 and Agricultural Black Economic Empowerment (AgriBEE) formalised in 2006; and (3) the process of deregulation in commercial agriculture. Unfortunately, these features often exacerbate rather than alleviate the plight of rural inhabitants and resource-poor small-scale farmers in particular. This group faces a number of constraints specific to residing in rural areas which curtail development and make integrated support for them problematic. Despite this, these processes continue as they are believed to be beneficial to the so called 'emerging' group of Black farmers.

Adey (2007) has suggested that from 1994 to 1999 the Mandela government provided limited support to resource-poor small-scale farmers and initially they were the ANC government's focal point. However, once it was realised that the provision of land and the transfer of technological solutions was not going to improve their situation attention shifted to the better resourced emerging farmer group. This shift in policy and subsequent strategy is clear if one examines the 1995 Agricultural White Paper (DoA 1995) and the 2001 Strategic Plan for South African Agriculture (DoA 2001). In the former document resource-poor small-scale farmers are mentioned regularly throughout the document while in the latter document they are not mentioned at all. Rather the emphasis is on the emerging farmer group who are similar to commercial farmers and can therefore make use of existing support. As we have seen in the previous section this appears to be a very small group in comparison to the number of resourcepoor small-scale producers. At present the emphasis of state, parastatal and private sector support is predominantly focused on commercial and the 'emerging' commercial sector as opposed to spreading these resources so they reach as many resource-poor farmers as possible. This latter approach would be a concerted effort to promote food security and agricultural production as a sustainable livelihood (Adey 2007:17). It can be argued that emerging farmers are far easier to assist than the resource-poor farmers. They can make use of the conventional technologies and support currently provided by the research and extension services with very little adjustment to the technologies and the supporting organisations. The resource-poor farmers, on the other hand, are in situations which prevent them from making adequate use of the existing technologies and support. In fact more effort is required to support this group as most are under-resourced, situated in marginal areas and semi-arid zones and consequently the transfer of technology alone is inadequate. Support for these farmers is complex and requires an integrated approach. Building on what they are already doing seems to be vital to adequate support. What follows is a review of the support provided to Black farmers (both resource-poor and emerging) during the past fifteen years and the broader constraints experienced by these farmers.

6.1 Government support

Many of the policies and programmes aimed at deracialising the agricultural sector and supporting Black farmer development have not had the desired effects as they tend to overlook most small-scale producers. Low investor confidence in agriculture is a result of many factors. For small-scale farmers this is often a result of inadequate, ineffective and inefficient service delivery from government agencies such as extension and research (Ortmann and Machethe 2003). In some areas of some provinces the extension services are ineffective. In other areas the type of technology that is transferred is unsuitable given the socio-economic and agroecological circumstances of the resource-poor small-scale farmers making such extension support ineffective (Stoop and Hart 2005). Similarly, no single institution currently takes responsibility for small-scale farmer market access. At present this is loosely shared amongst some organs of the NDA and lacks overall coordination (Makhura and Mokoena 2003).

6.1.1 Land reform and support programmes

Despite good intentions the initial SLAG and its replacement the LRAD programme has not really benefited small-scale farmers and the rural poor. As Ortmann and Machethe (2003:48) point out "... government policy is in favour of creditworthy land reform projects, and makes larger cash grants available to emerging farmers and farm workers to finance land or equity (shares) in established farming operations." In essence this policy is not supportive of resourcepoor farmers in South Africa who are amongst the poorest in the agricultural sector. Even with the introduction of the Comprehensive Agricultural Support Programme (CASP) in 2004 agricultural extension services in South Africa have a mandate to work with groups rather than individuals. The implication of this is that the resource-poor small-scale farming households (the majority of rural farmers) are generally ignored in favour of providing services to emerging farmers and selected land reform projects, especially those that appear to be financially viable. Some limited support is provided to communal vegetable gardens. However, working with groups is often fraught with difficulties such as political capture by the elite, free riding and diverse motivations for participating in the group suggesting why many of these projects are short-lived and membership extremely fluid. Comprehensive support that includes credit, infrastructure access to input and output markets and technical support seems to work in cases where emerging farmers are targeted and all the necessary support is made available. To date there has been a lack of targeted programmes that focus on the resource-poor small-scale farmer despite guiding information being increasingly available through various micro surveys and case studies. There is a need to select and direct support services to active small-scale farming communities and individuals. Such support must be appropriate to their socio-economic and agroecological circumstances.

6.1.2 National Agricultural Research System

Even restructuring of the National Agricultural Research System (NARS) in South Africa has not made significant impact on resource-poor farmers. In fact it has had a seemingly negative impact on the sector as a whole (Liebenberg and Kirsten 2003). While government set itself the objective to increase agricultural research from 1% in 2003 to 3% of agricultural GDP, Liebenberg and Kirsten (2003) argue that the fragmentation of the South African NARS over the past 20 years and the way in which it is currently funded and structured is a serious constraint to effective agricultural research and the promotion of economic growth across the entire agricultural sector. The change in funding strategies has reduced core funding for the science councils and brought about new funding sources, both government and private sector, often with the consequent shift away from primary agricultural research towards areas such as biotechnology and transgenic crops. Associated with changes in funding is the reduction in research capacity at science councils. New funding sources have also introduced the thorny issue of intellectual property rights and a seeming shift away from research as a public good. Consideration should be given to providing low-input and hence low-cost technology support to resource-poor small-scale farming households that farm in order to supplement their food requirements and to those individual farmers intent on moving towards commercial production. However, much of the NARS focus still remains on developing high cost and high-input technologies more suitable for the commercial and emerging farming sector. Consequently, appropriate technologies are not reaching resource-poor farming households. Greater emphasis on these technologies could improve the productivity of these households, enabling them at least to produce more food for household consumption, thereby reducing income expenditure on food.

6.2 Private sector support

While private sector support (from seed companies and cooperatives) also tends to focus on commercially viable agricultural actors, specifically those termed emerging farmers, unlike government it focuses on individuals. In doing this the private sector generally overlooks resource-poor small-scale producers in favour of the financially viable emerging producers. Private sector companies, such as Monsanto, say that their aim is to increase the market share of their products and they do this by organising comprehensive support (technology, inputs, finance and output markets) for commercially viable emerging farmers. The intention is that these farmers will become self-sufficient after a period of four to five years and will continue to purchase seeds and other inputs, increasing the companies' market share. They point out that attempts to support small-scale farmers are difficult as they engage in farming for diverse reasons and generally favour low-cost and low-input practices as a result of their poverty and resource constraints. Consequently, they are typically unreceptive to more expensive technologies and inputs such as transgenic crops, which when introduced on their own and without cognisance of the strategies employed by small-scale farmers are largely unsuitable. The state of flux and lack of resources common to resource-poor farmers works against their support needs and discourages private sector support.

6.3 Common constraints

Low productivity of small-scale farming is due to many diverse reasons, including household circumstances and motivations for engaging in agriculture (Aliber 2005; Stoop and Hart 2005); lack of tenure security; lack of reliable and effective farmer support services such as output market, trade and institutional policies, finance and extension, and inadequate access to the factors of production.

Uncertain property rights, associated with communal land ownership, restrict the development of necessary agricultural infrastructure, such as irrigation. Similarly, traditionally occupied or communal land cannot be alienated and thus cannot be used to provide collateral for bank loans. The result is a decrease in productive farming and increase in land degradation. Roth and Haase (1998) argue that land tenure security is necessary for economic development but creative strategies have sometimes overcome this hurdle. In the sugar industry Umthombo Agricultural Finance provides loans and financial services to economically viable emerging sugar growers (Bates and Sokhela 2003) doing away with the need for land as collateral for loans. However, no such alternative is available to the resource-poor semi-subsistence producers, who produce food for consumption rather than commodities that can be sold. They are not linked to mainstream producer or support organisations. Lyne and Graham (2001) stress that improved land tenure security would strengthen incentives to invest and enable an efficient farmland rental market, freeing up unused but potentially productive land. However, land tenure and access alone is not always a problem to small-scale production. In a recent study in the Eastern Cape (Fraser et al. 2003) it was uncovered that even when small-scale farmers had access to crop land but lacked access to implements and other resources they rather concentrated on home gardens to make ends meet. Their poverty prevented them from having the necessary resources to farm the large tracks of land they accessed and they could not afford the associated risks and inputs, even when resources were pooled amongst five households. Thus they concentrated on home gardens in order to provide some measure of food supplementation.

Risky crop production is a result of South Africa's climate, the relative scarcity of water in most areas and the low potentially arable land available to small-scale producers (Ortmann and Machethe 2003). Their poverty further exacerbates the situation preventing them from overcoming these circumstances by purchasing the costly inputs required or making long term investments. Consequently, they engage in more intensive and diverse practices and crops in

order to reduce risk while striving for a measure of food security for the household. Such households also diversify their sources of livelihoods and income in order to manage their risk (Coetzee 2003). Whiteford (2007) has suggested that only about 5% of income is typically derived from agriculture. Consequently, off-farm income is sought and is part and parcel of what it means to be a resource-poor small-scale farmer in South Africa. Most resource-poor smallscale or semi-subsistence farmers in South Africa tend to diversify their income and livelihood sources where possible; this is a strategy to spread and manage risk and is a buffer against poverty. While some livelihood and income might arise from agricultural production and the exchange of produce for other products or services a greater percentage of income is earned from other sources such as remittances (including social grants and migrant labour contributions), purchase and sale of non-agricultural goods - especially consumables such as food, beverages and paraffin, the renting of animals for traction, sale of labour and off-farm fulltime and seasonal employment in rural towns or on commercial farms (Hart and Vorster 2007). Livelihood diversification has the unfortunate consequence that these small-scale producers are not considered to be 'real' farmers and don't attract the scarce support that is available from state, parastatal and private sector.

6.4 Institutional constraints

The involvement of many resource-poor smallholders in value-added chains has been curtailed by institutional and resource constraints. Inability to access necessary resources means that crop quality and quantity cannot be guaranteed. Removal of these constraints is likely to make them more productive and to enable those who so desire to link up with various value-added chains. Some successful agreements have been conducted in the sugar, cotton and forestry sectors in attempts to overcome these constraints (Ortmann and Machethe 2003). In the sugar sector and integrated system of various institutions and support services was established to support emerging cane growers in KwaZulu-Natal, Eastern Cape and Mpumalanga provinces (Bates and Sokhela 2003). This type of support allows emerging producers to take advantage of preferential trade agreements that have been established with a number of countries. Possibly, for resource-poor small-scale producers institutional structures are required that can more effectively link communities identified as active in farming with good agricultural extension, as a first step. The establishment of associations between small scale and commercial farmers so that there can be the sharing of information and resources is also an important option. Research by Hendriks and Msaki (2006) showed that farmers forming part of an association generally do better in terms of food diversity, intake and generating income than those that do not. At the same time it will be critical to invest in encouraging the return of rural youth to agricultural production, and in making sure the institutional and infrastructural support is in place to make it attractive and sustainable. According to Ngqangweni and Hendriks (2003:99) increased agricultural production is unlikely without increased government investment in public goods.

6.5 Inadequate rural infrastructure

Under investment in rural infrastructure, such as roads and transport and communication networks poses a serious threat to all types of small-scale agriculture. Access to both input and output markets are seriously curtailed by poor rural infrastructure. This increases small-scale farmers' production and transaction costs, lack of knowledge and consequently reduces productivity and profit. Most small-scale farmers do not own transport and must use infrequent and expensive taxi services to access markets; where these exist. Alternatively they must hire vehicles from neighbours at exorbitant costs. Similarly, under investment results in a lack of suitable storage facilities situated within a reasonable distance of small-scale producers; currently crops must be transported over long distances in order to arrive at suitable storage facilities. It also means that produce diminishes in quality when transported to the centralised National Fresh Produce markets (Makhura and Mokoena 2003). A lack of communication

technology, particularly that providing market information, implies that small-scale farmers are at a disadvantage in the recently deregulated and now highly competitive market. Investment in rural infrastructure is required so that transaction costs for both services and technology are reduced; this will increase their competitiveness and bring about better prices for small-scale farmers.

6.6 Global factors

Global competitive pressures affect most commercial farmers but also affect small-scale producers who are often faced locally with the lower produce prices as a result of increased availability of surplus produce that has been dumped in South Africa by developed countries which actively subsidise their farmers, pushing down product prices for local producers. Rural consumers may well benefit from lower prices and this may be a reason why rural households regularly engage and disengage from their agricultural activities. The unlevelled playing fields brought about by the General Agreement of Tariffs and Trade (GATT) and the formation of the World trade Organisation (WTO) make it difficult for all farmers to enter into the global and often the local market. Many African and South African farmers are small-scale and the WTO Agreement on Agriculture tends to emphasise large-scale commercial farming rather than smallscale farming (Makhura and Mokoena 2003); resource-poor farmers do not feature in this highly competitive arena. South Africa's classification as a middle income country prevents local smallscale farmers from benefiting from the preferential treatment that the international community offers to some other African countries (ibid). Consequently, local small-scale producers must compete with the resource rich commercial farmers and produce high-quality and value-added products required by international markets, even though they do not have the resources to do so. Possibly South Africa needs to negotiate trade agreements that accommodate participation by small-scale producers (ibid) and back this up with the necessary resources and infrastructure to enable them to participate. While such a strategy may well benefit the emerging farmer group it is unlikely to have a positive impact on resource-poor farmers.

6.7 Changes in the commercial sector

The increasing number of commercial farm bankruptcies and subsequent sequestrations since 1995 put further pressure on the rural economy to provide jobs and livelihoods for retrenched farmworkers. This also puts pressure on rural households and resource-poor producers whose income and ability to produce crops depended on those formerly employed on these farms. The collapse of many land reform farms has also reduced the number of employment opportunities available to rural inhabitants. Restrictive labour practices in the commercial agricultural sector have resulted in the constant shedding of jobs and prevent many rural dwellers from obtaining employment which could contribute to the household's rural non-farm income. The seasonal and part-time employment that is now facilitated by labour brokers is often scarce and also occasionally subject to abusive practices. Labour legislation also curtails employment on emerging farmers' enterprises and commercially oriented small-scale farms. This is either because these farmers will not or cannot comply with the minimum legislative standards.

6.8 HIV/AIDS

HIV/AIDS infection has serious effects on small-scale farming. Households with infected members are unable to use their land effectively as members are too weak to farm and those with farming skills often die from the disease (Ortmann and Machethe 2003). In other instances infected migrants return home to rural areas requiring care, while being laid-off means that the household loses an important source of non-farm income. This income from migrants (and pensioners) is used to enable rural households to engage in semi-subsistence production by financing agricultural inputs, contractor services and for marketing agricultural produce (Matungul et al. 2001: 360 cited in Makhura and Mokoena 2003: 145) and contributes to the

overall income of rural households (Aliber 2005). A lack of remittances not only decreases household total income but is also likely to seriously curtail the household's agricultural activities; either due to the death or infirmity of a financial or labour contributing member. The resources available for agriculture are reduced as a result of infection for non-infected members have to divert reduced resources to the care of the ill.

8. Discussion

Government and others have increasingly introduced measures and policies to promote small farmer development in South Africa. However, this has had limited success when the plight of resource-poor small-scale farmers is considered. What is worrisome is that much of what has been reported as still being problematic was highlighted almost eleven years ago by Van Rooyen and Nene (1996). Many of the recommendations they made are still not included into small-scale farmer development strategies for both the resource-poor and the emerging groups. These include:

- Small farmers should be allowed to set the pace of their own development;
- Only those technologies that have been tested on-farm (and under similar conditions) should be transferred and recommended, as experimentation is risky to small farmer systems;
- Efficient marketing and information systems should be established for this group along with relevant support services, including financial support;
- Emphasis should be on farmer development and not farm production. To this end interventions should be flexible with regard to design, implementation, entrance and exit and land use and local institutions:
- There is a need to examine and understand households political, social, economic, cultural and gender relationships and those with the broader community; and
- Implementing agencies must be service oriented and provide a facilitative role in order to support farmer development.

While further support is required for small-scale producers in South Africa those providing this support need to factor in the various general and specific constraints encountered by these farmers such as the various implications of globalisation, the HIV/AIDS pandemic and the various structural constraints. What is required to support the agricultural sector in South Africa is probably a three-pronged approach which includes focus on the commercial sector, the emerging farmers and the resource-poor farmers. Ignoring any one of these groups will have a destabilising effect on the economy of the country. More urgently there is a need to provide appropriate and comprehensive support to the resource-poor farmers, but this will be far from a simple shift in focus given the constraints experienced by this group.

7. Conclusion

According to Aliber (2005) the best bet for the rural poor seems to be small-scale agriculture and rural micro-enterprises, mainly because they exist on a large scale. Consequently, he argues that the most strategic means of addressing rural poverty will be to work with what is available; in this instance micro-enterprises and small-scale agriculture. The opportunities they hold for economic growth, however, seem slim as they both bear the hallmark of survivalist or residual activities. The Labour Force Survey indicates that people's pursuit of both these activities is cyclical and often lacks continuity over time (ibid.). Currently both have the function of being buffers against absolute poverty. Both are also highly dependent on the formal economy because trends in wage employment affect the total household disposable income, which influences how much business they can do. The challenge is determine how these two activities can be made more robust as economic choices for the rural poor.

In conclusion to their Eastern Cape study, Fraser et al. (2003: 182) echo similar sentiments and suggest the following way forward for agricultural development to alleviate the effects of poverty:

"Improving food security by developing agriculture is a strategy that should be given priority because most rural households have some knowledge of farming and access to some agricultural resources. Although agricultural income is a small proportion of total income, livestock is an important store of wealth and the only asset that can be liquidated. However, food security is too complex to be dealt with by the Department of Agriculture alone, and it requires better collaboration across sectors, disciplines and organisations. The challenge is to develop policies and programmes capable of supporting what poor people already do, which will require a multidisciplinary approach with well co-ordinated and targeted interventions."

The shrinkage in agricultural production by resource-poor semi-subsistence farmers, together with the LFS data, which confirms the extent of reliance on food purchase even in rural areas, suggests that a rural development strategy to reduce poverty and improve food security in South Africa based solely on an agricultural focus is inappropriate. However, the impact of agricultural production on available food quality and diversity as components of food security at the local level is nevertheless seen as being of particular importance in South Africa. Consequently, the importance of agricultural production is more about improving the quality and diversity of people's diets rather than about improving the income of rural communities or contributing to the economy. In addition to its potential wider livelihoods impacts in promoting stability and dietary diversity, agriculture arguably has a critical, but currently underutilised, role to play in providing food to poor rural households, particularly in remote communities, and those affected by high levels of HIV/AIDS, poverty, unemployment, the elderly and those supporting orphans.

A successful poverty focused rural development strategy that considers agricultural development important and one which includes a focus on small-scale producers will need to include the following:

- Recognise the great diversity of reasons why rural people engage in small-scale production and take cognisant of the diverse socio-economic circumstances and biophysical environment in which they periodically find themselves.
- It should also understand and incorporate the various strategies that small-scale producing households engage in to reduce their risk and the effects of poverty.
- Respond to past and future changes in rural areas, including HIV/AIDS and climate change.
- Provide appropriate technology, quality and comprehensive support to small-scale producers including improvement of rural infrastructure and supportive local institutions.
- Recognise that initially food security and dietary diversity as a means of reducing poverty are more important than resource-poor small-scale farmers' contribution to economic growth.
- Ensure that such a strategy is consistent with the broader poverty reduction strategy and does not detract from such a strategy.
- Collaboration between departments, state, semi-state and private organisations, disciplines and rural inhabitants, specifically small-scale farming households.

Agricultural support (research, extension and other services) needs to change its current way of doing business. In its current state, collaboration with other institutions will not be enough. To this end it needs to be three-pronged in its approach, targeting both the needs of the commercial sector, the emerging farmer group and those of the resource-poor semi-subsistence

sector. After all a stronger focus on the resource-poor farmers will reach a far greater number of people in terms of household food security and will help to alleviate the immediate effects of poverty. This is especially so, as approximately 14 million people are food insecure and 1.5 million children suffer from malnutrition.

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