

The Role of Agriculture in Poverty Reduction: South Africa
Haroon Borat, Carlene van der Westhuizen and Elné Jacobs¹
6 June 2011

1. Introduction

The post-1994 period in the South African economy is characterised, perhaps most powerfully, by the fact that the economy recorded one of its longest periods of positive economic growth in the country's history. Indeed for the period 1994 to 2008 (inclusive of the early recession in 2008) South Africa's average annual growth in GDP in 2000 prices stood at 3.57% per annum. One of the more vexing issues within the economic policy terrain in post-*apartheid* South Africa though, has been the impact of this consistently positive growth performance on social welfare. In particular, there has been a rich debate within South Africa around the impact of economic growth on poverty in the post-1994 era.

Since 1994, wide-spread agricultural policy reforms have been introduced, with most of these aimed at improving the efficiency of the sector as well as increasing participation by emerging farmers in the sector. The agriculture, fishing and forestry industry's contribution to GDP has remained relatively stable at less than 3 percent in the post-*apartheid* period. Since 2001, employment in the sector has, however, declined by almost 50 percent. In addition, evidence suggests that farm workers remain some of the most vulnerable workers in the economy.

This paper has two main objectives. The first is to provide an overview of the shifts in income and non-income poverty in the post-*apartheid* period. The second objective is to provide a snapshot of the most important agricultural policies and support measures introduced since 1994. The lack of data, however, makes it impossible to review the impact of these policies, thus also making it impossible to quantify any possible contribution to poverty reduction these interventions might have had over the period.

The paper is organised as follows. Section two provides an overview of changes in income poverty followed by a discussion of the shifts in non-income poverty as measured by changes to a range of public services and one private asset. A very short overview of the performance of the sector since 1994 is provided in Section three. Section four summarises the key agricultural policy reforms and interventions since 1994.

2. Shifts in Income and Non-Income Poverty in post-*apartheid* South Africa

2.1 Shifts in Income Poverty: 1995 – 2005

Table 1 presents the changes in the headcount rate and the poverty gap ratio between 1995 and 2005, both nationally and by race. All poverty measures have been calculated using individual per capital household expenditure, and the indicators are based on the standard class of poverty measures, first defined by Foster, Greer and Thorbecke (1984). The headcount rate simply refers to the share of the total population with expenditure below a pre-defined poverty line. The poverty gap ratio is a measure of the average poor agent's expenditure relative to the poverty line. Two main sources of data were utilised for the analysis, namely the 1995 Income and Expenditure Survey (1995 IES) and the 2005/06 Income and Expenditure Survey (2005/06 IES). Both are household surveys conducted by Statistics South Africa (the country's agency responsible for the collection,

¹ Director, Senior Researcher and Researcher at the Development Policy Research Unit, School of Economics, University of Cape Town. South Africa.

production and dissemination of official statistics) with the specific aim of collecting information on the income and expenditure of South African households.

The results show that at the aggregate level, poverty as measured by the headcount rate declined in the first decade of democracy in South Africa. Specifically, the higher poverty line of R322² a month in 2000 prices, aggregate poverty declined by three and a half percentage points, from 52.5 percent in 1995 to 49 percent in 2005, while at the lower poverty line of R174 (also in 2000 prices) the decline was by more than seven percentage points, from 31 percent to 24 percent. The relatively larger decline at the lower poverty line suggests that those in deeper poverty experienced a relatively larger improvement in their welfare over the period.

Relative poverty, as measured by the poverty gap ratio displays a similar trend at the aggregate. At the R322 line, the poverty gap index declined from 26 to 21 percent. This means that in 1995 the average poor person lived about 26 percent below the R322 poverty line. Ten years later, the average poor person lived 21 percent below the poverty line. At the lower poverty line, the poverty gap ratio declined from 12 percent to approximately eight percent. Ultimately though, these results suggest the reduction in the headcount index and poverty gap was both significant and robust to the choice of poverty line.

² All poverty and inequality measures are individual measures, calculated using per capita total household expenditure. Per capita total household expenditure was created by dividing total household expenditure by the number of people in the household (or household size). Two standard poverty lines are used in our analysis. The R322 line (in 2000 prices) has been derived using a cost-of-basic needs approach, while the R174 line is equivalent to \$2 dollar a day (again in 2000 prices) (See Hoogeveen & Ozler, 2006). The 2000 poverty lines were adjusted for the impact of inflation both in 1995 and 2005 and these adjusted poverty lines were used to calculate the poverty measures in the two years.

Table 1: Poverty Shifts by Race of Household Head: 1995 - 2005

Category	Headcount Index		Poverty Gap Ratio	
	1995	2005	1995	2005
R322 a month poverty line				
African	63.04	57.55	31.86	25.23
Coloured	39.00	35.13	14.66	13.51
Asian	4.71	8.43	1.03	2.32
White	0.53	0.38	0.22	0.11
Total	52.54	49.03	26.04	21.29
R174 a month poverty line				
African	38.18	28.17	14.71	9.01
Coloured	14.62	12.94	4.09	4.09
Asian	0.82	1.60	0.14	1.09
White	0.23	0.07	0.09	0.00
Total	30.92	23.55	11.77	7.54

Source: Statistics South Africa (1995 and 2008) and Own Calculations

- Notes:
1. Poverty lines are in 2000 prices
 2. At both poverty lines, the changes in the headcount rate are statistically significant at the 95 percent level at the aggregate and for Africans (indicated by the shaded cells)
 3. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census

Race and gender remain key markers of vulnerability in the South African context; hence poverty estimates are also presented by race and the gender of household head (see Table 2). The results by race indicate that only African individuals experienced a decline in their levels of poverty over the decade between 1995 and 2005. For Africans, however, the decline in their headcount index at both poverty lines was relatively larger than the decline at the national level. At the R322 line, the headcount rate declined by more than five percentage points from 63 to just below 58 percent, whilst at the R174 line, the headcount rate declined by more than ten percentage points to 28 percent. Over the same period, African individuals also experienced a decline in their levels of relative poverty. At the R322 line, the poverty gap ratio decreased from 32 to 25 percent, while it decreased from 15 to nine percent at the lower poverty line. The other three population groups did not experience any statistically significant change in their levels of poverty (both absolute and relative) over the period.

While Africans did experience decreases in their headcount rates at both poverty lines, their poverty levels as measured by the headcount indices still remained higher than both the national estimates and those of other race groups. For example, in 2005 at the upper poverty line, the national headcount rate was 49 percent, while the African headcount rate was almost nine percentage points higher at 58 percent. In contrast, the Coloured headcount was 35 percent, while eight percent of Asians were poor at this line. Less than one percent of Whites were poor at both lines, and in both years.

Given the results above it is not surprising that Africans accounted for a disproportionate share of poor individuals in the country at both poverty lines and in both years (See for Appendix 1 for the breakdown of population and poverty by race). Africans accounted for about 77 percent of the population in 1995, with their share increasing to 79 percent in 2005. In both years, however, about 93 percent of the population who lived on less than R322 a month (in 2000 prices) were African. Africans clearly continue to account for a much larger share in poverty than their share in the

population, with the other race groups accounting for a considerably smaller share of poverty relative to their population weight. By way of contrast, in both years, Whites accounted for less than one percent of the poor population according to both poverty lines, while constituting around ten percent of the population.

Consonant with the national trends and those for the African population group, the data illustrates that both male and female-headed households experienced a decline in poverty levels as measured by the headcount index at both poverty lines. While individuals living in male-headed households experienced a relatively larger decrease of more than six percent in their headcount rate at the upper-bound poverty line, female-headed households experienced a slightly larger decline in their headcount rate at the lower poverty line. This is a key result: It suggests that at the lower-bound poverty line poverty reductions of the ex-ante more vulnerable category of households – female-headed – were greater than those of their male-headed counterparts. Whilst the severity of poverty declined, irrespective of the gender of the household head in the ten-year period, the evidence shows that individuals living in female headed households experiencing slightly larger declines in their poverty gap ratios.

Table 2: Poverty Shifts by Gender of Household Head: 1995 - 2005

Category	Headcount Index		Poverty Gap Ratio	
	1995	2005	1995	2005
R322 a month poverty line				
Male	45.83	39.42	22.22	16.57
Female	65.65	61.56	33.52	27.42
Total	52.54	49.03	26.04	21.29
R174 a month poverty line				
Male	26.12	17.77	9.79	5.67
Female	40.31	31.06	15.63	9.96
Total	30.92	23.55	11.77	7.54

Source: Statistics South Africa (1995 and 2008) and Own Calculations

- Notes:
1. Poverty lines are in 2000 prices
 2. All changes in the values of the headcount rates and the poverty gaps between 1995 and 2005 are statistically significant at the 95 percent level (indicated by shaded cells)
 3. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census

Despite the greater reduction in female-headed household poverty it is important to note that individuals living in households headed by females remained more vulnerable, in absolute terms, than male-headed households at both poverty lines. For example, at the upper-bound line in 2005, the headcount index for female-headed households was still a massive 22 percentage points higher than for households headed by males, whilst at the lower poverty line, this differential, a decade into democracy, was more than thirteen percentage points higher. Indeed, the population and poverty shares presented in Appendix 1 confirm that individuals living in female-headed households also continued to account for shares in poverty which are larger than their shares in the population. In addition, those living in female headed households also continued to experience higher levels of relatively poverty at both poverty lines.

It is clear then from the above that gains in poverty reduction at the national level have been recorded in the first decade of democracy. Hence, it is important to note that both absolute and relative poverty in the period 1995-2005 have declined significantly in South Africa. The result is also robust to the choice of poverty line. However, the data also illustrates that when considering two

key markers of vulnerability – race and gender – challenges remain. In terms of race, despite reductions in African poverty, individuals living in households headed by Africans account for a disproportionate share of the poor in the society. In parallel, female-headed (it must be said predominantly African female-headed) households yield vastly higher headcount and poverty gap ratio estimates in both 1995 and 2005, so reflecting the strong gender dimension to the country's poverty profile.

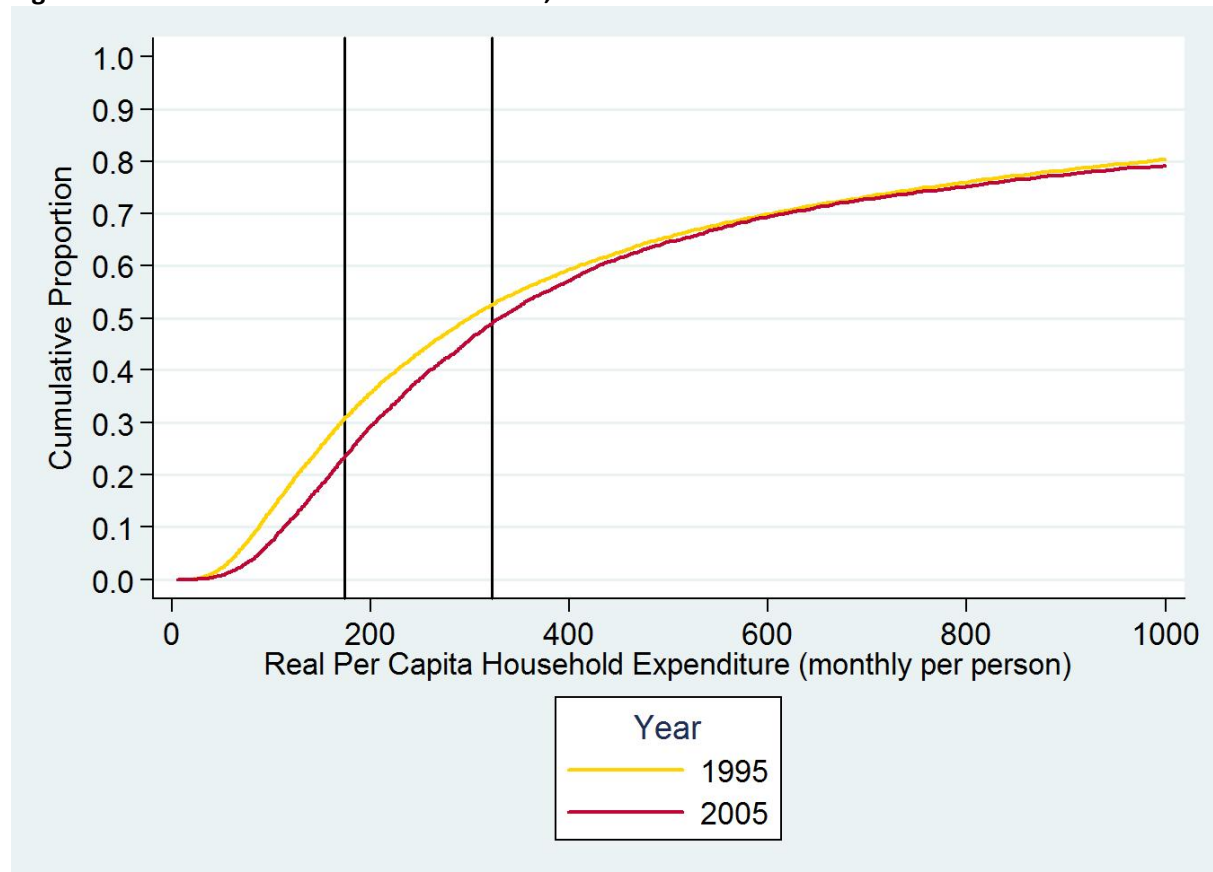
Poverty Shifts without Poverty Lines: 1995 -2005

The estimates presented in the tables above show that at a national level, both the headcount and the poverty gap indices declined when measured using the two stipulated poverty lines. Another manner in which to examine the changing pattern of poverty – and one indeed which is not hamstrung by debates around the choice of the poverty line - is by deriving cumulative distribution functions (CDFs) of per capita expenditure. Figure 1 below presents one such CDF.³

The Cumulative Distribution Functions (CDFs) in Figure 1 shows that for South Africans spending less than about R1 000 a month (in 2000 prices) poverty has either declined or, at a poverty line above R800, remained constant, between 1995 and 2005. In the nomenclature of this literature, we would argue therefore that first order dominance holds, although it is important to note, though, for those spending between R600 and R800, the gap between the two CDFs does appear to be very small, reflecting minor or possibly no change in absolute poverty levels.

³ The vertical axis of the CDF shows the cumulative proportion of all individuals with a monthly per capita expenditure value less than or equal to the corresponding monthly per capita expenditure value on the horizontal axis. CDFs allow us to compare changes in poverty between two time periods independent of any feasible poverty line. Visually, if a CDF for period $t+1$ lies at any point on the horizontal axis below the CDF for period t , it means that poverty has decreased between the two periods irrespective of any specific poverty line.

Figure 1: Cumulative Distribution Functions, 1995 and 2005



Source: Statistics South Africa (1995 and 2008) and own calculations

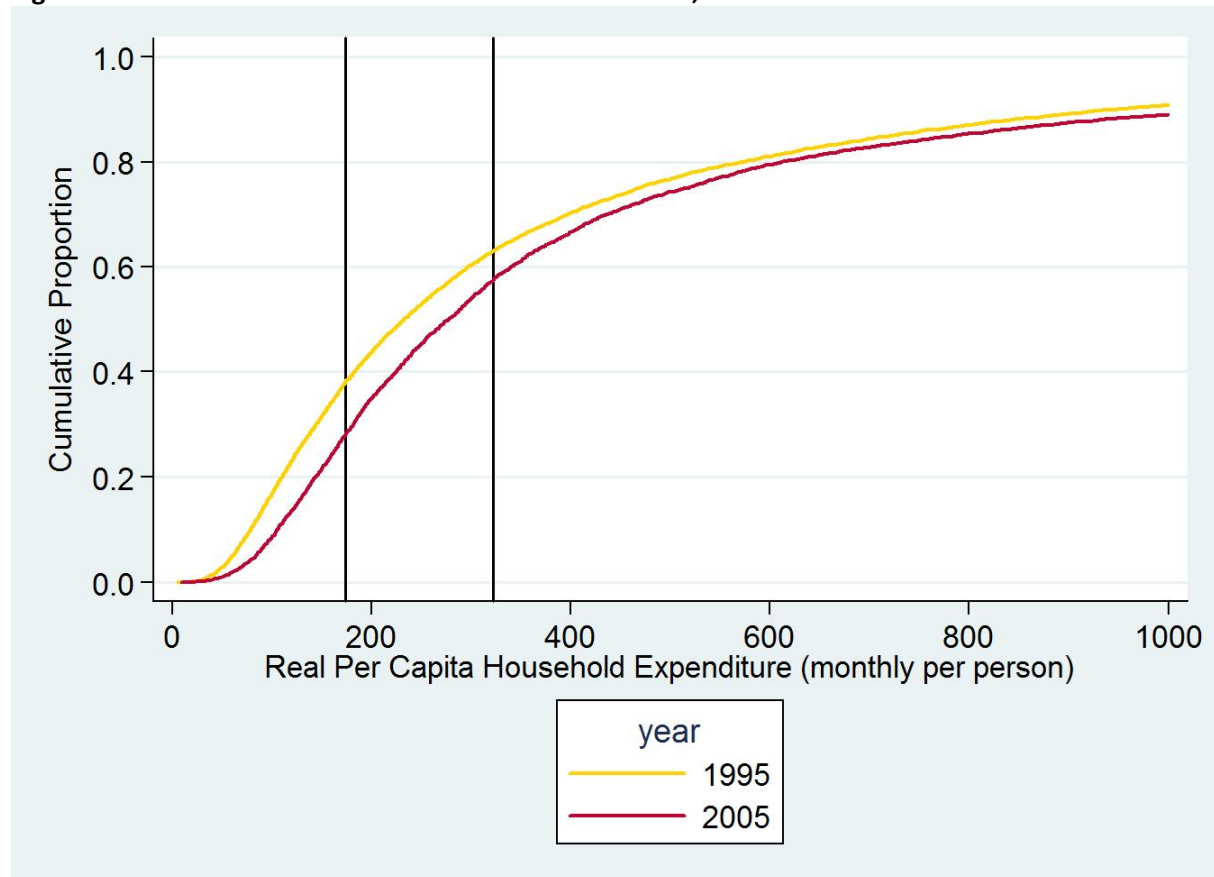
- Notes:
1. Per capita expenditure as converted to real per capita expenditure (expressed in 2000 prices) using the Consumer Price Index
 2. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census

Importantly also, this result suggests that the decline in the headcount reported above (or the lack of change in poverty levels for those spending more than R600 a month) is not subject to our choice of poverty line. Independent of any feasible poverty line that we may choose, the result here affirms that poverty levels have at best declined or at worst not increased in South Africa between 1995 and 2005.⁴

Figure 2 presents the CDFs for Africans with a real per capita expenditure of R1 000 a month or less in 2000 prices. In both years, as noted above, this accounts for about 90 percent of the African population in the country. In this particular case, our results are stronger as the CDFs show that poverty undoubtedly declined irrespective of any range of poverty lines, with the 2005 CDF lying below the 1995 CDF at all points of the distribution. The gap between the two CDFs is also larger for Africans than at the national level, across the distribution, illustrating the relatively larger decline in poverty levels experienced by Africans for any feasible range of poverty lines.

⁴ The two vertical lines in Figure 1 represent the lower and upper bound poverty lines stipulated at the outset. Note that the larger gap between the 1995 CDF and the 2005 CDF at the R174 poverty line confirms the larger decline in poverty as measured by the R174 headcount rate relative to the R322 poverty line, illustrated in Table 1 above.

Figure 2: Cumulative Distribution Functions for Africans, 1995 and 2005

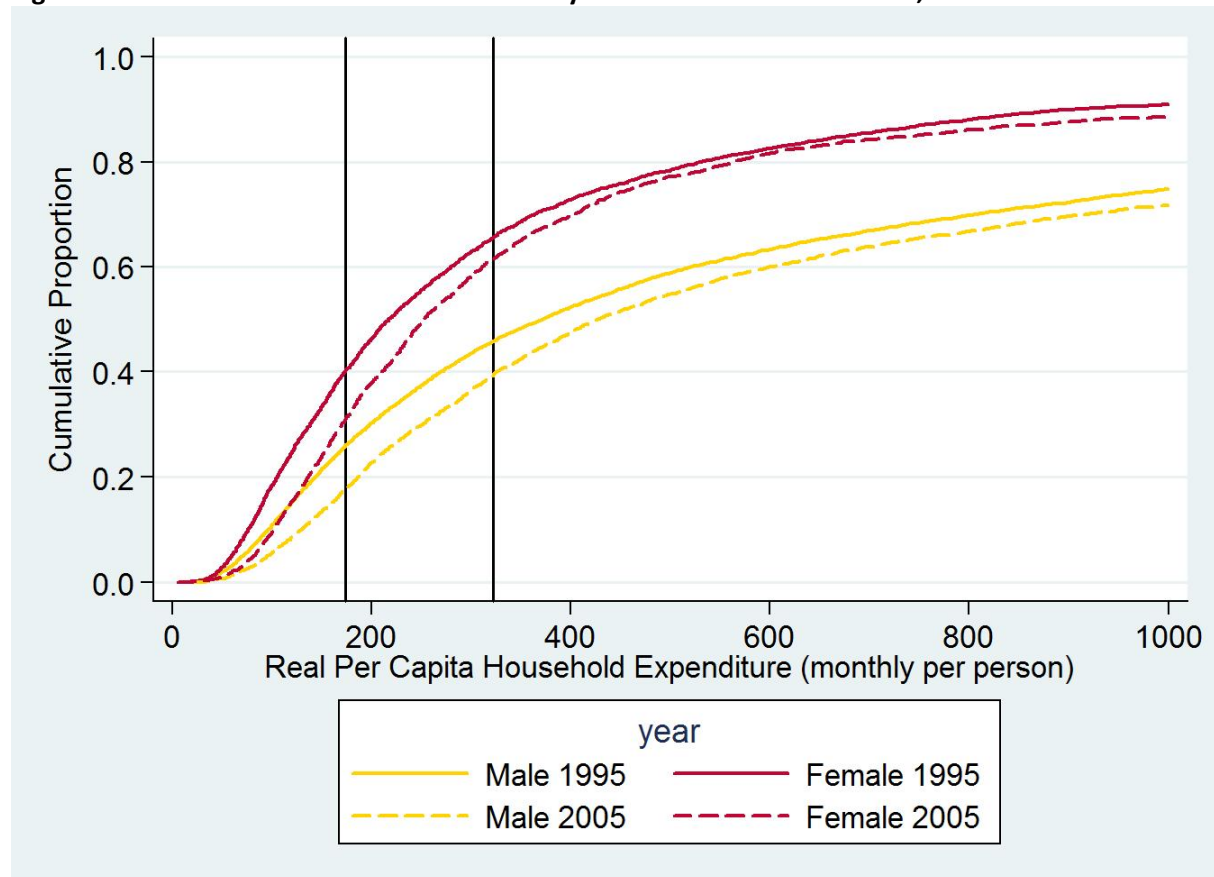


Source: Statistics South Africa (1995 and 2008) and own calculations

- Notes:
1. Per capita expenditure as converted to real per capita expenditure (expressed in 2000 prices) using the Consumer Price Index
 2. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census

The poverty estimates presented above have shown that households headed by females remained more vulnerable than those headed by males at our two poverty lines. Figure 3 presents the CDFs for male and female headed households for 1995 and 2005, and captures this result as the CDFs show that poverty declined for individuals living in both male and female-headed households in the ten-year period irrespective of any chosen poverty line. The position of the CDFs also confirms the larger declines in poverty levels at the lower-bound poverty line for female headed households. It is further very clear that in both years, the CDFs for male-headed households lie below those for female-headed households, confirming that at any chosen point of the expenditure distribution, individuals living in households headed by females experienced significantly higher absolute levels of poverty. In fact, by 2005, with the exception of the bottom 20 percent of the distribution, the 2005 CDF for female-headed households still lies above the 1995 CDF for male-headed households, implying that for the most part individuals living in female headed households were worse off in 2005 than those living in male-headed households in 1995.

Figure 3: Cumulative Distribution Functions by Gender of Household Head, 1995 and 2005



Source: Statistics South Africa (1995 and 2008) and own calculations

- Notes:
1. Per capita expenditure as converted to real per capita expenditure (expressed in 2000 prices) using the Consumer Price Index
 2. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census

The value-added of the above analysis is the non-dependence on the oft-debated poverty line. Hence, in an attempt to circumvent the use of specific poverty lines for our analysis of poverty, the standard methodology of stochastic dominance testing was applied. It is clear then that irrespective of the poverty line, our results show that the proportion of poor individuals either declined or remained constant in the first decade of democracy. Indeed it is true that only at high poverty lines (in excess of R500 per person per month) poverty levels remained stagnant. Importantly though, the more robust results are that African poverty levels, together with poverty amongst female-headed households, declined significantly across any range of feasible poverty lines. Despite these advances, however, race and gender continue to define and characterise poverty in post-apartheid South Africa.

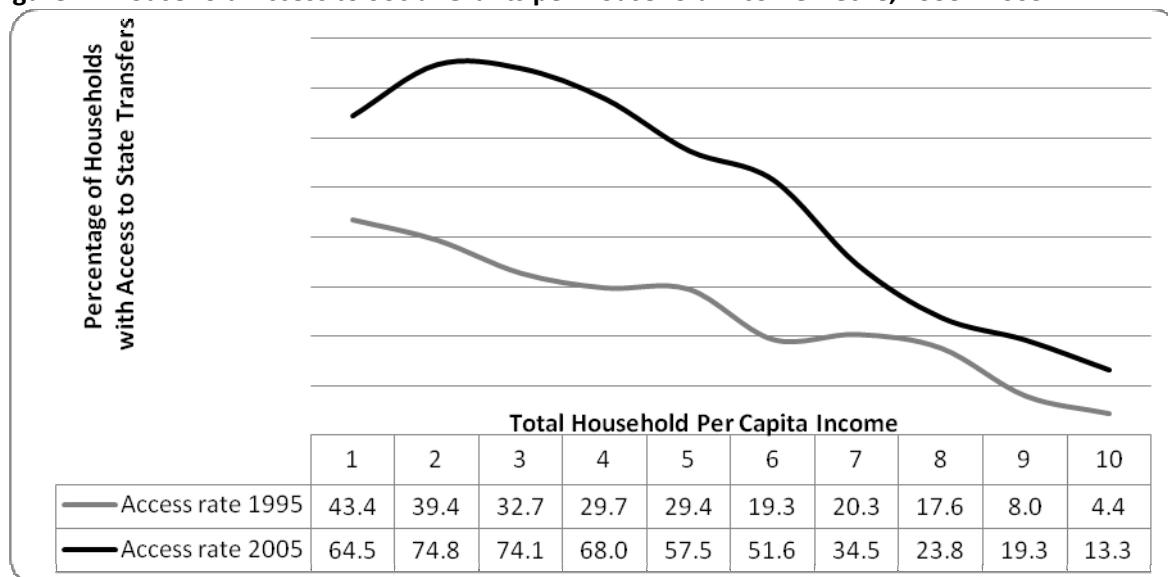
While a detailed discussion of the drivers of the changes in poverty levels falls outside the ambit of this report, we briefly touch on what has possibly been the main contributor to the increase in the income levels of the poor.

The first decade of democracy has been characterised by a rapid widening and deepening of the state social security system. Social grants are targeted at the most vulnerable members of the South African society, specifically the disabled, the aged and children. Analysis by Pauw and Ncube (2007) shows that not only has the share of social grant expenditure in GDP increased significantly since the first democratic election, but the number of recipients of social grants has increased more than

three-fold. In 1996/97, social grant transfers accounted for about 2.5 percent of GDP and by 2005/06, this share had increased to more than three percent. The total number of beneficiaries increased from approximately three million in 1997 to 9.4 million in 2005, an average annual growth rate of more than 15 percent.

Figure 4 illustrates the impact of the increase in the state’s provision of social grants as measured by the change in the share of households in each income decile with access to one or more social grant. The access rate is simply the percentage of households in each income decile which received grant income in the two years.

Figure 4: Household Access to Social Grants per Household Income Decile, 1995 - 2005



Source: Statistics South Africa (1995 and 2008) and own calculations

Notes: 1. The population in 1995 has been weighted according to the 1996 Census, while the population in 2005 has been weighted according to the 2001 Census. In both datasets, the population has been weighted by the household weight multiplied by the household size.

There has been a significant increase in the access rates across all deciles between 1995 and 2005. For example, the share of households in the first decile with access to grant income increased from 43.4 percent in 1995 to 64.5 percent in 2005. However, access to grant income not only increased significantly at the bottom deciles, but also in the deciles in the middle of the income distribution. For example, in the 6th decile the share of households with access to grant income increased from 19 percent to more than 50 percent. This is an important result, as it shows that grant income not only supported the very poor, but also a large portion of households in the middle of the distribution. In fact, between 50 and 75 percent of households in the bottom six deciles of the distribution received income from grants in 2005. The proposition therefore, on the basis of this evidence here, is that the rapid widening and deepening of the state’s social security system in this first decade of democracy lies at the heart of the rapid growth in expenditure levels of the poor. Put differently, the extension of the social grant system has been the driving force behind the declining levels of poverty since 1995.

While the estimates presented above provide clear evidence of a decline in income poverty over the ten year period between 1995 and 2005, the lack of more recent comparable survey datasets makes it impossible to extend the analysis. The above also only presents the changes in income welfare over the period, without taking into account the other non-income dimensions of poverty such as household access to services and assets. The South African government has, as part of its attempt to eradicate poverty in the country, instituted a range of policy interventions designed to improve the welfare of households. These interventions include significant increases in the delivery of a range of

free basic services, such as formal housing, electricity, piped water and flush/chemical toilets. The following section presents an overview of the changes in household access to a range of government provided services, as well as to one private asset between 1993 and 2009.

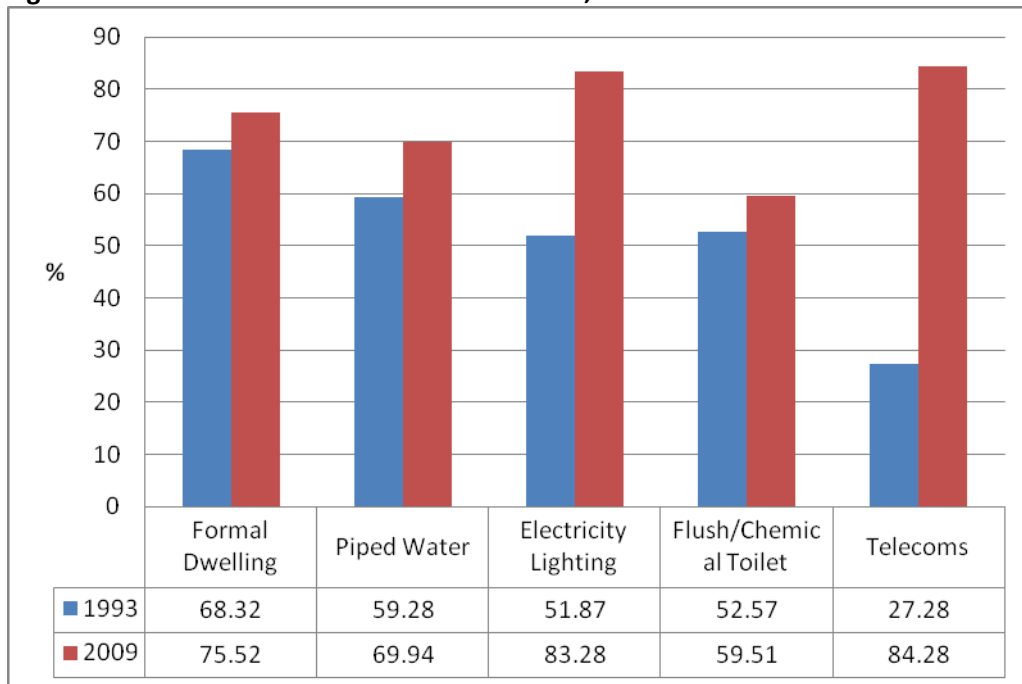
2.2 Shifts in Access to Services and Assets

In this section, the changes in household access to a range of public services and one private asset are presented at the aggregate level as well as by household expenditure decile. By presenting the estimates according to household expenditure decile, we are able to evaluate the extent to which the South African government has managed to target the provision of these services to the most vulnerable households.

Two sources of data were used in the analysis. The first is the 1993 South African Integrated Household Survey from the Project for Statistics on Living Standards and Development (PSLSD). This survey, conducted by the South African Labour Development Research Unit (SALDRU) at the University of Cape Town's School of Economics was South Africa's first representative multi-purpose household survey and collected a wide range of information on different aspects of living standards. The second data source is the 2009 General Household Survey (GHS), a nationally representative household survey conducted annually since 2002 by Statistics South Africa. The aim of this survey is to capture information on living conditions of South African households in order to evaluate government programmes and projects. The survey covers education, health, the labour market, housing and household access to services and facilities, as well as household assets.

Turning first to access to public services at the aggregate level, the evidence presented in Figure 5 confirms that household access to all these services increased between 1993 and 2009. The largest relative increase was experienced in access to electricity, with the South African government's drive to increase household access to electricity resulting in a more than 30 percentage point increase in the use of electricity for lighting. In 1993, just more than half of South African households used electricity for lighting. By 2009, more than 83 percent of households used electricity for lighting. The household access rate to piped water increased by more than ten percentage points from 59 percent in 1993 to almost seventy percent.

Figure 5: Shifts in Access to Services and Assets, 1993 - 2009

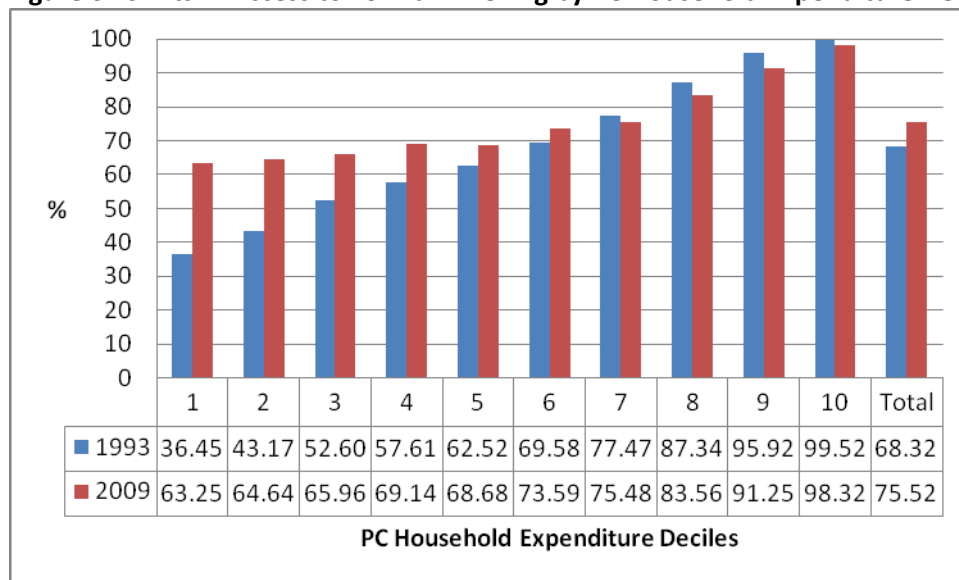


Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

By 2009, almost three-quarter of South African households lived in formal dwellings, an increase from 68 percent in 1993. The improvement in access to flush/chemical toilets was the least impressive. By 2009, just less than 60 percent of household had access to a flush/chemical toilet, an increase from 53 percent in 1993. Finally, the increase in access to the private asset, namely telecommunications, was enormous over the period. Driven by the rapid increase in cellular phone ownership over the period, household access to telecommunications increased from 27 percent in 1993 to 84 percent in 2009.

While the figures above illustrate the increase in household access to services at the aggregate level, the figures below present an indication of how well the government’s provision of free basic services has been targeted to the poor. Specifically, the changes in the access rates to the range of services are presented according to per capita household expenditure deciles.

Figure 6: Shifts in Access to Formal Dwelling by PC Household Expenditure Decile, 1993 - 2009



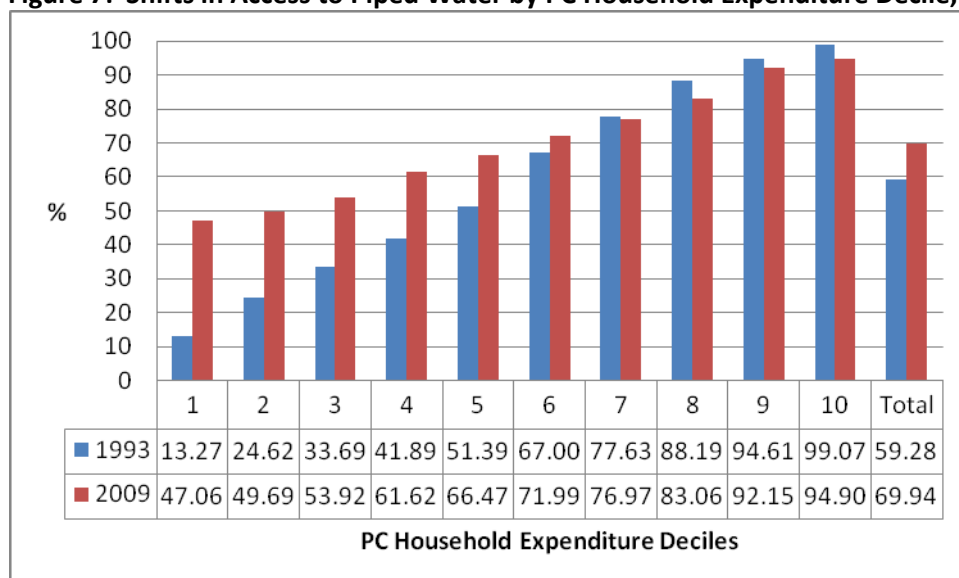
Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

The increases in access to formal dwelling by per capita household expenditure decile confirm that the provision of formal housing was well targeted to relatively poorer households, with the bottom six deciles experiencing increases in access to formal dwellings between 1993 and 2009. In the bottom expenditure decile, the access rate to formal dwelling increased from 36 percent in 1993 to 63 percent in 2009. In fact, by 2009, the access rates were above 60 percent in all expenditure deciles.

While the figure above suggests a decline in the access to formal dwelling for those in the seventh to tenth deciles, the absolute number of households with access to formal housing did increase over the period. The decline in access rates reflects the increase in household formation over the period, with a slightly smaller share of households having access to formal dwellings as a result. Despite the slight decline in the access rates in the top deciles, the results also confirm that poorer households still have relatively lower rates of access to formal housing than those at the top of the distribution. For example, the access rate in the tenth decile is 35 percentage points higher than in the first decile.

The changes in the access rates to piped water according to per capita household expenditure display a similar trend to changes in access to formal dwellings. Again, households in the bottom six expenditure deciles experienced an increase in access to piped water over the period, with the largest relative increases experienced by households in the bottom deciles. In the first decile, household access to piped water increased more than three-fold, from 13 percent in 1993 to 47 percent in 2009. In the second decile, the access rate doubled from almost 25 percent to just less than fifty percent.

Figure 7: Shifts in Access to Piped Water by PC Household Expenditure Decile, 1993 – 2009

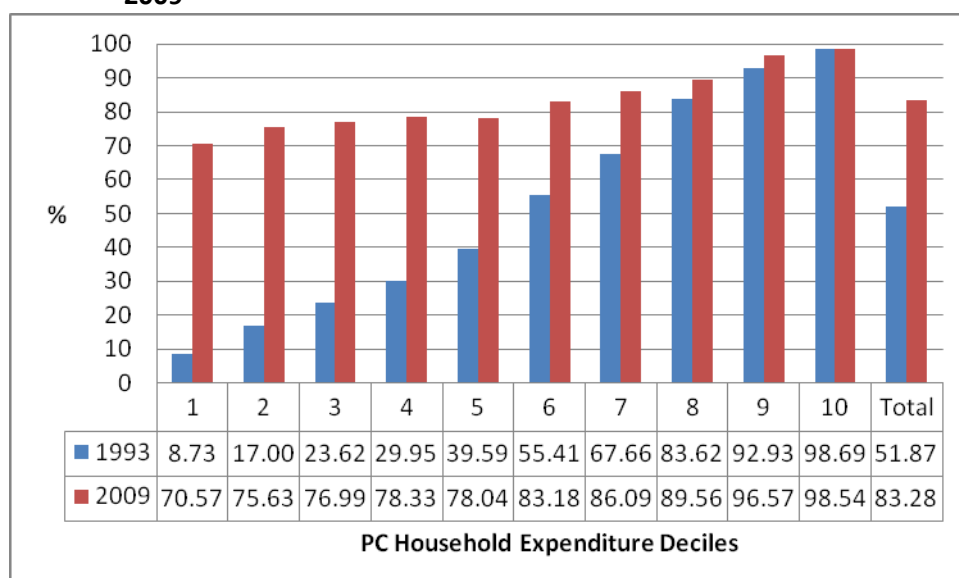


Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

Again, the household access rate to piped water declined slightly in the seventh to tenth deciles, but the absolute number of households with access to piped water increased over the period. In 2009, the access rates in the upper deciles also still remained significantly higher than for poorer households.

Figure 8 clearly illustrates the impressive success achieved by the South African government in the provision of free basic electricity to households. Household access to electricity for lighting increased in all expenditure deciles, with only the access rate in the top decile remaining relatively unchanged at almost 99 percent.

Figure 8: Shifts in Access to Electricity for Lighting by PC Household Expenditure Decile, 1993 - 2009



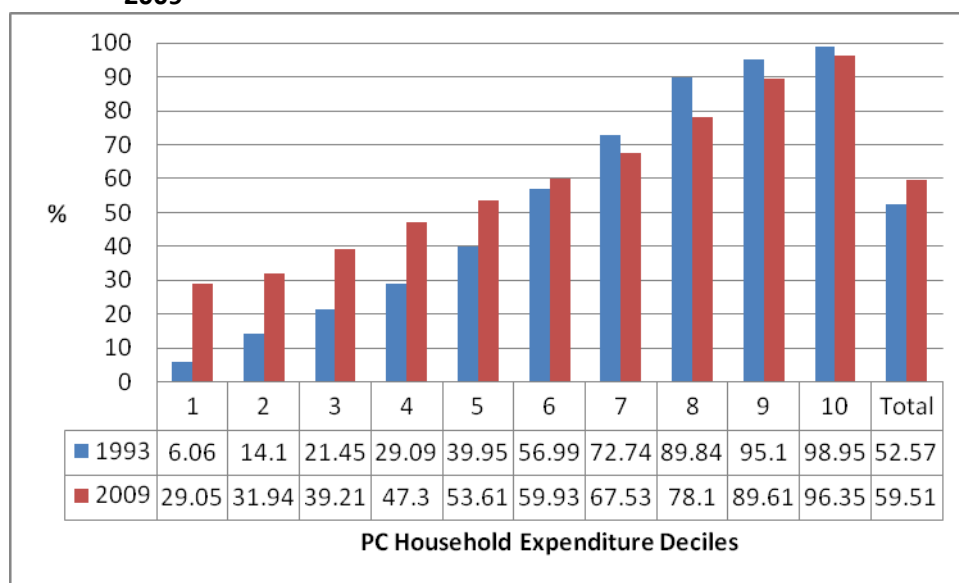
Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

Households in the bottom expenditure deciles experienced enormous increases in access to electricity for lighting over the period. In 1993, less than nine percent of households in the first decile had access to electricity for lighting. By 2009, more than seventy percent of households in

that decile utilised electricity for lighting. This constitutes an increase of more than sixty percentage points. In the second decile, the household access rate increased from 17 percent in 1993 to just less than 76 percent in 2009. In addition, by 2009, household access to electricity for lighting was above seventy percent in all ten expenditure deciles.

As discussed earlier, the increase in access to flush/chemical toilets was relatively modest over the period. While the access rate in the bottom decile did increase almost five-fold, by 2009 still less than 30 percent of households in that decile had access to flush/chemical toilets. In fact, up to the fourth decile, less than half of households had access to flush/chemical toilets by 2009. In contrast, just more than 96 percent of households in the top decile had access to a flush/chemical toilet.

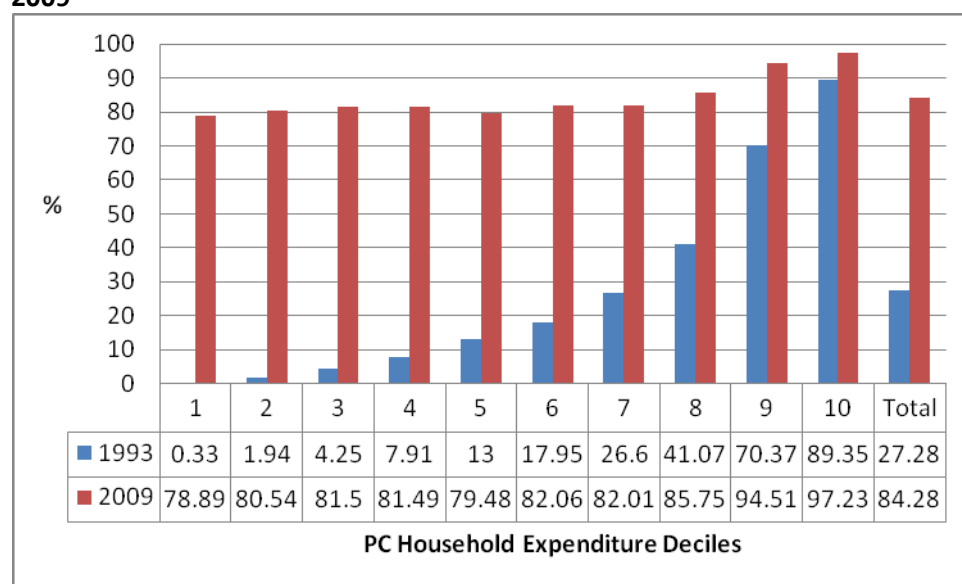
Figure 9: Shifts in Access to Flush/Chemical Toilets by PC Household Expenditure Decile, 1993 - 2009



Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

The introduction of cellular phones had an enormous impact on the share of households with access to telecommunications. In 1993, less than 10 percent of households in the bottom four deciles had access to that mode of communication. In the bottom decile, less than one percent of households had access to a phone. By 2009, almost 79 percent of households in the first decile had access to telecommunications. For the rest of the expenditure deciles the access rate was 80 percent or higher.

Figure 10: Shifts in Access to Telecommunications by PC Household Expenditure Deciles, 1993 - 2009



Source: Statistics South Africa: GHS 2009; SALDRU: PSLSD 1993; Own Calculations

To conclude then, the evidence presented in this section shows that South Africa has witnessed a decline in absolute and relative poverty since the advent of democracy, both at the aggregate level and for the largest population group, namely Africans. The gains in terms of income welfare have, however, been relatively modest and by 2005 still almost half of South Africans were living in poverty according to a Cost of Basic Needs poverty line. By contrast, the evidence suggests that the South African government has been very successful in the delivery of basic services to South African households since 1994. This is particularly true of access to electricity for lighting. The results also show that service delivery has been well targeted to the poor, with households in the bottom expenditure deciles experiencing the largest relative increases in access to the range of services. The estimates for 2009, however, do show that poorer households still had significantly lower access to all assets, but particularly to piped water and flush/chemical toilets.

3. The Performance of the Agricultural Sector in post-apartheid South Africa

Since 1994, the agricultural sector in South African has experienced extensive changes, both as a result of domestic reforms introduced by successive post-apartheid governments and as a result of the restructuring of the global markets for agricultural products (for a more detailed discussion see Tregurtha, 2008). While the reforms introduced after 1994 mainly focused on the promoting equity and efficiency in the sector, the global food crisis in 2008 shifted renewed attention to the stimulation of production in both the commercial and small-scale farming sector in order to promote household food security. Preceding the food crisis, the South African government released its Accelerated and Shared Growth Initiative for South Africa (ASGISA) and there was general consensus amongst policymakers and other stakeholders that the agricultural sector has a critical contribution to make in achieving ASGISA's goals of higher economic growth, poverty reduction and unemployment reduction (Tregurtha, 2008:2)

The objective of this section is to provide a brief overview of the agricultural sector, including performance in terms of output, international trade and employment.

3.1 Agriculture in South Africa: An overview

The structural shift that has been taking place in the South African economy since the 1970s is characterised by a move away from production in the primary and secondary sectors to production in the tertiary sector. This shift has continued in the post-*apartheid* period and is clearly illustrated by the evidence presented in the figure below.

Specifically, between 1995 and 2005, with the exception of the General government services sector, all tertiary sectors grew at a faster rate than real GDP over the period. In addition, the only non-tertiary sector which grew at a faster rate than total output was the construction sector.

Table 3: Quarterly Value added by Industry and Gross Domestic Product at Constant 2005 Prices

	1995		2009		Ave annual Growth Rate
	R Million	Share	R Million	Share	
Primary Sectors					
Agriculture, forestry and fishing	26 405	2.33%	40 891	2.29%	3.17%
Mining and quarrying	100 802	8.89%	95 185	5.34%	-0.41%
Secondary Sectors					
Manufacturing	196 934	17.36%	266 932	14.97%	2.20%
Electricity, gas and water	25 843	2.28%	33 635	1.89%	1.90%
Construction	25 519	2.25%	57 630	3.23%	5.99%
Tertiary Sectors					
Wholesale, retail, motor trade and accommodation	131 650	11.60%	213 939	11.99%	3.53%
Transport, storage and communication	74 969	6.61%	162 722	9.12%	5.69%
Finance, real estate and business services	174 720	15.40%	378 421	21.22%	5.68%
General government services	191 034	16.84%	243 144	13.63%	1.74%
Personal services	63 820	5.63%	101 837	5.71%	3.39%
Aggregate GDP	1 134 445		1 783 617		3.28%

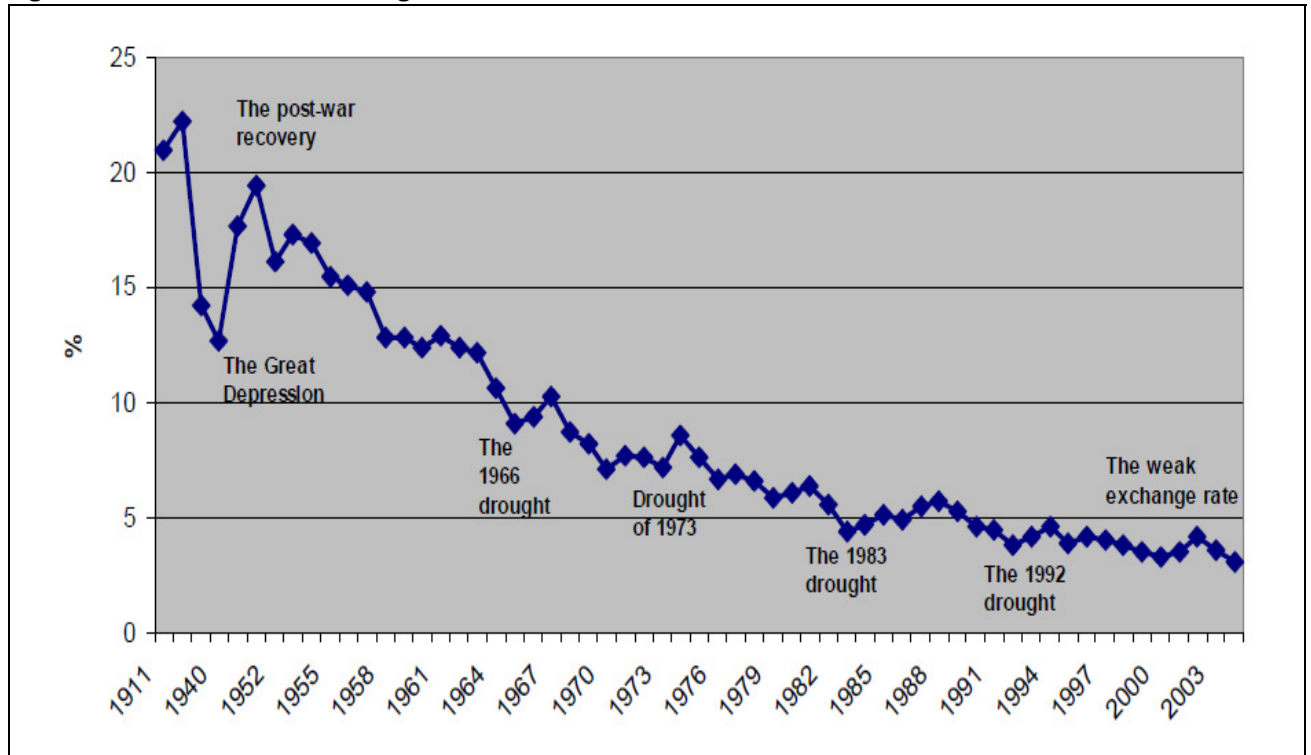
Source: Statistics South Africa, P0441 - Gross Domestic Product (GDP), 4th Quarter 2010

- Notes: 1. No official statistics are released for the Agricultural Sector's separate contribution to GDP, and the contribution of the sector is therefore included in the Agriculture, Forestry and Fisheries sector.
2. Growth rates in this table are compounded annual growth rates and were calculated using the 1995 and the 2009 estimates

Turning to the performance of the agriculture, forestry and fishing sector over the period, this sector grew at a compounded average annual rate of 3.17 percent, just slightly less than real GDP growth over the period of 3.28 percent. This result therefore suggests in the post-*apartheid* period the increase in output in the agricultural sector has kept pace with the increase in aggregate output. In addition, the contribution of the sector to aggregate GDP has remained relatively unchanged at about 2.3 percent. However, if growth in output since 2000 is considered, the agricultural sector grew at an average annual rate of only 1.8 percent, which is almost half of the aggregate real GDP growth rate of 3.6 percent (StatsSA, 2011, estimates not shown here). This suggests that in more recent years, growth in output in this sector has slowed down relative to the rest of the economy.

While the above suggests that the agricultural sector has remained relatively stagnant in terms of contribution to GDP between 1995 and 2005, the evidence presented in Figure 11 illustrates the long term decline of the sector since 1911. The vulnerability of the sector to external factors is clear, particularly the impact of periodic droughts on production in the agricultural sector.

Figure 11: The Contribution of Agriculture to GDP since 1911



Source: Tregurtha, et. al. (2010)

Not surprisingly, these structural changes in the economy referred to above have resulted in a particular pattern of changes in the demand for labour over the period. Employment growth since 1995 has been unevenly distributed among the different sectors, with most growth occurring in the tertiary sector. Tertiary employment grew by almost 3.3 million, representing 96 percent of the change in employment during the period. When analysing the data at the 3-digit SIC level, the key result is that employment growth in post-apartheid South Africa has been driven by the Financial and Business Services sector on the one hand, and the Wholesale and Retail Trade sector on the other hand. The latter, wherein the informal sector is dominant, has thus been a key job generator within the domestic economy. The data shows that these two main sectors alone accounted for close to 2.2 million of the 3 million new jobs created in South Africa between 1995 and 2009. Put differently, 66% of all employment generation in post-apartheid South Africa can be located within these two sectors. On the other hand, primary sector employment, specifically Agriculture and Mining, experienced a significant decline in employment of 17.3 and 4.4 % per annum respectively.

Table 4: Sectoral Distribution of employment change

Sector	1995		Q32009		AAG 1995 to 2009	Change	
	'000s	Share	'000s	Share		'000s	Share
Primary	1,696	17.9	952	7.4	-4.0	-744	-22
Agriculture	1,247	13.2	653	5.1	-4.5	-594	-17.3
Mining	449	4.8	299	2.3	-2.9	-150	-4.4
Secondary	1,988	21.0%	2,861	22.2	2.8	873	25
Manufacturing	1,452	15.4%	1,723	13.4	1.2	271	7.9
Utilities	86	0.9%	81	0.6	-0.5	-5	-0.2
Construction	449	4.8%	1,057	8.2	6.3	608	17.7
Tertiary	5,774	61.0%	9,064	70.4	3.3	3,290	96
Wholesale and Retail	1,684	17.8%	2,852	22.1	3.8	1,168	34.1
Transport	483	5.1%	737	5.7	3.1	254	7.4
Finance	592	6.3%	1,682	13.1	7.7	1,090	31.8
CSP	2,205	23.3%	2,627	20.4	1.3	422	12.3
Private Household	809	8.6%	1,166	9.1	2.6	357	10.4
Total	9,845	100%	12,884	100	1.9	3,038	100

Source: OHS 1995; QLFS Q3, 2009 (Statistics South Africa).

- Notes: 1. Growth rates in this table are compounded annual growth rates and were calculated using the 1995 and the 2009 estimates.
2. Other and unspecified categories are not shown here.
3. CSP is the Community, Social and Personal Services sector.

More specifically, approximately 744 000 jobs were shed in the agricultural sector over the period. As a result, the sector witnessed its share of total employment in the economy decline from 13 percent in 1995 to just more than five percent in 2009.

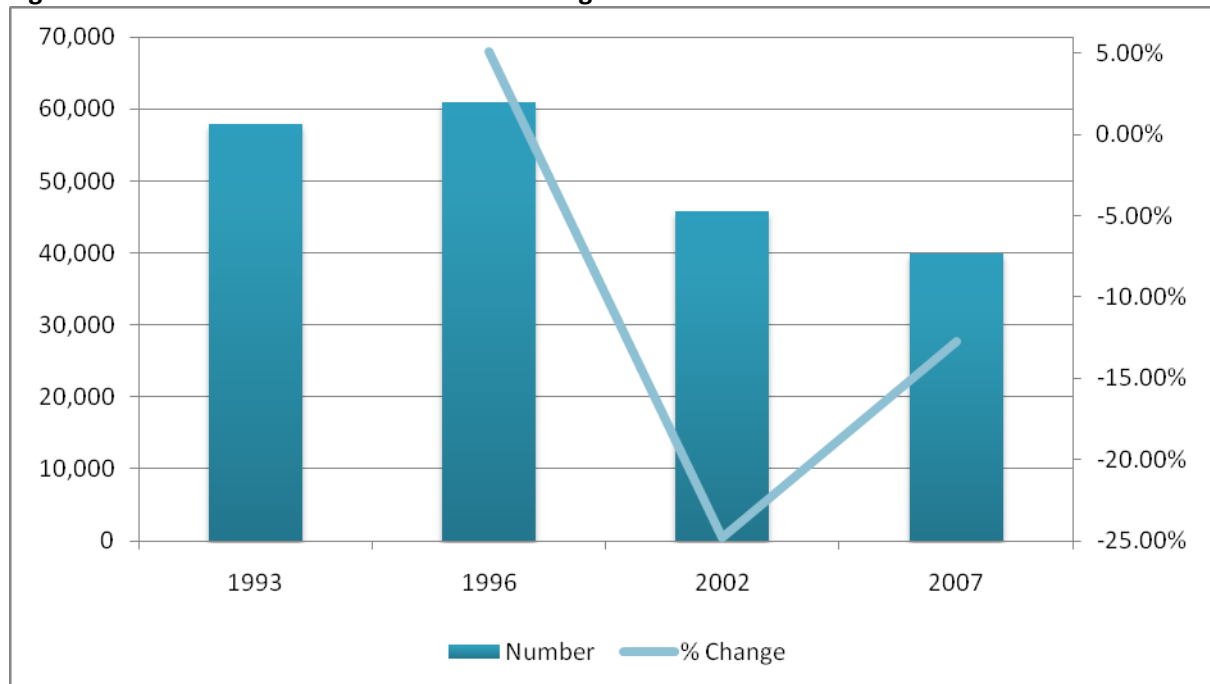
While this evidence may suggest a decline in the role of agriculture in the South African economy, particularly in terms of its contribution to employment, the importance of the sector cannot be underestimated, both in terms of its key role in the maintenance of food security and its potential to contribute to economic growth and employment creation.

3.2 Composition of the Agricultural Sector in South Africa

The South African agricultural sector comprises two distinct sectors, namely the small-scale subsistence farmers in rural areas and the more developed commercial farming sector. In addition to these two sectors, an emerging farming category can be distinguished. These farmers are mostly beneficiaries of the government's land reform policies, which assist poor households (often organised in groups) to purchase commercial farm land. This category also includes black farmers who are farming on land obtained through private sales (Tregurtha, 2008).

Figure 12 illustrates the relative decline in commercial farming in post-*apartheid* South Africa. After a small increase in the number of farming units between 1993 and 1996, the number of commercial units declined by 25 percent to approximately 45 000 in 2002. The decline continued after 2002, albeit at a lesser pace, and by 2007 approximately 40 000 commercial units remained. (While a more recent estimate is not available, in 2005 commercial farming units covered an area of approximately 82 million hectares (Tregurtha, et. Al. 2010).)

Figure 12: Total Number of Commercial Farming Units in South Africa



Source: Own Calculations from the National Department of Agriculture (2010)

Hall (as quoted in Tregurtha, 2008 and Tregurtha, et.al. 2010) suggests the decline in the number of commercial units reflects a consolidation of landholding into larger units of ownership and production, as smaller and less efficient commercial farmers have been forced out of the sector. These higher levels of concentration and competition have been a direct result of the liberalisation of South Africa's trade policy and the deregulation of the marketing of agricultural products. The entry of large agribusiness also appears to have contributed to the increased levels of concentration.

Data on small-scale subsistence farmers is not easily available. Estimates from household surveys suggest that approximately 1.3 million households living in non-metro areas has access to land suitable for agricultural production. In addition, 97 percent of these households engage in some agricultural activity, but on plots of land of less than 0.5 hectare. Evidence suggests that government social grants constitute the main source of income for these households and agricultural production makes a small but important contribution to these households' livelihoods and that the main objective is to provide for household food requirements. Generally, these small plots of land serve as an important asset for the rural poor, but small scale farmers face a number of constraints such as lack of access to finance, lack of access to agricultural support services as well as lack of knowledge to deal with occurrences such as droughts and disease (Tregurtha, 2008 and Tregurtha, et. al. 2010).

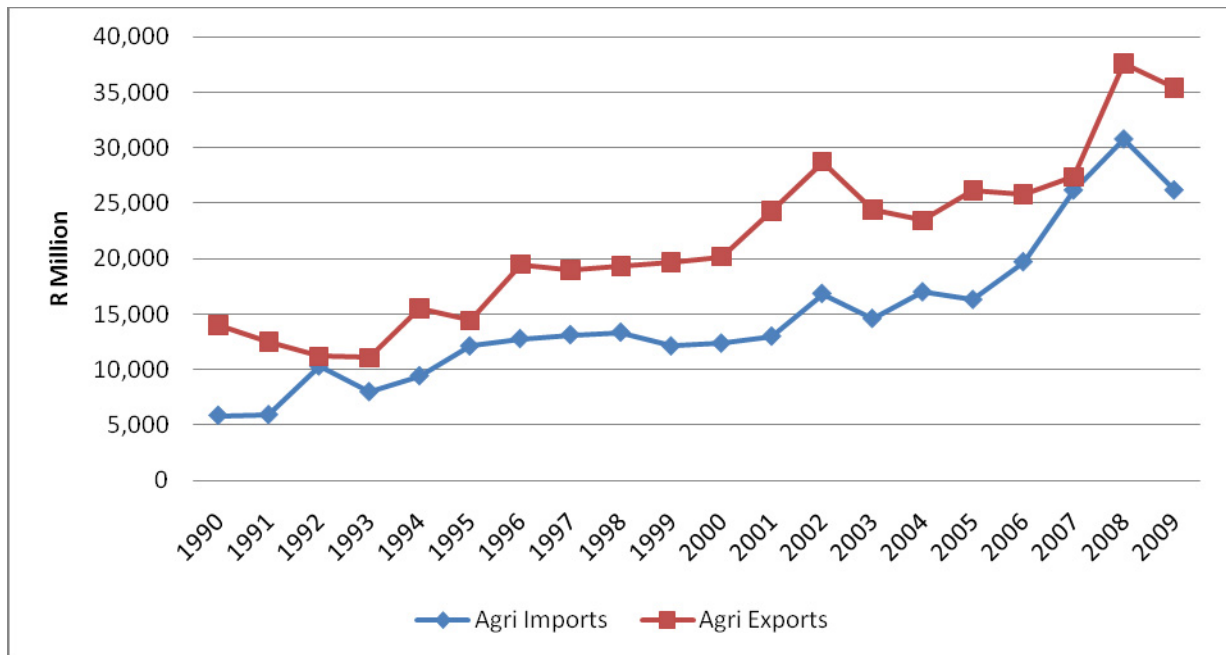
As highlighted above, the emerging farming category comprises both land reform beneficiaries as well as black farmers who have acquired land through private purchases. However, black participation in commercial farming remains low and this has been attributed to a range of factors such as the slow pace of land reform, the lack support for emerging farmers, as well as lack experience and access to finance and machinery (Tregurtha, 2008).

3.3 Trends in International Trade in Agricultural Products

The trade in agricultural products (both processed and unprocessed products) has increased steadily between 1990 and 2009, as measured by the value of imports and exports. In addition, for most of

the period, the monetary value of agricultural exports remained higher than that of agricultural imports.

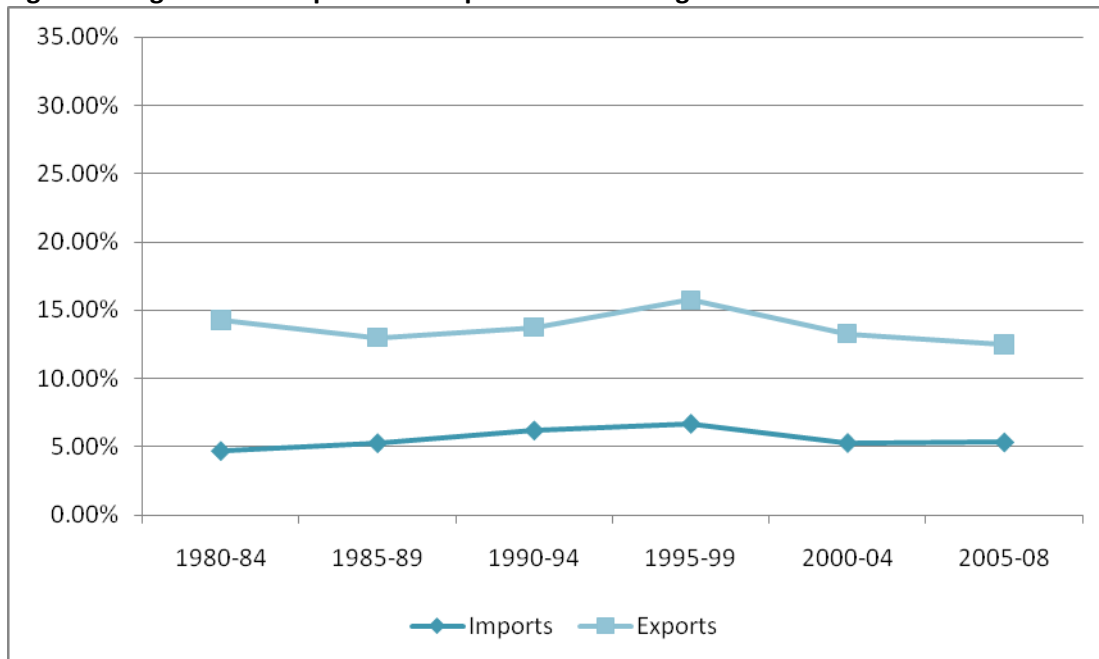
Figure 13: Trends in Agricultural Exports and Imports (R Million in 2005 Prices)



Source: Own Calculations from the National Department of Agriculture (2010)

However, the evidence presented in the figure below suggests that since 1990, the contribution of agricultural exports to the country’s total exports has declined slightly from about 14 percent in 1990-94 to approximately 13 percent in 2005-08. Over the same period, the contribution of agricultural imports to total imports has remained relatively stagnant at just more than five percent.

Figure 14: Agricultural Imports and Exports as Percentage of Total Trade Flows



Source: Own Calculations from National Department of Agriculture (2010)

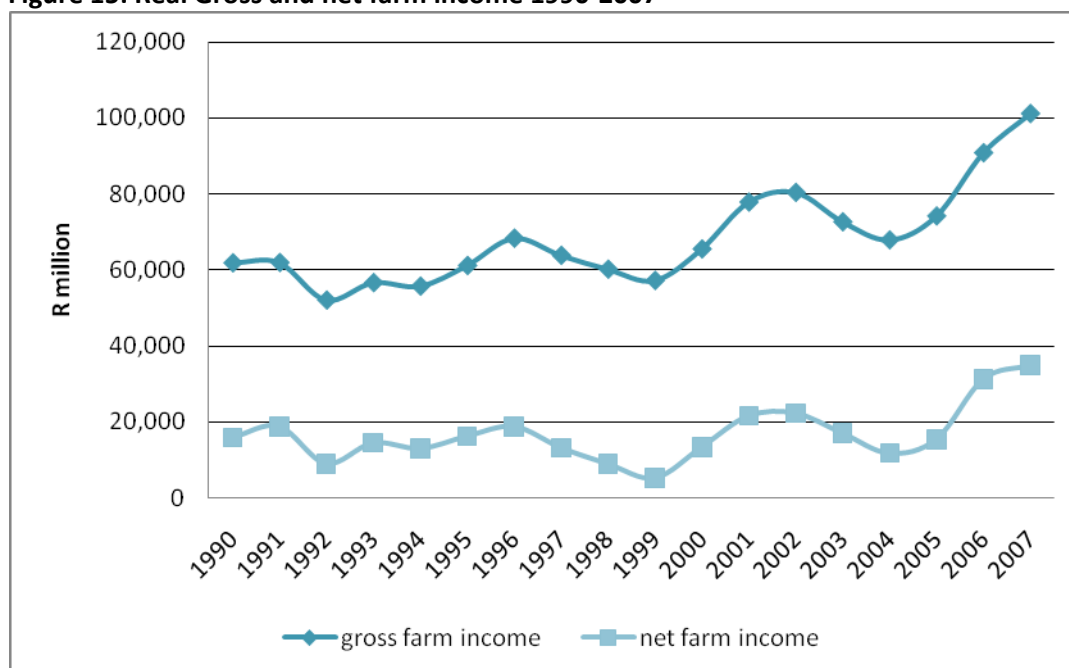
Overall then, while the Rand value of exports has increased since 1990, the sector has not managed to increase its share in total exports – suggesting an inability to increase access to foreign markets relative to non-agricultural exports (See Tregurtha, et.al. 2010 for a more detailed discussion on the trend in agricultural trade since 1990).

3.4 Profitability of the Agricultural Sector

As discussed above, the output from the agricultural sector has been relatively unchanged, as measured by its contribution to GDP in South Africa between 1995 and 2009. Data focusing on the performance of the sector since 2000 suggests that in more recent years, growth in the sector has been lagging behind aggregate output growth. In addition, the relative contribution of agricultural imports and exports to total trade flows has remained unchanged. The objective of this section is to evaluate the profitability of the sector, by considering the trends in gross and net farm income as well as the average return on agricultural investment.

Figure 15 presents the trends in gross and net farm income respectively between 1990 and 2008. Net farm income is calculated by subtracting all production expenses from gross farm income. While gross farm income experienced fluctuations over the period, the overall trend has been upward between 1990 and 2008, with a particularly large increase between 2006 and 2007. By 2008, aggregate gross farm income was just more than R100 billion.

Figure 15: Real Gross and net farm income 1990-2007

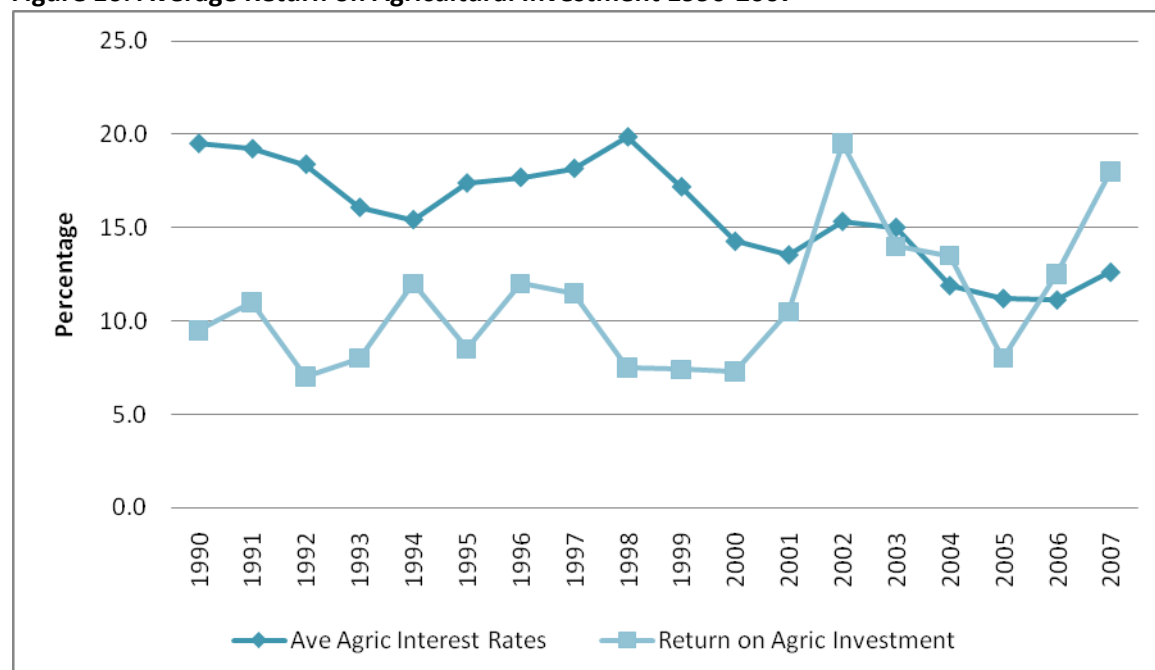


Source: Own Calculations from National Department of Agriculture (2010)

For most of the period, the trend in net farm income displays a similar pattern than that for gross farm income. Again, while net farm income also displays some fluctuations over the period, the overall trend is upwards.

The evidence presented below suggests that the average return on agricultural investment peaked in 2002 at 19.5 percent before declining to almost seven percent in 2005. Since then it resumed an upward trend again, reaching approximately 18 percent in 2007.

Figure 16: Average Return on Agricultural Investment 1990-2007



Source: Own Calculations from National Department of Agriculture (2010)

Before 2002, the cost of capital (as measured by the average agricultural interest rate) was higher than the return from agricultural activities. In 2002, 2004, as well as 2006 and 2007, the return on the agricultural activities was higher than the interest rate. This suggests that the profitability of the agricultural sector may have been on the increase over the final two years under consideration.

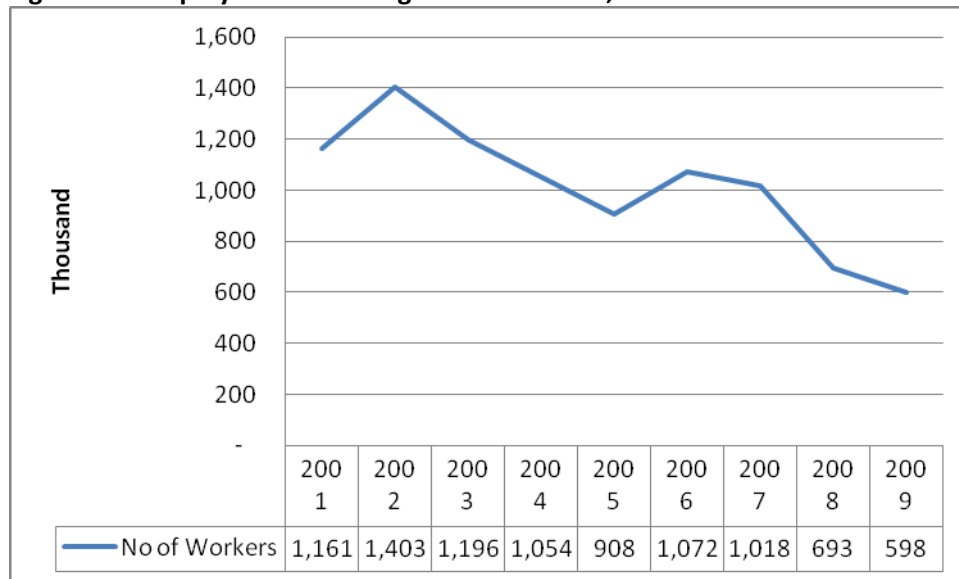
Overall then, while the both gross and net farm income fluctuated over the period, the long-term trends have been positive. Coupled with the fact that the returns on agriculture have remained higher than the cost of capital, the evidence thus suggests that, in recent years, the farming sector has become more profitable.

3.5 Employment in the Agricultural Sector

Before discussing the trends in employment in the agricultural sector, some problems associated with the definition and measurement of agricultural employment should be noted. Before 1994, Statistics South Africa, as well as the National Department of Agriculture, estimated total employment in the agricultural sector according to the total number of workers employed on farms in South Africa. In the post-Apartheid era, official surveys utilise the industry and occupational coding according to the International Standard Industrial Classification of all Economic Activities (ISIC 1993) and the International Standard Classification of Occupation (ISCO 88). According to ISIC 1993, agricultural workers can be classified using the agricultural, forestry and fisheries *industry* code. The occupation code list also makes provision for the classification as skilled agricultural workers, but evidence suggests that these workers have not been recorded consistently over successive Labour Force Surveys.

Below we only present the estimates for those recorded as being employed in the agriculture sub-sector of the agriculture, forestry and fisheries industry. While the majority of skilled agricultural workers are included in these estimates, a small number were reported as working in a different industry. These workers are not included in the analysis.

Figure 17: Employment in the Agricultural Sector, 2001 to 2009



Source: Own Calculations from StatsSA (2010)

The estimates confirm the overall decline in employment in the agricultural sector already discussed. In 2001 just less than 1.2 million workers (including farmers) were employed in the sector. After an increase to just more than 1.4 million employees, the number of individuals working in agriculture declined to just less than half of the number employed in 2001. Thus, by 2009 just less than 600 000 people were classified as working in the sector.

A detailed analysis of the trends in employment falls outside the scope of this paper, but several reasons for the decline in the number of jobs in the sector can be put forward. The structural change in the South African economy, characterised by the relative decline in the primary and secondary sectors and the increased output by the tertiary sectors, has already been mentioned. This decline in the primary and secondary sectors has also been accompanied by an increased level of capital intensity of production. As a result the agricultural sector has witnessed an increase in the number of skilled workers as well as job losses amongst unskilled workers. In addition, permanent farm workers have been replaced by seasonal and/or casual workers (referred to as the casualisation of labour) (See Tregurtha, 2010). (If the seasonal workers are not actually working at the time of the survey, they are officially classified as unemployed.)

Metz (2010) analysed the impact of the Sectoral Determination (implemented in March 2003) on the employment levels of farm workers and found that in the four years after the implementation of the determination, employment decreased by 36 percent. Stanwix (2011) also found (utilising data from the Labour Force Surveys) that farmworker employment has fallen as a result of the introduction of the minimum wage. Specifically, he found that the number of farmworkers covered by the Sectoral Determination fell by approximately 20 percent within six months of the introduction of the minimum wage legislation. He compared this decrease in employment to changes experienced by a group of demographically similar workers who were not covered by the law and no such decrease in employment was evident for these workers. Additionally, using a difference-in-differences approach, Stanwix (2011) showed that the probability of employment as a farmworker fell by approximately 13% in the post-law period.

4. Agricultural Policy Reforms since 1994

Since 1994, the post-*apartheid* government has released a number of policy documents to guide the development of the agricultural sector. The most important of these are the Agricultural White Paper, the Agricultural Policy in South Africa Discussion Document and the Strategic Plan for South African Agriculture. In addition, the Accelerated and Shared Growth Initiative for South Africa (ASGISA) has identified a critical role for the sector in terms of its potential for contributing to employment creation and economic growth (for a more detailed discussion see Tregurtha, 2010).

The broad policy documents will not be discussed here and the objective of this section is to rather provide a brief overview of some of the key policy interventions and instruments implemented in the agricultural sector since 1994. All these interventions share a key objective common, namely to improve the livelihoods of those working in the agricultural sector by improving efficiency in the sector.

We first turn to reforms of trade and marketing policies since 1994, aimed at stimulating output in the sector, before discussing direct interventions such as land reform policies, wage setting, skills development and support to emerging farmers.

4.1 Trade and Marketing Policies since 1994⁵

Trade Liberalisation

Before 1994, trade policy in the agricultural sector largely comprised direct controls such as quantitative restrictions, specific duties, price control, and import and export permits (Tregurtha, et.al., 2010). After 1994, these direct controls were replaced by tariffs and the gradual lowering of these tariffs. In fact, the lowering of tariffs already commenced before 1994. Between 1990 and 1999, South Africa reduced its number of tariff lines from 12 500 to 7 743. The maximum existing tariff was reduced from 1400 percent to 55 percent. Tariffs on agricultural products were similarly reduced and currently all agricultural tariffs are set below the 1994 Marrakech Agreement rates (Vink & Van Rooyen, 2009). South Africa is also part of a number of preferential trade arrangements, both regionally (within the Southern African Customs Union and the SADC) and internationally (most notably with the EU and as part of the Africa Growth and Opportunity Act (AGOA)) (Tregurtha, et. al., 2010 and Vink & Van Rooyen, 2009).

The liberalisation of trade had a significant impact on the South African agricultural sector. The global prices of field crops were adjusted downwards in line with global prices and have since been set by market forces. Farmers, usually commercial farmers, also adjusted their risk management profiles to adjust for the greater instability. The liberalisation of the agricultural trade policy also contributed to increased competition and concentration levels in the sector. Without the benefit of protection and unable to take advantage of economies of scale, smaller and less efficient commercial farmers were unable to continue farming and had to exit the sector (Tregurtha, 2008:5).

Marketing Deregulation

The original Marketing Act (1937) and the revised Marketing Act (1968) regulated approximately 70 percent of agricultural output (under 22 marketing schemes) until 1998. While attempts to deregulate the industry already commenced in the 1980's, the most important policy changes were introduced by the Marketing of Agricultural Products Act (Act 47 of 1996). The Act established the National Agricultural Marketing Council (NAMC) whose main tasks were to dismantle the existing Control Boards, as well as to monitor and manage the interventions of the state in the agricultural

⁵ This section draws heavily on Tregurtha, Vink, Kirsten (2010).

sector (Vink and Van Rooyen, 2009). The overall objectives of the Act were to promote efficiency in the agricultural sector, increase access to markets, promote viability within the sector, and to optimise export earnings. A rule for state intervention in the sector was established, namely that intervention is only allowed if at least one of the objectives mentioned above is furthered, *but* that the outcome of the intervention is not substantially detrimental to any other objective. While the original Marketing Act encouraged and implemented state interventions, the aim with the new Act was to limit and monitor state interventions (Tregurtha, et. al., 2010).

The Marketing of Agricultural Products Act made different provisions for different commodities and production modes in the sector, and the impact of the Act hence depended on the commodity or sub-sector in question. For example, with regards to field crops, the key change was the abolishment of the pan-territorial and pan-seasonal pricing mechanism, which was a single channel fixed price marketing regime. The pan-territorial mechanism did not take transport costs into account when setting prices and all farmers received the same prices irrespective of distances travelled. Pan-seasonal pricing created a market where all crops were sold immediately after harvesting, with no crops stored for sale at a later stage. This mechanism resulted in an over- of under-supply of crops, depending on the harvest of that season. With the abolishment of these two pricing mechanisms, prices became regionally and seasonally differentiated to take account of transport costs as well as variation in demand and supply (according to seasonal markets) in different regions.

Under the previous regime, livestock was subject to a range of market control schemes. For example, red meat was regulated under 'surplus removal' schemes which effectively set a floor price. A board was responsible for controlling supply in order to maintain prices above this floor price. In addition, controlled areas for the supply of red meat were allocated (usually the main consuming areas) and meat had to be slaughtered in approved abattoirs. The new Marketing Act provided for the deregulation of controlled areas as well as a higher number of slaughterhouses. This resulted in a greater supply of red meat as well as enhanced access to the red meat market (Tregurtha, et. al, 2010).

Overall, the Marketing of Agricultural Products Act of 1996 created agricultural markets which are beneficial to both the farmers and the consumers by allowing demand and supply factors to influence market outcomes. One of the negative consequences, however, has been that smaller and less efficient commercial farmers have been unable to adjust to the changing circumstances and have exited the sector (Tregurtha, 2008).

The Monitoring of Food Prices

Before 1991, price controls applied to a variety of food products, including bread, maize and dairy. In 1991 these controls were abolished and market forces were allowed to set prices. With demand and supply factors influencing prices, food price inflation became a reality in the South African economy. Initially, overall food price inflation remained stable due to the deregulation of the sector as well as the process of trade liberalisation. Specifically, the producer prices for cereals were forced downwards as a result of deregulation and liberalisation, and this, in turn, stabilised the food price inflation. However, in 2002, the depreciation of the South African Rand against major currencies increased the cost of imported inputs in production in the agricultural sector. This in turn resulted in sharp increases in food prices (Tregurtha. et.al. 2010 and Vink & Van Rooyen, 2009).

The Food Price Monitoring Committee was established in response to the increases in the prices of food items. Its key objective was to investigate the operation of price formation mechanisms in the product value chain. The Committee reported that the high level of food price inflation was mainly

due to the increase in the commodity prices which in turn was influenced by world prices and the depreciation of the exchange rate of the Rand against major currencies. One of the outcomes of the Committee's recommendations was the regular publication of food cost review, as well as investigations by the Competition Commission into anti-competitive behaviour in a number of food industries, including grain storage, bread and dairy (Vink and Van Rooyen, 2009).

In 2002, the Integrated Food Security Strategy (IFSS) was adopted with its vision the provision of "access to sufficient, safe and nutritious food by all South African at all times to meet their dietary and food preferences for an active and healthy life" (See DoA, 2002). The IFSS was in part a response to the high basic food prices at the time, but at the same time a key poverty alleviation intervention by the South African government. A further objective of the IFSS was to consolidate and integrate the various food security programmes implemented by different government departments

Also in 2002, the Emergency Food Relief Programme was introduced as a sub-programme of the IFSS. The programme distributed food parcels to households in need, but this approach proved to not be sustainable. It was replaced by an initiative which distributed agricultural starter packs to rural and urban households as well as to communities with access to land. The objective was to stimulate agricultural production by establishing food gardens for household production of agricultural goods. This Agricultural Starter Pack Programme later evolved into the Household Food Production Programme (HFPP) whereby provinces were encouraged to implement the starter pack, but to also provide assistance and capacity building to the households involved (Tregurtha, et. al. 2010).

4.2 Land Reform Policies⁶

Redressing the injustices of forced removals and the denial of access to land during the *apartheid* era has been one of the main concerns of successive post-*apartheid* governments. During the *apartheid* years, black South Africans were forcibly removed from their homes and land according to the Group Areas Act (urban areas) and Natives Land and Trust Acts (rural areas) of 1913 and 1936. Influx control policies into urban/metropolitan areas as well as the creation of Bantustans (which relocated individuals to demarcated areas) restricted movement and access to labour markets for many black South Africans.

In April 1994, the ANC released the Reconstruction and Development Policy base document as part of its election manifesto. In November of the same year, the RDP White Paper was released with the aim of providing more concrete implementation strategies for the RDP (Republic of South Africa 1994b). One of the key objectives articulated in the RDP was the implementation of a fundamental land reform programme focusing on the provision of access to agricultural land for poor South Africans as well as the provision of security of tenure for farm workers (Republic of South Africa, 1994a).

The White Paper on Land Policy, released in 1997, identified the three key elements in the land reform process, namely land restitution, land distribution and land tenure. This White Paper continues to guide land reform policy in South Africa (see Lahiff, 2008).

Land Restitution

The Restitution of Land Rights Act 22 of 1994 was one of the first pieces of legislation passed by the post-*apartheid* government. In effect, this Act addresses property loss due to unfair discrimination

⁶ This section draws on Sibanda (2001) and Hall (2004).

after 1913 (when the Natives Land Act was implemented). According to the Act, claimants have a choice between restitution of, or compensation for land lost. If claimants opt for the compensation option they are provided with a Restitution Discretionary Grant of R3 000 per household. In terms of the restitution option they receive land as well as a Settlement Planning Grant which is calculated as a percentage of the value of the claim. The objective of the Settlement Planning Grant is to enable the claimants to appoint consultants to assist with the development of the land, and transfer the skills necessary to ensure long term sustainability of the venture.

Tregurtha et al (2010) reported that 74 417 claims have been settled between 1995 and 2007. As part of these claims, 1.6 million hectares of land were transferred to the claimants. Statistics show that about 6 percent of settled claims went towards the restitution of land for rural households.

Land Redistribution

A pilot programme for land redistribution was instituted between 1995 and 1999. The aim of the programme was to assist the poor to buy land by providing them with state grants. In order to be eligible for this grant, a household's income had to be less than R1 500 per month. The maximum value of the grant was R16 000 per household. The grant was used to purchase land from a willing seller and the intention was for this land to be used for residential and agricultural productive purposes. Due to the high cost of land, individuals often pooled their grants to buy land as a group.

In 2001, Land Redistribution for Agricultural Development (LRAD) was established after the pilot programme for land redistribution ended. LRAD removed the income ceiling for eligible households but introduced a new restriction, namely that only black South Africans could receive the grant. Within this group, four further target groups were identified, namely women, farm workers, the youth and the disabled. Sliding scales for grants between R20 000 and R100 000 were introduced but applicants were required to make a capital, loan, asset or labour contribution. LRAD was also made available to individuals and each adult in a household became eligible. The intention was for household members to pool their grants and acquire more (and more fertile) land.

By 2007, 2.5 million hectares of land had been redistributed (Tregurtha et al 2010) through both redistribution initiatives. Over the years, a decline in the number of participants as well as the size of the pockets of land (in hectares) has been observed.

The Comprehensive Agricultural Support Programme (CASP) was introduced in 2004 with the overall aim to assist new land owners in retaining their land. The objectives were to provide support to beneficiaries through the provision of the following: information and technological management; technical advice, marketing and business development; financial support; training and capacity building; and on/off farm infrastructure support. The target groups included subsistence-based households, beneficiaries of land distribution programmes and commercial farmers, to ensure that the overall agricultural environment was able to provide support to beneficiaries of land reform programmes. By the end of 2007, 3 000 CASP projects were underway, with an estimated 230 000 beneficiaries.

In total, land redistribution programmes were well formulated and well-funded but statistics suggest that only 5 percent of commercial farm land had been transferred (Tregurtha et al 2010). Evidence also suggests that beneficiaries are not necessarily benefitting financially as a result of their participation. State transfers of land have further been lagging behind private transfers of agricultural land. However, there are examples of success stories where beneficiaries have moved out of poverty and the production of small-scale agricultural products had increased. In Kwa-Zulu

Natal, success has been achieved by small farmers producing sugar cane. This success has been emulated in the Mpumalanga province where new sugar cane plantations have been established.

Land Tenure and the Extension of Security of Tenure Act of 1997

In 1997, the Extension of Security of Tenure Act (ESTA) No 62 was implemented with the key objectives of securing farm dwellers' rights to tenure and to prohibit arbitrary evictions. Before this Act was passed, farmers had the right to evict farm workers from their houses. Farm owners generally evicted workers after terminating their contract of employment. These workers therefore lost their source of income as well as place of living simultaneously.

The ESTA Act makes provision for lawful eviction whereby the farmer and the farm workers have certain responsibilities. It also offers farm workers long-term tenure rights through the purchasing of land with the assistance of the state. This long-term tenure only applies to individuals and households living within land zoned for agricultural purposes and consent has to be obtained from the owner of the land as well as all the workers employed on the land.

Evidence suggests that a large number of workers have moved from farms to urban areas or former homelands since the implementation of the ESTA Act (Hall 2004). It has also been suggested that farmers' hostility⁷ towards the tenure security act as well as economic pressures are to blame for this rapid decrease in farm worker tenure. Critics have also suggested that the ESTA Act has encouraged farmers to replace permanent workers with seasonal/casual workers to avoid the provision of the Act that they have to provide permanent workers with permanent tenure. While agricultural employment has declined since the implementation of the ESTA Act and there has been an increase in farm worker evictions, it is impossible to link these trends directly to the introduction of the ESTA Act. It is therefore impossible to compare the negative consequences of the Act with the benefits to permanent farm workers who now have security of tenure.

4.3 Sectoral Determination for Farm Workers⁸

In 2002, sectoral determinations were instituted for a number of sectors/categories of workers, including farm workers. The Minister of Labour can proclaim a sectoral determination that establishes basic conditions of employment for employees in a specific sector and area. A sectoral determination may set minimum terms and conditions of employment, including minimum wages. It may also provide for the adjustment of minimum wages, regulate the manner, timing and other conditions of payment of remuneration as well as prohibit or regulate payment of remuneration in kind.

The Sectoral Determination 8 for Farm Workers became binding in March 2003 and was succeeded by the Sectoral Determination 13 for Farm Workers in 2006. Two types of minimum wages were prescribed, namely a certain level of minimum wage for workers working within an urbanised municipal area (Area A) and those working in rural areas (Area B). In Table 5 the minimum wage for each area and different time period are shown. From the 1st of March 2009, the distinction between the two types of areas became void and all farm workers had the same minimum wage irrespective of their area of work.

⁷ Farm owners feel that the new act limit them to hire and fire workers, and that they are pressured into providing living quarters to all of those working permanently on the farm, as well as those that have retired.

⁸ This section draws on Borhat, Kanbur, Mayet (2010) as well as Metz (2010).

Table 5: Sectoral Determination (Minimum wage per Month) for Farm Workers

Farm Workers	01-Mar-2006 to 28-Feb-2007	01-Mar-2007 to 29-Feb-2008	01-Mar-2008 to 28-Feb-2009	01-Mar-2009 to 28-Feb-2010	01-Mar-2010 to 28-Feb-2011
Area A	R994, 00	R1041,00	R1090,00	R1231.7	R1316.69
Area B	R885,00	R989,00	R1090,00	No Area Type specified	No Area Type specified

Source: Department of Labour (2011)

The Sectoral Determination for Farm Workers also prescribes wages according to hours of work. For workers that worked more than 27 hours a week, a monthly minimum wage was introduced, whereas for workers working less than 27 hours a week, an hourly wage was set. The monthly wage is equivalent to the hourly wage if workers are employed for the maximum work week of 45 hours. In addition, a farm worker is not allowed to work more than 45 hours a week and provisions for annual leave and overtime are specified. Below the impact of the minimum wage prescription on farm workers will be explored.

The Impact of the Sectoral Determination on Farm Workers

Metz (2010) analysed the impact of the Sectoral Determination on the employment and wage levels of farm workers and found that between 2000 and 2002, before the Sectoral Determination came into effect, employment of farm workers increased by 28 percent. However, in the four years after the implementation of the determination, employment decreased by 36 percent. Both males and females were affected by the decrease in employment, while Coloured workers were the population group most affected by the employment changes. Metz also argues that after the implementation of the Determination, farmers preferred to employ casual and temporary workers instead of permanent workers. One of the drivers of this change in structure of the agricultural employment sector is farmers' need for more flexible work arrangements with workers and to evade the complexities associated with a permanent employment, as well as compliance with the Sectoral Determination. Metz (2010), however, also found that real wages in the agricultural sector declined steadily before 2003, but increased dramatically after the implementation of the Determination.

The evidence therefore suggests that the Sectoral Determination has been successful in improving the income levels of vulnerable workers in the sector. However, the total number of workers employed in the sector has declined since the implementation of the Determination. As discussed earlier, the accurate measurement of employment in the sector is difficult. In addition, the decline in employment levels can be a result of a number of factors, but the above does suggest that the gains associated with the introduction of the Sectoral Determination have to a certain extent been offset by job losses in the sector.

Violations of the Minimum Wage

A key problem affecting wage earners in developing countries, and especially South Africa, is the issue of enforcement of legislation pertaining to minimum wages. Indeed, if non-compliance persists in a labour market, the effectiveness of Sectoral Determinations (such as the one for farm workers) in raising actual wages is unclear. Borat, et. al (2010) found that compliance with minimum wage laws in South Africa is generally low. They suggest that in 2007, 45 percent of workers subject to minimum wage legislation received less than the minimum wage. By simulating this rate of violation for 2001, they measured the violation rate for workers by assuming minimum wages were in effect in 2001. They found that, had minimum wage legislation been in place, 55 percent of workers would have received less than the minimum wage in 2001.

In addition, Borat, et. al. (2010) found that farm workers experienced a significant decline in the numbers of workers earning less than the prescribed minimum wage from 70 percent in 2001 to 55 percent in 2007. Firstly, this result suggests that the enforcement of the minimum wages for farm workers improved over the period, which would have resulted in an increase in their wages. Secondly, the result however also suggests that farm workers were still more likely to receive wages below the statutory minimum than workers in other sectors governed by Sectoral Determinations.

4.4 Support for Skills Development⁹

As discussed earlier, one of the key issues contributing to the lack of progress or success in the emerging farming sector, has been the lack of skills and experience of these farmers. The section below briefly reviews the main initiatives to development skills in the agricultural sector.

AgriSETA

The Agricultural Education and Training programme of the National Department of Agriculture focuses on skills training programmes to meet the skills demands of the Agricultural sector. The Sector Education and Training Authority or AgriSETA plays a key role in the provision of skills as part of this programme. The specific functions of the AgriSETA include:

- to develop sector skills plans that falls within the national skills development strategy
- establishing learnerships through the implementation of the sector skills plan
- promoting practical work experience through learnerships
- and the development of learning materials.

The AgriSETA, however, are faced with challenges which are very specific to the agricultural sector. Due to the complex nature of the sector, the SETA has to deal with a wide range of stakeholders. Clients include large-scale commercial farmers as well as small-scale subsistence-based farmers. These clients have different needs and requirements, making it difficult for AgriSETA to deliver an adequate service to all. Another problem is that the SETA has an insufficient revenue base due to a limited number of employers who are paying the skills development levy. Hence, the lack of funds restricts AgriSETA in implementing the necessary skills development and capacity building so critically needed in the sector.

Farmer Support and Extension Services

The Farmer Support and Extension Services are prescribed in the framework of the National Department of Agriculture's policies but the actual services are provided by the nine provinces. The primary objective of the farmer support and extension services is to develop the skills base of farmers through providing technical advice, information and training. Technology plays a pivotal role in the agricultural landscape and the gap between available technology and farmers' expertise remains wide. A definite client focus shift has taken place since 1994, moving from commercial farmers to emerging small farmers, who are most in need of assistance.

One of the main challenges experienced in the implementation of the extension services is the lack of skills of the extension officers themselves. These officers generally have no tertiary agricultural qualifications and farmers have reported that they feel that the officers lack crucial management

⁹ This section draws heavily on Tregurtha, Vink, Kirsten (2010).

and agricultural skills. Similar to the problems experienced by the AgriSETA, the lack of sufficient funding has also been cited as a major problem.

4.5 Support for emerging farmers

While the skills development support described above is targeted at the agricultural sector as a whole, some initiatives are aimed specifically at supporting emerging farmers.

MAFISA

The lack of access to finance is one of the key constraints to the development of small, emerging farmers in the agricultural sector. In 2004 the government established MAFISA (Micro Agricultural Financial Institutions of South Africa) to improve access to financial services for the poor emerging farmers.

A pilot phase was initially instituted in three provinces namely Limpopo, Eastern Cape and Kwa-Zulu Natal and by July 2007 the programme was expanded nationally. Evidence of the performance relates mainly to the pilot phase which ended in March 2007. 5 170 farmers received loans, which is more than the targeted number of 2 000 farmers, but evidence suggests that the default rate on the repayment of the loans might be as high as 40 percent.

One of the biggest obstructions for MAFISA was the discovery of fraudulent activities at one of the Land Bank branches. The Land Bank was responsible for administering the loans to farmers. It is estimated that the loss from this amounted to R 17.5 million and involved 27 projects. Other constraints included high interest rates charged on loans and inadequate capacity within the agency. Due to the problems at Land Bank the disbursement of loans had started late and no review has taken place as of yet to estimate the success/failure of the agency.

AgriBEE

In 2003, the Broad-Based Black Economic Empowerment Act (Act 53 of 2003) was implemented. The main objective of the Act was to address the past injustices against previously disadvantaged racial groups. A Code of Good Practice was initiated within the act. Charter Councils was also established to monitor progress of BEE within an industry through the use of a scorecard. This scorecard identifies seven categories namely management control, ownership, employment equity, skills development, corporate social investment and procurement.

In the agricultural sector, AgriBEE was established. The agricultural scorecard made provisions for land reform initiatives as well as rural development. In the agricultural sector, evidence suggests that the cost of compliance makes it detrimental to comply with the rules and regulations of the BEE charter. Small farmers and large commercial farmers are expected to measure their contribution to BEE in the same manner. Large commercial farmers have more resources to comply and measure their contribution to AgriBEE whereas small farmers find it difficult to measure their contribution with their limited resources. As a result, the AgriBEE Charter Council is in the process of being established and the review of the AgriBEE charter is its key objective.

4. Conclusion

The first objective of this paper was to provide an overview of the shifts in income and non-income poverty in the post-*apartheid* period in South Africa. The evidence presented suggests that South Africa has witnessed a decline in absolute and relative poverty since the advent of democracy, both

at the aggregate level and for the largest population group, namely Africans. This result is robust across a range of feasible poverty lines. The data also, however, illustrates that race and gender continue to be key markers of vulnerability. Despite the reductions in African poverty levels, individuals living in households headed by Africans account for a disproportionate share of the poor in the society. In parallel, female-headed (it must be said predominantly African female-headed) households yield vastly higher headcount and poverty gap ratio estimates in both 1995 and 2005, thus reflecting the strong gender dimension to the country's poverty profile.

It was also shown that the rapid widening and deepening of the South African government social security system since 1995 lies at the heart of the rapid growth in the expenditure levels of the poor. Specifically, the enormous extension of the social grant system targeted at the most vulnerable members of the South African society, specifically the disabled, the aged and children, has been the main contributor to the decline in poverty between 1995 and 2005.

While the gains in terms of income poverty have been relatively modest, great strides have been made in the delivery of basic services to South African households. The evidence also confirms that the delivery of electricity, flush/chemical toilets, formal housing and piped water has been well targeted to the poor, with households in the bottom of the expenditure distribution experiencing the largest relative increases in access to these services. The estimates for 2009, however, do show that poorer households still had significantly lower access to all of these assets.

The second main objective of the paper was to provide a snapshot of the most important agricultural policies and support measures introduced since 1994. The majority of these interventions were aimed at increasing participation by emerging farmers in the sector. While the agricultural sector has remained relatively stagnant between 1995 and 2009 in terms of its contribution to GDP, the sector witnessed its share of total employment in the economy decline from 13 percent in 1995 to just more than five percent in 2009. This corresponds to approximately 744 000 jobs lost in the sector. The decline in employment has been the result of a number of factors, including the increased level of capital intensity of production, the introduction of minimum wage legislation and the replacement of permanent farm workers with seasonal or casual labour (the latter also partly in response to the introduction of the minimum wage). While it is impossible to accurately measure whether agriculture has played any role in the reduction of poverty levels since 1995, the decline in the employment of farm workers does suggest a loss of income experienced by the households attached to these workers. In addition, evidence suggests that farm workers were also still more likely to receive wages below the statutory minimum than workers in other sectors governed by Sectoral Determinations.

In addition, while the lack of data makes it impossible to comprehensively review the impact of the measures introduced since 1994, evidence suggests that interventions such as trade liberalisation, marketing deregulation as well as the land reform policies have been less than successful in increasing participation in the sector (particularly by previously excluded groups). Small and emerging farmers generally lack the skills and experience to take advantage of the policy changes. Progress with the land redistribution process has also been slow.

The above suggests that, despite the government's emphasis on the role of agriculture in contributing to economic growth and job creation, the scope for this might be limited. For the sector to play a significant role in poverty reduction, several issues have to be resolved. The most critical of these include support for emerging farmers, in terms of skills development, improved support and extension services, as well as improved access to financial services. The slow progress with the land redistribution process also warrants attention.

5. References

- Department of Agriculture. 2002. *The Integrated Food Security Strategy for South Africa*. 17 July. 2002. Available from <http://www.info.gov.za/otherdocs/2002/foodpol.pdf>.
- Foster, J.E., Greer, J & Thorbecke, E. 1984. A Class of Decomposable Poverty Measures, *Econometrica*. Vol 52.
- Hall, R. (2004). *Land and Agrarian Reform in South Africa: A status Report 2004*. Programme for Land and Agrarian Studies, School of Government, University of the Western Cape. Research Report no. 20.
- Hoogeveen, J. & Özler, B. 2006. Not Separate, Not Equal: Poverty and Inequality in Post-Apartheid South Africa. In Borat, H. & Kanbur, R. 2006. *Poverty and Policy in Post-Apartheid South Africa*. Pretoria: HSRC Press
- Lahiff, E. 2008. *Land Reform in South Africa: A Status Report 2008*. Programme for Land and Agricultural Studies, School of Government, University of the Western Cape. Available from http://www.plaas.org.za/pubs/rr/PLAAS_RR38_Lahiff.pdf
- Metz, R. 2010. 'Deceiving hopes of the poor' or Realising the rights in our constitution: A study on the impacts of the Sectoral Determination of farm workers on Basic Conditions Of Employment. University of Cape Town. Unpublished Honours Thesis.
- National Treasury. 2011. *Budget Review 2011*. 23 February 2011. Available from <http://www.treasury.gov.za/documents/national%20budget/2011/review/default.aspx>
- NDA (National Department of Agriculture), 2010. *Abstract of Agricultural Statistics, 2010*. Pretoria. National Department of Agriculture
- Pauw, K., Mncube, L., 2007. Expanding the Social Security Net in South Africa: Opportunities, Challenges and Constraints. *Development Policy Research Unit Working Paper 07/127*. Cape Town: University of Cape Town
- Republic of South Africa. 1994a. *The Reconstruction and Development Programme: A Policy Framework*. Available from <http://www.polity.org.za/polity/govdocs/rdp/rdp.html>
- Republic of South Africa. 1994b. *White Paper on Reconstruction and Development*. Government Gazette Notice Number 1954 of 1994. Cape Town, 15 November
- Sibanda, S. 2001. *Land Reform and Poverty Alleviation in South Africa*. Paper presented at the SARP conference on Land Reform and poverty alleviation in Southern Africa held at the Human Science Research Council Pretoria 4-5 June 2001.
- Southern Africa Labour and Development Research Unit (SALDRU). 1993. *Project for Statistics on Living Standards and Development (PSLSD). The South African Integrated Household Survey*. Cape Town. Dataset.
- Statistics South Africa. 1995. *Income and Expenditure Survey 1995*. Dataset. Pretoria

- Statistics South Africa, 1995. *October Household Survey* (dataset). Pretoria.
- Statistics South Africa. 2008. *Income and Expenditure Survey 2005*. Dataset. Pretoria
- Statistics South Africa. 2009. *General Household Survey*. Dataset. Pretoria
- Statistics South Africa. 2011. Gross Domestic Product (GDP), 4th Quarter 2010. Statistical Release P0441
- Statistics South Africa, various years. *Labour Force Survey* (datasets). Pretoria.
- Statistics South Africa, various years. *Quarterly Labour Force Survey* (datasets). Pretoria.
- Tregurtha, N. 2008. *Position paper on the Role of Skills Development in Accelerating Growth and Equity in the South African Agricultural Sector*. Paper prepared for the JIPSA Technical Working Group. November 2008.
- Tregurtha, N; Vink, N; Kirsten, J. 2010. *Presidency Fifteen Year Review Project- Review of Agricultural Policies and Support Instruments in South Africa 1994-2009*. Trade & Industry Policy Strategies (TIPS).
- Vink, N. & Van Rooyen, J. 2009. *The economic performance of agriculture in South Africa since 1994: Implications for food security*. Development Bank of Southern Africa. Development Planning Division Working Paper Series No. 17.

Appendix 1

Shares in Population and Poverty: By Race and Gender of Household Head

	1995			2005		
	Population Share	R322 Poverty Line	R174 Poverty Line	Population Share	R322 Poverty Line	R174 Poverty Line
Race	77.28%	92.74%	95.45%	79.40%	93.19%	94.98%
African	9.31%	6.92%	4.40%	8.79%	6.30%	4.83%
Coloured	2.61%	0.23%	0.07%	2.48%	0.43%	0.17%
Asian	10.79%	0.11%	0.08%	9.23%	0.07%	0.03%
White						
Gender of Household Head						
Male	66.18%	57.74%	55.91%	56.50%	45.42%	42.63%
Female	33.82%	42.27%	44.09%	43.43%	54.53%	57.29%

- Notes:
1. Poverty lines are in 2000 prices
 2. The population in 1995 has been weighted by population weights according to the 1996 Census. The population in 2005 has been weighted by the household weight multiplied by the household size. The 2005 weights are based on the 2001 Census