

# Backward Capitalism in Rural South Africa:

Prospects for  
Accelerating Accumulation  
in the Eastern Cape



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# **Backward Capitalism in Rural South Africa: Prospects for Accelerating Accumulation in the Eastern Cape**

*John Sender\**

Date: February 2014

### **Working Paper Series No. 17**

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*\*Many people were generous with their time and helped to improve this paper.  
They include: Chris Cramer, Ben Fine, Mike Lewis, Vijay Makanjee and Vishnu Padyachee.*

# Abbreviations

OECD	Organisation for Economic Cooperation and Development
MMR	Maternal Mortality Rate
U5MR	Under 5 Mortality Rate
ART	Antiretroviral Therapy
HOI	Human Opportunities Index
EC	Eastern Cape
GFCF	Gross Fixed Capital Formation

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# FOREWORD

John Sender first came to the attention of ECSECC in 2012 with his paper in the *Transformation* journal titled “Fictions and elephants in the rondavel: Response to NDP on rural development”. We were impressed by the clarity of the paper and the depth of its reference material. Coincidentally, ECSECC officials then met with John at a workshop at Rhodes University on “Political Economy Restructuring of South Africa” (PERSA, October 2012). Initial discussions were held on rural development issues and it was agreed that John would visit the Province in 2013 for a rural field trip, jointly hosted by ECSECC and RuLiv. John arrived in April and visited Langkloof (deciduous fruit), Sunday’s River Valley (citrus) and Pondoland (Magwa Tea). A well-attended seminar was hosted by ECSECC.

John brings to his subject a wealth of global experience with a particular focus on agricultural development in sub-Saharan Africa, which he has been studying for the last forty years. ECSECC believes that the fresh insights on agricultural development policy contained in this paper deserve wide exposure.

John is Professor Emeritus at the School of Oriental and African Studies (SOAS), London University.

# Introduction

This paper begins with a brief historical discussion of recent international and national macroeconomic trends, before focussing on its main theme by providing a more disaggregated discussion of forces of production in rural South Africa and of the performance of the agricultural sector at the national and sub-sectoral levels. It will be argued that the long-term lack of dynamism of capitalist development in South Africa as a whole is reflected in and helps to explain failures of rural development; these failures have resulted in acute suffering in, for example, the Eastern Cape, where the barriers to dynamic capitalist growth remain particularly high, (although not insurmountable). The most disaggregated examples of crop and farm-specific failure are taken from the Eastern Cape, but the ambitious aim is to provide arguments that are relevant to most rural areas in South Africa, as well as a few arguments that may be relevant to macroeconomic policy making.

One reason for focussing on the Eastern Cape is that this province contains a relatively large number of the most deprived districts and of the most vulnerable rural children in South Africa (Day et al, 2009; Wright and Noble, 2012). The paper concludes with proposals for promoting more rapid capitalist development in the rural Eastern Cape, but also makes proposals to protect vulnerable rural people from the worst consequences of such development. These proposals are contrasted with the conventional wisdom in South Africa, i.e. both the rural development strategies proposed by the current government and those proposed by the critics of government policy. In an international context of unprecedented opportunities for growth, the long-term rate of accumulation in the South African economy has been sluggish. In many other economies throughout the world capitalism has, over the last fifty years or so, dramatically raised the level of the forces of production and has transformed relations of production.

*“The world economy performed better in the last half century than at any time in the past. World GDP increased six-fold from 1950 to 1998 with an average growth of 3.9 per cent a year compared with 1.6 from 1820 to 1950...”* (Maddison, 2006: 127).

After 1998, global accumulation continued to be impressive:

*“The world economy experienced very rapid growth in the decade before the global financial crisis. In fact, once we smooth out the annual variations, growth reached levels that were even higher than those in the immediate aftermath of World War II”* (Rodrik, 2011: 6).<sup>1</sup>

This historically unprecedented global performance was accompanied by a massive increase in wage employment (Glyn, 2006; Chi et al, 2012:5) and by a surge in labour productivity in both the manufacturing and agricultural sectors (IFPRI, 2013:23). Underlying these improvements in labour productivity (and driving the level of the forces of production) have been widespread and unprecedented improvements in the health, education and skills of workers (Casabonne and Kenny, 2011).

Of course, this has not been a smooth process diffused evenly across the world. About a third of the world’s population are unfortunate enough to live in countries that have grown relatively slowly or not at all since the early 1970s (Maddison, 2006: 25). Also, there have been short-run crises of accumulation even in the most dynamic capitalist economies, e.g. in South Korea and in Indonesia in 1998, as well as in a wider range of advanced capitalist countries after 2008. Moreover, within some of the fastest growing countries, the benefits of rapid capitalist growth in recent decades have certainly not spread to all regions or households.<sup>2</sup>

Although poverty reduction has generally been impressive, as has the unprecedented rate at which indicators of basic human welfare such as the Under Five Mortality or Maternal Mortality improved between 1950 and 2012, these improvements have been very much faster in some countries than others, while in a few countries there have actually been periods of acute deterioration in human welfare as measured by these indicators.<sup>3</sup> This paper does not rely on economic comparisons of rates of growth of output, input use, agricultural investment, etc., but also examines South African trends in human welfare, including rural education, health, maternal mortality and gender relations. It would be easy to cherry-pick a biased selection of comparator countries to demonstrate the strength/weakness of South Africa’s economic or welfare performance. Here, comparisons are made with all those economies classified as Upper-Middle Income by the World Bank, or with economies that are major producers of the same agricultural products as South Africa.

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<sup>1</sup> Economists working in the Maddison tradition have published projections for 2011-2020 that suggest faster global GDP growth than in 2000-2010 (or even 2000-2008), and not much below 1950-1973 (van Ark, 2010).

<sup>2</sup> For example, the share of the top 10 percent in GNI has increased in some rapidly growing economies, relative to the share of the bottom 40 percent (Cobham and Sumner, 2013: 9). On trends in regional inequality in China during a period of extremely rapid accumulation see Knight 2013.

<sup>3</sup> For example the Maternal Mortality Rate in South Africa worsened between 1990 and 2010 (WHO et al, 2012: 35 and 44); and life expectancy in the Russian Republics fell catastrophically in the mid-1990s (Shkolnikov et al, 2001). Rates of increase in life expectancy across countries have been heterogeneous: improvement has been unusually rapid in some countries over the period 1950 to 2005, despite the fact that these countries suffered from very low levels of life expectancy in 1950 (Canning, 2012).

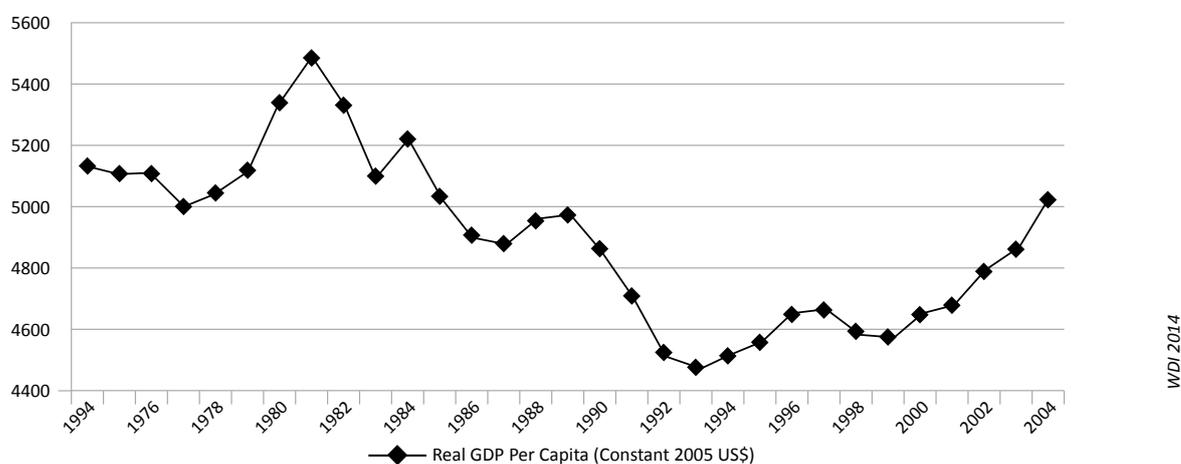
## Growth in South Africa and in the Upper Middle-Income Economies

In South Africa, the failure to use resources productively, or to take advantage of accumulation opportunities, has a long history. Much of the recent literature does not emphasise this record of failure.<sup>4</sup> For example, the World Bank makes the claim that “The South African economy has done well since turning the corner after the fall of apartheid in 1994. Macroeconomic management has been exemplary ...” (2011: 15). Similarly, the OECD refers to “considerable success on many economic and social policy fronts over the past 19 years (OECD, 2013: 11), while an influential apologist for Treasury policies in the 1990s concludes that: “The performance of the economy has been strong, with post-1998 being the longest continuous period of growth in South Africa’s recorded national account history...Government and business in South Africa have learned to manipulate the levers of growth, and redistributive policies are reinforcing the positive growth trajectory... It looks increasingly feasible that South Africa can attain growth in the vicinity of 5-6% consistently” (Hirsch, 2005: 263-4).<sup>5</sup>

These claims are hard to reconcile with the fact that, compared to other middle-income economies, the rate of growth of GDP has been weak for many decades: South Africa’s real GDP per capita was lower in 2004 than it had been in 1980 (Chart 1), while the gap between the growth rates achieved by the Upper Middle- Income Economies and by South Africa appears to have become wider between the late 1960s and the most recent two decades (Chart 2).<sup>6</sup> Slow growth reflects an inability to sustain an adequate level of investment and a failure to improve the performance of the manufacturing sector.

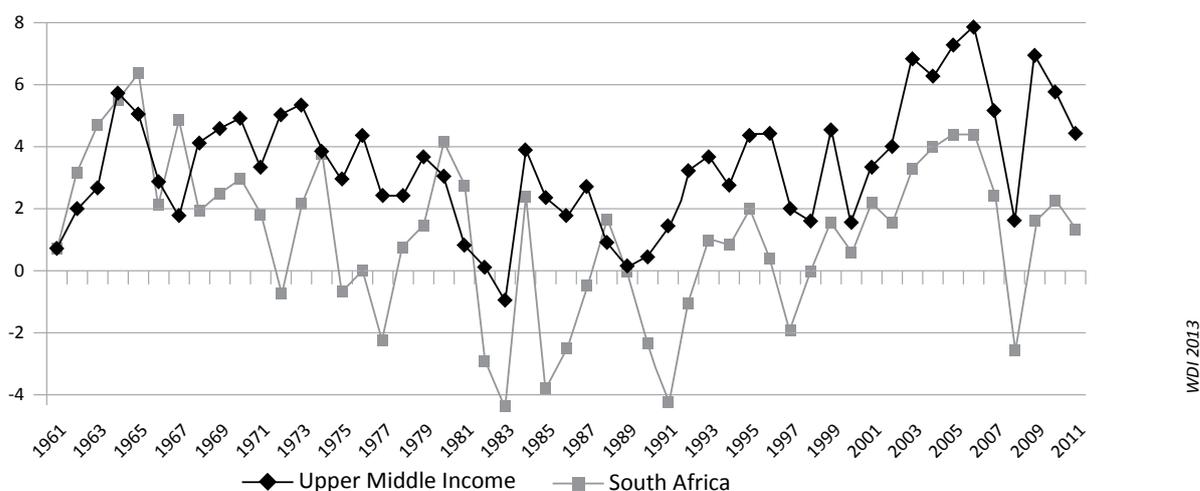
### Chart 1

Real GDP Per Capita in South Africa, 1974 to 2004 (2000 Constant US Dollars)



### Chart 2

Growth Rates of Real GDP Per Capita in South Africa and Upper Middle Income Economies, 1960 to 2012 (Constant 2000 US Dollars)



<sup>4</sup> An older literature, referring to the period between 1948 and the 1970s, also played down failure and made exaggerated claims for the performance of the South African economy (Moll, 1991: 271.2). One dualistic strand of this literature even claimed that dynamic accumulation in South Africa’s ‘successful’ capitalist sector was predicated on rural stagnation and poverty.

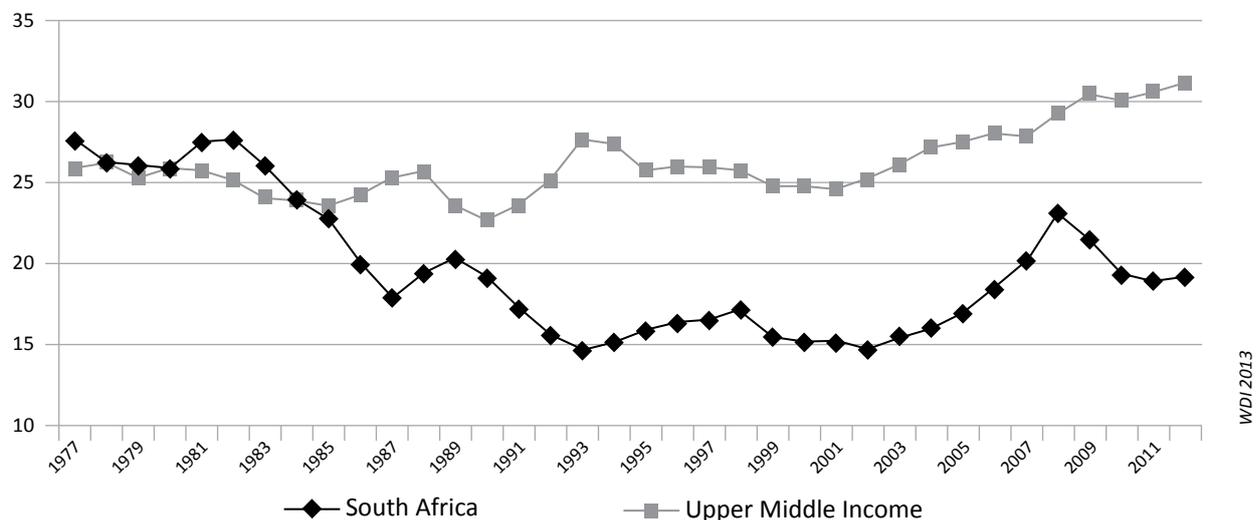
<sup>5</sup> In the seven years since the publication of Hirsch’s extraordinary claim, the annual rate of growth of GDP has never reached 6 percent; it was negative or well below 4 percent for five of these years (WDI). The most recently available projected real GDP growth rates (for 2013 and 2014) are 2 percent and 2.9 percent respectively (IMF, 2013).

<sup>6</sup> If the comparator group of economies contains all the Middle Income (as opposed to Upper Middle-Income) countries, the relatively poor growth performance of the South African economy in each of the decades since 1960 remains clear (Tregenna, 2012: 165). The IMF uses its own comparator or peer group of economies - Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, the Philippines, Poland, Romania, Russia, Thailand, Turkey, and Ukraine. Comparing South Africa’s economic performance with this group makes no difference to the argument.

South Africa, unlike other Upper Middle Income economies, has been unable consistently to achieve an adequate level of Gross Fixed Capital Formation, e.g. at over 20 percent of GDP (Chart 3).<sup>7</sup> In South Africa, Private Sector Gross Fixed Capital Formation as a percentage of GDP has, since the late 1990s, always been lower than in the Upper Middle-Income economies (Chart 4), while Net Foreign Direct Investment as a percentage of GDP was also low until 2000, thereafter becoming more volatile, but still relatively low (WDI, 2013).

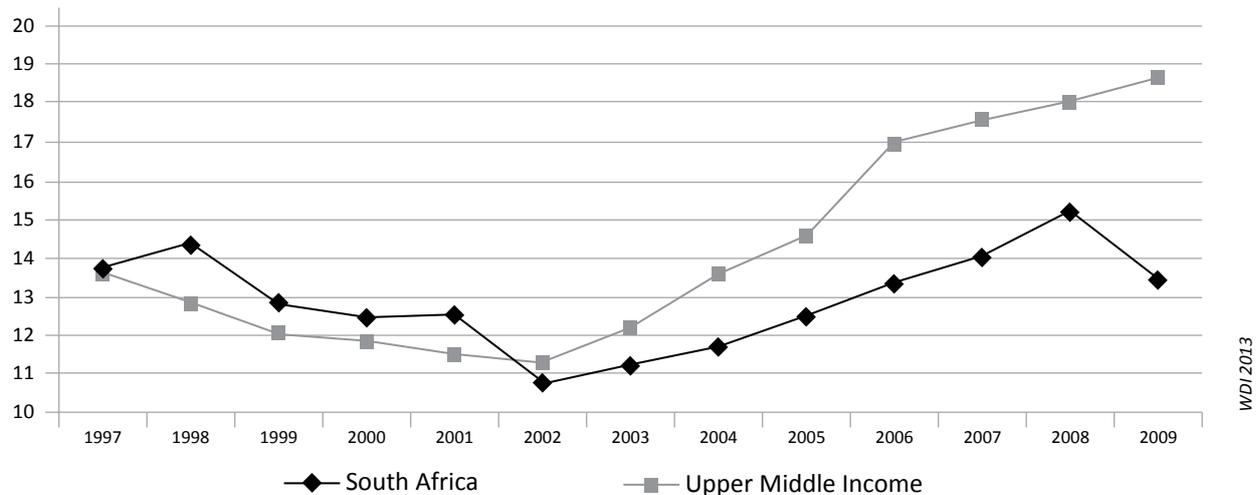
### Chart 3

Gross Fixed Capital Formation as Percentage of GDP, 1977 to 2011



### Chart 4

Private Sector Gross Fixed Capital Formation as Percentage GDP, 1997 to 2009



The manufacturing sector in South Africa has also performed badly since the 1960s. The annual growth rate of Manufacturing Value Added has usually been lower (and often much lower) than in the Upper Middle-Income economies (Chart 5). Also, South Africa’s manufacturing sector is unusually capital-intensive, compared to manufacturing sectors in other developing countries. So it is possible to conclude that: “Not only has accumulation been on an inadequate scale, but the nature of accumulation has been skewed (relative to what would be optimal for growth and in particular for employment” (Tregenna, 2007: 93).

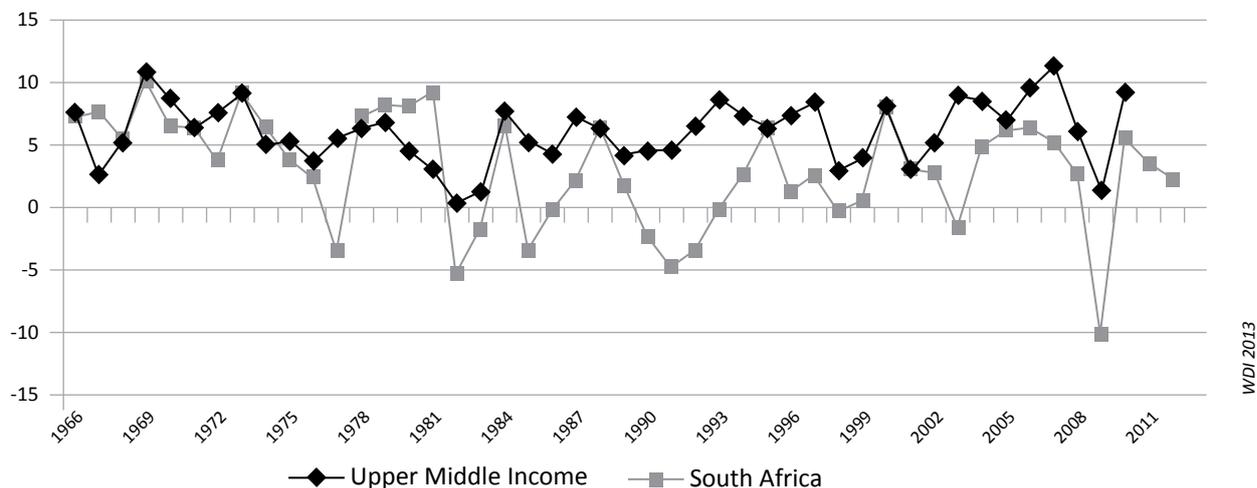
The consequences of the failure to invest and of the skewed performance of manufacturing have included: a decline in the Employment to Population Ratio (EPR) between 1995 and 2011 –from 42 percent to 39.3 percent – and a much worse employment performance over this period than in the Upper Middle-Income economies, where the EPR has remained at about 65 percent; a fall in the EPR for young people (aged between 15 and 24 years) over the same period

<sup>7</sup> The World Bank has made unfavourable comparisons between South Africa’s investment rate and investment rates in those economies that have grown rapidly over the period since 1980. While the Upper Middle-Income Economies consistently achieved investment rates of more than 20 per cent of GDP before and after 1990, South Africa did not (World Bank, 2011: 17 and 21). Earlier data on inadequate investment rates and the poor performance of manufactured exports have been analysed by Feinstein 2005: 218-223). In 1955, South Africa’s share of developing country manufactured exports was 12.6 per cent, but by 1985 its share had fallen to under two percent (Moll, 1991: 282).

from about 20 percent to 13 percent, while the comparable EPR in Upper Middle-Income countries remained very much higher – at close to 50 percent (WDI, 2013); a long-term decline in South Africa’s share of world exports – from about 2 percent in 1948 to 0.4 percent in 2012 (UNCTADSTAT, 2012)<sup>8</sup>; a low share of hi-tech manufactured commodities in total manufactured exports – about 5 percent compared to almost 20 percent for Upper Middle Income economies (WDI, 2013)<sup>9</sup>; and a lack of capacity to seize opportunities to expand export volumes when world market prices are particularly favourable - the most recent example of this failure is illustrated in Chart 6.

## Chart 5

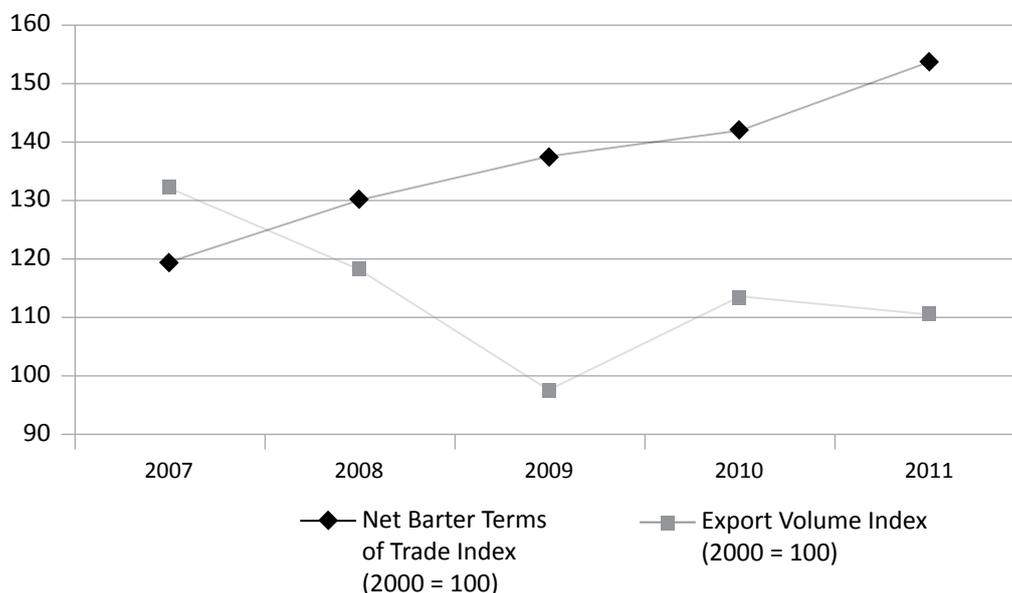
Growth Rate of Manufacturing Value Added, 1966 to 2011



WDI 2013

## Chart 6

Export Volume and Net Barter Terms of Trade, 2007 to 2011



<sup>8</sup> Over the same period the share of Middle-Income developing economies in world exports increased from about 9 percent to nearly 17 percent. On the growing gap between South Africa’s recent export performance and the export performance of comparator economies, see IMF, 2013: 25 and 35).

<sup>9</sup> Middle-Income developing economies have been far more successful than South Africa in increasing the value both of Medium and High-Skill Technology-intensive Manufactured Exports (UNCTAD-STAT 2013). On the long-term failure of the South African system of accumulation to develop an industrial strategy worthy of the name, or a capital goods sector, or a changed structure of manufacturing output and exports see Ashman et al, 2013.

## The Health and Education of South African Labour: a Comparative Perspective

There are other, perhaps even more important, indicators of South Africa's relative failure to raise the level of the forces of production, of sluggish capitalist development. For example, the prospects for raising labour productivity and accelerating development have been and will continue to be influenced by the opportunities open to South African children compared to the opportunities that are available to children in other economies. Children's prospects are strongly influenced by their access to maternal support (Goldberg, 2013; Clark et al, 2013). One problem is that South Africa has a high and rising number of maternal orphans;<sup>10</sup> it is a member of the very small group of countries where the Maternal Mortality Rate (MMR) has failed to decline since 1990. By 2008, 90 countries showed declines in their MMRs of 40 per cent or more, while another 57 countries reported at least some gains (United Nations 2011:29). In contrast, the South African MMR increased.

The official estimate is that while there were approximately 150 deaths per 100,000 live births in 1998, by 2010 the MMR had risen to about 625 deaths per 100,000 live births in 2010 (UNDP 2010:67). Although this estimate has been questioned, because the South African state has been unwilling or unable to collect reliable data on these issues, careful research concludes that "the likelihood is that the MMR has been steadily increasing rather than decreasing since 1990 ... a significant number of women, both HIV-negative and HIV-positive, still die of preventable direct obstetric causes each year" (Blaauw and Penn-Kekana 2010:6:19). Recent estimates suggest that about one third of maternal deaths in South Africa are not AIDS-related and that the annual rate of deterioration in the MMR between 1990 and 2010 may have been as high as 6.4 percent (WHO et al, 2012: 35 and 44).

This extraordinarily high and rising number of maternal deaths could have been reduced substantially by appropriate interventions. The failure to prevent death from direct obstetric causes appears to be concentrated in rural areas, where there is a "lack of blood for transfusion, inadequate emergency transport, poor referral systems, insufficient intensive care unit facilities, and lack of appropriately trained staff to manage obstetric emergencies", especially in the Level 1 Hospitals (District), which are the only hospitals that most rural women are likely to enter (Odhiambo and Mthathi 2011:16). A high proportion of poor women living in rural areas continue to face barriers to accessing basic obstetric care services, not only because they are unaffordable/unavailable, but also because of brutal staff attitudes to the poor and less educated (Silal et al, 2012). One material reason for the failure to eliminate these barriers and to reduce the large number of preventable deaths related to obstetric haemorrhage and to hypertension is that health care resources in poor rural areas have been allocated from the Treasury to the Provinces following an inequitable formula that meant that "the gap between resource-rich and resource-deprived areas was sustained in health spending" (Stuckler et al, 2011: 169). When there are budgetary constraints on filling nurse vacancies, then stressed staff may well be abrupt and discourage women from attending rural clinics (Steinberg, 2008).

The excess mortality of poor women in rural areas can be better understood if, in addition to the inequitable pattern of resource distribution, ideological factors are also discussed, in particular the resurgence of racial nationalism after 1998. Africanist (re)-inventions, championed both by the President and his predecessor, have tightened the fetters of anti-democratic, patriarchal and coercive rural authority.

*"'Tradition' and 'culture' have ...been used to legitimise discrimination and (rapidly increasing) violence against women. The continued erosion of women's rights in the rural areas has occurred under this mantle. Rather than take decisive action to defend women's rights against 'traditional' orders, influential voices within the ANC have, on the contrary, come to embrace an increasingly restorative and authoritarian conception of the patriarchal family structure as the 'healthy' foundation for a desirable social order" (Marx, 2002: 63).<sup>11</sup>*

An important part of the explanation for the number of maternal deaths is the fundamental lack of respect for poor and young females who are regularly abused, slapped and screamed at when they attempt to obtain reproductive health services (Stevens, 2012; Hodes, 2013). Well-documented abuse and violence within health facilities is unsurprising in a cultural context that has generated the highest rates of violence towards women in the world and a female homicide rate that was five times the global rate in 2009. "Gender-based violence ... is more common in communities where there is a cultural emphasis on gender hierarchy, where there is greater acceptability of the use of violence in interpersonal relations, and where men's dominance over and control of women is seen as legitimate" (Abrahams et al, 2013: 2; Collins, 2013). Between 1999 and 2009, the South African state proved unable to reduce the incidence of the most

<sup>10</sup> The number of maternal orphans in South Africa rose from 121 thousand in 2003 to 185 thousand in 2009 (<http://www.childrencount.ci.org.za/indicator.php?id=1&indicator=3>).

<sup>11</sup> The rise and implications of racial nationalism are further discussed in Glaser (2011). Jacob Zuma has not only supported the use of force to "educate" pregnant teenage girls, but has made strenuous and electorally very successful efforts "to position himself as a respectable patriarch, an umnumzana, and not a rapist" (Hunter, 2011; Steinberg, 2013). Particularly in the period after 2003, the government has "swung its might behind the chiefly lobby as opposed to rural women" (Claassens, 2013: 72).

extreme form of gender-based violence – the murder of an intimate female partner (ibid).<sup>12</sup> In addition, the state has continued to play a direct role in sponsoring violence, such as the brutality of the police towards striking miners at Marakana, limiting its ability to control other forms of violence.

Obscurantist forms of nationalist and Africanist ideology, including vigorous state promotion of *ubhejane* and other “traditional” herbal concoctions (while stressing the toxicity of “western” medicines) certainly increased the mortality of HIV-positive women and the risks of infection and death faced by their infants (Nattrass, 2008; Geffen and Cameron, 2009). Between 1990 and 2005 the trend in the Under Five Mortality Rate (U5MR) in South Africa was worse than in Somalia, the Democratic Republic of Congo and Iraq. The U5MR only improved after 2006 when Prevention of Mother to Child Transmission was scaled up and ARTs became more widely available, but the average annual rate of reduction of the U5MR for the whole period 1990 to 2011 was only about 1.4 percent in South Africa (Kerber et al, 2013). This was an abysmal performance when compared to the annual average rates of reduction over this period of 4.5 percent for the Upper Middle-Income Countries, and of about 6 percent in Brazil, Turkey and China ([http://www.childinfo.org/mortality\\_igme.html](http://www.childinfo.org/mortality_igme.html)).

Anti-imperialist posturing and the cabinet’s endorsement of presidential and ministerial advocacy of quack cures (‘developed in Africa for Africans’) delayed access to appropriate drugs for years, squandering opportunities to reduce rates of infection. More rational assessments of the efficacy of the antiretrovirals produced by multinational corporations show that:

“The life expectancy of HIV patients who begin ART before they fall severely ill and who subsequently adhere to their ART regimens approaches the life expectancy of people who are HIV-negative” (Bor et al, 2013: 962).

“When combinations of antiretroviral drugs are given to HIV-positive women, either as lifelong treatment or as prophylaxis to prevent mother-to-child transmission of HIV, the rate of HIV transmission from mothers to non-breastfed infants can be reduced to < 1% ... the elimination of HIV in infants is attainable” (Horwood et al, 2012: 1-2).

Not only would it have been perfectly possible to save the lives of several hundred thousand adults and children by provision of ART between 2000 and 2005 (Chigwedere et al, 2008), but the labour productivity of adults with HIV and their families could also have been increased substantially, especially if delays in initiating ART had been reduced (Bor, 2012). Even as late as 2010, there were at least 40,000 new HIV pediatric infections in South Africa, despite the fact that many other countries have demonstrated that effective health systems can virtually eliminate HIV infection in infants (Black et al, 2013: 557; Sprague et al, 2011).<sup>13</sup> One recent estimate suggests that only about half of those eligible for ART are currently receiving ART (Bor et al, 2013: 965). Moreover, WHO data for South Africa show that there has been a fall in antiretrovirals coverage both for pregnant women and for children living with HIV between 2011 and 2012 (WHO, 2013: 25 and 30). Limited or delayed access to diagnosis and ART is a particularly severe problem for infants and for women living in the poorest rural areas (Bharadwaj et al, 2012).

Prospects for rural infants and children should have been the focus of South African policymakers’ concerns, because the rural areas of the former homelands are where about half of African children live; and the overwhelming majority of these rural children are members of the lowest income per capita households in South Africa (Hall and Posel, 2012: 44-5). Instead, there are well-documented cases of high levels of elite appropriation of resources budgeted for rural health and education (Bateman, 2013; Section 27, 2012; Corruption Watch, 2012). The elite has been described as “a criminal Breitling brigade that grows fat on ...pocketing public funds budgeted for textbooks, toilets and libraries” (Naidoo, 2012). In an international comparative perspective, it appears that a very low priority has been attached to providing opportunities to the most vulnerable children. To compare progress in different countries toward universal availability of basic opportunities and the fairness of allocating these opportunities among children, the World Bank has constructed a new operational measure – the Human Opportunities Index (HOI). Although this Index has not been calculated for the most dynamic capitalist developing economies, the conclusion is that: “the rates at which opportunities have expanded in South Africa are distinctly lower than the majority of Latin American countries ... On the annual average rate of HOI improvement in finishing primary school on time and in access to safe water and improved sanitation, South Africa ranks 16th, 14th, and 11th, respectively, of 23 countries” (World Bank, 2013: 25). Predictably, the World Bank concludes that children who have the most limited opportunities in South Africa live in rural areas and their parents have also had limited access to education (ibid: 28). Other explanations for failures to complete primary school on time in South Africa place more stress on children’s socio-economic status rather than rurality (Timæus et al, 2013).

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<sup>12</sup> Research suggests that there has been no reduction in gender-based violence over the past decade (Mayosi et al, 2012: 10) and that women who experience violence are more likely to have HIV (Jewkes et al, 2009)

<sup>13</sup> An effective health system would, at a minimum, require that there were sufficient staff and test kits available in the antenatal clinics visited by rural women and that women were encouraged both to attend these clinics at an early stage of their pregnancy and to make repeat visits (Sprague et al, 2011). In May 2013, a high proportion of health facilities in the rural Eastern Cape were not receiving ART drugs in the amount and at the time required (MSF, et al 2013).

Perhaps a more direct and transparent indicator of limited prospects for children than the HOI is the prevalence of stunting. Inadequate diets and a heavy burden of disease (or both) result in early-life malnutrition and increase the prevalence of stunting. Within population differences in height have been strongly associated with within population differences in cognitive outcomes, productivity and health (Coffey et al, 2013). In South Africa, the results of the latest (2012) national survey on stunting have been compared to the results of a 2005 survey and indicate an increase in stunting among children aged between one and three years old from 23.4 to 26.6 percent, as well as a particularly large increase over the same period in the incidence of severe stunting (Shisana et al, 2013: 211). Internationally comparable results on trends in stunting refer to children in a different age group, i.e. children under-five years of age. In upper middle-income economies the incidence of stunting for children in this age group has fallen dramatically between 1990 and 2011 – from 31.6 percent to 8.5 percent. In South Africa prevalence for children under five had been about the same as the average for the upper middle-income group in 1990, but prevalence is now very much higher - 21.5 percent (UNICEF, WHO, The World Bank, 2013).

Part of the explanation for South Africa's failure to reduce stunting may be found by examining national trends in adolescent fertility. Poor outcomes for children, as well as risks of mortality and morbidity for mothers, are often associated with high rates of adolescent fertility. Even after controlling for pre-childbirth socioeconomic status, children born to teenage mothers are more likely to be born underweight and to be stunted. These children are also at risk of lower educational attainment and are more likely to drop out of school. Rural and African women, who are particularly vulnerable to the atavistic patriarchal norms and gender-based violence discussed above, are more likely to give birth in their teens and the proportion of African twenty year old women giving birth in their teens has remained high since 1990 – at about 30 percent (Branson et al, 2013: 4 and 10).<sup>14</sup>

South Africa has made some progress since the early 1980s in reducing the proportion of very young teenage births, i.e. the proportion of women who first gave birth below the age of 18 (ibid: 8). In the period between 1997 and 2011 South Africa's adolescent fertility rate (births per 1000 women aged 15 to 19) did fall from about 80 to about 52 births, but this 2011 rate was still very much higher than the rate in the Upper Middle-Income Countries (30 births) and about five times the rate of 10 achieved in Malaysia and China (WDI, 2013). Statistical analysis of the data for a large set of countries suggests that a poor relative performance in reducing adolescent fertility rates is associated with a relatively poor accumulation performance and a high and increasing level of inequality as measured by the Gini Coefficient (Santelli et al, 2013).<sup>15</sup>

To summarise, compared to countries with similar or less favourable initial characteristics South Africa's record in developing the capacity of the most important productive force – human labour – has been remarkably bad.<sup>16</sup> By no means all of the indicators and possible determinants of this long-standing failure to develop the potential of labour have been discussed here. For example, the failure to improve the numeracy and mathematical skills of the children of the poor (Reddy et al, 2012) has placed the South African economy at considerable disadvantage compared to its Middle-Income competitors.<sup>17</sup> Also, compared to countries such as Brazil, Columbia or Malaysia, a tiny and relatively slow growing proportion of adults has completed tertiary education (Barro and Lee, 2013).

There has also been insufficient discussion in this paper of the degree to which all the different indicators of the waste of human resources – the morbidity, anthropometric and educational indices - point to a concentration of deprivation in the rural areas of the former homelands. A fine-grained mapping of deprivation (measured by an index of multiple deprivation) confirms this concentration, showing that the remote rural areas of the former homeland of the Transkei are much more deprived than any other former homeland or area in South Africa (Noble and Wright, 2013). Given the historical record of both rural deprivation and a slow rate of accumulation in the economy as a whole, it is not surprising that production in rural South Africa is lagging way behind the agricultural output of the more dynamic capitalist economies. The following section of this paper presents some disaggregated national and provincial data that confirm the backwardness of agricultural capitalism in South Africa and in the Eastern Cape.

<sup>14</sup> Rural gender norms legitimate male power, male control, male violence and men's sexual risk taking; the first sexual experience of girls is often a forced encounter (de Lange et al, 2012). "Traditional" leaders in the Eastern Cape continue to defend "ukuthwala" (the forcible abduction of young girls), provided the parents of the abductor and the girl's parents have reached an agreement (Thornberry, 2013).

<sup>15</sup> A broader explanation of South Africa's failure to tackle the adverse consequences of teenage pregnancy would also emphasize the ideological context: Authorities and state officials inside and outside schools have "blamed and shamed" young women and/or their mothers, rather than develop appropriate policies (Unterhalter, 2013).

<sup>16</sup> On the development of individual potential as a force of production, see Marx, Notebook VII, <http://www.marxists.org/archive/marx/works/1857/grundrisse/ch14.htm>

<sup>17</sup> Historically black schools concentrated in the poor rural areas of the Eastern Cape, KwaZulu Natal, and Limpopo Provinces also have appallingly low results in reading and literacy among Grade 5 students (Shepherd 2011:20). Capitalist employers in the rural Eastern Cape regard the deteriorating quality of rural schools as a major constraint on their viability (Antrobus and Antrobus, 2008: 24-5).

## The Performance of the Agricultural Sector

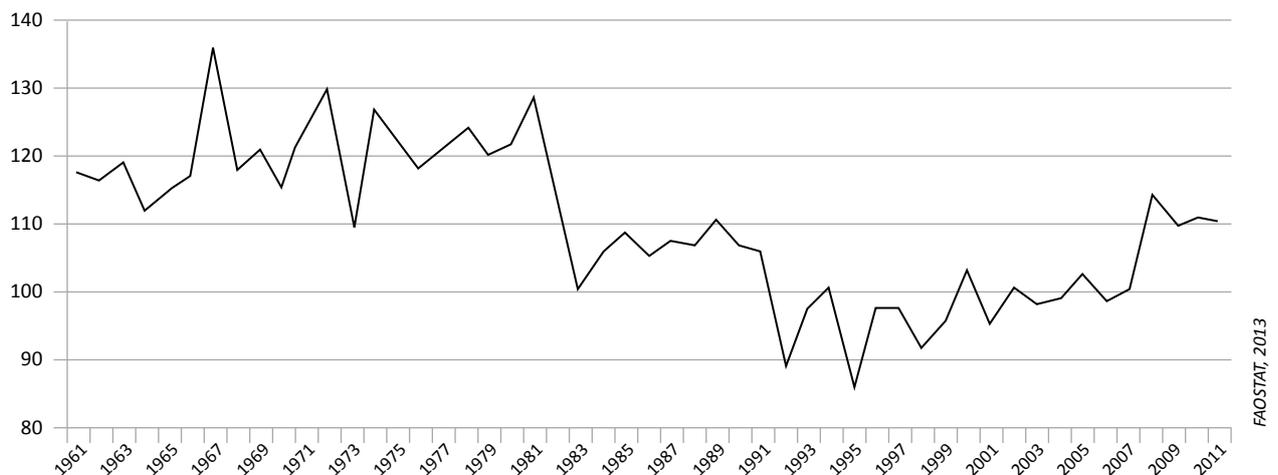
Agricultural failure, like macroeconomic failure, is not emphasized in assessments published by mainstream economists. Instead, documents commissioned by the OECD and the South African Presidency claim that: “The commercial agricultural sector adapted well to the policy reforms and liberalisation efforts”, the result being “an acceleration in the establishment of new enterprises in agriculture and downstream food processing sectors and foreign trade” as the agricultural industry became “internationally more competitive” (OECD, 2006: 11, 17; OECD, 2013: 4). Similarly, the Fifteen Year Review for The Presidency claims that:

*“Widespread domestic and international market liberalisation, introduced in the early 1990s, has had a strong, catalytic effect on commercial agricultural production ...Physical output increased from around 18 million metric tons in 1975 to 28 million tons in 2006. This absolute increase in the volume of agricultural production has played a role in the development of the country’s manufacturing sector” (Tregurtha et al, 2010: 1, 8).*

In the face of obviously negative trends in agricultural performance since the mid-1960s (Chart 7), this faith in the ‘catalytic’ power of deregulation and liberalization to increase output and exports seems misplaced.<sup>18</sup> Nevertheless, not only mainstream agricultural economists, but even a radical sociologist has highlighted the successful “normalization” of capitalist agriculture in South Africa since 1994, failing to remark on the abnormally low and declining level of the forces of production on all South African farms employing waged workers. Instead, the claim is that “measures to safeguard capitalist farming and agriculture in the ‘new South Africa’ following the abolition of the institutional apparatus of apartheid ... have continued since 1994. Freed from the former constraints of trade sanctions on agricultural exports, and of barriers to inward investment by international agribusiness ... production and accumulation have grown, accompanied (or accomplished) by ...technical change” (Bernstein, 2013: 25).

### Chart 7

Index of Agricultural Production Per Capita, 1961 to 2011 (2004 to 2006 = 100)



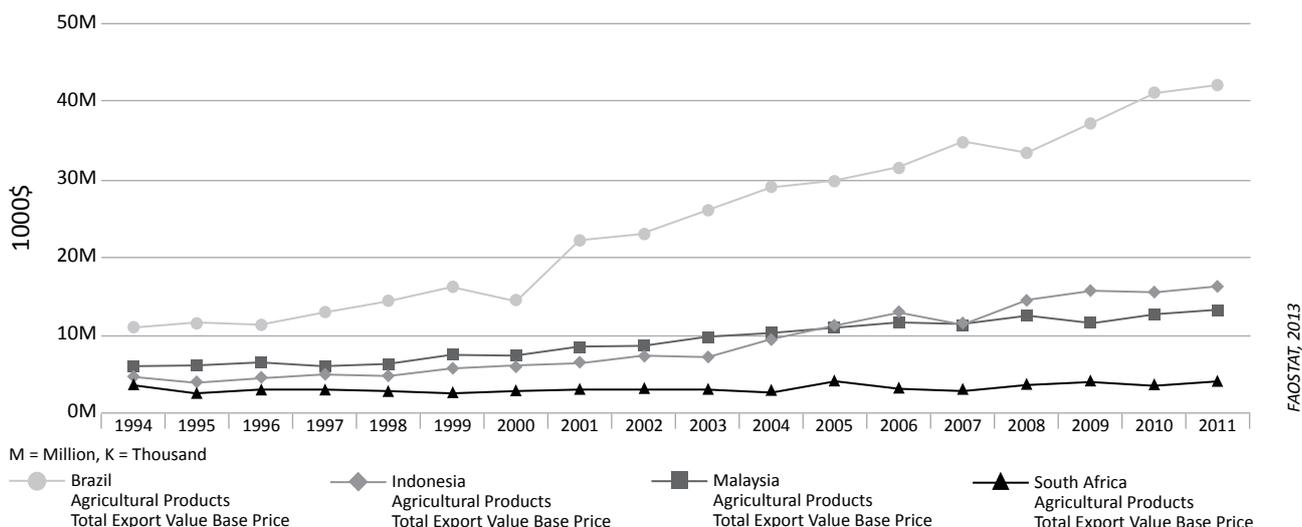
Perhaps the most telling and reliable indicators of the declining relative performance of South African agriculture are in the trade data – partly because trends in agricultural production for domestic consumption are so poorly monitored in South Africa. In a context of rapidly growing world trade in agricultural commodities – this trade has increased fivefold in real terms over the last 50 years (FAO, 2012: 208) - the share of South Africa’s agricultural exports in world exports of agricultural commodities has declined: on average it was only 0.53 per cent between 1986 and 1994, having averaged 0.85 per cent between 1976 and 1985; more recently, South Africa’s share has fallen still further to an average of 0.50 between 2006 and 2008 (FAOSTAT). In contrast, the shares in world agricultural exports of several peer developing countries, including Argentina, Brazil, Indonesia, Mexico, China, Thailand, and Chile have all increased substantially between 1990/91 and 2006/7 (Aksoy and Ng 2010:12). A declining relative share is associated with the slow growth in the dollar value of South Africa’s agricultural exports since the early 1990s (compared to more dynamic developing economies such as Indonesia, Malaysia and Brazil), as illustrated in Chart 8. In this Chart, the gap between the export performance of South Africa and more dynamic economies appears to have widened between 1994 and 2010.<sup>19</sup>

<sup>18</sup> One estimate is that real agricultural output (measured in constant 2005 prices) grew by only 0.4 percent per year between 1980 and 2007 (Liebenberg and Pardey, 2012: 15). Since 1975, there has been a decline in the area under maize and wheat production of three million hectares (BFAP, 2013: 126).

<sup>19</sup> South Africa’s slow rate of growth of agricultural exports relative to its major southern hemisphere competitors during an earlier period (1990 to 2000) has been analysed by Adriaen et al, 2004. South Africa’s slow rate of growth of processed agricultural exports (compared to Brazil, India, Indonesia and China) is shown in Liapis, 2011: 18.

## Chart 8

Comparative Value of Agricultural Exports, 1994 to 2011 (Current US Dollars)

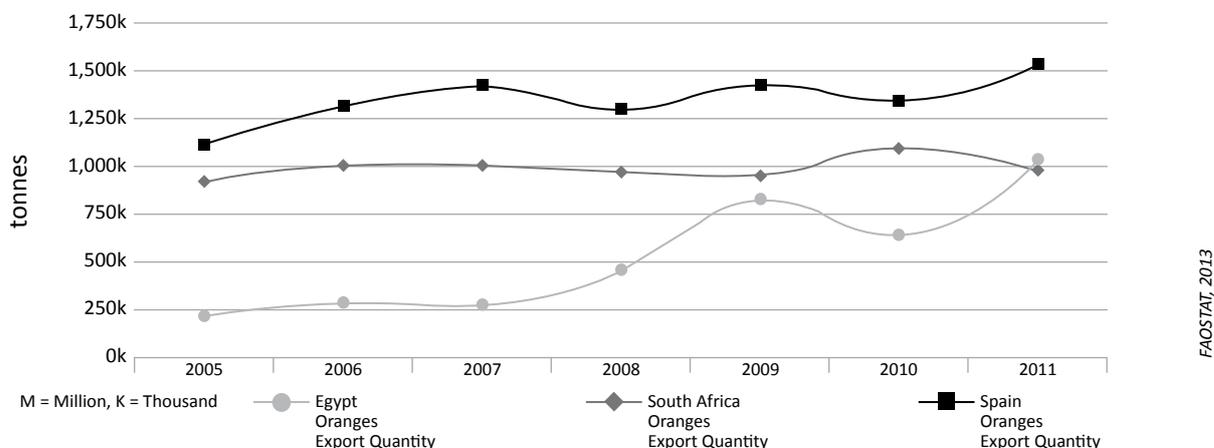


Part of the explanation for the relatively slow rate of growth of South Africa's agricultural exports is that producers lost virtually all state support during an ideologically driven process of domestic market deregulation and unilateral trade liberalisation that lasted for most of the 1990s (Sandrey et al 2008:89). The level of support to farms in South Africa, measured by the Producer Support Estimate, has declined substantially and is now at a very low level (3 per cent in 2008-2010), well below the OECD average of 20 per cent (OECD, 2011: 252). Unlike South Africa, most middle-income developing economies have adopted policies that increased their support for agriculture over the last decade (Aksoy and Ng 2010:2).<sup>20</sup> Additional explanations for South Africa's relatively weak export performance will be discussed below. But before introducing these explanations, disaggregated data on the world market share of a few specific commodities will highlight the poor performance of Eastern Cape producers of agro-exports.

In 2010/11, citrus was the country's most important agricultural export and South Africa ranked as the world's second largest exporter of fresh citrus fruit by volume behind Spain (USDA, 2012). However, in recent years Spain has consistently achieved higher volumes and faster growth rates of exports than South Africa and even Egypt is now exporting more oranges than South Africa (Chart 9). The Eastern Cape (EC) devotes about 14,000 hectares to citrus production and probably employs more than 23,000 workers in the field and in pack-houses, processing, transport, etc.<sup>21</sup> It is the leading producer of navel oranges in South Africa, accounting for over one third of the area in production (about 4,000 hectares).

## Chart 9

Volume of Orange Exports South Africa, Egypt and Spain, 2005 to 2011



<sup>20</sup> While the South African state was removing protection it is not surprising that agricultural imports increased very rapidly – from a nominal R3.4 billion in 1990-94 to R29.4 billion in 2006-8. The ratio of agricultural exports to agricultural imports obviously declined over the same period – from about 1.6 to 0.9 (Sandrey et al 2011:15), making a very modest contribution to the dangerous gap at the macroeconomic level between the value of merchandise imports and the value of merchandise exports.

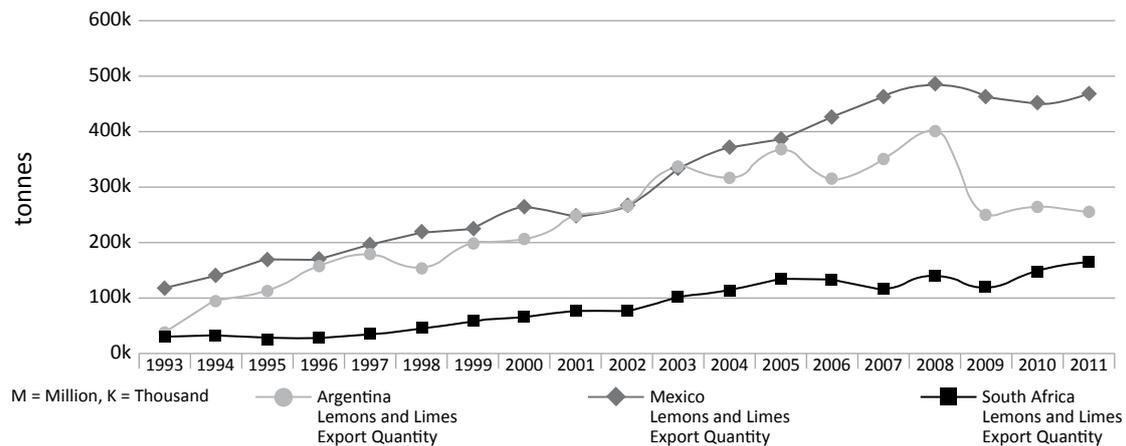
<sup>21</sup> The national area devoted to citrus is about 62,000 hectares. The Sundays River citrus production area in the EC is the largest single production area in South Africa, as defined by the Citrus Growers Association (CGA). All data on hectares in production in this paragraph are taken from CGA, 2013 and 2012.

The EC also accounts for about half of the national area producing soft citrus fruit - clementine, mandarin and satsuma - (more than 2,000 hectares). Unfortunately, the volume of soft fruit exports from South Africa has stagnated - in 2011 it was well below levels reached in 2002.

Lemon and lime production is also very important in the EC, with the EC accounting for the majority of the total production area in South Africa (over 5,500 hectares). In contrast to the performance of soft fruit exports, the volume of exports of lemons has increased, doubling since 2002. Nevertheless, South Africa has fallen way behind the export growth rate of lemons and limes achieved by important global competitors such as Argentina and Mexico over the period 1993 to 2011 (Chart 10).<sup>22</sup>

## Chart 10

Volume of Exports of Lemons and Limes from South Africa, Mexico and Argentina, 1993 to 2011

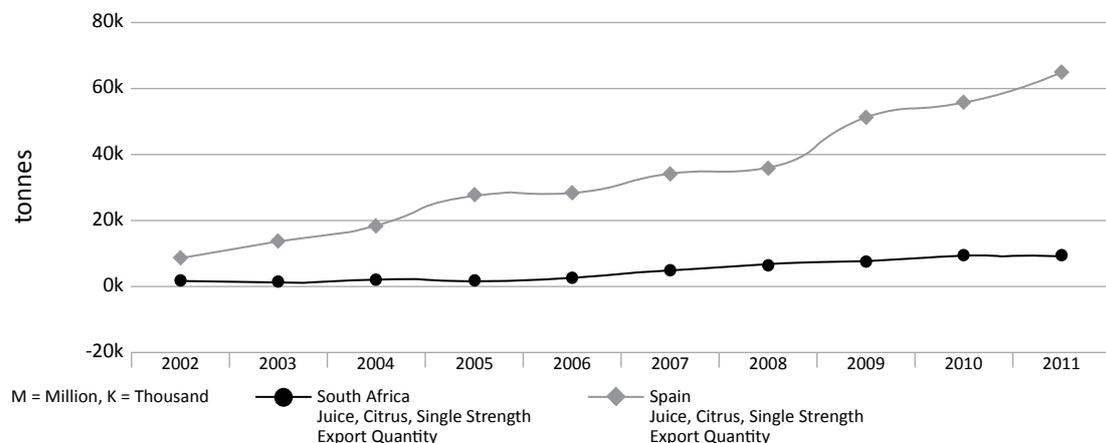


FAOSTAT, 2013

Since citrus production is labour intensive, (currently providing a much larger volume of unskilled jobs than, for instance, the auto industry OEM producers in the EC), the failure to respond to growing world market demand as rapidly as other countries has resulted in a growth of rural wage employment in the EC (and elsewhere in South Africa) that is way below potential. A further indication of failure to create wage earning opportunities in the citrus industry is the stagnation in the volume of exports of concentrated orange juice over the decade before 2011, while over the same period concentrated orange juice exports surged in several countries, including Mexico, Turkey, Israel and, of course, Brazil (FAO, 2012: Table 22). The dramatically widening gap between the performance of Spain and of South Africa in exports of single strength citrus juice is shown in Chart 11.<sup>23</sup>

## Chart 11

Single Strength Citrus Juice Export Volume in Spain and South Africa, 2002 to 2011



FAOSTAT, 2013

<sup>22</sup> There is a real danger that the growth of citrus exports from the EC may be radically constrained in the future because of insufficient efforts by the state to monitor and control a fungal growth called Citrus Black Spot (CBS). The European Union has been auditing South Africa's CBS control procedures since 1998. These audits have revealed a number of shortcomings and the EU has recently complained that the South African authorities have provided insufficient feedback/follow-up on audit recommendations (van de Geer, 2013).

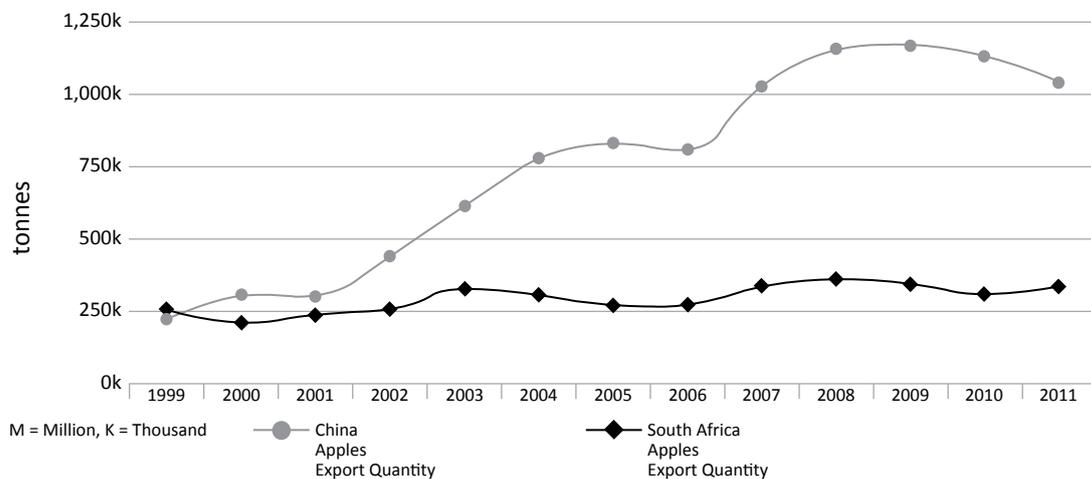
<sup>23</sup> There has been a loss of potential employment on 10,000 hectares of citrus as a direct result of Land Reform policy. This was the area of citrus re-allocated through the Land Reform process and at least 70 percent of this area is now "in distress" (NPC, 2011: 201).

Apples and Pears are also labour-intensive commodities grown on about 6,000 hectares in the EC, largely in the Langkloof East area. Although the EC makes a small contribution to the total South African production area of about 34,000 hectares, on-farm employment to produce these crops in the EC may be as high as 7,500 “permanent equivalent” workers (HORTGRO, 2013: 6-7). During the peak season, the largest producer in the EC (Dutoit Apples) employs 2.5 workers per hectare, as well as a very large number of additional workers in their pack houses. The value of apple exports from the EC is recorded as falling very substantially between 2009 and 2011, having been more or less static between 2003 and 2009, although some EC exports appear to have been (mis)recorded as Western Cape exports because most registered exporters are based in that province (DAFF, 2012: 26). On the other hand, the value of pear exports from the EC is recorded as having grown considerably between 2000 and 2009 (DAFF, 2010: 26).

It is reasonable to assume that EC performance as an exporter of Apples and Pears may be similar to the performance of South Africa as whole, as shown in Charts 12 to 15. Since 1999 China has begun to eclipse South Africa’s world market share of apple exports (Chart 12) and of exports of Apple Juice. In 1996 China exported about the same volume of single strength apple juice as South Africa (less than 30,000 tonnes); now China exports about a million tonnes while South Africa’s exports of apple juice have fallen well below levels reached in 1996 (Charts 13 and 14).<sup>24</sup> Similarly, Argentina began to overtake South Africa as an exporter of pears in 1986 and the gap between the exports achieved by these two economies has widened very rapidly since the mid-1990s (Chart 15).<sup>25</sup>

## Chart 12

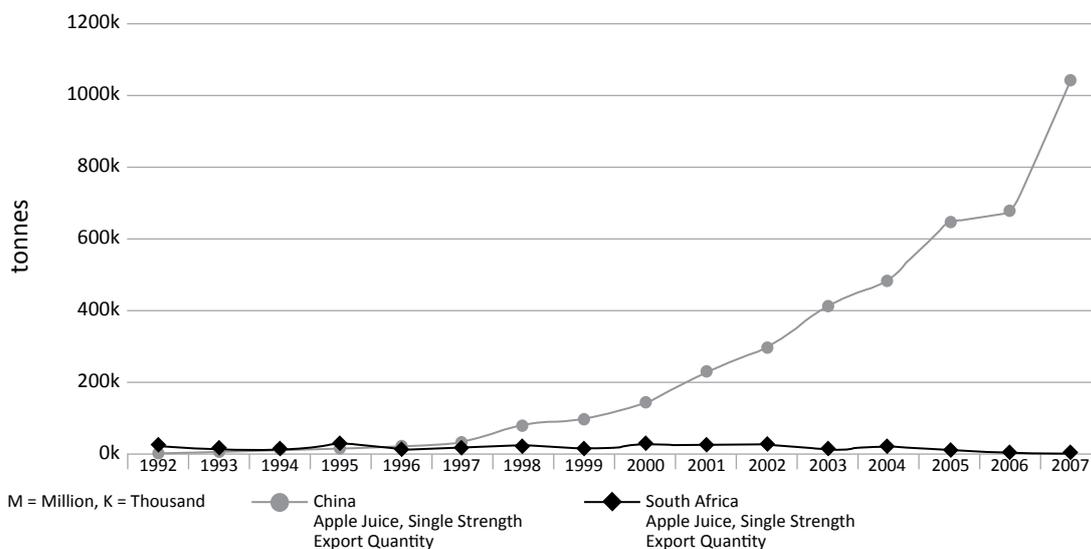
Apple Export Volume from South Africa and China, 1999 to 2011



FAOSTAT, 2013

## Chart 13

Single Strength Apple Juice Export Volume from South Africa and China, 1992 to 2007



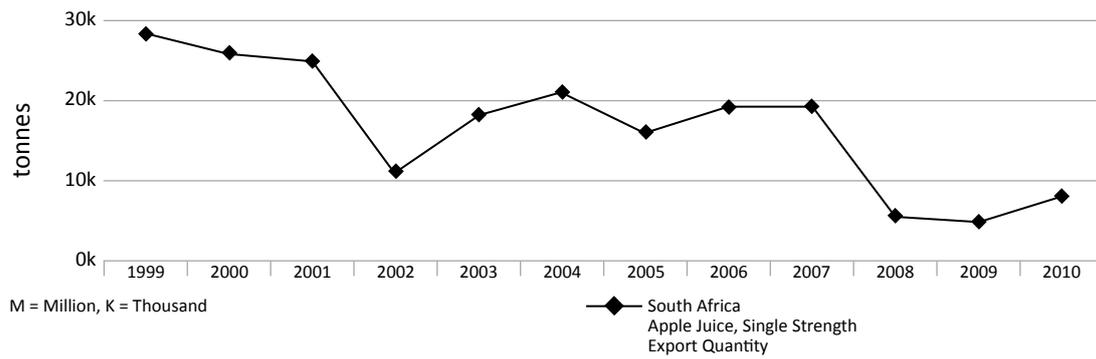
FAOSTAT, 2011

<sup>24</sup> New Zealand is South Africa’s major southern hemisphere competitor in world apple markets. Between 1995 and 2005 the annual volume of apple exports from South Africa was consistently and substantially below annual volumes from New Zealand (FAOSTAT, 2013).

<sup>25</sup> The total area planted to bearing apples and pears over the period 2002 to 2013 has declined (BFAP, 2013: Figure 56).

## Chart 14

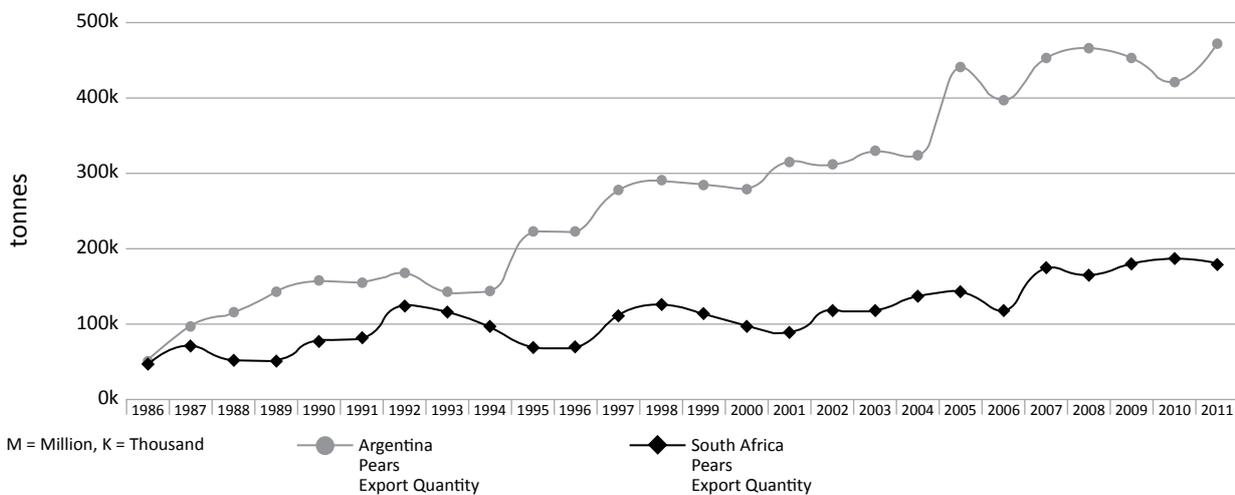
Apple Juice Exports from South Africa, 1999 to 2010



FAOSTAT

## Chart 15

Pear Export Volume from South Africa and Argentina, 1986 to 2011



FAOSTAT, 2013

It is not necessary to graph the absolute and relative performance of every agricultural commodity produced in the EC to justify the argument concerning backward agricultural capitalism. The examples selected below are also labour-intensive commodities that clearly make or have the potential to make a major contribution both to export revenue and to employment, i.e. pineapples and flowers, as well as a few less labour-intensive commodities such as wool and milk, that have been important sub-sectors in the EC.

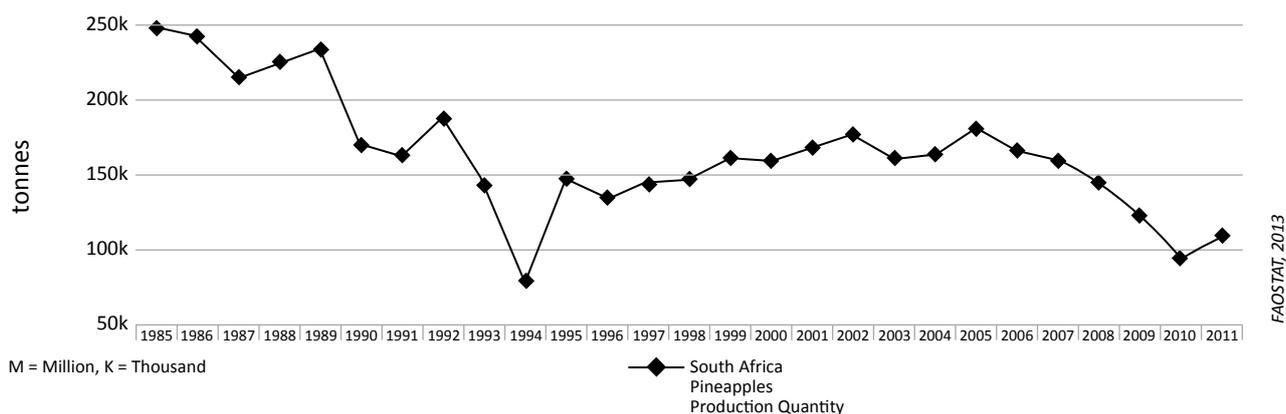
The EC accounts for a high proportion of South African pineapple production (about 75 percent, historically); and the national production record has been dismal. In 2002, the harvested area was about 13,000 hectares; by 2010 it had fallen to 7,200 hectares (FAOSTAT, 2013). The trend in pineapple output is obviously negative and declines date back to the mid-1980s (Chart 16). The failure to increase output and exports has resulted in a huge loss of potential export revenue and employment. The magnitude of the potential is illustrated by the recent experience of Costa Rica: In 1983 both South Africa and Costa Rica were exporting about 4,000 tonnes of pineapple; by 2011, South African exports had fallen to about 2,000 tonnes, while Costa Rica was exporting over 1.7million tonnes (FAOSTAT, 2013). Apart from the stellar performance of Costa Rica (and the Philippines) in exporting pineapples, Ecuador and more recently Panama have also achieved very high growth rates relative to South Africa (Chart 17).

The majority of pineapples – about 75 per cent – are processed and the largest processor in South Africa (Summerpride) is located in the EC (Jarvis, 2012). Canned pineapple exports from South Africa fell from almost 35,000 tons a year in 2000 to zero by 2008 (FAOSTAT, 2012). Exports of concentrated pineapple juice from South Africa in 2011, almost entirely produced by Summerpride and shipped from Coega, are now a tiny fraction of juice exports from countries such as Thailand and the Philippines that were not exporting any juice at all at the beginning of the decade.<sup>26</sup>

<sup>26</sup> The collapse of pineapple production and canning in 2007 left only about 24 active farmers in the EC. Part of the reason for the collapse appears to have been a regulatory failure that resulted in the application of an agro-chemical that poisoned producers' soil with cadmium, although the volume and value of canned pineapple exports from South Africa has stagnated since the early 1970s (Burgess, 2011). Areas previously devoted to pineapple production are now devoted to far less labour-intensive enterprises such livestock, game farming and tourism (Personal communication: Tamryn Roberts, Rhodes University).

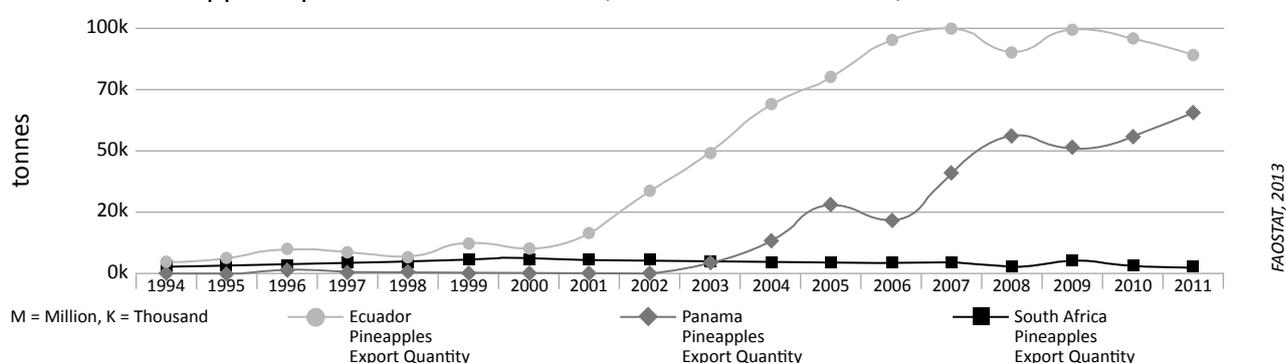
## Chart 16

Output of Pineapple in South Africa, 1985 to 2011



## Chart 17

Volume of Pineapple Exports from South Africa, Ecuador and Panama, 1994 to 2011



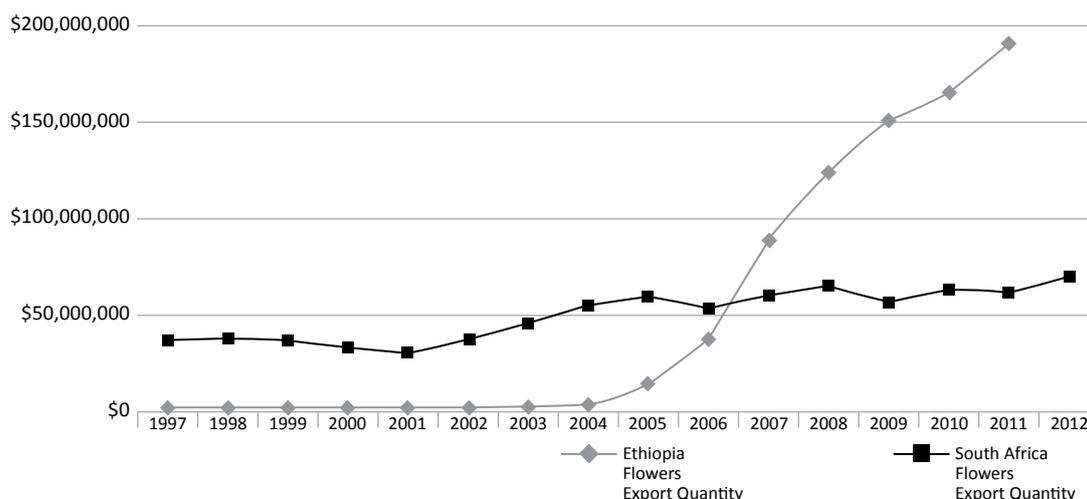
Floriculture is extremely labour intensive, employing about 17,500 people according to one rather dated estimate (Kaiser Associates, 2000). Protected cultivation (of roses etc.) employs about 16 permanent and 3 part-time workers per hectare. The production of fynbos flowers is less labour-intensive, employing about one worker per hectare for cultivation and about 8 workers per thousand hectares for wild harvesting. Women are the majority of employees and make up about three quarters of the seasonal employees (Conradie and Knoesen, 2010). There are no regularly published data on the national or provincial area devoted to floriculture or to fynbos flower production, but the Eastern Cape is said to be an important producing area, accounting for about 20 percent of output (Allerts et al, 1998). One estimate is that the national area of commercial fynbos farmed on open land amounts to 545 hectares (de Visser and Dijkxhoorn, 2012: 27).

According to the Protea Producers of South Africa, the volume of exports in 2010 was lower than it had been in 2008 (<http://www.ppsa.co.za/statistics/>). South Africa's natural advantage in fynbos flower exporting has been eroded by the success in increasing exports achieved by Australia, New Zealand, Israel and the USA. These competitors have taken advantage of the fact that the Agricultural Research Council in South Africa has had to sell off cultivars from its commercial nursery because it lacked sufficient resources to protect and to develop them (Kaiser Associates, 2000). South African exports of all types of cut flower have grown much more slowly than in other African and Latin American countries. Perhaps the most dramatic illustration of relative failure is provided in Chart 18. Compared to South Africa, the value of Ethiopia's exports of cut flowers in 2003 was miniscule. By 2007, the value of Ethiopia's exports was greater than South Africa's and by 2011 the value of South Africa's exports of cut flowers was a small fraction of the exports achieved by Ethiopia. An important part of the explanation for Ethiopia's success is that the Ethiopian state intervened decisively to support the expansion of flower exports through subsidising investors' access to land, long-term credit and airfreight, as well as through tax holidays for foreign investors (Gebreeyesus and Iizuka, 2012:24). The logistical problems faced by South Africa's flower exporters were described as critical in the Kaiser Study more than a decade ago, but investment in handling capacity, especially at provincial airports, has been inadequate and it remains difficult for exporters to predict the availability of air freight capacity (Department of Transport, 2008).<sup>27</sup> More recent work suggests that flower exporters face relatively high airfreight charges compared to their competitors in Africa. In addition, the main flowers grown under protection in South Africa are roses (T-Hybrid), but compared for example to Kenyan roses, quality and productivity are low (de Visser and Dijkxhoorn, 2012: 48 and 31).

<sup>27</sup> Amathole Berries at Thornhill Farm in the EC currently employs at the peak of the season about 300 workers on 43 hectares – mainly women who have not completed secondary schooling - but aims to expand blueberry production to 225 hectares. Expanded production of blueberries at Thornhill and elsewhere in the area by out growers could generate 10,000 jobs, but the rate of expansion is constrained by limited access to the profitable UK market. A key constraint is the inadequacy of cold storage facilities at East London airport and the limited number of freight flights from that airport (Personal communication Ryan Davies).

## Chart 18

Value of Flower Exports from Ethiopia and South Africa, 1997 to 2012 (US Dollars)



COMTRADE, United Nations Commodity Trade Statistics Database

The livestock industry in the EC makes a major contribution to national production of wool and milk and contains a high proportion of the sheep, goats and cattle in South Africa. For example, virtually all of South African exports (and over half of world production and exports) of mohair are from the EC. The value of mohair exports from the EC halved between 2002 and 2010, falling from nearly 2 billion Rand in 2002 to about 1 billion Rand in 2010. The volume of exports to Europe, South Africa's most important market for mohair by far, has also fallen dramatically, from over 800 tonnes in 2004 to virtually zero in 2010 (DAFF, 2011: 17). Between 2011 and 2012 the volume of exports fell by 12 percent. Annual production of mohair reached about 12 thousand tonnes at the end of the 1980s, but had fallen to about 2.3 thousand tonnes by 2012 (Mohair South Africa, 2013: 13). Similarly, South African exports of greasy wool have declined in absolute terms and at a much faster rate than exports from its major competitor (Australia): In the 1960s, South Africa regularly exported well over 100 thousand tonnes of greasy wool; but by 2010, South African exports had fallen to about 35 thousand tonnes, compared to exports of about 300 thousand tonnes from Australia (FAOSTAT, 2013).<sup>28</sup>

In 2011, the volume of South Africa's exports of dry salted sheepskins was less than 40 percent of the volume achieved in 2003, while the volume of exports of sheepskins with wool halved between 2007 and 2011 (*ibid*). In fact, the volume of exports of all hides and skins from South Africa is now only about 10 percent of the level recorded in 2003; and this decline is reflected in the sharp fall in the value of exports of hides and skins from the Eastern Cape over the same period (DAFF, 2011: 12 and Figure 29). Employment creation through forward linkages to export industries using leather inputs has been constrained by the inappropriate quality and insufficient quantity of the leather produced in South Africa. Only about 60 percent of South African hides are suitable for automotive leather; the leather seat and kit component industry in the EC is heavily dependent on imported Raw Hides (DTI, 2008). Similarly, imported leather accounts for a high proportion of inputs into South African tanneries supplying the declining local shoe industry (ITC, 2010:14).

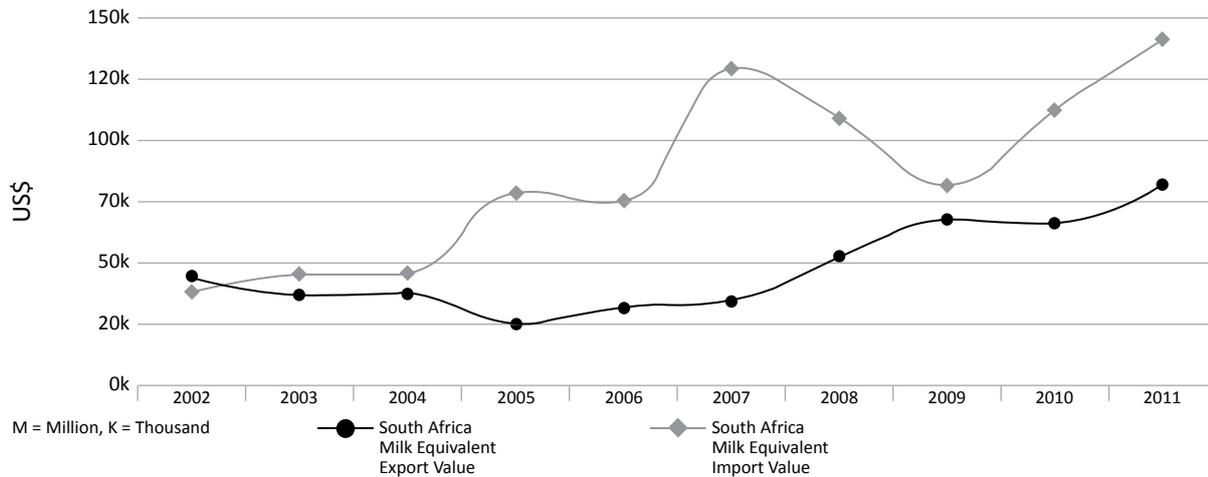
The EC accounts for over a quarter of total milk production in South Africa. About 15,000 people are employed for wages on the rapidly declining number of dairy farms in the EC (DAFF, 2011). Between 2000 and 2011 the volume of South African milk exports (milk equivalent) declined from about 130 thousand tonnes to about 112 thousand tonnes. Over the same period New Zealand succeeded in dramatically increasing its milk exports from about 8.6 million tonnes to about 11 million tonnes (FAOSTAT, 2013), indicating the scope for foreign exchange and employment gains in this sector. Not only did South Africa fail to expand output and employment by expanding exports, it has allowed the gap between milk imports and exports to widen since 2003, effectively reducing potential domestic employment (Chart 19).

Further product-specific examples of weak agricultural performance could easily be given, both for the Eastern Cape and elsewhere in South Africa. A much more difficult task is to propose an analytical framework within which this dismal performance might be explained. The following section of this paper begins, but certainly does not complete, this complex task.

<sup>28</sup> The total number of sheep in the country declined from 37.4 million head in 1966 to 21.9 million in 2008 (Liebenberg and Pardey 2012: 26).formatting??

## Chart 19

Value of Exports and Imports of Milk in South Africa, 2002 to 2011 (US Dollars)



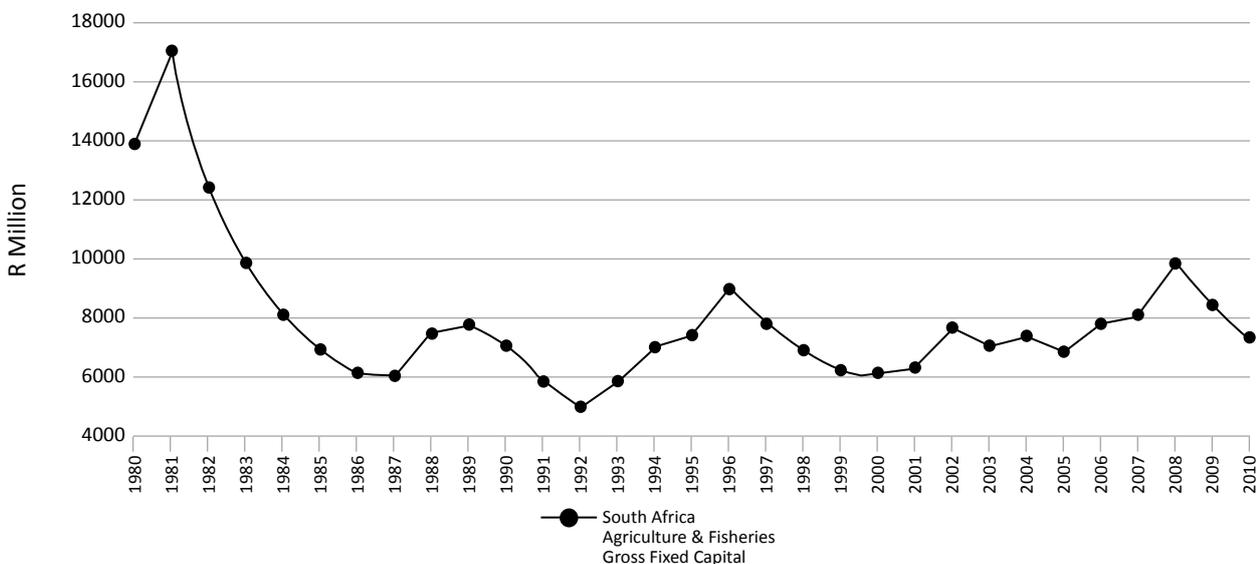
## Policy Failures and Fetters on the Level of the Forces of Production

Technological dynamism and rapid capitalist development in the agricultural (as in other) sectors could not conceivably be achieved in the context of the fundamentalist fiscal, monetary and exchange rate policies pursued over the last two decades. The rapid removal of protection for labour-intensive sectors, combined with an overvalued exchange rate, high real interest rates and insufficient public sector investment to boost sluggish domestic demand all help to account for the low levels of investment in agribusiness. In addition, and perhaps even more importantly, the relaxation of exchange control regulations and a series of other deregulatory initiatives and amnesties gave a major impetus to capital flight – a key feature of the South African economy well before 1994, but accounting for 20 percent or more of GDP by 2007 (Ashman et al, 2011).

All those wishing to evade current or possible future tax liabilities by shifting their assets to offshore tax havens, or those planning to educate their children abroad, were encouraged by the Reserve Bank to pretend that exporting capital was in the national interest – a means of reducing external vulnerability. Not only conglomerates and the apocryphal ‘doctors and dentists’ with limited commitment to a national accumulation project, but also farmers abandoned investing in the domestic productive sector. It has been suggested that part of the reason for the explosion in the area devoted to game farming and hunting is the ease with which undeclared tourist dollars can be hoarded abroad (Bonner, 2013: 163). The

## Chart 20

Gross Fixed Capital Formation in Agriculture Forestry and Fisheries, 1980 to 2010 (SA Rand)



Minister of Agriculture and the Department of Foreign Affairs have followed the ideological lead provided by the Reserve Bank; they now actively facilitate South African farmers' acquisition of assets in other countries while, as shown in Chart 20, farms in South Africa have been starved of investment (Hall, 2012: 831).<sup>29</sup>

Quite apart from appropriate macroeconomic policy, there are some forms of state intervention that are particularly important if technological change in agriculture is to accelerate. The South African state has a very poor record in supporting the Research and Development likely to increase output in the agricultural sector. Between 1993 and 2006 real agricultural R&D decreased by 0.83 per cent per year. By 2007, direct public investment in agricultural R&D was just 70 per cent of the corresponding level in 1971. The ratio of agricultural R&D expenditure to agricultural GDP has, for more than two decades, been much lower than the comparable ratio in Australia, for example, while there has been a dramatic absolute fall in the number of scientists employed as agricultural researchers in all the relevant South African institutions over the same period (Liebenberg et al 2011).<sup>30</sup> Estimates of R&D output and expenditure in biotechnology are also low in South Africa compared to Asian, Latin American, Australian and other international comparators (Gastrow 2010), while the most recent evidence shows that total R&D expenditure as a percentage of GDP has fallen between 2007 and 2010 (HSRC, 2013).

The proportion of farmland under irrigation has a profound influence on the level of labour use per hectare, as well on the intensity with which other inputs, such as agro-chemicals and machinery are used. Irrigation and water control are, therefore, regarded as the "leading input" in historical accounts of technical change, output and productivity growth in the most dynamic Asian economies (Ishikawa, 1974). In these economies, much of the required investment in irrigation schemes, and ancillary investments in transportation, storage and fertilizer production, was undertaken by the public sector (Pincus, 2006: 208; Bramall, 2004: 134).

In contrast, the South African state has not invested to increase the total area equipped for irrigation over the last two decades and the ratio of this area to the total area cultivated remains below 10 per cent, compared to an Asian average of about 34 per cent (FAOSTAT 2011 and Svendsen et al 2009:19).<sup>31</sup> There has also been insufficient investment to reduce the substantial loss of potential crop area and production arising from inefficient irrigation practices and maintenance backlogs (BFAP, 2012: 15; DBSA, 2012: 84-5). For example, it would be possible to increase the acreage under citrus in Sundays River Valley by about 30 percent, with a huge impact on wage earning opportunities, with more appropriate water management policies (F. Olivier, 2013, personal communication).

There is an important lobby in South Africa (as elsewhere) arguing that "small dams, which cause little environmental degradation and population displacement, are an obviously superior solution to the water scarcity problem of agriculture...". These arguments only offer a small fig leaf to cover the state's embarrassing failure to invest in dams, because the South African evidence is that larger dams have many important advantages over small dams (Blanc and Strobl, 2013).

The irrigated area farmed by smallholders is a tiny fraction of the total irrigated area, but the post-apartheid state has presided over the collapse of the smallholder irrigation systems previously supported by homeland parastatals (Van Averbeke et al, 2011; Van Koppen et al, 2009; Cloete, 2013). Even before this collapse, small farmers on the majority of these schemes achieved low yields and performance on these smallholder projects was well below agronomic potential. Several recent efforts to revitalise or rehabilitate small farm irrigation schemes "have seen little return, or worse, have resulted in perverse development outcomes" (Van Averbeke et al, 2011: 9). Despite this record, the rhetoric of current government policy places a great deal of emphasis on small farmers and new entrants producing on irrigated land in the future (NPC, 2011: 198).

The pattern of rural under-investment shown in the data on GFCF, R&D expenditure and the area irrigated is repeated in the data on fertiliser use and farm machinery, reflecting the steady decline in the total farmed area since 1960 (Liebenberg and Pardey, 2012: 21-22). In 1981 South Africa applied a total of 872 thousand metric tonnes of fertilizer, but by 2010 total fertilizer use had declined to only 557 thousand metric tonnes ([www.fssa.org.za](http://www.fssa.org.za)). Expenditure on fertilizer in constant Rand terms in 2010 was only about 60 percent of the level it had reached three decades previously (Liebenberg, 2010: 22). South Africa has also become increasingly dependent on imports to satisfy local fertiliser demand. In 1990, less than 20 % of fertiliser needs were imported; in 2008, over 65 % of South Africa's nutritional fertiliser needs were imported (Grain SA, 2011: iv). In the Upper Middle Income economies fertilizer consumption per hectare of arable land increased substantially between 2002 and 2009 - from about 133 kg to over 160 kg. Over the same period, fertilizer consumption in South Africa was much lower and has declined - from about 57 kg to 49 kg per hectare. South African fertilizer consumption per hectare now amounts to less than 15 percent of the current level of fertilizer consumption per hectare in the East Asian developing economies (WDI, 2013).

<sup>29</sup> The declining investment trend shown in the chart appears to have continued in more recent years: "farmers are opting to reinvest a smaller percentage of their net income back into the sector" (BFAP, 2013: 17). Unsurprisingly, net inflows of Foreign Direct Investment into the agricultural sector between 2006 and 2011 have been very low for South Africa, far lower than in comparator economies such as Brazil, Australia and Argentina (NAMC, 2013: 125)

<sup>30</sup> More than 300 FTE researchers left the Agricultural Research Council between the mid-1990s and 2008 (Flaherty et al, 2010).

<sup>31</sup> Other sources provide even less favourable comparisons. Measured by the percentage of the area of arable and permanent crop land that is irrigated, South Africa (8%) falls way below the achievements of economies such as Chile (139%), Mexico (23%), or the Asian average (39%). See: <http://www.icid.org/database.html>. Liebenberg's estimates of the cultivated area under irrigation in South Africa show a major decline from 1.67 million hectares in 1981 to about 1 million hectares in 2011 (Liebenberg, 2010: Figure 4.10).

The decline in investment in tractors has also been dramatic. In 1981 South Africa had about 142 tractors per 100 square km of arable land; by 2004 the number of tractors per 100 square km of arable land had fallen to 43, equivalent to about 37 percent of the tractor density in the Upper Middle Income economies (WDI, 2013). There were about 70 thousand tractors in use in 2010, equivalent to less than half the number in use in the early 1970s. Estimates of real capital expenditure on farm machinery show an obvious downward trend between the early 1980s and 2010/11 (Liebenberg, 2010:22 and 86).<sup>32</sup>

It has been argued here that government policies have, for many decades, failed to promote adequate rates of investment and output growth in the agricultural sector; but most of the evidence so far presented relied on statistics that only cover large-scale farms and total output/export trends. Unfortunately, the historical and current statistics on agriculture in the former homeland areas are notoriously unreliable (Liebenberg, 2010: Chapter 3.2; Aliber and Hall, 2012: 554; Statistics South Africa, 2013: 1), but it cannot be argued that state interventions either before or after 1994 were at all successful in raising the level of the forces of production on farms in these rural areas or on small farms. In fact, there are few, if any signs of dynamic capitalist development from below, of the emergence of a new class of more productive capitalist farmers from the ranks of smallholders. The trend in the share of black farmers in the total field cropped area planted and in national production shows a very substantial decline between 1960 and 2011: Black farmers' share in the total planted area declined from about 15 to 8.4 percent; their share total field crop output declined from about 6 to 3 percent; (ibid: Figure 3.3).<sup>33</sup>

There is abundant further evidence of the failure of smaller farms in South Africa. Within the former homelands, a remarkably low proportion of the available arable land is currently cultivated – perhaps about 25 percent (Aliber and Hall, 2010: 18). Moreover, the many micro case studies that have assessed the economic sustainability of small-farm projects, including irrigated and non-irrigated projects as well as production on farms acquired through the Land Reform processes, confirm that failure rates have been high (ibid). The obvious inability of state intervention to create viable small farms has deep historical roots since the Nationalist party, like the ANC, was rhetorically and electorally compelled to offer support to small farmers:

*“Poor, marginalised farmers played a major role in the coming to power of the National Party. The National Party returned the favour by helping such farmers survive on the land... Throughout the 1950s the Government sustained its commitment to keeping inefficient, uncompetitive farmers on the land”* (Schirmer, 2004: 6).<sup>34</sup>

Following the removal of most forms of state support, the number of white- owned farms decreased rapidly; by 2007 they had been reduced to only one third of the number recorded in 1959. More than half of these remaining white-owned farms may be regarded as small, at least on the basis of the level of income they generate (OECD, 2006: 40). As in other OECD economies, a tiny number of farm enterprises now dominate marketed agricultural production in South Africa: A total of 237 private companies were recorded as owning farms in 2007, but these company-owned farms accounted for over one third of all gross farm income (Statistics South Africa, 2007:4).<sup>35</sup> Most of the farms outside the former homelands, let alone those located within the former homelands, are making an insignificant contribution to food availability and national output (and an even less significant contribution to exports).

Estimates of the precise number of small farms in the former homelands and in South Africa as a whole depend on whether or not farms are defined to include every household claiming to engage in some form of part-time agricultural production. Such claims are made by households that only have a few chickens scabbling in their backyards as well as by households that derive no income at all from farming. The information on “Agricultural Households” derived from Census 2011 indicates that there are 2.9 million such households, but 43 percent of these do not farm any crops and a third claim to earn no income at all (Statistics South Africa, 2013). The General Household Survey of 2009 identified a similar number of households engaged in one or more agricultural activity (2.8 million), but only 3.3 percent of these households reported marketing most of their production and about 74 percent did not produce any crops on farm land, as opposed to in “backyard gardens” (Statistics South Africa, 2011: 40). The NPC reports that about 97 percent of those South African households with some access to agricultural land have access to less than 10 hectares. A recent estimate is that a total of about 47,000 small farms operated by black households are able to market “most of their production” (Aliber and Hall, 2012: 551). In fact, it is likely that a very much smaller number of households – perhaps a few hundred - account for the overwhelming majority of the output marketed by black households, since recent state (and corporate) interventions have been skewed, privileging an “emerging” farming elite and reinforcing the well-established trends toward differentiation

<sup>32</sup> The use of other inputs, such as pesticides, herbicides, fuel and combine harvesters also declined after deregulation (Vink and van Rooyen, 2009: 7)

<sup>33</sup> The fall in black farmers' share in the national production of specific crops – such as sorghum - was even more dramatic (Liebenberg and Pardey, 2012: 21). The recent decline in production by small-scale sugar growers, after about 40 years of state and Bantustan support, is remarkable. In 2003 there were about 50,000 small-scale sugar growers producing about 14 percent of national output; by 2011 less than 14,000 small-scale growers remained in the market and they accounted for only 8.59 percent of total production (Dubb, 2012: 3). It is estimated that white-owned farms currently account for more than 95 percent of total marketed agricultural output (Kirsten, 2012: 4).

<sup>34</sup> By 1959, as a result of government support, the number of rather small farms (below 257 ha) owned by white farmers was about 48,000 – a slight increase on the comparable number in 1926. By 1993 the number of farms in this small size category had fallen dramatically - to about 22,000 – and by 2007 the total number of farms in all size categories was only about 39,000, with an average farm size of over 2,100 ha (Liebenberg, 2010: 26). About 7 percent of the remaining white-owned farms (2,900 farms) may be regarded as large-scale units (Kirsten, 2012: 4).

<sup>35</sup> Similarly, in the USA there were about 1.3 million farms in the smallest size category of farms. Although these farms accounted for 60 percent of the total number of farms, they accounted for less than one percent of production in 2007. As in South Africa, there has been “a steady and widespread shift of acreage and production toward much larger farms”. By 2007, a tiny number of very large farms - about 2 percent of the total number of farms in the USA – accounted for nearly 60 percent of production (MacDonald, 2013: 35).

and concentration in the former homelands (ibid: 555).<sup>36</sup> A good example of these targeted forms of state intervention is the land reform programme: “between 2001/02 and 2005/06, there were only about 3900 households benefiting per year, while between 2006/07 and 2008/09 there were fewer than 2000 households benefiting per year, despite annual expenditure in excess of R1 billion” (Aliber and Hall, 2010: 21).<sup>37</sup>

Although there has been limited research on technological change and the trends in wage employment on enterprises owned by the small new class of black capitalist farmers, the long-term viability of their accumulation strategies has been called into question:

*“The way in which many of the small class of new commercial black farmers have accessed land, finance and markets exhibits parasitic features: reliance not only on the state and the Land Bank but on the patronage of established agrarian and agribusiness capital, special share deals, affirmative action, BEE quotas, fronting, privatisation, tender policies and trading on its one real piece of ‘capital’ – access to state power and resources”* (Jara and Hall, 2009: Section 2).<sup>38</sup>

At worst, BEE has made pests out of parasites. For example, in the key Langkloof fruit producing area in the Eastern Cape; at least two farms acquired through BEE deals have been abandoned and now act as pest reservoirs, limiting production on neighbouring capitalist farms (J. Kotze, General Manager Jourbertina, 2013, personal communication).

Rather than investing in new techniques to improve labour productivity and to compete effectively against the most dynamic agricultural capitalists, the black farming elite is lobbying for their own exemption from minimum wage legislation (<http://www.fin24.com/Economy/Rocketing-costs-threaten-black-farmers-20130306>) and has strong incentives to adopt less risky strategies to realise profits on their farms. State policies provide them with subsidised access to land (and with access to increasing amounts of subsidised credit from the Development Finance Institutions), facilitating speculative real estate development – both in shopping malls and residential projects. When the state does allocate inputs for “small” farm development or to promote food production in the former homelands, they are in a strong position to appropriate the lion’s share of these subsidised resources or to make an easy killing as ‘tenderpreneurs’ offering to supply the standard input package of tractor services, seeds, fertilizer, etc. Of course, the wealthiest members of the national elite may prefer to take their farm profits in the form of a quiet life - i.e. in trout fishing, the breeding of rare forms of livestock, or in other semi-feudal rural pursuits.<sup>39</sup>

State intervention and generous salary payments since 1998 have also created another, if overlapping, elite group in the former homelands. Anti-democratic policies favouring “kings” and “chiefs” proved successful in reducing the threat posed by Inkatha to the ANC in KwaZulu-Natal; urban-based ANC leaders continue to feel the need to mollify rural intermediaries who might help to secure the vote in other former homeland areas (Friedman, 2012; Beall and Nkonyama, 2009: 4 and 10; Ntsebeza, 2002:356). As a quid pro quo for electoral support, the re-invented “traditional” authorities insist on playing an important role in land allocation, acting in a legal framework that is, after the rejection by the Constitutional Court of the Communal Land Rights Act in 2010, profoundly uncertain and ambiguous (Bennet et al, 2013: 29; Bonner, 2013), but no less conducive to patronage, clientelism and gender discrimination.<sup>40</sup>

Interventions (or inaction) by this reactionary elite have prevented the most dynamic capitalist farmers, white or black, from obtaining secure access to under-utilized land. In many areas there are long-standing disputes concerning the legitimacy of particular “traditional” leaders, which make it difficult to identify the appropriate recipients of bribes to ensure access to land, or to pinpoint the “community” of rural people or a particular squatters’ leader who should receive and then convey promises of wage employment or other benefits. The problem of how to achieve a reasonable degree of security of access to farmland and irrigation water has obviously constrained agricultural output growth. Many examples of protracted negotiations and conflicts over land rights leading to the collapse of output or the loss of tens of thousands of potential waged jobs can be cited for the Eastern Cape, including: The Magwa and Lambasi farms (Kepe, 2005); Ncera farms (Parliamentary Monitoring Group, 2013); Dudumashe (Bennett et al, 2013); Keiskammahoek and Tyefu irrigation schemes (van Averbek, et al, 2011: 6); the Qamata irrigation scheme (Hofstatter, 2007); Cape Concentrates and the King Sandile

<sup>36</sup> An elite of about 3,000 farmers constitute the membership of the African Farmers Association of South Africa. AFASA was established in 2011 and appears to have a strong influence on agricultural policymaking and on the ANC leadership. Its president owns a farm of more than 1000 hectares and the Association aims “to mobilise resources for the benefit of African farmers”. The annual membership fee of R1500 is more than the total annual expenditure by a poor rural household on clothing and footwear ([http://afasa.za.org/afasa\\_about.html](http://afasa.za.org/afasa_about.html); Statistics South Africa, 2012a: 123).

<sup>37</sup> No effort has been made to publish data on the percentage of commercial farm land that is currently in black ownership in each province following land reform, or as a result of private purchase by individuals and by companies (Walker, 2012: 6).

<sup>38</sup> The use of access to state resources to establish and expand capitalist enterprises is a normal feature of capitalist development, both in the agricultural and other sectors (Sender and Smith, 1986). There is no reason to assume that such enterprises will always lack the ability to compete successfully in capitalist markets on the basis of a new pattern of investment to achieve technological dynamism, although pessimists would note that a “high corruption low growth scenario” did persist for at least two decades in South Africa after 1972 (Hyslop, 2005: 782).

<sup>39</sup> The President and the Deputy President of the ANC both set the tone by breeding livestock on farms they use for occasional weekend retreats (Farmers Weekly, May 23, 2012; Mail and Guardian, 12th July, 2013). On black “hobby farmers” in the Eastern Cape see Morris, (2013: 3).

<sup>40</sup> “Traditional” councils are also playing an important role in allocating scarce wage employment opportunities on farms attempting to compete in capitalist markets. After land restitution, the failure of large, highly capitalised farms on prime land in the Lebavu Valley is partly explained by the prevalence of staff and farm labour recruitment on the basis of identity rather than competence, coupled with the use of farm resources to supplement the salary of the secretary to the traditional council (Manenzhe, 2012: 16).

Development Trust (Wahid Arai, personal communication, 2013); and the SAPPI-Lambazi forestry project (Andrew et al, 2000). The pattern of state intervention and legislation, as well as the ANC's efforts to shore up its rural base in the former homelands, have resulted in these examples (and many others outside the Eastern Cape) of stagnation, retrogression and a backward agricultural capitalism.

It has already been shown that capitalist development in South Africa is constrained by the failure to improve the health, education and skills of millions of labour force entrants. The conventional policy wisdom is that policy efforts should (yet again) be made to subsidise food production on farms in the former homelands, or on small farms operated by black households, because the reinvention of this wheel will improve the nutritional and health status of poor rural people, or increase their access to food, or reduce their vulnerability to labour market shocks. The most recent proposals build on earlier food production subsidies promoted by a relative of the President, by the President himself and several key leadership figures. These high-cost and poorly monitored interventions outsourced to a crony NGO – the Masibambisane Rural Development Initiative - have recently been questioned by both the Minister of Rural Development and the Minister of Agriculture. Subsequently, a rebranded “end hunger” scheme has been launched (<http://taungdailynews.wordpress.com/2013/10/13/zumas-ngo-canned/>).

This new scheme will have a budget of about R1.6 billion “to increase local access to food...Government through Fetsa Tlala Framework intends to support subsistence and smallholder farmers to put one million hectares under production by 2018/19” (<http://intsika.org/minister-explains-fetsa-tlala-initiative>). The design of Fetsa Tlala, with its focus on subsidised land preparation and input provision for maize and bean production, shows no indication of having learned any lessons from the plethora of similar (and failed) projects dating back to the 1950s and Betterment,<sup>41</sup> such as the Farmer Support Programme, the Massive Food Programme, the Siyazondla Household Food Security Programme, the Comprehensive Rural Development Programme and countless NGO-promoted projects to encourage small-scale farmers, women and schools to produce vegetables/food.<sup>42</sup> All of these populist initiatives ignore a mountain of evidence and some good theory demonstrating that household food production projects do not improve the nutritional status of women and young children. A systematic review of the evidence published in 36 screened articles found no significant improvement in the stunting, underweight and wasting of children and only ambiguous results for the nutritional status of women (Girard et al, 2012). Another review found that some of these projects adversely affect women's workloads, without improving their bargaining position or control over income (van den Bold et al, 2013).

More importantly, the South African evidence concerning those rural households most vulnerable to nutritional deprivation, i.e. households in the former homelands with high female:male adult ratios, low levels of educational attainment and limited access to labour, shows that such households are extremely unlikely to be able farm more intensively and increase production on their own garden/farms. In fact, the poorest rural households are almost always compelled to rely on sources of income other than self-employment as food producers; they depend on cash income from casual wage employment and on transfer incomes. In common with most other rural households, they purchase almost all the food they consume and, as shown in Agricultural Census 2011 as well as in many earlier surveys, the vast majority of rural households do not derive any of the cash income they require to buy food from farming (Palmer and Sender, 2006; Cock et al, 2013).<sup>43</sup>

Rather than considering interventions relevant to improving the nutritional status of the rural poor, current policies will result in channelling subsidised resources to promote food production towards well-connected and inefficient producers, who are usually by no means poor relative to other rural households, and who will not be able to produce or market food at prices comparable to agribusiness or to the four big supermarkets.<sup>44</sup> These producers will offer fewer days of work and pay lower wages to their female casual workers than larger farmers, failing to provide the most vulnerable with annual earnings sufficient to purchase the food necessary to improve the nutritional status of their children. There are alternative policies that might improve the bargaining power and earnings of millions of rural women vulnerable to malnutrition. This paper will conclude by highlighting some policy alternatives that are obscured in the swirling mists of populist rhetoric in South Africa, or ruled out of court by Treasury dogma.

<sup>41</sup> Betterment planning involved half-hearted and misconceived interventions to improve the sustainability of production in the Bantustans using some familiar inputs - including brutal extension “advice”, tractor hiring and co-operatives . The results have been described as “a re-arranging of the deck chairs on the Titanic in the form of a re-arranged land use plan” (de Wet, 2010: 8)

<sup>42</sup> On the failure of school food gardens in the Eastern Cape see (UNICEF, 2008). The Eastern Cape is not participating in a recent programme (repeatedly praised by the Minister of Agriculture) that has provided subsidised inputs and “mentoring” for smallholder vegetable producers and was designed to improve the image of Walmart/Massmart. However, the scope of this programme is insignificant; only 40 smallholders were participating by the end of 2012 (Engineering News, 2nd September, 2013).

<sup>43</sup> According to the latest General Household Survey, there are about 11.5 million Black African Households, but only 36,000 of these households (8,000 in the Eastern Cape) derive any income at all from sales of farm products. When those who claim to engage in one or more agricultural activities in the Eastern Cape are asked whether or not agricultural production provides their main source of food or their main source of income, almost 99 percent respond negatively (Statistics South Africa, 2012b: 42 and 145; Statistics South Africa, 2013: 43). A recent survey in Limpopo concluded that: “Household food production does not seem to contribute to a higher food security status” (Cock et al, 2013). The latest wave of the National Income Dynamics Study confirms the low and rapidly declining relevance of self-employment in farming: the proportion of rural households in Tribal Authority Areas who claim to engage in any type of agricultural activity halved between 2008 and 2012 (Daniels et al, 2013: 9).

<sup>44</sup> Most households in a survey of two rural villages in the Transkei, including the poorest households, purchased their basic food requirements from city supermarkets, rather than from the much more expensive village shops (D'Haese and Van Huylenbroeck, 2005: 107). Perhaps the NGO activist champions of localism, arguing for “support for local systems of distribution based on what already exists in the ‘informal’ sector”, always buy their own groceries from the nearest ill-stocked and expensive spaza (Greenberg, 2013: 24)?

Elite policymakers' reliance on populist rhetoric and their resort to moralistic platitudes have been criticized elsewhere (Sender 2012), while this paper has already discussed the growing power of the authoritarian and patriarchal ideologies. Before moving on to discuss alternative policies, one additional ingredient in the elite attitude mix should be noted, because it serves as an excellent complement to the notion of promoting food production on small farms. Ministers and the ANC leadership, aping the views of members of the ruling class in other places and times, have been eager to distinguish between the deserving and the undeserving poor. They often bemoan "handouts" and want to fight against perceived dangers of dependency, indolence and a culture of entitlement (Seekings, 2008). The Rural Development and Land Reform Minister has recently expressed these quasi-hegemonic views rather clearly, complaining about "people who sit on the farms and do not work":

*"The biggest problem in South Africa is that the people are too lazy. People are given land all the time, but all they ever do is complain about what the government did not do for them"* (Daily Dispatch, April 8, 2013).

In Victorian Britain the able-bodied poor were often required to prove that they were not lazy by breaking stones, chopping wood, or "agricultural digging" before they could qualify for any support from the local state. Their poverty and hunger were believed to be the consequence of individual moral weakness (Mah, 2009). The aim of Victorian policy was punitive and the backbreaking labour was generally not remunerated, much as the labour to grow food crops on small farms in South Africa is unlikely to yield much cash (or food). Even if it could be established that children's nutrition could be improved much more rapidly and at much lower administrative cost by universal cash transfers to all adults living in the former homelands, small farm food production would still be regarded as the more virtuous path.<sup>45</sup>

## Conclusions and Policy Issues

Gandhi compared a book on social conditions in India (written by a feminist foreign researcher) to a report by a drain inspector: "... the impression it leaves on my mind is that it is the report of a drain inspector sent out with the one purpose of opening and examining the drains of the country to be reported upon, or to give a graphic description of the stench exuded by the opened drains" (Emilsen, 1987). Although it is true that one purpose of this paper is to describe the rather disgusting consequences of backward capitalism in rural South Africa, the paper also aims to raise questions about the future. For example, after about four decades of stagnation and some periods of retrogression, what are the prospects for a more dynamic agricultural capitalism?

While the balance of class forces and the apartheid and post-apartheid states were clearly not conducive to rapid capitalist development, the (im)possibility of radical change and dynamic development in the future is not path-dependent, but contingent on political struggles the timing and outcome of which cannot be predicted with any confidence. Only one year ago (in October 2012) a prediction that strikes and struggles by grape harvesters would rapidly lead to an increase in the legislated rural minimum wage of more than 50 percent would have been ignored or dismissed as an optimistic joke. The success of thousands of De Doorns farm workers in demanding state support may come to be seen as an insignificant blip in the continuing record of government failure to intervene on the side of the rural poor. But learning from failure is often a good recipe for future success (Hirschman, 1967). It is too easy, on the basis of the long record of failure documented above, to predict the persistence of unrealistic agricultural policies with perverse outcomes. At the risk of being labelled naïvely optimistic, this paper proposes a few new recipes for greater success in rural development and demands that the old, unappetising menu currently on offer in South Africa be sent back to the kitchen.

The most important departure in any new recipe should be a rejection of the taint of racism. Much more state intervention in support of capitalist investment in agriculture is obviously required, probably breaching the narrow treasury orthodoxy on fiscal restraint, but new and non-racist criteria should be used in the allocation of such support. Lessons should be learned from the failures of protracted attempts to: shore up inefficient Afrikaner farmers; promote "emerging African" commercial farmers; allocate land on the basis of ethnicity in land reform processes; and encourage food production by black African micro-farmers in the former homelands. Twenty years ago, the Macroeconomic Research Group argued that:

*"The state should certainly intervene to restructure production on large-scale capitalist farms, but the objectives of such interventions should be broader than to merely achieve a change in the colour of the capitalists concerned. These objectives must include achieving ...rapid improvement in the wages and working conditions of farm labourers"* (MERG, 1994: 192).

Such state support should never be granted without a quid pro quo from the capitalist beneficiaries and a clearly identified mechanism to discipline them, should they fail to meet their side of the bargain.

<sup>45</sup> Workfare in India, which has its origins in the Victorian Famine Codes of the 1880s, has been shown to be a much less cost-effective way of reducing rural poverty than cash transfers and a basic income scheme (Murgai, et al, 2013).

For example, if the state invests to create or rehabilitate irrigation infrastructure and allocates subsidised water, land and credit to capitalist farmers, not only will these farmers have to employ a target number of waged workers, supported by an independent trade union and receiving decent wages and working conditions, they should also be required to meet output and export targets within a short period. If they fail to meet these conditions, then all subsidies should be withdrawn and more efficient capitalists should be encouraged to take over the enterprises failing to meet state-specified performance criteria. The ability to monitor the outcome of capitalists' use of subsidized inputs and to discipline them through the threat of forced mergers is likely to be much greater if a few larger scale enterprises are the target of state strategy. In South Korea, cutting off subsidized credit and forcing mergers of chaebols were state interventions vital to the success of industrialization. The success of policies to discipline agribusiness and to accelerate capitalist development "will also depend on the number of agents involved in the policy. Trying to coordinate investments among a few large firms may be easier than organizing a country-wide distribution of subsidized fertilizer that involve(s) millions of small farmers who are ... scattered all over the country" (Chang, 2013: 12).

Populist (or racist) forms of state intervention always stress group homogeneity and avoid debating the policy implications of difference, of heterogeneity within groups or sectors. But discrimination and targeting, reinforced by an explicit and publicly debated rationale for the choice of target, are urgently required if accelerated capitalist development is to be achieved. So, state support for the agricultural sector should not only "bet on the strong" by targeting a few large agribusinesses, it should also focus on specific sub-sectors within rural South Africa: Exports and the most wage-labour-intensive crops should be the focus of support, while extensive rain-fed farming of low-value food and livestock for the domestic market should continue to be denied subsidies. This denial is justified both by the balance of payments constraint on growth and by the waste and suffering caused by an acute scarcity of wage employment opportunities in rural areas. The level and stability of the real wages and the food consumption of the poor can more effectively be protected by specific interventions to influence the price of those food items consumed by the most vulnerable, e.g. by variable tariffs on selected traded food grains such as wheat and maize, and by introducing, monitoring and regularly revising a national minimum wage. Populist and nationalist slogans demanding home gardens and food self-sufficiency should no longer be allowed to stifle debate on more effective forms of direct intervention in food and labour markets to reduce malnutrition.<sup>46</sup>

A focus on export and wage-labour-intensive agricultural commodities has implications for the prioritisation of infrastructural investments and for allocating state expenditure on R&D and tertiary education. For example, the pattern of investment to transform and subsidize cold storage, airfreight, port and rail logistics, as well as to improve irrigation, water control and agronomic research capacity, should cater to the specific needs of wage-labour-intensive agribusiness exporters, rather than to the demands of all black African farmers or to considerations of Provincial equity. More dynamic agribusiness exporters will need substantial state support to improve the transport logistics (and the research skills) required to meet global supermarkets' strict delivery schedules, their sanitary and phytosanitary regulations, and their insistence on new varieties with specific shelf life and other attributes. A "fair" allocation of rural development funds across all traditional authorities, say to improve local rural roads and increase the number of local extension workers, will not cut the mustard in terms of increasing wage employment and export revenue. Too many areas in the former homelands were "dumping grounds", remote from markets and with limited agro-ecological potential. The returns to allocating investment funds to such areas would be low.

"Unfair" or discriminatory resource allocation is also required when investing to upgrade the education, health and productivity of vulnerable members of the rural labour force. Both improved rural welfare and capitalist accumulation entail the transfer of huge numbers of rural workers into waged employment in more highly productive sectors; these transfers of labour have never proceeded smoothly and without waste (unemployment) and awful hardships. The probability of finding wage employment in South Africa, as well as the level of wages earned, is now closely associated with secondary school completion (Branson et al, 2012). Improved education not only increases the probability of more successful job search, it also raises the capacity to bargain and to organise to defend basic conditions in all labour markets. Rather than remain "land-locked" – tied to a farm plot that yields fluctuating and tiny returns to labour – women are more likely to be able to chart an escape route from oppressive poverty, probably through migration for wage labour outside the rural former homelands, if they are reasonably educated. Unfortunately, it is possible to predict that the daughters of rural mothers with limited education will, by the time that they are young adults, have failed to matriculate (Timaues et al, 2013).

The most vulnerable labour market entrants are badly educated and will be compelled to seek casual/seasonal manual agricultural wage work. The girls most likely to depend on wages in this particular sub-sector of the labour market should receive a disproportionate share of national educational and health expenditures. It would not be enough to achieve a dramatic increase in per-student expenditures in the rural areas of all the former homelands. This is because some of the former homeland rural areas are deprivation hotspots, with very much lower levels of female educational attainment, nutritional and health status than other areas. For example, in the Eastern Cape there are local municipalities where almost

<sup>46</sup> Timmer (2010) discusses how, by ignoring all World Bank advice, the Indonesian and Indian states have directly intervened to stabilise food prices successfully since the 1970s.

half of the female population aged over 20 have completed their matric or higher levels of education, whereas in other, more deprived local municipalities, i.e. Sunday's River Valley, Matatiele, and Kou-Kamma, about 75 percent of women have not completed matric (Makiwane and Chimere-Dan, 2010: 180). State resources should be concentrated on the schools and girls in the latter type of municipality. Similarly, the District Health Barometer (<http://www.hst.org.za>) provides indicators of health inequalities between Districts and Municipalities in the Eastern Cape, assessing the delivery of primary health care by the public sector. These indicators could be used to identify those rural areas where women and children have the least adequate access to primary health care and where state resources should be concentrated.

In many other middle-income (and low-income) economies cash transfers directly to girls attending secondary schools in rural and urban hotspots of deprivation have achieved some success in terms of school enrolment and schooling outcomes (Baird et al, 2009).<sup>47</sup> Universal, non-means-tested, unconditional cash transfers have the highest take-up rates and the lowest administrative costs in poor economies, but if the moralistic elite or Treasury officials in South Africa remain opposed to such Basic Income Schemes, then targeted cash transfers to all teenage girls in those local municipalities with the worst record of female education and public health provision could make an important contribution to the longer-term prospects for development, breaking the depressing inter-generational chain of rural poverty transmission.

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<sup>47</sup> Evidence of the impact of conditional cash transfers on maternal and newborn health is discussed in Glassman et al, 2013.

# References

- Adriaen, D., Kleynhans, T. E., & Tollens, E. (2004). A comparison between South African agricultural exports to the European union and those of other selected southern hemisphere countries. *Agrekon*, 43(2), 184–201.
- Aksoy, M. A., & Ng, F. (2010). The evolution of agricultural trade flows. Policy Research Working Paper Series, 5308.
- Aliber, M., & Hall, R. (2010). Development of evidence-based policy around small-scale farming. Report commissioned by the Programme to Support Pro-Poor Policy Development, on behalf of the Presidency. Retrieved from [http://d2zmx6mlqh7g3a.cloudfront.net/cdn/farfuture/gmilj2YgSHqH1AkmHlltVhhEBIPpTO7YjuFqR0WO8o/mtime:1275298517/files/docs/100526plaa\\_1.pdf](http://d2zmx6mlqh7g3a.cloudfront.net/cdn/farfuture/gmilj2YgSHqH1AkmHlltVhhEBIPpTO7YjuFqR0WO8o/mtime:1275298517/files/docs/100526plaa_1.pdf)
- Aliber, M., & Hall, R. (2012). Support for smallholder farmers in South Africa: Challenges of scale and strategy. *Development Southern Africa*, 29(4), 548–562.
- Allerts, S., Kleynhans, T. E., & Vink, N. (1998). Fynbos exports from the Western Cape Province: A problem of logistics. *Agrekon*, 37(4), 579–587.
- Andrew, M., C. Fabricius, & Timmermans, H. (2000). An overview of private sector-community partnerships in forestry and other natural resources in the Eastern Cape. Unpublished report for the Forest Enterprise Development Office, Hunting Technical Services and Environmentek, Council for Scientific and Industrial Research, South Africa. Retrieved from <http://www.nda.agric.za/daoDev/sideMenu/ForestryWeb/webapp/ResourceCentre/Documents/Reports/scan20.pdf>
- Antrobus, G.G. and R.R. Antrobus. (2008). Agriculture in Makana Municipality (Working Paper Series 1). Grahamstown: Institute of Social and Economic Research Rhodes University.
- Ark, B. van. (2010). How Unique are Current Times? Global Growth and Crises in Historical Perspective. Presented at the Maddison Memorial Conference 6, IISG, Amsterdam: Retrieved from <http://www.ggdc.net/maddison/maddison-project/conferences.htm>
- Ashman, S., Fine, B., & Newman, S. (2011). Amnesty international? The nature, scale and impact of capital flight from South Africa. *Journal of Southern African Studies*, 37(01).
- Ashman, S., Fine, B., & Newman, S. A. (2013). Systems of Accumulation and the Evolving MEC. Retrieved from [http://repub.eur.nl/res/pub/40424/Metis\\_172179.pdf](http://repub.eur.nl/res/pub/40424/Metis_172179.pdf)
- Baird, S., McIntosh, C., & Özler, B. (2009). Designing cost-effective cash transfer programs to boost schooling in sub-Saharan Africa. World Bank Policy Research Working Paper, (5090).
- Barro, R., & Lee, J. W. (n.d.). A new data set of educational attainment in the world, 1950–2010. Retrieved from <http://www.barrolee.com/data/dataexp.htm>
- Bateman, C. (2013). Eastern Cape's corruption-busting DG finally ousted. SAMJ: South African Medical Journal, 103(4), 215–217.
- Beall, J., & Ngonyama, M. (2009). Indigenous institutions, traditional leaders and elite coalitions for development: the case of Greater Durban, South Africa (Crisis States Research Centre, Working Paper no. 55 - Cities and Fragile States). London: LSE Development Studies Institute. Retrieved from <http://eprints.lse.ac.uk/28487/>
- Bennett, J., Ainslie, A., & Davis, J. (2013). Contested institutions? Traditional leaders and land access and control in communal areas of Eastern Cape Province, South Africa. *Land Use Policy*, 32, 27–38.
- BFAP. (2012). The Role of the National Development Plan – Vision 2030 in Shaping SA Agriculture and Agribusiness. Retrieved from [www.agbiz.co.za/LinkClick.aspx?fileticket=U12USZEYkUs%3D...362](http://www.agbiz.co.za/LinkClick.aspx?fileticket=U12USZEYkUs%3D...362)
- Bhardwaj, S., Giese, S., Dlamini, N., & Slavin, L. (n.d.). Children and HIV: Monitoring equitable access to services. in *ChildGauge 2012*. Retrieved from [http://www.ci.org.za/depts/ci/pubs/pdf/general/gauge2012/cc\\_children\\_hiv.pdf](http://www.ci.org.za/depts/ci/pubs/pdf/general/gauge2012/cc_children_hiv.pdf)
- Blaauwi, D., & Penn-Kekana, L. (2010). Maternal Health. South African Health Review, Centre for Health Policy, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg. Retrieved from [http://www.hst.org.za/uploads/files/sahr10\\_1.pdf](http://www.hst.org.za/uploads/files/sahr10_1.pdf)
- Black, S., Zulliger, R., Myer, L., Marcus, R., Jeneker, S., Taliep, R., ... Bekker, L.-G. (2013). Safety, feasibility and efficacy of a rapid ART initiation in pregnancy pilot programme in Cape Town, South Africa. *South African Medical Journal*, 103(8).
- Blanc, E., & Strobl, E. (n.d.). Is small better? A comparison of the effect of large and small dams on cropland productivity in South Africa. Retrieved from [http://www.ipag.fr/fileadmin/user\\_upload/mediatheque/recherche/WP/IPAG\\_WP\\_2013\\_10.pdf](http://www.ipag.fr/fileadmin/user_upload/mediatheque/recherche/WP/IPAG_WP_2013_10.pdf)
- Bonner, P. (2013). History and the here and now. *Social Dynamics*, 39(2), 159–166.
- Bor, J. (2012). HIV Treatment and Labor Supply in Rural South Africa. Retrieved from [http://scholar.harvard.edu/jbor/files/art\\_and\\_labor\\_supply\\_10oct2012.pdf](http://scholar.harvard.edu/jbor/files/art_and_labor_supply_10oct2012.pdf)
- Bor, J., Herbst, A. J., Newell, M.-L., & Bärnighausen, T. (2013). Increases in adult life expectancy in rural South Africa: valuing the scale-up of HIV treatment. *Science*, 339(6122), 961–965
- Branson, N., Ardington, C., & Leibbrandt, M. (2013). Trends in teenage childbearing and schooling outcomes for children born to teens in South Africa (Southern Africa Labour and Development Research Unit Working Paper Number 98). Cape Town.
- Bureau for Food and Agricultural Policy (BFAP). (2013). Agricultural Outlook 2013 - 2022 (No. 10TH BFAP BASELINE). Retrieved from <http://www.bfap.co.za/index.php/baselines>
- Canning, D. (2012). Progress in Health around the World. *The Journal of Development Studies*, 48(12), 1784–1798.
- Casabonne, U., & Kenny, C. (2011). The Best Things in Life are (Nearly) Free: Technology, Knowledge and Global Health (No. Working Paper 252). Centre for Global Development. Retrieved from <http://ideas.repec.org/p/cgd/wpaper/252.html>
- Chang, H.-J. (2013). Is Industrial Policy Feasible and Necessary in Sub-Saharan Africa? Theoretical considerations and historical lessons. Working paper prepared for JICA/IPD Africa Task Force Meeting, Yokohama. Retrieved from <http://jica-ri.jica.go.jp/publication/assets/Is%20industrial%20policy%20necessary%20and%20feasible%20in%20Africa,%20Change%20-%20JICA%20IPD%20Working%20Papers.pdf>
- Chi, W., Freeman, R. B., & Li, H. (2012). Adjusting to Really Big Changes: the labor market in China, 1989–2009. National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w17721>
- Chigwedere, P., Seage, G. R., Gruskin, S., Lee, T.-H., & Essex, M. (2008). Estimating the Lost Benefits of Antiretroviral Drug Use in South Africa: JAIDS Journal of Acquired Immune Deficiency Syndromes, 49(4), 410–415.
- Claassens, A. (2013). Recent Changes in Women's Land Rights and Contested Customary Law in South Africa. *Journal of Agrarian Change*, 13(1), 71–92.
- Clark, S. J., Kahn, K., Houle, B., Arteche, A., Collinson, M. A., Tollman, S. M., & Stein, A. (2013). Young Children's Probability of Dying Before and After Their Mother's Death: A Rural South African Population-Based Surveillance Study. *PLoS medicine*, 10(3), e1001409.
- Cobham, A., & Sumner, A. (2013). Putting the Gini Back in the Bottle? Retrieved from <http://www.kcl.ac.uk/aboutkings/worldwide/initiatives/global/intdev/people/Sumner/Cobham-Sumner-15March2013.pdf>
- Coffey, D., Tarozzi, A., Deaton, A., Spears, D., & Dreze, J. (2013). Stunting among Children. *Economic and Political Weekly*, 48(34), 68–69.
- Conradie, B., & Knoesen, H. (2010). A survey of the cultivation and wild harvesting of fynbos flowers in South Africa. Report. Retrieved from [http://www.givengain.com/cause\\_data/images/1866/PPSA\\_report\\_Conradie\\_Knoessen.pdf](http://www.givengain.com/cause_data/images/1866/PPSA_report_Conradie_Knoessen.pdf)
- D'Haese, M., & Van Huylbroeck, G. (2005). The rise of supermarkets and changing expenditure patterns of poor rural households case study in the Transkei area, South Africa. *Food Policy*, 30(1), 97–113.
- Reza C. Daniels, Andrew Partridge, Dineo Kekana, & Sibongile Musundwa. (2013). Rural Livelihoods in South Africa. University of Cape Town: Southern Africa Labour and Development Research Unit Working Paper Series No. 122.
- Day, C., Barron, P., Massyn, N., Padarath, A., & English, R. (2011). The district health barometer. Durban: Health Systems Trust. Retrieved from <http://indicators.hst.org.za/uploads/files/DHB0708.pdf>
- De Lange, N., Mitchell, C., & Bhana, D. (2012). Voices of women teachers about gender inequalities and gender-based violence in rural South Africa. *Gender and Education*, 24(5), 499–514.
- De Wet, C. (2010). The State, Involuntary Resettlement, and Unintended Agency: Some Reflections From Southern Africa. The Hague: ISS. Retrieved from [http://www.iss.nl/fileadmin/ASSETS/iss/Documents/Research\\_and\\_projects/DRS/de\\_Wet\\_TheStateInvoluntaryResettlement\\_SouthernAfrica.pdf](http://www.iss.nl/fileadmin/ASSETS/iss/Documents/Research_and_projects/DRS/de_Wet_TheStateInvoluntaryResettlement_SouthernAfrica.pdf)
- Department of Agriculture Forestry and Fisheries (DAFF). (2010). Estimate of the Contribution of Agriculture Sector to Employment in the South African Economy. Directorate: Economic Services Department of Agriculture, Forestry and Fisheries. Retrieved from [http://www.nda.agric.za/docs/Economic\\_analysis/macroE.html](http://www.nda.agric.za/docs/Economic_analysis/macroE.html)
- Department of Agriculture Forestry and Fisheries (DAFF). (2011). A Profile of the South African Mohair Market Value Chain. Pretoria.
- Department of Trade and Industry (DTI). (2008). Footwear and Leather Goods Sector Development Strategy (Trade and Investment South Africa Chief Directorate: Customised Sector Programmes). Pretoria.
- Department of Transport. (2008). The National Freight Logistic Strategy. Pretoria. Retrieved from [http://www.transportsig.com/index.php/component/docman/cat\\_view/38-department-of-transport?Itemid=154](http://www.transportsig.com/index.php/component/docman/cat_view/38-department-of-transport?Itemid=154)
- Doctors Without Borders (MSF, Treatment Action Campaign (TAC), Rural Health Advocacy Project (RHAP, & SECTION27. (2013). The chronic crisis - Essential drug stock-outs risk unnecessary death and drug resistance in South Africa. Retrieved from [www.msf.org.za/download/file/fid/4726](http://www.msf.org.za/download/file/fid/4726).
- Dubb, A. (2012). Social reproduction, accumulation and class differentiation: small-scale sugarcane growers in Mtubatuba, KwaZulu-Natal, South Africa (No. Working Paper 25). Belleville: PLAAS, University of the Western Cape.
- Emilsen, W. W. (1987). Gandhi and Mayo's "Mother India." *South Asia: Journal of South Asian Studies*, 10(1), 69–81.
- FAO. (n.d.). Citrus Fruit Fresh and Processed, Annual Statistics 2012 (No. CCP:CI/ST/2012). Rome.
- Feinstein, C. H. (2005). An economic history of South Africa: conquest, discrimination, and development. Cambridge University Press.
- Flaherty, K., Liebenberg, F., & Kirsten, J. (2010). South Africa Recent developments in agricultural research. IFPRI. Retrieved from <http://www.ifpri.org/publication/south-africa-0?print>

- Friedman, Steven. (2012, May 17). Balancing act in placating tradition. *The New Age*. Retrieved from <http://www.thenewage.co.za>
- Gastrow, M. (2010). Great expectations: The state of biotechnology research and development in South Africa. *African Journal of Biotechnology*, 7(4).
- Gebreeyesus, M., & Iizuka, M. (2012). Discovery of Flower Industry in Ethiopia: Experimentation and Coordination. *Journal of Globalization and Development*, 2(2).
- Geffen, N., & Cameron, E. (2009). The deadly hand of denial: governance and politically-instigated AIDS denialism in South Africa. Centre for Social Science Research. Retrieved from <http://www.cssr.uct.ac.za/sites/cssr.uct.ac.za/files/pubs/WP257.pdf>
- Girard, A. W., Self, J. L., McAuliffe, C., & Olude, O. (2012). The Effects of Household Food Production Strategies on the Health and Nutrition Outcomes of Women and Young Children: A Systematic Review: Household food production and maternal and child health outcomes. *Paediatric and Perinatal Epidemiology*, 26, 205–222.
- Glaser, D. (2011). The new black/African racial nationalism in SA: towards a liberal-egalitarian critique. *Transformation: Critical Perspectives on Southern Africa*, 76(1), 67–94.
- Glassman, A., Duran, D., & Koblinsky, M. (2013). Impact of Conditional Cash Transfers on Maternal and Newborn Health (Policy Paper 19). Washington D.C.: Center for Global Development.
- Glyn, A. (2006a). *Capitalism unleashed: finance globalization and welfare*. Clarendon Press.
- Goldberg, R. E. (2013a). Family Instability and Pathways to Adulthood in Cape Town, South Africa. *Population and Development Review*, 39(2), 231–256.
- GRAIN SA. (n.d.). Fertilizer Report 2011. Retrieved from <http://www.grainsa.co.za/documents/Kunsmisverslag.pdf>
- Hall, K., & Posel, D. (2012). Inequalities in children's household contexts: Place, parental presence and migration. *ChildGauge 2012*. Cape Town: University of Cape Town.
- Hall, R. (2012). The next Great Trek? South African commercial farmers move north. *Journal of Peasant Studies*, 39(3-4), 823–843.
- Hirsch, A. (2005). Season of hope: economic reform under Mandela and Mbeki. IDRC.
- Hirschman, A. O. (1967). *Development projects observed*. Brookings Institution Press.
- Hodes, R. (2013). The Medical History of Abortion in South Africa, c. 1970–2000. *Journal of Southern African Studies*, 39(3), 527–542.
- Hofstatter, Stephan. (2007). Qamata: how deep is the rot? *Farmers Weekly*.
- HORTGRO. (2013). Key Deciduous Fruit Statistics 2012. Retrieved from <http://www.hortgro.co.za/market-intelligence-statistics/key-deciduous-fruit-statistics/>
- Horwood, C., Vermaak, K., Butler, L., Haskins, L., Phakathi, S., & Rollins, N. (2012). Elimination of paediatric HIV in KwaZulu-Natal, South Africa: large-scale assessment of interventions for the prevention of mother-to-child transmission. *Bulletin of the World Health Organization*, 90(3), 168–175.
- HSRC. (2013). National Survey of Research and Experimental Development (2009/10 Fiscal Year) (High-level key results HSRC for the). Pretoria: Department of Science and Technology.
- Hunter, M. (2011). Beneath the “Zunami”: Jacob Zuma and the Gendered Politics of Social Reproduction in South Africa. *Antipode*, 43(4).
- Hyslop, J. (2005). Political Corruption: Before and After Apartheid. *Journal of Southern African Studies*, 31(4), 773–789.
- IMF. (2013). South Africa: 2013 Article IV Consultation. Washington DC.
- International Food Policy Research Institute. (2013). 2012 Global Food Policy Report.
- Ishikawa, Shigeru. (1974). *Economic Development in Asian Perspective*. Tokyo: Kinokuniya Bookstore.
- Jara, Mazibuko, & Ruth Hall. (2009). What are the Political Parameters. In *Another countryside?: policy options for land and agrarian reform in South Africa* (Vol. Chapter 9). Bellville: PLAAS, School of Government, University of the Western Cape.
- Jay Naidoo. (2012). An open letter to COSAT. Daily Maverick. Retrieved from <http://www.dailymaverick.co.za/opinionista/2012-09-04-an-open-letter-to-cosat/#.UIOu9ySKXIY>
- Jewkes, R., Sikweyiya, Y., Morrell, R., & Dunkle, K. (2009). Understanding men's health and use of violence: interface of rape and HIV in South Africa. *Cell*, 82(442) 3655. Retrieved from [http://www.womensnet.org.za/sites/www.womensnet.org.za/files/resources/men\\_exec\\_smry.pdf](http://www.womensnet.org.za/sites/www.womensnet.org.za/files/resources/men_exec_smry.pdf)
- Kaiser Associates. (2000). South African Floriculture Cluster Study. Cape Town. Retrieved from [www.nedlac.org.za/media/6178/assessment.pdf](http://www.nedlac.org.za/media/6178/assessment.pdf)
- Kepe, T. (2005). Magwa tea venture in South Africa: politics, land and economics. *Social dynamics*, 31(1), 261–279.
- Kerber, K. J., Lawn, J. E., Johnson, L. F., Mahy, M., Dorrington, R. E., Phillips, H., ... Oestergaard, M. Z. (2013). South African child deaths 1990–2011: have HIV services reversed the trend enough to meet Millennium Development Goal 4? *AIDS* (London, England).
- Kirsten, J. (2012). *The Political Economy of Food Price Policy in South Africa*. United Nations University, World Institute for Development Economics Research. Retrieved from [https://www.securenutritionplatform.org/Documents/political%20economy\\_south%20af.pdf](https://www.securenutritionplatform.org/Documents/political%20economy_south%20af.pdf)
- Knight, J. (2013). Inequality in China. Policy research Working Paper, (6482). Retrieved from [http://www-wds.worldbank.org/servlet/WDSContentServer/WDS/IB/2013/06/13/000158349\\_20130613150441/Rendered/PDF/WPS6482.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/WDS/IB/2013/06/13/000158349_20130613150441/Rendered/PDF/WPS6482.pdf)
- Liapi, P. (2011). Changing patterns of trade in processed agricultural products. OECD Publishing. Retrieved from <http://www.abhatoo.net.ma/index.php/fre/content/download/21743/398716/file/Changing%20Patterns%20of%20Trade%20in%20Processed%20Agricultural%20Products.pdf>
- Liebenberg, F. (2010). *South African Agricultural Productivity and Research Performance in the Twentieth Century*. University of Pretoria, Pretoria.
- Liebenberg, F., Pardey, P., & Kahn, M. (2011). South African agricultural R&D investments: Sources, structure, and trends, 1910–2007. *Agrekon*, 50(2), 1–26.
- MacDonald, J., Korb, P., & Robert A. Hoppe. (2013). Farm Size and the Organization of U.S. Crop Farming (Economic Research Service Economic Research Report No. 152). Washington: USDA. Retrieved from <http://www.ers.usda.gov/amber-waves/2013-september/cropland-consolidation-and-the-future-of-family-farms.aspx>
- MacDonald, J. M. (2011). Why are farms getting larger? The case of the US. Annual meeting of the German Association of Agricultural Economists, Halle, Germany. Retrieved from <http://ageconsearch.umn.edu/bitstream/115361/2/MacDonald.pdf>
- Maddison, A. (2006). *The World Economy a Millennial Perspective*. Paris: Organisation for Economic Co-operation and Development.
- Makiwane, M. B., & Chimere-Dan, D. O. (2010). The people matter: The State of the Population in the Eastern Cape. Research and Population Unit of the Eastern Cape. Department of Social Development. Retrieved from <http://www.hsra.ac.za/uploads/pageContent/558/ECapefullreport.pdf>
- Manenzhe, Tshililo. (2012). Land Reform, Large-Scale Commercial Agriculture and the Agrarian Question of Labour in the Levubu Valley, Limpopo Province, South Africa. Presented at the International Conference on Global Land Grabbing II, Ithaca, NY: Department of Development Sociology at Cornell University, Ithaca.
- Marx, C. (2002). Ubu and Ubuntu: on the dialectics of apartheid and nation building. *Politikon: South African Journal of Political Studies*, 29(1), 49–69.
- Mayosi, B. M., Lawn, J. E., van Niekerk, A., Bradshaw, D., Abdool Karim, S. S., & Coovadia, H. M. (2012). Health in South Africa: changes and challenges since 2009. *The Lancet*.
- Mike Burgess. (2011). Reviving the EC pineapple industry. *Farmer's Weekly*.
- Moll, T. (1991). Did the apartheid economy “fail”? *Journal of Southern African Studies*, 17(2), 271–291.
- Morris, Christopher. (2013). Failed Deeds: The Masakhane CPAs and State Negligence Under Customary Land Reform Policies. Presented at the Land Divided, University of Cape Town. Retrieved from [www.landdivided2013.org.za/.../Morris%20-%20Failed%20Deeds\\_24Ap](http://www.landdivided2013.org.za/.../Morris%20-%20Failed%20Deeds_24Ap)
- Murgai, R., Ravallion, M., & van de Walle, D. (2013). Is workfare cost-effective against poverty in a poor labor-surplus economy? World Bank Policy Research Working Paper, (6673).
- NAMC. (2013). Diagnostics of South Africa's Agricultural Trade Competitiveness (Market and Economic Research Division). Pretoria: National Agricultural Marketing Council.
- Nattrass, N. (2008). AIDS and the scientific governance of medicine in post-apartheid South Africa. *African Affairs*, 107(427), 157–176.
- Noble, M., & Wright, G. (2012). Using Indicators of Multiple Deprivation to Demonstrate the Spatial Legacy of Apartheid in South Africa. *Social Indicators Research*, 112(1), 187–201.
- NPC. (2011). National development plan. Pretoria: National Planning Commission.
- Ntsebeza, Lungisile. (2002, November). Structures and Struggles of Rural Local Government in South Africa: The Case of Traditional Authorities in the Eastern Cape (Ph.D.). Rhodes University.
- Odhiambo, A., & Mthathi, S. (2011). Stop Making Excuses: Accountability for Maternal Health Care in South Africa.
- OECD. (2006). *OECD Review of Agricultural Policies South Africa*. Paris.
- OECD. (2013). South Africa. In *Agricultural Policies in Emerging Economies* (pp. 249–259). Paris: OECD Publishing.
- Palmer, K., & Sender, J. (2006). Prospects for On-Farm Self-Employment and Poverty Reduction: An Analysis of the South African Income and Expenditure Survey 2000. *Journal of Contemporary African Studies*, 24(3), 347–376.
- Parliamentary Monitoring Group. (2013). Forensic investigation into Ncera Farms (Pty) Ltd: Meeting with stakeholders & Department of Agriculture, Forestry and Fisheries. Retrieved from <http://www.pmg.org.za>
- Pincus, Jonathan. (2006). Green Revolution and Biotechnology. In David Clark (ed.) (Ed.), *The Elgar companion to development studies*. Cheltenham, Glos, UK: Edward Elgar Pub.
- OECD. (2006). *The World Economy a Millennial Perspective*. Paris: Organisation for Economic Co-operation and Development.

- Reddy, V., Berg, S. van der, Rensburg, D. J. van, & Taylor, S. (2012). Educational outcomes: Pathways and performance in South African high schools. *South African Journal of Science*, 108(3).
- Sandrey, R., Karaan, M., & Vink, N. (2008). Is There Policy Space To Protect South African Agriculture? *South African Journal of Economics*, 76(1), 89–103.
- Sandrey, R., Punt, C., Jensen, H. G., & Vink, N. (2011). Agricultural Trade and Employment in South Africa. OECD, Trade Policy Working Papers (No. 130).
- Santelli, J. S., Vinit Sharma, & Russell Viner. (2013). Inequality, national wealth, economic development and global trends in teenage birth rates, 1990-2010. *Journal of Adolescent Health*, 52(2 Supplement 1), S4–S5.
- Schirmer, S. (2004). Motives for mechanisation in South African agriculture, c1940–1980. *African Studies*, 63(1), 3–28.
- Section27. (2012). Corruption in the Eastern Cape. NSP Review, (Edition 5). Retrieved from [www.nspreview.org](http://www.nspreview.org)
- Seekings, J. (2008). Deserving individuals and groups: The post-apartheid state's justification of the shape of South Africa's system of social assistance. *Transformation: Critical Perspectives on Southern Africa*, 68(1), 28–52.
- Sender, J. (2012). Fictions and elephants in the rondawel: a response to a brief chapter in South Africa's National Development Plan. *Transformation: Critical Perspectives on Southern Africa*, 78(1), 98–114.
- Sender, J., & Smith, S. (1986). *The development of capitalism in Africa*. London: Routledge.
- Shepherd, D. L. (2011). Constraints to school effectiveness: what prevents poor schools from delivering results? Department of Economics and the Bureau for Economic Research. Retrieved from <http://www.ekon.sun.ac.za/wpapers/2011/wp052011/wp-05-2011.pdf>
- Shisana, O., South Africa, Department of Health, Human Sciences Research Council, & South African Medical Research Council. (2013). *The South African National Health and Nutrition Examination Survey: SANHANES-1*. Cape Town: HSRC Press.
- Shkolnikov, V., McKee, M., & Leon, D. A. (2001). Changes in life expectancy in Russia in the mid-1990s. *The Lancet*, 357(9260), 917–921.
- Silal, S. P., Penn-Kekana, L., Harris, B., Birch, S., & McIntyre, D. (2012). Exploring inequalities in access to and use of maternal health services in South Africa. *BMC Health Services Research*, 12(1), 120.
- Sprague, C., Chersich, M. F., & Black, V. (2011). Health system weaknesses constrain access to PMTCT and maternal HIV services in South Africa: a qualitative enquiry. *AIDS Research and Therapy*, 8(1), 10.
- Statistics South Africa. (May, 2012b). General Household Survey 2011 (No. Statistical release P0318). Pretoria.
- Statistics South Africa. (2012a). Income and Expenditure of Households 2010/2011 (No. Statistical release P0100). Pretoria.
- Statistics South Africa. (2007). Census of Commercial Agriculture, 2007: Financial and production statistics (No. Report No. 11-02-01 (2007)). Pretoria: Statistics South Africa.
- Statistics South Africa. (2011). General Household Survey 2009 (Revised version) (No. Statistical release P0318). Pretoria.
- Statistics South Africa. (2013a). Census 2011: Agricultural Households Key Highlights (No. 03-11-01 (2011)). Pretoria.
- Statistics South Africa. (2013b). General Household Survey 2012 (No. Statistical release P0318). Pretoria.
- Steinberg, J. (2008). Aids and Aids treatment in a rural South African setting. Retrieved from <http://dspace.cigilibrary.org/jspui/handle/123456789/30984>
- Steinberg, J. (2013). Working through a Paradox about Sexual Culture in South Africa: Tough Sex in the Twenty-First Century. *Journal of Southern African Studies*, 39(3), 497–509.
- Stephen Greenberg. (2013). The disjunctures of land and agricultural reform in South Africa: Implications for the agri-food system (PLAAS Working Paper No. 26). UWC, Belleville: Institute for Poverty, Land and Agrarian Studies.
- Stevens, Marion. (2012). Maternal Mortality, HIV and unsafe abortion: a silent epidemic. *Agenda*, 44–50.
- Stuckler, D., Basu, S., & McKee, M. (2011). Health care capacity and allocations among South Africa's provinces: infrastructure-inequality traps after the end of apartheid. *American journal of public health*, 101(1), 165–172.
- Svendsen, M., Ewing, M., & Msangi, S. (2009). Measuring irrigation performance in Africa. International Food Policy Research Institute (IFPRI).
- Thornberry, Elizabeth. (2013, September 30). When ukuthwala is stealing a child. *The Mercury*.
- Timæus, I. M., Simelane, S., & Letsoalo, T. (2013). Poverty, Race, and Children's Progress at School in South Africa. *The Journal of Development Studies*, 49(2), 270–284.
- Timmer, C. P. (2010). Reflections on food crises past. *Food Policy*, 35(1), 1–11.
- Tregenna, F. (2007). Which sectors can be engines of growth and employment in South Africa? An analysis of manufacturing and services. In HSRC EGD1 Roundtable. Pretoria: HSRC. Retrieved from <http://www.hsrc.ac.za/en/research-outputs/ktree-doc/1345>
- Tregenna, F. (2012). Sources of Subsectoral Growth in South Africa. *Oxford Development Studies*, 40(2), 162–189.
- Tregurtha, N., Vink, N., & Kirsten, J. (2009). Presidency Fifteen Year Review Project. Trade and Industrial Policy Strategies. Retrieved from [www.npconline.co.za/.../agriculture%20presidency%20fifteen%20year%...](http://www.npconline.co.za/.../agriculture%20presidency%20fifteen%20year%...)
- UNDP. (2010). Millennium Development Goals, Country Report, Draft MDG Report Version 1. Statistics South Africa, Republic of South Africa.
- UNICEF. (2008). Evaluation of the School Nutrition Programme (Provincial Report: Eastern Cape). Pretoria.
- UNICEF-WHO-The World Bank: Joint child malnutrition estimates - Levels and trends. (n.d.). WHO. Retrieved September 6, 2013, from <http://www.who.int/nutgrowthdb/estimates/en/>
- United Nations. (2011). The Millennium Development Goals Report. United Nations, New York. Retrieved from [http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2011/11-31339%20\(E\)%20MDG%20Report%202011\\_Book%20LR.pdf](http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2011/11-31339%20(E)%20MDG%20Report%202011_Book%20LR.pdf)
- Unterhalter, E. (2013). Connecting the private and the public: pregnancy, exclusion, and the expansion of schooling in Africa. *Gender and Education*, 25(1), 75–90. doi:10.1080/09540253.2012.742218
- Van Averbeke, W., Denison, J., & Mkeni, P. N. S. (2011). Smallholder irrigation schemes in South Africa: A review of knowledge generated by the Water Research Commission. *Water SA*, 37(5), 797–808. Retrieved from <http://www.ajol.info/index.php/wsa/article/view/72848>
- Van den Bold, M., & Gillespie, S. (2013). Women's Empowerment and Nutrition. Retrieved from <http://www.ifpri.org/sites/default/files/publications/ifpridp01294.pdf>
- Van Koppen, B., Sally, H., & Aliber, M. (2009). Rural redress and agrarian reform. DBSA.
- Vink, Nick and Johan van Rooyen. (2009). The economic performance of agriculture in South Africa since 1994: Implications for food security (Development Planning Division Working Paper Series No. 17). Midrand: Development Bank of Southern Africa.
- Visser, P. H. B., & Dijkxhoorn, Y. (2012). Business Opportunities for Protected Horticulture in South Africa: An Overview and Developments in South African Protected Horticulture. Wageningen UR Glastuinbouw. Retrieved from [http://books.google.fr/books/about/Business\\_Opportunities\\_for\\_Protected\\_Hor.html?id=\\_tJ1MwEACAAJ&redir\\_esc=y](http://books.google.fr/books/about/Business_Opportunities_for_Protected_Hor.html?id=_tJ1MwEACAAJ&redir_esc=y)
- Walker, Cheryl. (2012). Grounding “effective land reform” for 2030: past, present and future considerations. Presented at the Strategies to Overcome Poverty and Inequality: Towards Carnegie III, Cape Town. Retrieved from [www.carnegie3.org.za](http://www.carnegie3.org.za)
- WHO. (2013). Global Update on HIV Treatment 2013: Results, Impact and Opportunities. Geneva.
- World Bank. (2013). South Africa Economic Update: Focus on Inequality of Opportunity (Africa Region Poverty Reduction and Economic Management No. Issue 3). Washington.
- World Health Organization (WHO), UNICEF, United Nations Fund for Population Activities, World Bank, World Health Organization, & Reproductive Health and Research. (2012). Trends in maternal mortality, 1990 to 2010 WHO, UNICEF, UNFPA and the World Bank estimates. Geneva, Switzerland: World Health Organization.
- Wright, G., & Noble, M. (2012). Spatial inequality: Persistent patterns of child deprivation. in *South African Child Gauge 2012* (pp. 38–42). Cape Town: Children's Institute, University of Cape Town.







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