



CONFERENCE
Strategies to Overcome Poverty & Inequality
"Towards Carnegie III"
University of Cape Town, 3 - 7 September 2012



This paper was presented at "Towards Carnegie III", a conference held at the University of Cape Town from 3 to 7 September 2012.

Please note that copyright is held by the author/s of the paper, and it may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information retrieval systems, without express permission from the paper's author/s.

Final Draft

Factors Contributing to Inequalities in Food Security in South Africa: Implications for Agricultural Policy.

¹Christopher Manyamba, ²Sheryl L Hendriks, ³Pius Chilonda, ⁴Emmanuel Musaba,
c.manyamba@cgiar.org; sheryl.hendriks@up.ac.za; p.chilonda@cgiar.org;
e.musaba@cgiar.org;

Abstract

The World Food Summit of 1996 defined food security to exist when, all people, at all times, have physical, social and economic access to enough, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2003).

South Africa has by far the highest GDP in the SADC region, is a net exporter of cereals, is the largest importer of agricultural products and is 'food secure' at the aggregate national level. However, recent data from various surveys, although using different proxies to determine food security, indicate that chronic household food insecurity exists at significantly high levels in South Africa.

This paper highlights contributing factors to food insecurity in South Africa and provides possible recommendations for interventions. The empirical analysis is based largely on data from commonly available databases such as the Food and Agricultural Organisation Statistics Division, the World Bank World Development Indicator, national surveys, and literatures. The paper concludes that increasing food prices, and lack of income (unemployment) are among the most crucial factors contributing to food insecurity in South Africa, hence it is therefore crucial for policy makers to understand the impact of structural poverty and inequality on household food security.

Keywords: *Food security, vulnerability, agricultural growth, poverty, food prices*

¹ Research Officer -International Water Management Institute and PhD Candidate of the Institute for Food, Nutrition and Well-being and the Department of Agricultural Economics, Rural Development and Agricultural Extension, University of Pretoria.

² Director, Institute for Food, Nutrition and Well-being and the Department of Agricultural Economics, Rural Development and Agricultural Extension, University of Pretoria.

³ Head, International Water Management Institute-Southern Africa

⁴ International Water Management Institute-Southern Africa

1.1 Introduction

SADC Heads of State have recognised the importance of agriculture, by endorsing the Comprehensive Africa Agriculture Development Programme (CAADP) (AU/NEPAD, 2003). A key objective of CAADP is to improve productivity of agriculture to attain an average annual growth rate of 6% especially focusing on small-scale farmers (AU/NEPAD, 2003). In addition, countries in the region signed the African Union (AU) Maputo Declaration in 2003 under which they committed themselves to increasing investment in the agriculture sector to at least 10% of their national budget by the year 2008. SADC countries have in addition, committed themselves to achieving the first millennium development goal (MDG1) of halving the proportion of people living below US\$1 a day and the proportion of people who suffer from hunger by 2015 (SADC, 2009).

Although South Africa's budget allocation to agriculture is less than 5% of the national budget, it is among one of four out of the 15 countries that has made progress towards achieving the SADC- RISDP⁷ cereal yield target of 2,000 kg per ha (RESAKSS-SA). Theoretically, this means South Africa should be food sufficient. The country plays a role in fostering agricultural growth in the SADC region and helping to fill national food gaps in several SADC countries where agriculture is still one of the leading contributors to gross domestic product (GDP).

Crop production in the SADC region, including South Africa, is dominated by cereal food crops (mainly wheat, maize, and rice and including millet and sorghum) with maize and rice being the most important in terms of aggregate national food security. Cereal production trends are thus indicative of the ability of the region to supply its food needs and these cereals (Chilonda *et al.*, 2007). In most SADC countries, national food security is generally determined in terms of adequate production of and access to maize, the countries' staple crop (IFPRI, 2010) while tubers and roots (cassava and sweet potatoes) are seen as complementary foods, providing substitutes when the main staples are in short supply and between seasons.

Food security is enshrined in section 27 of the South African Constitution which states that every citizen has the right to have access to sufficient food and water, and that "the state

⁷ Regional Indicative Strategic Development Plan

must by legislation and other measures, within its available resources, avail to progressive realisation of the right to sufficient food (DOA, 2002). The South African government has committed to halving poverty between 2004 and 2014. Achieving household food security is a critical component in meeting MDG1 (HSRC, 2009).

However, despite South Africa being a middle income country that is also a net exporter of food, it is reported that about 35% of the population in South Africa, were estimated to be vulnerable to food insecurity, while about one quarter of children under the age of 6 were classified as stunted by malnutrition (HSRC, 2004). Furthermore, in 2008-09 about a quarter (25,7%) of households indicated that their standard of food consumption was less than adequate, with more than 50% of the households reporting that they either owned or had access to a particular asset (StatsSA, 2009). Hendriks (2005) suggests that food insecurity is no longer seen as a failure of food production at the national level but as a livelihood failure (Devereux & Maxwell, 2001) as evidenced by the inclusion of food security as one outcome of sustainable livelihoods (Department for International Development, 2000; cited in Hendriks, 2005). There is also evidence that the vast majority of South Africans buy their staple foods from commercial suppliers, rather than growing it themselves, and are, therefore, dependent on having (direct or indirect) access to cash (DOA, 2006). This means that the cause of food insecurity in South Africa is not due to a shortage of food but rather, inadequate access to food due to structural poverty and inequalities. The purpose of this paper is to explore determinants of household food insecurity in South Africa.

1.2 Human demographics, poverty and inequality

There are strong links between vulnerability to food insecurity and economic and demographic indicators linked to poverty and well-being of the population. Table 1 shows that South Africa has one of the highest levels of GDP per capita in the SADC region. The country also has, the lowest proportion of rural population. However, high levels of poverty (29 percent of the population) and significant inequalities (a Gini coefficient of 0.60) exist (World Bank, 2011).

For the purposes of this paper, poverty refers to different forms of deprivation (mainly income, housing, food and other basics) whilst inequality is concerned with the distribution of well-being within a population group as classified by Lok-Desallien (1999); cited in Poobalan *et al.*, (2007). Due to poverty and inequalities, it is difficult for parts of society in South Africa to develop livelihood strategies, adaptive behaviours and coping strategies to

ensure long-term food security DOA (2006). The following table highlights some of the demographic characteristics of South Africa in relation to other the SADC countries.

Table 1: Total population, population growth rate, per capita incomes and percentage rural population by economic classification, SADC in 2010.

	Total population (2010)	Population growth rate-2010	Population Rural (2010)	2010 GDP per capita, PPP	Poverty Head Count at \$1.25/day	Income inequality Gini index⁹
	<i>(Millions)</i>	<i>Annual %</i>	<i>Percent</i>	<i>(Constant 2005 US\$)</i>	<i>Percent</i>	
<i>Low Income Countries</i>						
Congo, DR	66.0	2.7	65	311	-	44
Malawi	14.9	3.1	80	791	66	45
Madagascar	20.7	2.9	70	869	66	44
Zimbabwe	12.6	0.8	62		-	50
Mozambique	23.4	2.3	62	845	68	46
Zambia	12.9	1.6	64	1,401	65	50
Tanzania	44.8	3.0	74	1,286	-	35
<i>Middle Income Countries</i>						
Lesotho	2.2	1.0	73	1,437	36	58
Angola	19.1	2.8	42	5,550	-	59
Swaziland	1.2	1.5	75	5,339	42	56
Namibia	2.3	1.8	62	5,808	-	74
South Africa	50.0	1.4	38	9,477	29	60
Botswana	2.0	1.3	39	12,462	-	61
Mauritius	1.3	0.5	57	12,286	-	
Seychelles	0.1	-0.9	45	20,734	2	50

Source: Authors' calculations based on World Development Indicators (World Bank, 2011).

Despite South Africa being a middle income country and enjoying national food security, large numbers of households are food insecure due to a number of factors that are related to poverty. The following sections define food security and the associated factors that contribute to inequalities in food security among households.

1.3 Dimensions of Food Security

According to FAO (2003), food security includes four key components:

- a. Food must be *available* in sufficient quantities and of appropriate quality either by means of domestic production or imports. This includes food aid when necessary.
- b. Individuals must have *access* to adequate resources and entitlements (ability to grow and/or purchase food, to be given food or to work for food) that enable them to acquire appropriate food for a nutritious diet.
- c. People must be able to select, store, prepare, distribute and eat food in ways that ensure adequate nutritional absorption for all members of the household.
- d. A food secure person, household or population must have sustained access to adequate nutritious food at all times. People should not be anxious about food supply.

These four dimensions are interconnected and all must be present for people to be food secure, as no single element is able to ensure and sustain food security on its own (Faber *et al.* 2008). Food insecurity occurs when one or more of these elements is weakened and can impact on the national, household and individual levels. Food security at one level does not indicate food security at another. Altman *et al.*, (2009) argues that food security cannot be understood in isolation from other developmental questions such as social protection, sources of income, rural and urban development, changing household structures, health, access to land, water and inputs, retail markets, or education and nutritional knowledge.

Transitory food insecurity is usually sudden in onset, short-term or temporary and refers to short periods of extreme scarcity of food availability and access (Barrett & Sahn 2001). Chronic food insecurity on the other hand is long-term or persistent in that it can be considered to be an almost continuous state of affairs. It is closely related to structural deficiencies in the local food system or economy, chronic poverty, lack of assets and low incomes which persistently curtail food availability and access over a protracted period of time (DFID 2004; FAO 2005).

1.4 National vs Household Food Security in South Africa

South Africa is the largest producer of cereals as well as net exporter in the SADC region, and is classified as food secure at national level. Evidence from international data sources indicate that South Africa has an overall Global Food Security Index score of 61 and highest (most food secure) in Sub Saharan Africa. The GFSI considers the core issues of affordability, availability, quality and safety across a set of 105 countries. All scores are

normalised on a scale of 0-100 where 100=most favourable. Figure 1 shows selected countries and their rankings.

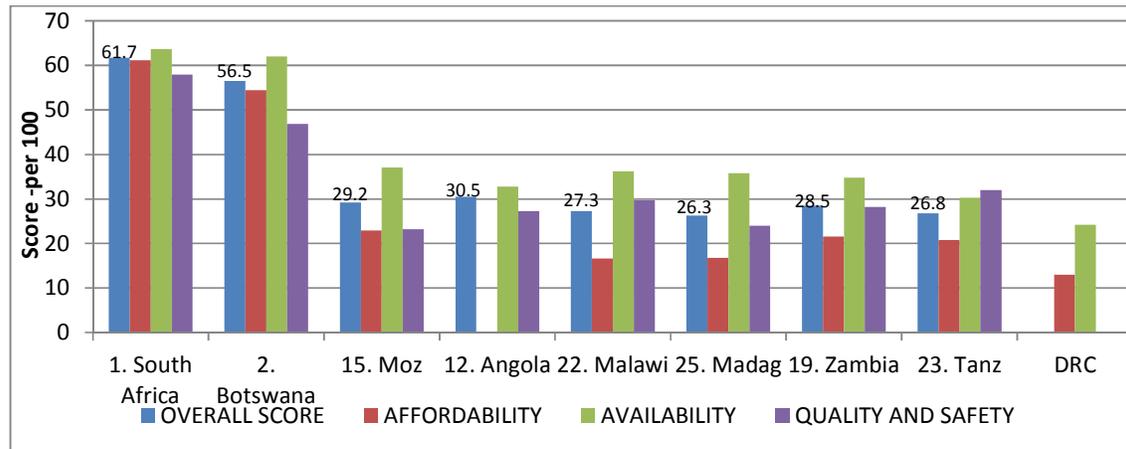


Figure 1: ¹²Global Food Security Index for selected SADC countries

Source: Economist Intelligence Unit (2012).

Figure 2 gives empirical evidence of household food insecurity at household level. The recent General Household Survey¹³ indicates that an estimated 21% of South African households have inadequate or severely inadequate access to food (StatsSA, 2011), most households experiencing transitory food insecurity. Food access problems were the most serious in North West where 33.4% of households had inadequate or severely inadequate food access as depicted by Figure 2.

¹² The index is a dynamic quantitative and qualitative benchmarking model, constructed from 25 unique indicators, that measures these drivers of food security across both developing and developed countries. Food security is defined as the state in which people at all times have physical, social, and economic access to sufficient and nutritious food that meets their dietary needs for a healthy and active life based on the definition established at the 1996 World Food Summit. The overall goal of the study is to assess which countries are most and least vulnerable to food insecurity through the categories of Affordability, Availability, and Quality and Safety (IFPRI, 2012)

¹³ Based on the Household Food Insecurity Access Scale assessment

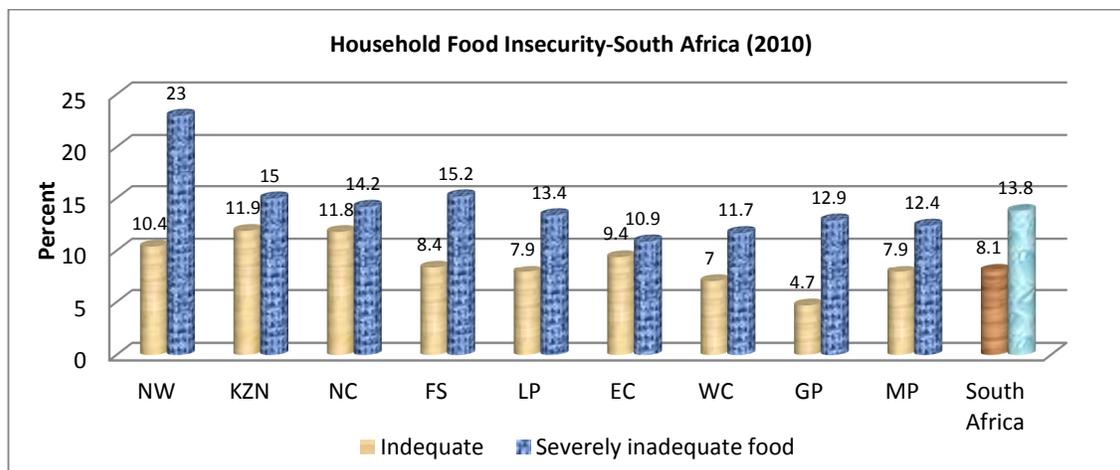


Figure 2: Percentage of households experiencing food adequacy in South Africa by province, 2010

Source: Author’s calculations based on StatsSA (2011).

■ Causal Pathways of Food Insecurity

Possible shocks and stresses to household food security in South Africa are likely to impact negatively on a large proportion of households already facing vulnerability to food insecurity, increasing hunger and malnutrition. For most of the households, inadequate and unstable food supplies, lack of purchasing power, weak institutional support networks, poor nutrition, inadequate safety nets, weak food emergency management systems and unemployment are some of the pathways in which households get trapped in a cycle of food insecurity and poverty (DOA, 2002). Aliber (2001) suggests that groups most vulnerable to food insecurity in South Africa are: the rural poor; female headed households; disabled; elderly; retrenched or evicted farm workers; AIDS orphans and households with HIV sufferers; cross-border migrants and the ‘street homeless’. This paper will focus on the following factors that may lead to food insecurity: agricultural productivity with regards to cereal production, food prices, HIV/AIDS, and population dimensions, in this case, migration.

2.1 Agricultural Production

Rapid population growth has a negative impact on human development, provision of basic services and poverty eradication; these effects are magnified and become more urgent in the context of food security (Crush *et al.*, 2006). There is evidence that agricultural growth has a high poverty reduction payoff. Analysis by the International Fund for Agricultural Development (IFAD), the World Bank, and IFPRI shows that there is a clear correlation

between the developing countries with the largest reduction in poverty rates and incidence of undernourishment and those with the most rapid agricultural growth. There is now a large body of literature indicating that domestic and international investment in agriculture and rural development, combined with supportive policies, stimulates agricultural growth (Cleaver, 2012).

The role of agricultural growth in reducing poverty and triggering overall economic growth has been thoroughly studied and has led to wide consensus in the international development community and academia that agricultural growth has been the engine of overall economic growth and poverty eradication elsewhere in the world and can potentially become so in Africa (World Bank 2003; IFAD 2001) cited in Van Koppen (2005). However, Hart *et al*, (2009) argues that “it may seem counter-intuitive to promote subsistence or small scale agricultural production in a semi-industrialised economy like South Africa”. However, most households that are vulnerable to food insecurity are consumers rather than producers of food rely on cash to buy the food but may not have stable and reliable incomes apart from unconditional cash transfers, casual wages or temporary employment. The General Household Survey provides evidence that less than a quarter of South African households (20.7%) were involved in agricultural production. Those involved engage mostly in the production of food and grains for home consumption (StatsSA, 2011). This means that the majority of South Africans need reliable and stable sources of incomes to buy their staple foods.

South African cities and towns are growing at exceptional rates, and with rapid expansion of informal settlements, hundreds of thousands of people are forced to live in conditions without basic services, security of tenure and in extreme overcrowding and are vulnerable to food insecurity. However, there is evidence that at national level, South Africa produces the largest volumes of cereals; greater than 2000 kgs per hectare within the SADC as evidenced by Figure 3.

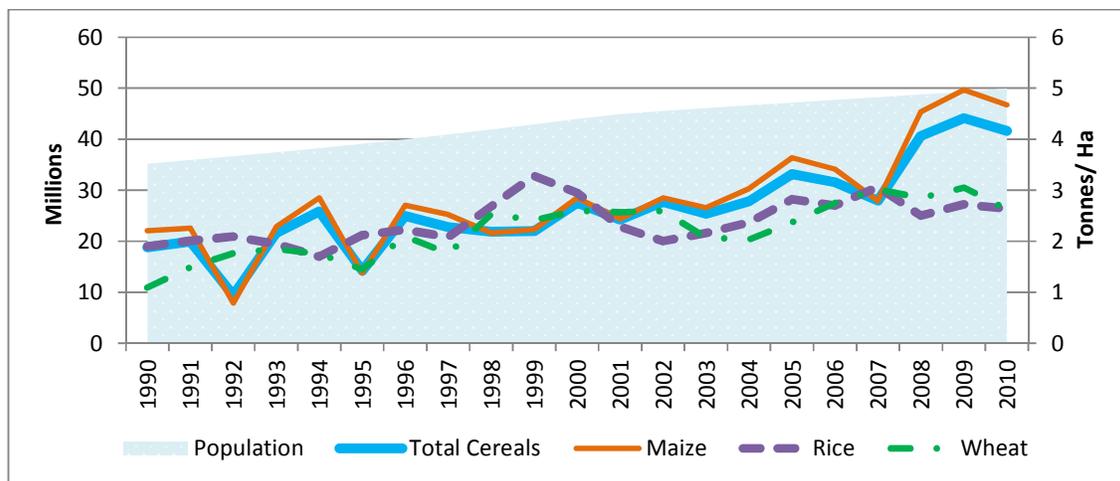
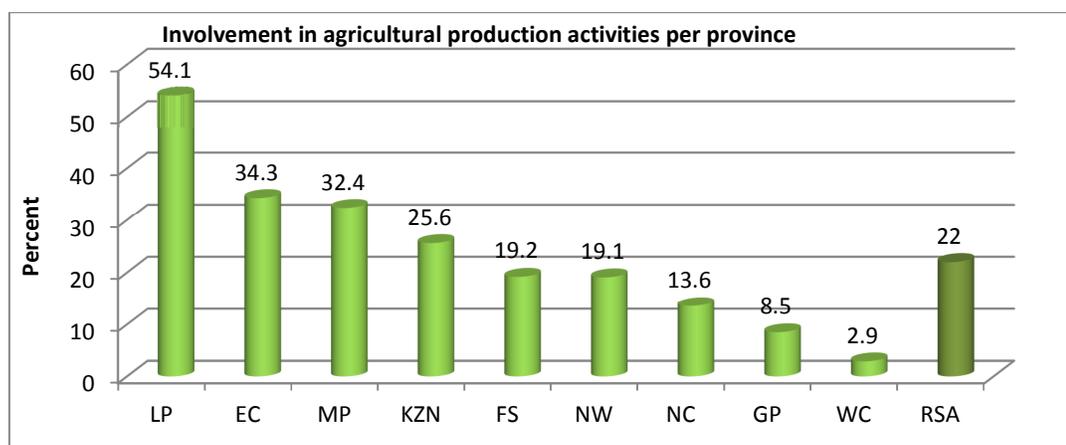


Figure 3: Population and Cereal Production (South Africa).
Source: Authors' Own Calculations based on data from FAOSTAT (2011)

The trends in cereal yields (productivity) in the South Africa over the period 2000 to 2009 are assessed with reference to the progress made towards achieving the SADC-RISDP¹⁶ cereal yield target of 2,000 kg per ha (SADC, 2010). Figure 1.6 shows that cereal production in terms in South Africa has been above the regional target and double the target in the last 2 years. The fact that figure 1.6 also shows that population has been increasing exponentially over the years in relation to an increase in cereal production should be a worrisome scenario taking into consideration that shocks and stresses due to climatic conditions could be contributing factors that exacerbate the food insecurity among the vulnerable poor.

Cereal production is mostly by large scale farmers in South Africa and there is very little involvement of agriculture at household level as depicted by figure 4.



¹⁶ Regional Indicative Strategic Plan

Figure 4: Involvement in agricultural activities, South Africa.

Source: General Household Survey (StatsSA, 2011)

2.1.1 Per Capita Cereal Production

Figure indicates that there have been variable trends in per capita cereal yield, with a general downward trend, indicating that as population is growing, the number of mouths to feed is also increasing and this trend has negative consequences on household food security.

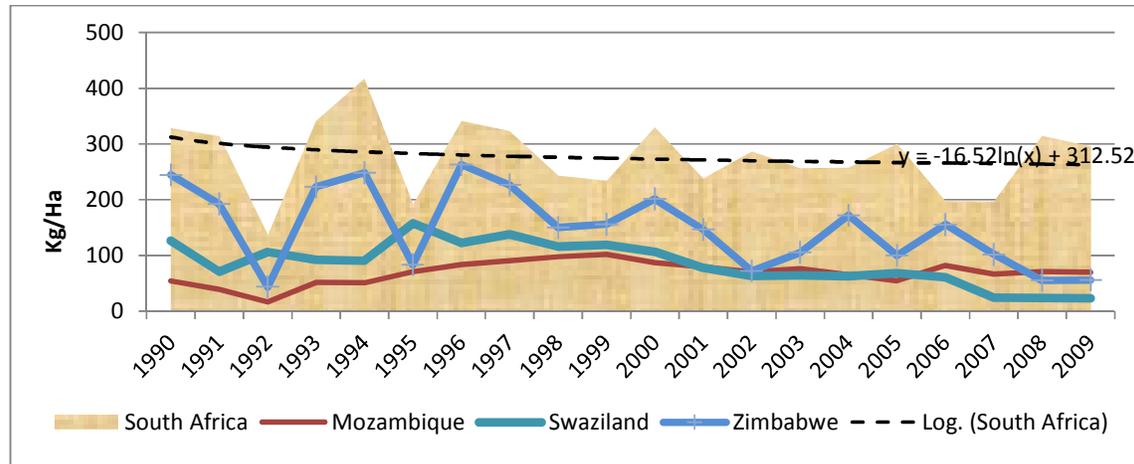


Figure 5: Per capita cereal production

Source: Authors' Own Calculations based on data from FAOSTAT (2011)

Reducing the rate of population growth has long been a development goal for most SADC countries, including South Africa, because of the detrimental effect of rapid population growth on economic development. Rapid rates of population growth in sub-Saharan Africa are impeding its ability to even contain the number of people living in extreme poverty, which is the main cause of food insecurity.

2.2 Cereal Trade

At the national level, South Africa is food secure. It produces its main staple foods, exports its surplus food, and imports what it needs to meet its food requirements (DOA, 2002). Literature surveyed by the WTO Secretariat indicates that trade has generally helped to alleviate poverty in the WTO era. However, some poor households have been affected negatively and differently depending on their source of income (Zunkel, 2012). Figure 6 indicates that there is a weak negative correlation (correlation coefficient=-0.16) between cereal production and cereal exports, i.e. the more the cereal food is produced the more the exported food cereal, and the less the imports. This general trend shows that South Africa has

the ability to meet its national food requirements and does meet needs from domestic agricultural resource, import food items that cannot be produced efficiently, and to export commodities with comparative advantage (DOA, 2002).

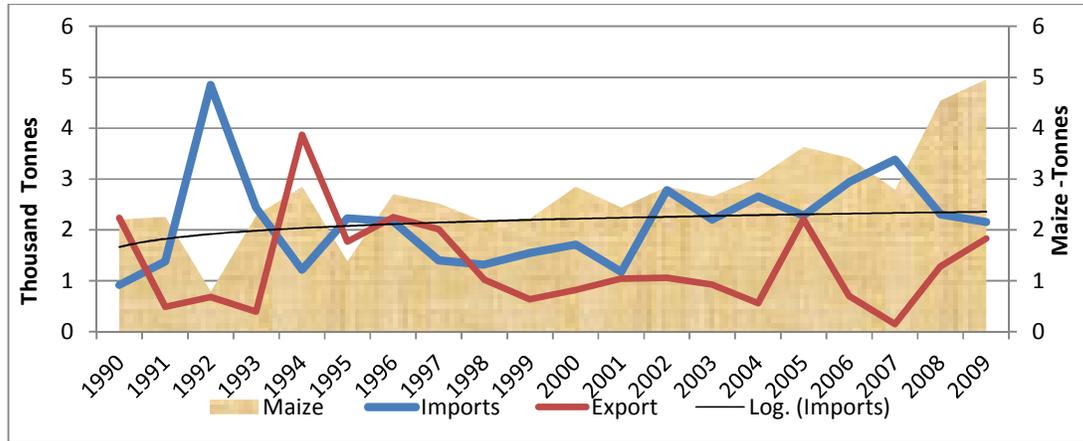


Figure 6: Net Trade and Cereal Production

Source: Authors' Own Calculations based on data from FAOSTAT (2011)

2.3 Urbanisation and Migration

The number of people to be fed in a population is determined by four possible dimensions of population dynamics: people enter or leave a population, by being born, dying, migrating in, or migrating out. Legal and undocumented cross-border migration throughout SADC countries into South Africa has been on the increase in the last 10 years. As shown by figure 7a and 7b, urbanisation and the number of migrants have both increased exponentially within and into South Africa. Most of these migrants probably contribute to most of the poor households in the cities, usually involved in casual or temporary jobs just to make a living by purchasing food. Given that certain shocks and stresses may affect their families, they might find themselves lacking access to buy food, i.e. not having regular and reliable income with which to buy with, or worse, unable to find other food security avenues, including urban agriculture. Furthermore, most migrants are vulnerable to HIV/AIDS which may trigger economic deprivation if a family loses the main bread winner or in situations where they have to spend more on medication than on food.

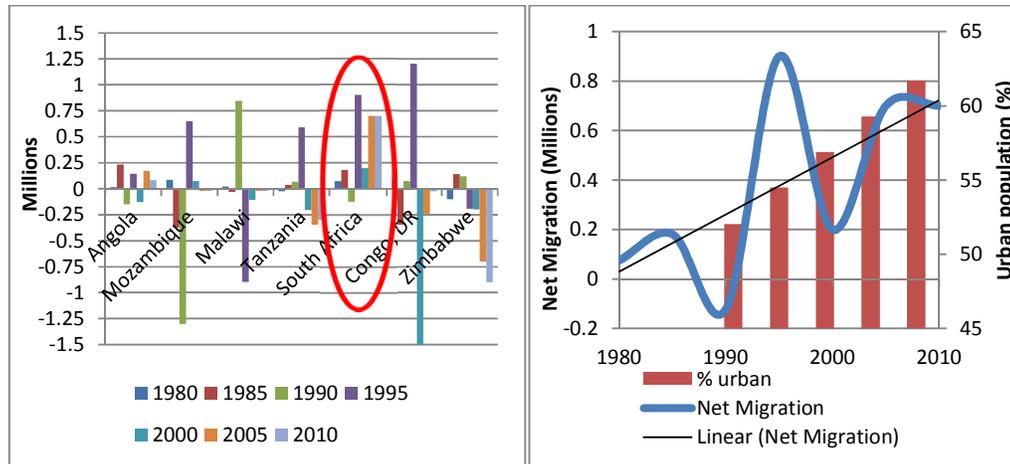


Figure 7a: Net Migration in selected SADC countries; **Figure 7b:** Urban Population, South Africa
 Source: Author's Calculations based on World Bank Development Indicators (World Bank, 2011)

2.4 Lack of purchasing power

While South Africa may have a high per capita income, a significant percentage of households lack cash to purchase food. Continually rising food prices and increasing poverty threaten household food security by reducing the purchasing power and available resources for purchasing food and eroding incomes (Hendriks, 2005). Underlying the lack of purchasing power is the limited scope of income opportunities, especially in the rural areas (DOA, 2002). On the other hand, urban dwellers are particularly affected by their dependence on low wage, casual, temporary or seasonal work and thus their cash flows are intermittent and in flux, which directly impacts upon their ability to buy food (Crush *et al.*, 2006).

The lack of purchasing power, which leads to food insecurity, persists primarily because of poverty which makes low-income people unable to afford to buy all of the food they need. Figure 8a and 8b indicate that since 1990, the South African poverty headcount as estimated by the World Bank has been on the increase, and by 2009 there were almost 3 in 10 people who were living below the poverty line. These categories of people are the ones who are vulnerable to food insecurity, since they are not able to purchase food and utilise it. There is empirical evidence of association between poverty and food insecurity as indicated by the strong positive correlation between the two variables. Using the \$1.25 /day poverty rate, Figure 4 illustrates that malnutrition is linearly related to poverty (correlation coefficient=0.86); i.e. an increase in poverty is followed by an increase in malnutrition over the years.

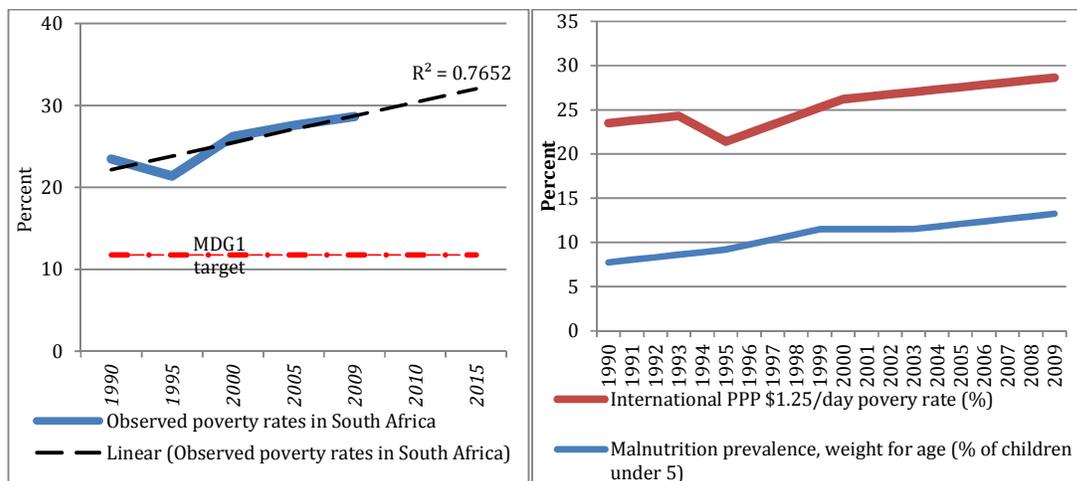


Figure 8a: Poverty Rates (International PPP \$1.25 /day and **Figure 8 b:** Malnutrition and poverty

Source: Author's Calculations based on World Bank Development Indicators (World Bank, 2011)

Cities and towns are cash intensive and residents often have to pay for the basic goods and services (such as fuel and housing) that they do not have to pay for in rural areas. High costs for non-food essentials means that urban dwellers spend a smaller proportion of their incomes on food because they must pay for goods such as housing, energy, transportation, household items, education, health care, and personal items (Crush *et al.*, 2006). Cohen, (2010) provides further supportive evidence that the vulnerable urban dwellers are more dependent on money income, may have fewer opportunities to grow their own food and usually pursue income-earning opportunities. This means that apart from not producing their own food, they also have to cut back on the quantity and quality of food consumption by mostly consuming cheaper high starchy foods of less nutritional value which may result in children being undernourished.

2.5 Food Prices

Against the background of the global economic meltdown and the use of certain staple diet foods (e.g. maize) for fuel, food prices have recently increased exponentially (Van der Merwe, 2011; FAO, 2011). The National Food Consumption Survey of 1999 reported that only 33% of sampled households engaged in crop production and 25% in animal production (Hendriks and Maunder, 2006 citing Labadarios, 2000) implying that most households indeed rely on purchased foods. Watkinson & Kakgetla, 2002; cited by HSRC (2004), report that increasing food prices have a disproportionate and devastating impact on the rural ultra-poor

i.e. to the households who spend more than 50% of the income on food. Global food price increases do have a net negative effect on the national food prices; any policies or trade restrictions that result in increases in global food prices have a direct impact on food availability and utilisation on many South African vulnerable families.

Evidence from the FAO (2012) indicates that there has been a general increase in the global food price index since 1990, with a linear trend indicating future increases (Figure 9a). On the national level, evidence from the South African Department of Agriculture show an increase in global oil prices have been followed by an increase in food and fuel prices at local level (Figure 9b). The factors that pushed up prices during the 2007–08 and 2010-2011 food price crisis, include high oil prices, biofuel policies that promote the expansion of biofuel production, increased weather-related shocks such as droughts and floods, and growing demand from emerging economies ((FAO, 2011).

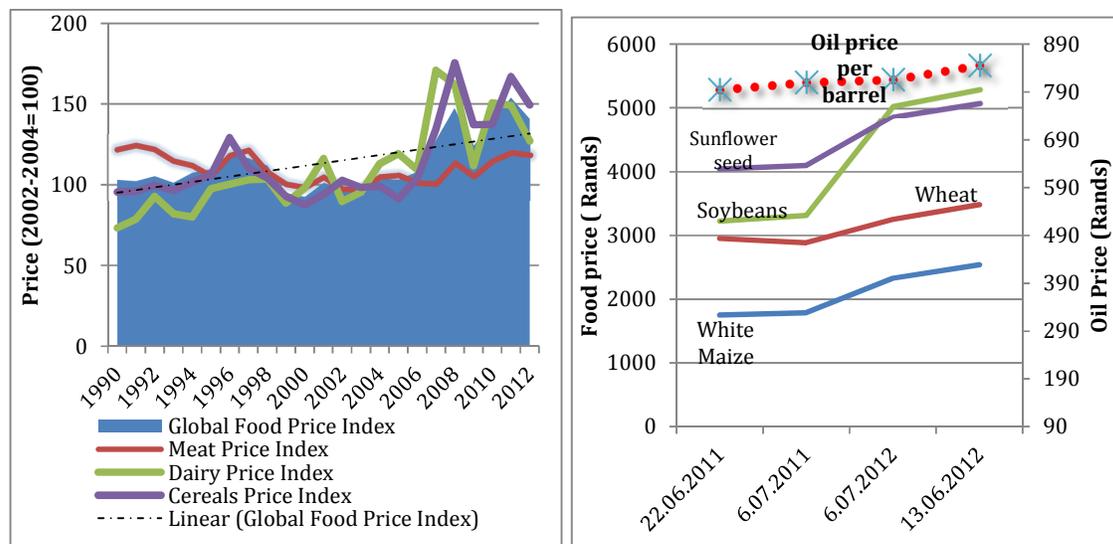


Figure 9a: Trends in Global Food Price Index (1990-2012) **Figure 9b:** Selected Food Prices, South Africa
Sources: Authors’ calculations based on FAO (2011) and Dept of Agriculture, Forestry and Fisheries and Stats SA (2011).

The rising food prices, particularly of maize and wheat which are the staple diet of the poor in South Africa, pose serious problems for the urban and rural poor as most are net buyers of food (HSRC, 2004). Zunckel, (2009) states that global price increases are caused by a rise in biofuel prices and market policies and trade restrictions. Biofuel support measures are estimated to increase average global wheat prices by five per cent, maize by seven per cent

and vegetable oil by about 19 per cent over the next decade. Furthermore, increases in climate variability will result in increased variability in agricultural production leading to more price and income fluctuations (HLPE¹⁸, 2012). According to the Food and Agriculture Organization (FAO), the global Food Price Index reached a record high in February 2011, mainly due to increased prices of cereals, meat, and dairy products (FAO, 2011),

Further evidence of the continued rise in food prices: crops, livestock products; fats and meals are shown in figure 10 below;

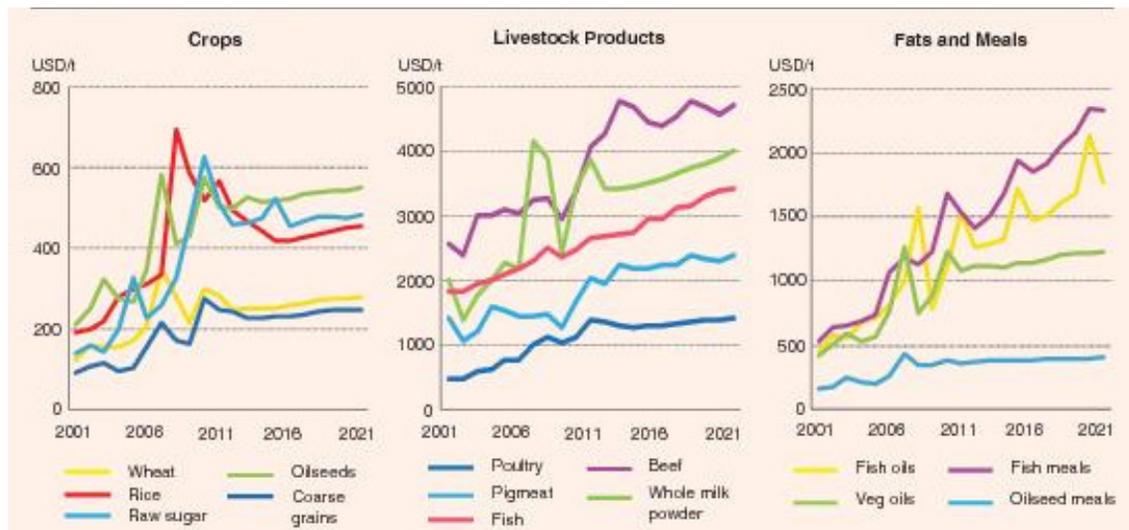


Figure 10: Future Outlook of nominal prices of commodities

Source: OECD-FAO Agricultural Outlook (2012)

Besides reducing poor people's spending, higher food prices have impacts on their calorie intake. As prices become more volatile, vulnerable households find their consumption decisions affected by higher prices in the markets (IFPRI *et al*, 2011). Furthermore, households' access to social safety nets and other social protection schemes will also be a key determinant of the level of suffering they will experience because of higher food prices.

2.6 HIV AIDS

HIV/AIDS is a shock to household food security and household food security cannot be properly understood without considering the effects of HIV/AIDS (SADC, 2003). HIV/AIDS, food and nutrition security can become increasingly entwined in a vicious cycle – HIV

¹⁸ High Level Panel of Experts on Food Security and Nutrition (HLPE)

heightens vulnerability to food insecurity, which can in turn increase susceptibility to HIV infection (Gillespie *et al.*, 2001).

The bidirectional linkages between migration, food security and HIV/AIDS constitute a complex web of causal connections and feedback mechanisms (Crush *et al.*, 2006). HIV increases vulnerability to food insecurity, which increases vulnerability to HIV infection and thus HIV can be treated as a shock to household security. Families affected by HIV and AIDS have higher dependency ratios because the disease, unlike most other illnesses, affects the strong and able bodied, meaning that more people in the household depend on each able-bodied adult for survival (Adato and Basset, 2012). Within HIV-affected households, there is increased risk of food insecurity and malnutrition as sick members are unable to work, income declines, expenditure on health care increases, caregiving burdens increase and there is less time for looking after children (Crush *et al.*, 2006). Supporting evidence states that as family members become ill, resources needed for care increase at the same time as the capacity to generate income decreases, resulting in fewer household resources. In Free State, South Africa, per capita adult-equivalent income in affected households was 50–60 percent of the income in non-affected households and the average monthly food expenditure of affected households was 70–80 percent of the expenditure in non- affected households (Booyesen and Bachmann, 2002).

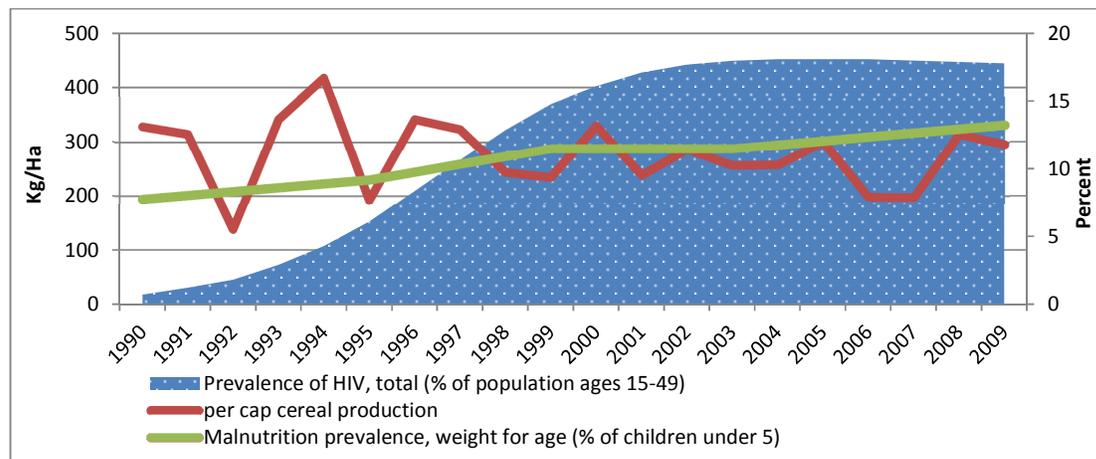


Figure 11: HIV Prevalence and Malnutrition

Source: Authors’ calculations based on World Development Indicators (World Bank, 2009)

Figure 11 shows that there is a very strong positive correlation between HIV and child malnutrition prevalence (correlation coefficient=0.9688) in South Africa, indicating that there

is a direct linkage between the two. The figure provides evidence that as HIV prevalence rates increase exponentially; child malnutrition also increases, supporting the evidence by other researchers that deaths due to HIV strips families of the bread winners and families are pushed into a cycle of poverty and deprivation, with children being the immediate victims.

The impacts of HIV on food security can be as detrimental as food insecurity has been on the epidemic, hence a vicious circle which may need further analysis. In this vicious cycle, food and nutrition insecurity increases susceptibility to HIV exposure and infection and lower resiliency to AIDS impacts, while HIV/AIDS intensifies vulnerability to food and nutrition insecurity (Adato and Basset, 2012). Poverty and food and nutrition insecurity can accelerate the spread of HIV by increasing exposure to the virus and heightening the risk of infection if exposure occurs (Adato and Basset, 2012).

HIV is a unique, slow-moving and devastating shock (Gillespie *et al.*, 2001) that strips households of livelihood assets, and progressively erodes the lives and livelihoods of affected households. Kadiyala & Gillespie (2003) go as far as postulating that food insecurity and HIV/AIDS may converge over time as increased HIV-related expenditures of richer households have a spill-over effect on the food security status of poorer households, especially with regard to hired labour from poorer families. Therefore, HIV/AIDS can contribute significantly to household food insecurity by leave households significantly impoverished and vulnerable to the epidemic.

2.7 Inadequate Safety Nets

Poor households are typically characterised by few income-earners, and many dependants. They are also often primarily dependent on migrant remittances and social security grants, making them vulnerable to food insecurity. Rural households are particularly vulnerable because of their reliance on the remittances from the urban areas. The majority of producers in the rural areas are unable to feed their families from their narrow production base. They are deficit producers, and hence, net consumers of purchased food, and rely on non-farm income to meet most of their household needs (DOA, 2002).

Conclusions

Food insecurity in South Africa is not viewed as a failure to produce enough food nationally, but rather as a failure of livelihoods to provide adequate cash to purchase food at the household level. There is enough evidence to draw a conclusion that at the household level in South Africa, many families have insufficient and unstable food supplies and many do not have the capabilities to produce enough food. This situation is exacerbated by poverty among a third of the population who live below the poverty line and struggle to meet their nutritional needs.

The drivers of high food prices are likely to remain in place for the foreseeable future, which means that food price increases may be a reality until such time as supply and demand moves back into balance (Zunckel, 2009). Although food insecurity results more from problems of access to food than from lack of food availability, broad-based agricultural and rural development must be at the centre of any strategy to achieve food security in South Africa.

3.1 Recommendations

From a policy perspective, this paper acknowledges that the problem of food insecurity in South Africa is partly due to demographic factors of race, family size, occupation, and gender of household head. Food prices, and lack of income (unemployment) are among the significant predictors or explanatory variables of food insecurity in South Africa, hence it is therefore crucial for policy makers to understand the impact of structural poverty and inequality on household food security.

There is an urgent need for the country to develop a comprehensive food security and nutrition strategy and policy to address the specific context of food insecurity in South Africa. This should include careful analysis of the nature and causes of household food insecurity that inform context-specific research-informed interventions to improve the conditions of vulnerable households by creating greater food security opportunities and by mitigation of the negative impacts of HIV/AIDS on the sustainability of livelihoods for the vulnerable population. This should include strategies to support sustainable home production of fresh fruit and vegetables to supplement cereal-based diets and improve nutrition. Policymakers and urban planners should consider zoning specific land for the use of rural as well as urban agriculture in Municipal Integrated Development Plans, especially where intensive agricultural production could be practised.

References

1. Adato M., and Bassett L., (2012). Social protection and cash transfers to strengthen families affected by HIV. International Food Policy Research Institute, Washington, D.C.
2. Booyesen, F., and M. Bachmann. 2002. HIV/AIDS, poverty, and growth: Evidence from a household impact study conducted in the Free State Province, South Africa. Paper presented at the Annual Conference of the Centre for the Study of African Economies, Oxford, U.K.
3. CAADP (Comprehensive Africa Agriculture Development Programme). 2011. <<http://nepad-caadp.net>>. Accessed March 2011.
4. Chilonda, P.; Machethe, C. and I. Minde. 2007. Poverty, food security and agricultural trends in Southern Africa. ReSAKSS Working Paper 1.
5. Cook J.T and Frank, D.A (2007). Food Security, Poverty, and Human Development in the United States
6. Crush J, Frayne B, and Miriam Grant M (2006). Linking Migration, HIV/AIDS and Urban Food Security in Southern and Eastern Africa. *The Regional Network on HIV/AIDS, Livelihoods and Food Security (RENEWAL), International Food Policy Research Institute (IFPRI), Southern African Migration Project (SAMP)*
7. DAFF (2011). Weekly Price Watch: 15 December 2011. Directorate: Statistics & Economic Analysis. Republic of South Africa.
8. FAO. (Food and Agriculture Organization of the United Nations). 2010. FAOSTAT. <<http://faostat.fao.org>>. Accessed March 2011.

9. DOA (2006) FIVIMS. Food Insecurity in Sekhukhune. . Food Security Brief 1
10. FAO (Food and Agriculture Organization of the United Nations). 2003. The state of food insecurity in the world 2003: Monitoring progress towards the world food summit and Millennium Development goals. Rome.
11. (DOA, 2002).The Integrated Food Security Strategy For South Africa
12. Gillespie, S., L. Haddad, and R. Jackson. 2001. HIV/AIDS, food and nutrition security: Impacts and actions. In Nutrition and HIV/AIDS. Nutrition Policy Discussion Paper 20. Geneva: United Nations Standing Committee on Nutrition.
13. HLPE, 2012. Climate change and food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome 2012.
14. IFRPI (2011). The Global Food Policy Report (2011). Major Food Policy Developments in 2011. *International Food Policy Research Institute*.
15. IFPRI, Concern Worldwide and Welthungerhilfe (2011): Taming Price Spikes and Excessive Food Price Volatility. Bonn, Washington, DC, Dublin. October 2011
16. IFPRI (2010): Agricultural Growth and Investment Options for Poverty Reduction in Malawi.
17. IFPRI (2007): The Role of Agriculture in Development Implications for Sub-Saharan Africa.
18. Nepad,2003: CAADP Pillar III Implementation Guide for Country Round Tables
19. SADC (Southern African Development Community). 2009. Updates on the Impact of the Global Economic Crisis on SADC. Gaborone: SADC Secretariat, 2009.
20. Svendsen, M., M. Ewing and S. Msangi. 2009. Measuring irrigation performance in Africa. International Food policy Research Institute, Discussion Paper 00894. Washington, DC., USA.
21. UN (United Nations). 2010. Millennium Development Goals Report 2011. New York: United Nations.
22. UNECA (2007): Impact of Food Aid and Developed Countries' Agricultural Subsidies on Long-term Sustainability of Food Security in Southern Africa by the Economic Commission for Africa.
23. World Bank. 2010. Country Classification Webpage. <<http://data.worldbank.org/about/country-classifications>>. Accessed November 2011.
24. USAID (2010): Feed Your Future Implementation Plans.

25. OECD/FAO (Organization for Economic Cooperation and Development/ Food and Agriculture Organization of the United Nations). 2011. OECDFAO Agricultural Outlook 2011–2020. Paris and Rome: OECD Publishing and FAO. http://dx.doi.org/10.1787/agr_outlook-2011-en.
26. Zunckel H.E. (2009): Agriculture: Future Scenarios for Southern Africa – Ensuring Food Security through Trade Policy. International Institute for Sustainable Development. Winnipeg, Manitoba Canada. <http://www.iisd.org/>.
27. SADC (2010): Regional Agricultural Policy (RAP) Synthesis Report of Key Agricultural Issues and Policy Directions. Gaborone, Botswana.