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Evidence for Supporting Vulnerable Households to Achieve Food Security in SADC Countries

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ABSTRACT Improved food security is an essential element of household well-being in a sustainable livelihood. This paper seeks to provide evidence for supporting vulnerable households including investing in smallholder agriculture to achieve food security among food insecure households in Southern African Development Community. It uses secondary data from various sources to explore the extent of vulnerability to food insecurity, its underlying causes, existing constraints and opportunities to improve households' welfare and food security status. The paper points to the importance of smallholder agricultural production, social protection and development policies in combating vulnerability to food insecurity. It also points to the importance of understanding the heterogeneity of households, their interactions with resources and the role of policies in improving households' welfare.

INTRODUCTION

Rural households and smallholder agricultural production issues have been claimed to be widely ignored, marginalized and overlooked as one of the drivers to sustainable household food security in most countries within Southern African Development Community (SADC) (FAO 2010). IFPRI (2013) indicated that most SADC countries have either serious or alarming Global Hunger Index Scores. There is little progress made in eradicating poverty and reducing hunger globally as about 925 million are still undernourished, representing almost 16% of the population in developing countries (Acosta 2009). These issues gravely threaten the ability to achieve internationally agreed goals on hunger reduction: the first Millennium Development Goal (MDG) and the 1996 World Food Summit goal.

UNDP report highlighted that the economic crisis, high food and fuel prices slowed the rate of poverty reduction in some countries (UNDP 2013). According to UNDP (2012), proportion of people living in extreme poverty in developing regions dropped from 47% in 1990 to 24% in 2008. This translated to a declined from 1.8 billion to less than 1.4 billion of the number of people living below the international poverty line of US$1.25 a day in the same period. High food prices which pushed 44 million people into poverty and other changes in the world food situation are exacerbating the conditions of afflicted, poor and food insecure households (Hart 2009). However, Sub-Saharan Africa has made little progress in reducing extreme poverty despite realizing economic growth between 2000 and 2012 (UNDP 2012, 2013). This entails that economic growth, while essential, is not sufficient to eliminate hunger and vulnerability to food insecurity in developing countries within an acceptable period of time (UNDP 2012, 2013).

In SADC, the incidence of hunger is high among rural households. High unemployment rates, inadequate social welfare systems and high HIV/AIDS infection rates contribute to food insecurity in SADC (Hart 2009; Casale et al. 2010; Tawodzera 2011). Food security challenges in SADC countries are partly due to historical injustices regarding access to land and resources and policies that fail to promote smallholder agriculture and rural development (Lemke et al. 2012; Thamaga-Chitja and Morojele 2014). Studies attribute global recession, high food prices, climate change and structural problems as some of the underlying reasons for the continued vulnerability to food insecurity (Pinstrup-Andersen and Cheng 2009; DAFF 2011; SADC 2011). This is exacerbated by the highest concentration of poor rural residents, high HIV/AIDS prevalence rate among the adult population and poverty (Aliber and Hart 2009; May et al. 2003; HSRC 2008; SADC 2010). The experience of household

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vulnerability to food insecurity in SADC deserves more in-depth attention in order to understand the causes, nature, magnitude and impact on household's welfare (Hart 2009). There is a need to establish the existing gaps between the intensity, magnitude and duration of vulnerability to food insecurity among rural households. This needs to take into account rural livelihoods systems, resilience to stressors and the ability of households to accumulate and access necessary assets, resources and services to acquire food. The objective of this paper is to provide evidence for supporting vulnerable households including investing in smallholder agriculture to achieve vulnerable households' food security in SADC. It points to appropriate directions for humanitarian and development interventions to reduce household vulnerability to food insecurity. It also draws common pointers (indicators) and underlying causes of household vulnerability to food insecurity across SADC countries and opportunities to improve food security in the region. The approach adopted in the paper would help policy makers to understand dimension of household vulnerability to food insecurity and set appropriate social protection and development mechanisms to improve household food security.

Concept of Vulnerability to Food Insecurity and Poverty

Vulnerability[1] to food insecurity situation in SADC poses mixed challenges to policy makers and practitioners as livelihoods of a number of households within the region continue to be threatened with food insecurity and poverty. Vulnerability to food insecurity and poverty are terms commonly used by a number of development agencies and institutions but defined differently and used widely depending on their area of focus. Vulnerability to food insecurity and poverty, although they may be used interchangeably at one level, are different concepts at the deeper level. Poverty and food insecurity usually describe livelihood status at a particular point in time, whereas vulnerability to food insecurity is forward looking (Msaki 2010). It describes the chance or probability of a household to face an acute loss in the ability and capacity to acquire food. Vulnerability studies indicate a higher proportion of households vulnerable to food insecurity than incidence of household food insecurity (Tawodzera 2011; Bogale 2012). This shows the importance of vulnerability assessment in monitoring household food security progress and enabling policy makers to respond to the needs of vulnerable households. It is imperative to understand the extent and nature of their vulnerability to food insecurity.

METHODOLOGY

The data used in this paper is sourced from repository databases from World Bank and SADC secretariat and a number of food security studies conducted from 1990 to 2014. Literature used involved peer reviewed papers, food security reports from SADC, FAO, WFP, Statistics South Africa, IFPRI, UNDP, FEWSNET, DFID and Food and Nutrition Security Working Group (FNSWG) in southern Africa. Trends and proportions of a number of indicators used in the paper are obtained and calculated from available data sources. Scope, coverage and variability of quantifiable information used depended on data availability. The approach adopted in this paper is descriptive, analytical and explorative. The next section covers concepts of household vulnerability to food insecurity. The fourth part of the paper explores the extent of household vulnerability to food insecurity and its underlying causes, trends in household vulnerability to food insecurity, existing constraints and opportunities to improve household's food security and welfare. The remaining part provides conclusion and recommendations.

Vulnerability to Food Insecurity in SADC Region

While some affluent regions and social classes in developed countries struggle with surplus production and consumption, close to twenty percent of the global population lives in constant under-nourishment and food insecurity (Juma 2007). The economic and food security situation is critically worse among rural households, especially women-headed households in the region.

Table 1 shows that most countries in SADC region experienced negative annual GDP per capital growth at constant price between 1990 and 1999. Angola and Zambia had worst annual GDP per capital growth at constant price of about -1.99 and -1.84 % respectively. During 2000

Table 1: Trend in GDP per capita and annual growth rate in selected SADC countries (1990 – 2010)

Country	*GDP per capita (Current price)*			*Annual growth rate (current price)*		*Annual growth rate (constant 2000 US$)*	
	1990	*2000*	*2010*	*1990-99*	*2000-10*	*1990-99*	*2000-10*
SSA	588	512	1286	-1.29	15.05	-0.47	2.37
Angola	993	455	4423	-5.41	57.46	-1.99	10.71
Botswana	2743	3395	7403	2.38	13.11	3.18	3.07
Malawi	200	163	343	-1.89	12.07	1.86	1.86
Mozambique	182	251	410	3.79	7.56	2.85	6.70
Namibia	1661	1829	5330	1.01	15.85	1.14	2.94
South Africa	3182	3103	7275	-0.25	14.09	-0.57	2.40
Tanzania	172	300	527	7.42	7.16	-0.16	4.85
Zambia	418	315	1253	-2.47	29.47	-1.84	3.62
Zimbabwe	839	546	595	-3.49	1.26	0.07	-3.85

Source: Based on World Bank (2011). http://data.worldbank.org/data-catalog/world-development-indicators/ [Accessed 12 January 2011].

and 2010, most SADC countries improved their economic performance including South Africa, Namibia, Botswana and Angola. However, there is growing concern that such economic growth has failed to lift the majority of their citizens out of poverty and food insecurity. Deep rooted poverty has also widened the gap between the rich and the poor. For instance, Namibia has a high income disparity (0.58 Gini index) because industrialization and commercialization has contributed to high unemployment (World Bank 2012). Furthermore, the global hunger index score for South Africa rose from 6.9 in 1990 to 7.4 in 2001 and declined to 5.8 in 2012 (IFPRI 2012). This indicates that chronic vulnerability to food insecurity among households remains high and fragile in some parts of South Africa. The stark reality in such situations is that SADC countries need both broad based and comprehensive social protection mechanisms and development interventions which invest in sustainable household asset accumulation and prioritize both poor and marginalized households.

There is some leniency among SADC countries to invest in rural development and broad based rural poverty reduction initiatives thereby exacerbating food insecurity and poverty (Boussard et al. 2005; DFID 2005). Statistics showed that vulnerability to food insecurity has been rising rather than falling in most SADC countries with most countries falling within medium and low human development categories (UNDP 2012, 2013). This is also because the largest number of poor in SADC lives in arid zones and rural areas with poor soils and infrastructure where the incidence of poverty is also the highest.

Economic growth is not necessarily reaching the poor as rising food and fuel prices push the poor further into poverty. The persistent high food insecure population in SADC is a manifestation of chronic food insecurity and high levels of poverty. The majority of rural households in this region rely on rainfall for their livelihoods. Lack of access to agricultural extension services, productive assets, food and essential non-food items for the poor due to among other things, poor infrastructure, institutions, rainfall distribution, low productivity, prevalence of livestock diseases, few labour opportunities and declining real wages and effects of climate change render a number of people vulnerable to food insecure across the region (Shinns and Lyne 2005; Tibbo and Drimmie 2006; IFPRI 2012). The main concern for the food and agricultural sector in SADC is to provide enough food, in quantity and quality, to meet the nutritional needs of a growing population and to conserve natural resources for future generations (Capone et al. 2014). The region lacks a sustainable food system that supports food security, makes optimal use of natural and human resources, is culturally acceptable, affordable and accessible, environmentally sound and economically fair and viable, and nutritionally adequate, safe and health.

Table 2 depicts low agricultural productivity in SADC countries with a higher degree of production instability as measured by the coefficient of variation (CV). The observed variability in cereal production ranges from 23% and 46% while that of yield per hectare ranges from 22% and 57%. Botswana had both the highest vari-

Table 2: Food availability and stability in selected SADC countries (1990-2009)

Country	*Annual cereal production and adequacy*			*Cereal yield (kgs/ha)*			*Food production index*
	Mean (1990-2010)	*CV*	*Adequacy (2010)*	*Mean*	*Std.dev.*	*CV*	
Angola	564921	0.3706	-66.27	525.75	136.96	0.261	198
Botswana	39240	0.4614	-87.60	409.07	231.45	0.566	113
Malawi	2002323	0.3424	19.37	1291.6	422.80	0.327	129
Mozambique	1271732	0.3440	-57.23	718.74	203.63	0.283	102
Namibia	107020	0.3262	-60.86	374.00	106.05	0.284	101
South Africa	11831927	0.2301	82.36	2552.9	792.21	0.310	122
Tanzania	4730979	0.2439	-13.21	1350.3	295.68	0.219	134
Zambia	1253541	0.3092	6.25	1626.06	369.26	0.227	135
Zimbabwe	1786902	0.4457	-65.22	976.57	433.34	0.444	82

Source: Computed based on Data from WORLD BANK (2011). http://data.worldbank.org/data-catalog/world-development-indicators/ [Accessed 12 January 2011].

ability in cereal production and yield (46% and 57%, respectively) between 1990 and 2010. South Africa, Zambia, Tanzania and Malawi registered increased cereal productivity between 1990 and 2010. Angola has doubled between 1990 and 2010 while Zimbabwe has experienced decline in cereal production by 18% between 1990 and 2010. South Africa registered the highest cereal production in the region between 1990 and 2010.

Huge investment and support for commercial agricultural production in South Africa has significantly improved cereal production and productivity for decades. These cereals constitute main staple food for most households including the poor. The only problem is that small scale agricultural production is not adequately supported in South Africa to enable poor households to produce own cereals and move out of food insecurity and poverty (Aliber and Hart 2009). There is limited access to water resources, markets, technology and provision of affordable inputs for smallholder agricultural production which limits agricultural activities and productivity among vulnerable households (Adato et al. 2006; DAFF 2011).

The challenge amongst SADC countries is low investment in agricultural research and rural development. Utilization of agricultural research results in SADC is very limited and there is inadequate public investment in agriculture, lack of well-trained researchers, inadequate research infrastructures and poor management of the agricultural research and development system leading to little visible agricultural research impact (Abdoulaye-Seek et al. 2013). This leaves a lot of smallholder households with insufficient support to provide for themselves and contribute to food security. For instance in South Africa, most rural households which regard farming as a moderately successful tool to attain food security have inadequate agricultural support (Aliber and Hart 2009; Altman et al. 2009).

Therefore, it is necessary to support, invest in rural development and support small scale agriculture because it is where the poor work to achieve the most direct reduction of hunger. Furthermore, such sectors as rural development use factors of production that the poor and food insecure households possess and generate outputs they consume.

Even though there has been remarkable increase in cereal production and productivity in southeastern Asian countries during the last decades, low productivity remains one of the major challenges in SADC region. Increased agricultural productivity not only increases food availability and access but also improves household welfare of the general population. However, due to poor agricultural practices and low technology adoption partly attributed to poor agricultural extension services, absence of strong institutions and ineffective policies, food production has not significantly improved in SADC countries.

Almost all SADC countries apart from Zambia and Malawi had cereal food deficits from 2010 to 2012 (Table 3). Table 3 also shows that there is a high degree of heterogeneity in food availability among SADC countries. The cereal surplus in Malawi and Zambia is mostly attributed to the effective implementation of hybrid seeds and fertilizer subsidies which increased cereal productivity and national production.

Table 3: Comparison of cereal surpluses / deficits in SADC countries in 2011and 2012

Country	*Cereal requirements (thousand tons)*			*Cereal availability (thousand tons)*			*Cereal surplus / deficit (thousand tons)*		
	2010	*2011*	*2012*	*2010*	*2011*	*2012*	*2010*	*2011*	*2012*
Angola	2226	2282	2257	1178	676	900	-970	-1606	-1344
Botswana	419	429	405	55	73	116	-280	-356	-432
Lesotho	369	378	395	137	73	29	-163	-305	-312
Malawi	2638	2704	3178	3572	4121	3929	1123	1417	555
Mozambique	3672	3768	3715	2641	2912	1449	-625	-856	-1858
Namibia	368	333	333	155	141	201	-187	-191	-179
South Africa	16515	16644	14877	15122	13122	14988	1923	-3522	-1409
Swaziland	158	159	165	75	89	84	-73	-70	-91
Tanzania	7191	7200	7396	7095	6787	7708	205	-413	193
Zambia	2263	2549	2441	3078	4286	3685	1170	1737	1108
Zimbabwe	2328	2535	2389	1534	1701	1824	-790	-834	-1468
SADC	38465	38981	37863	34643	33981	34916	1022	-4999	-5548

Source: SADC 2012

South Africa, Zimbabwe, Mozambique and Angola registered substantial cereal deficits within the same period. Maize production is crucial since most households in SADC regard maize as their main source of food and energy. A slight change in cereal availability affects affordability and availability of food among vulnerable households.

South Africa is a major producer and supplier of cereals including maize in SADC region. Figure 1 shows that the average price of maize ranges from ZAR2000/Mt and ZAR3200/Mt in 2012/13 to 2013/14 growing season. This represents about 53 percent increase from February 2012/2013 to February 2013/2014 growing season. FEWSNET (2014) shows that high prices of cereals in SADC are experienced in lean production period (November – February) hence such price increases in cereals including maize pose a high risk of household vulnerability to food insecurity.

The food security problem in SADC is also an access issue since food insecure households

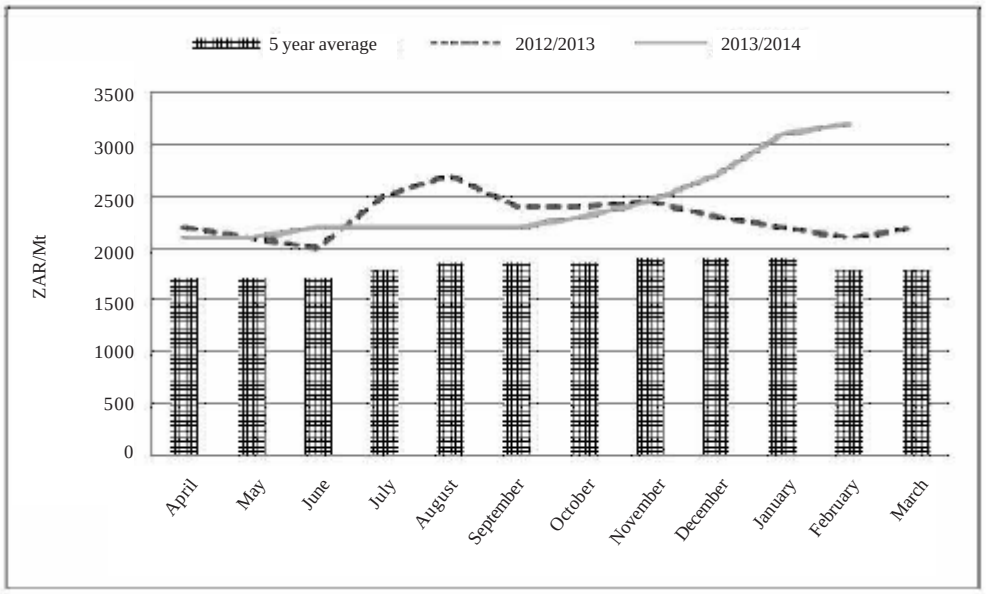

Fig. 1. Prices of white maize on South African Future Exchange (SAFEX) Market in 2012/13 and 2013/14
Source: FEWSNET 2014. Note: ZAR=South African Rand, Mt=Metric tones

do not have the means to pay the price for imports in order to access adequate supply of food (Boussard et al. 2005). This is exacerbated by lack of solvent demand due to insufficient income. Furthermore, some of SADC countries have average daily calorie availability below the recommended level of 2100 kcal (Mozambique and Zambia) while in some other countries (Tanzania, Botswana and Tanzania) the situation has been worsening over the past ten years (SADC 2010, 2011, 2013). This has resulted in relatively higher rates of malnutrition (SADC 2010).

Without food imports in most SADC countries, it is very unlikely for most countries to meet food energy requirements. The striking fact in SADC is the absence of timely country response to access food through imports to allow adequate food availability when domestic production is insufficient (Boussard et al. 2005). For instance, Malawi suffered food security crises in both 2000 and 2004 due to untimely country response to import adequate food when domestic production was insufficient (Pinstrup-Andersen and Cheng 2009).

Malnutrition remains a challenge in most of SADC countries. Stunting, wasting and underweight are some indicators of either chronic or transient household vulnerability to food insecurity among under-five children. These have long lasting negative impacts on children health and welfare. Figure 2 confirms that there is a high degree of stunting, underweight and wasting in Malawi, Zambia and Namibia respectively. Figure 2 also shows that almost 18% of children in South Africa are stunted. The situation is much of concern since even countries that have been experiencing national food surplus like South Africa and Tanzania, are still struggling to contain malnutrition. Households are still lagging behind in proper food preparation and utilization (SADC 2011). Nutrition and adult education campaigns might be required to address such a challenge in SADC.

Figure 3 shows that the proportion of undernourished persons as a percentage of the population which reflect the share of the population with insufficient calorie intake has declined in most SADC countries including Angola (40%), Malawi (36%), Mozambique (36%), Zimbabwe (25%) and Namibia (40%) between 1992 and 2008. However, the share with insufficient calorie intake in Botswana, Tanzania and Zambia remains a challenge. The percentage of undernourished people in South Africa remained almost the same between 1992 and 2008. This calls for radical and broad based response to reverse the trend in SADC.

The situation in South Africa is fairly unique in that colonialism and apartheid configured the present poverty and household vulnerability to

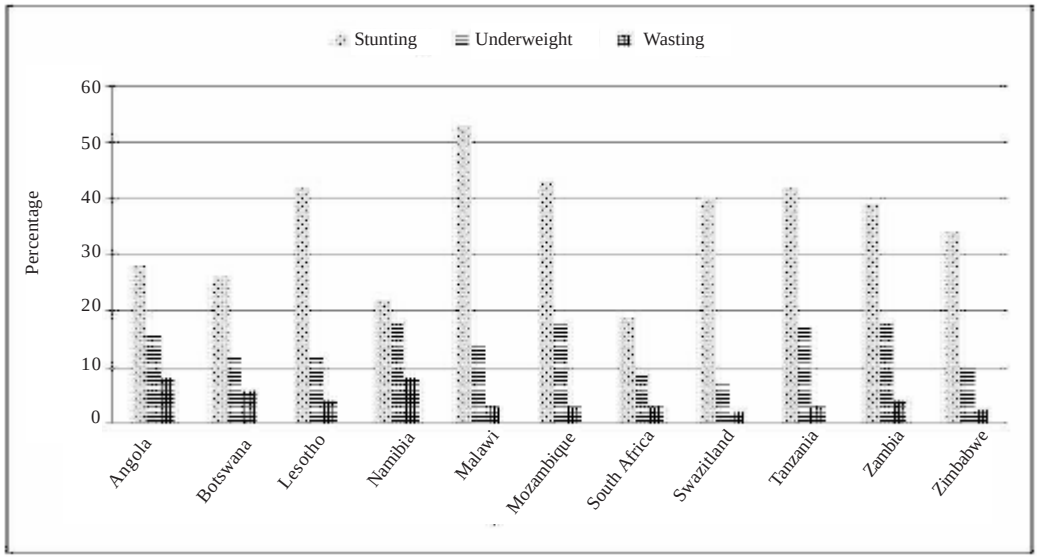

Fig. 2. Malnutrition situation in SADC in 2011
Source: SADC 2011

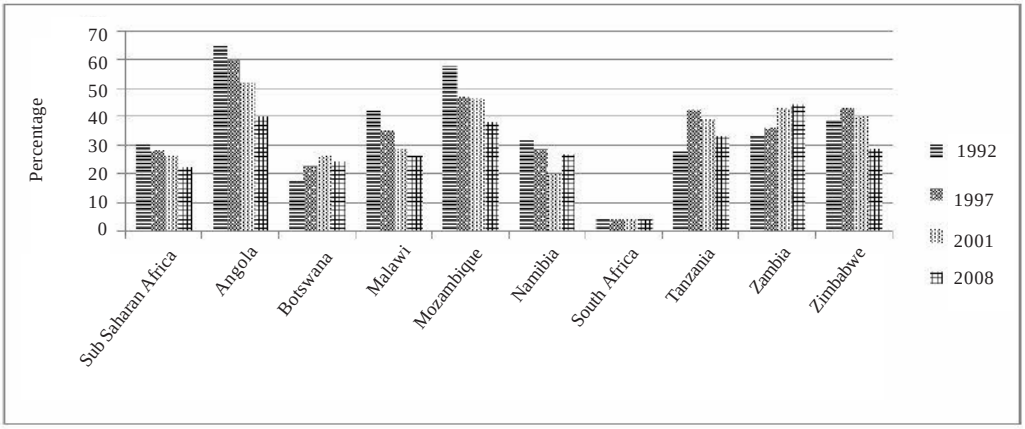

Fig. 3. Prevalence of undernourishment in SADC (% of population)
Source: World Bank 2011 (compiled from World Development Indicators Databank)

food insecurity among some social classes (Shinns and Lyne 2005). The persistence of an unacceptably high prevalence of under-nutrition constitutes a public health problem among South Africans, too. Both chronic poverty and food insecurity in South Africa is largely attributed to income distribution and structural inequalities (Hart 2009). Statistics in 2009 showed that chronic food insecurity is experienced by 20% of children, indicated by stunting, and 10% of underweight children in South Africa (Hart 2009). The disadvantaged groups in rural South Africa have been left with fewer resources, including land, lower levels of education and spatially divided households due to the need for external incomes (Aliber 2001; Shinns and Lyne 2005). Most of these disadvantaged groups are in rural areas of South Africa. As long as these rural households are not supported by either clear policies or broad based programs to produce their own food and generate own income, vulnerability to food insecurity would remain a challenge among rural households.

Underlying Causes of Vulnerability to Food Insecurity in SADC Region

There is a thin distinction between causes and symptoms of vulnerability to food insecurity (Shinns and Lyne 2005). In SADC, households' capacity to manage risk is especially low due to a number of issues making them particularly vulnerable to poverty and food insecurity. Van-Ginkel et al. (2014) indicated social and economic limitations including access to markets and inputs, weak governance and lack of information about production technologies as some of the triggers of risk and food insecurity in some dry lands of developing countries. Low income is a major contributory factor to food insecurity in developing countries. Some authors argue that prevailing structural conditions are actually more responsible for the persistence of famines or food security crises in SADC in this century than the actual shocks that trigger them (Msaki 2010). Furthermore, others highlighted that current food emergencies are the result of a combination of problems that range from drought and adverse weather patterns and civil conflict, to political - economic crises including low asset ownership and hyperinflation, HIV/AIDS and poor policy decisions (Clover 2003; Devereux 2009; Tawodzera 2011; Thamaga-Chitja and Morojele 2014). For instance the HIV/AIDS pandemic is contributing to increased vulnerability to food insecurity. In the agricultural sector, HIV/AIDS reduces households' ability to produce their own food and the financial cost of looking after the chronically ill puts a heavy burden on the economic situation of households, communities and the country leading to food insecurity (Haile 2005). Low levels of household income, labor productivity, and capital endowment, and poor access to markets, productive assets and agricultural extension services are some of the major causes of household vulnerability to food insecurity. Hence no single factor is uniquely responsible. Food crises sometimes emerge when

shocks such as drought, flood, pest, economic downturn or conflicts occur and affect chronically insecure populations and reduce their agricultural productivity. For instance, southern African countries agricultural productivity grew by only 1.6% per year between 1970 and 2004, which is very low compared to the rest of the world (Alene 2010). High unemployment rates, rising food prices, policy constraints, inadequate social welfare systems and high HIV/AIDS infection rates have also contributed to food insecurity in South Africa (DAFF 2011). Some authors alluded to low levels of income, poor health, low levels of economic wealth, poor standards of housing, proneness to income shocks, institutional failures, gender discrimination, low human and social capital as some of the main symptoms and causes of household vulnerability to food insecurity (Casale et al. 2010). The combination of these is more than sufficient to trap many people in chronic food insecurity making them either stochastically or structurally poor.

Chronic food crisis is sometimes attributed to the persistence and interaction of multiple stressors which effectively undermine household livelihood strategies. These stressors include sudden shocks like floods, droughts, unemployment, death, and price changes and also gradual changes such as changes in service delivery, land degradation, social and economic marginalization, erosion of assets as a result of the AIDS epidemic and the changing nature of the world food situation. Some vulnerable groups are also more likely to be chronically food insecure including rural households, women headed households, households headed by elderly people, former (retrenched) farm workers, AIDS orphans and other households directly affected by AIDS (Aliber 2001; Thamaga-Chitja and Morojele 2014).

A large proportion of observed food insecure households may be transient, with movements into and out of food secure or insecure situations. In particular, the welfare status of a substantial share of the population may be just above the food insecurity line, with a high probability of falling below it in the near future. The chronic nature and status of some of the causes of vulnerability to food insecurity is an indication of not just seasonal changes but deep rooted helplessness and poverty (SADC 2011; Tawodzera 2011).

Regional Vulnerability Assessment Approaches in SADC Region

Since 2002, SADC Regional Vulnerability Assessment and Analysis (RVAA) programme, which comprises a multi-agency Regional Vulnerability Assessment Committee and National Vulnerability Assessment Committees (NVACs), has been conducting a series of vulnerability assessments in SADC to inform policy makers on the extent of household vulnerability to food insecurity within the region. The assessments mainly use livelihood–based approaches like Household Economy Approach (HEA) and Integrated Phase Classification (IPC) which among other things entails assessing the impact of availability or lack of various sources of income and food as well as an analysis of expenditure patterns of rural households on their livelihoods.

These approaches make use of both qualitative and quantitative methods such as informant interviews, household surveys and rapid participatory approaches to collect data on macroeconomic conditions, prices, rainfall patterns, crop and livestock production levels, health, nutrition, water and sanitation. The design of the assessments methodologies, geographical coverage, and depth of the analysis by the National Vulnerability Assessment Committees is largely dependent on the technical support sourced, financial resources and time available to carry out an assessment (SADC 2010).

Table 4 shows that the percentage of populations vulnerable to food insecurity in SADC countries has been fluctuating between 0.5% and 44.8% from 2007/08 to 2011/12 growing seasons. Lesotho, Swaziland and Zimbabwe reported high percentage of populations vulnerable to food insecurity in SADC in the same period. Despite input subsidies in Malawi and Zambia, a number of households are still struggling to produce, afford and acquire enough food for daily consumption. This entails that subsidies alone are not sufficient to address food insecurity. Mixed trends in populations vulnerable to food insecurity in SADC indicate either inconsistent policies or lack of broad based and holistic approaches in addressing food security. Progress in achieving food security is continually hampered by weather shocks and market uncertainties. Rainfall in this case plays a crucial role in supplying water for production. With

Table 4: Estimated populations vulnerable to food insecurity in selected SADC countries (2007/08-2012/13)

Country	*Food insecure population in southern Africa*					
	2007/08	*2008/09*	*2009/10*	*2010/11*	*2011/12*	*2012/13*
Lesotho	553000	353000	450000	200000	514000	725519
% of food insecure population	26	17	23	10	27	39
Malawi	63200	673498	147492	1061000	201854	1630007
% of food insecure population	0.5	4.5	2.1	3.5	2.0	11.0
Mozambique	520000	302664	281300	350000	350000	255297
% of food insecure population	2.4	1.4	1.3	1.5	1.5	1
Swaziland	345000	238600	262000	160989	88511	115713
% of food insecure population	30.6	21.2	19.3	11.7	6.4	11
Zambia	440866	444624	110000	53629	74804	62842
% of food insecure population	3.8	3.7	0.8	0.4	0.5	0.5
Zimbabwe	4100000	5100000	1400000	1287937	1390000	1668000
% of food insecure population	36.1	44.8	12	10.7	11	13
SADC	6604040	7892802	3116131	4437619	2862643	5477613

Source: SADC 2012

climate change effects, it is unrealistic for SADC countries to leave the plight of its households' welfare to harsh weather conditions. Small scale income generating activities would play a crucial role in supporting those with insufficient land for agricultural production.The trend of populations vulnerable to food insecurity calls for a radical change in the way governments focus on social protection, development policies and agrarian reforms.

Constraints and Opportunities to Address Vulnerability to Food Insecurity

The major constraints to food security are found in social, economic and political conditions rather than in production methods themselves. The main solutions to food security problems will therefore be found in improvements in social, economic and political environments that recognize the needs of the poor and empower them to accumulate productive assets (Juma 2007). Policies and programs geared towards household economic and social empowerment will enable poor households to produce and accumulate income. Therefore supporting small scale agricultural production might play a better role in improving household food production, income, savings and asset accumulation.

South Africa registered the highest average cereal productivity (2552.98 kg per hectare) in the region between 1990 and 2009 largely attributed to modernized large scale commercial farming. However, farm productivity of smallholder and rural households is relatively very low. This low rural household farm productivity is partly attributed to low government investment and inadequate agricultural support (Ali-Dinar 1996). Stat SA report argues that the absence of income from agricultural activities as a main source of income in their General Household Survey (GHS) series casts doubts on the value of agriculture as a way to address food insecurity (Stat SA 2012). However, this is not the case. There is evidence that the poor are engaging in agriculture as a main source of food (Aliber and Hart 2009; Thamaga-Chitja and Morojele 2014). The crucial element is that there is little investment in rural households' interventions and smallholder agricultural production. About 30% of households that have inadequate food access and 26% with severely inadequate food access are involved in agricultural activities in South Africa (Aliber and Hart 2009). There is, therefore, a need to improve access to water resources and broad based support programmes to rural households. This could be coupled with promoting appropriate crops and livestock, improving productivity while maintaining existing production capacity and being able to assist farmers to move into commercial and market oriented production. Increased agricultural productivity does not only increase food availability and access but also improves household welfare of the general population. This requires broad based and holistic approaches to improve agricultural extension delivery, technology adoption, strong institutions, and effective policies.

In a world where adoption of technology such as GM crops are a vital part of food security, it will be imperative to strike a balance and promote them wherever there are poor soils thereby conserving natural habitat and biodiversity (Thomson 2006).

Social grants have been widely used in South Africa to address poverty, inequality, unemployment and food insecurity. Stat SA report indicates that about 44.8% of households in South Africa received a social grant while 22.3% of household regard social grants as their main source of income between 2002 and 2011 (Stat SA 2012). However, sustainability of such programs is a concern. The existing challenge in this current situation is that most households are predominantly net consumers of purchased food and most of them either do not produce food for their needs or produce too little to meet their household needs (DAFF 2011). Small scale agricultural activity is therefore a potentially sustainable contributor to food security. If small scale agriculture would be incorporated with broad based development programmes and interventions such as community and village loans and savings (VLSs) and improved access to capital for productive income generating activities, a majority of rural households' welfare will be improved. Non-agricultural households would be stimulated to venture into business activities thereby improving their food purchasing power and livelihoods.

It is also imperative for SADC countries to address gender disparity while efforts to promote smallholder farm households are emphasized. It has often been claimed by researchers that women produce about 60 to 80% of food in developing countries and provide over 40% of labour force in agriculture. However, women in agriculture have less access to productive resources including land, inputs and services than men. For instance some of the disadvantages faced by women smallholder farmers in South Africa, Zimbabwe, Zambia, Tanzania and Malawi relate to household size, and organization, gender-differentiated household livelihood strategies, patriarchal tenure systems and the emerging clashes between traditions and contemporary realities which make it difficult for women to progress in their farming initiatives. These constrain women farmers who wish to expand their farming efforts to acquire more land and participate in markets and value chains. Closing the gender gap in smallholder agriculture is important because such efforts would increase yields on women farms by 20 to 30% thereby reducing number of hungry people by 12 to 17% in the world (FAO 2011). This can possibly be done by addressing cultural practices which suppress participation of women in productive activities and promoting and empowering communities to promote equal access to resources and opportunities. SADC countries need also ensure that agricultural policies and programmes are gender sensitive and promote investments in smallholder agricultural production, value addition and market chains. This would build on the contributions that both men and women make in agriculture and promote their farm productivity and access to resources thereby reducing hunger and food insecurity.

Coordination and harmonization of food security programs and interventions need to be addressed also if SADC countries particularly South Africa would improve her rural food security status. Food security interventions are very much disaggregated at all levels in South Africa. Coordination of these efforts is not well built to improve local expertise, institutions and managements of annual and seasonal food security monitoring. The existing poor institutional arrangement and alignment of sectors at all levels have been contributing to the lack of unified approach and effective food security program delivery (Drimie and Ruysenaar 2010). The main challenge affecting coordination, integration and harmonization of food security programs in South Africa is the tendency of over burdening public institutions and departments with limited budgets, personnel and expertise to handle and champion most food security programs (Drimie and Ruysenaar 2010). Both public and private food security institutions in SADC need to coordinate integrate and harmonize their efforts in order to contribute to sustainable rural food security and development. Some SADC countries realized the need for this and developed multisectoral national vulnerability committees (NVACs) as a coordination mechanism to monitor both annual and seasonal variation in food security. This enables food security practitioners to build well-functioning local structures, expertise and systems that ably handle food security challenges. This might be a good option for South Africa to adopt.

Malawi and Zambia have initially made tremendous progress in achieving national food security through implementation of input subsidies. Through this program smallholder households have been accessing improved seed technologies and chemical fertilizers to increase production and agricultural productivity. Smart input subsidies in these countries have been able to lower production cost and stimulate food supply response hence rural households have been able to absorb the stress of global food price increases. FAO report highlighted that when prices surge, input subsidies improve welfare of rural households (FAO 2009). This has been shown to increase the profitability of agricultural production for the poor in Zambia. This has also shown to enhance the ability of smallholder households to acquire own food and assure national food security (FAO 2009). Despite gaining some lessons from the implementation of input subsidies, SADC countries need a mix of humanitarian and developmental policies with some bias towards developmental policies because of their sustainability concerns. Heavy and significant investment in agricultural research and development would also improve the development status of the poor. This is bearing in mind that no country has ever made significant success in food security without significant investment in agricultural research and development (IFPRI 2012). A balance might need to be struck in southern Africa between factors that promote food production as well as improving access to food markets and food utilization. This would yield better progress in achieving food security and empowering rural communities to be food self-sufficient.

CONCLUSION

SADC countries have embarked on a number of programs and initiatives to improve household welfare and food security since the development of the Millennium Development Goals. However, the scanty progress made in reducing household vulnerability to food insecurity in the region, poses a number of challenges to policy makers to achieve food security. This paper used secondary data from a number of sources including peer reviewed papers, databases, reports and studies conducted in the region to provide evidence for supporting food security initiatives among households that are vulnerable to food insecurity in SADC countries. The paper adopted a descriptive, analytical and explorative approach to establish the extent of vulnerability to food insecurity, its underlying causes and existing constraints and opportunities to improve household's welfare and food security. Results show that most countries in SADC region have high proportion of populations which are vulnerable to food insecurity. Populations which are vulnerable to food insecurity in SADC countries have fluctuated between 0.5 to 44.8% for the past five years. Zimbabwe, Swaziland and Lesotho have a high percentage of populations which are vulnerable to food insecurity whereas Malawi, Lesotho, Tanzania and Mozambique have high prevalence of malnutrition. Some of the factors that have been exacerbating vulnerability to food insecurity in SADC include climate change, gender disparities, limited access to factors of production, extension, technology and low productivity and access to income. Results have also shown that it is imperative to support vulnerable households through both humanitarian (social protection interventions) and development initiatives including investing in smallholder agricultural production; community savings and loan; off farm income generating activities and promotion of access to markets, services and infrastructure to improve household food security. The vulnerable households in SADC region require proactive policies and broad based interventions to address food insecurity while closing existing gender gaps. Social protection policies including social grants in South Africa and input subsidies programs in Malawi and Zambia which target smallholder households need to incorporate development interventions that empower vulnerable households to be self-reliant, produce their own food, and accumulate productive assets and access essential services and infrastructure.

RECOMMENDATIONS

Due to the severity of vulnerable populations in SADC region, the paper has recommended a mix of both social protection and development policies and interventions with some bias towards development policies and interventions due to their sustainability. This can be done through broad based programmes and investment in small scale agriculture and improved access to both farm and off farm income gener-

ating activities. Some of the recommended initiatives include promotion of village savings and loans, access to input and output markets, infrastructure and improved coordination and harmonization of food security programs and policies.

NOTE

1. Food Security is achieved when food is available at all times, to which all persons have means of access and the food is nutritionally adequate in terms of quantity, quality and variety, and is acceptable within the given culture (World Food Summit 1996) while Vulnerability to food insecurity is a risk that a household will, if currently food secure fall below the food security threshold or if currently food insecure, remain food insecure. Hence vulnerability is forward-looking concept and is not directly observable.

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