

CIVIL SOCIETY ORGANISATIONS
PARTICIPATION OIN FOOD SECURITY
ACTIVITIES IN SOUTH AFRICA

MARCH 2013



NDA

National
Development
Agency



**A Research Report Produced by the
Human Science Research Council in Partnership with the
National Development Agency**

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ISBN: 978 – 0-621-41968-9

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ACRONYMS

AFSUN	African Food Security Urban Network
AU	African Union
CAADP	Comprehensive Africa Agriculture Programme
CADRE	Centre for AIDS Development, Research and Evaluation
CBOs	Community based organisations
CBNP	Community-Based Nutrition Programme
CFS	Committee on World Food Security
CSM	Civil Society Mechanism
CSO	Civil Society Organisations
CWP	Community Work Programme
DAFF	Department of Agriculture, Forestry and Fisheries
DBSA	Development Bank of Southern Africa
DPME	Department of Performance Monitoring and Evaluation
DAFF	Department of Agriculture, Forestry and Fisheries
DOH	Department of Health
DRDLR	Department of Rural Development and Land Reform
EPWP	Expanded Public Works Programme
FAFS	Framework of African Food Security
FBDGs	Food-based dietary guidelines
FAO	Food and Agricultural Organisation
FIVIMS	Food Insecurity and Vulnerability Information Mapping Systems
GHS	General Household Survey
HFBNP	Health Facility-Based Nutrition Programme
HSRC	Human Sciences Research Council
HST	Health Systems Trust
IEQ	Income Evaluated Question
IFSS	Integrated Food Security Strategy
INP	Integrated Nutrition Programme
IPC	Integrated Food Security Phase Classification
ISE	Informal Sector Enterprise
KZN	KwaZulu Natal
LAGAFA	Local and Global Action for Food Security in Africa
LCS	Living Conditions Survey
LFS	Labour Force Survey
MDG's	Millennium Development Goals
MFPC	Makgatadigame Farming Primary Co-operatives
MIQ	Minimum Income Question
NAMC	National Agricultural Marketing Council
NDA	National Development Agency
NGP	New Growth Path
NPC	National Planning Commission
NGO	Non-Governmental Organisations
NEPAD	New Partnership of Africa's Development
NIDS	National Income Dynamics Study
NSNP	National School Nutrition Programme
PEM	Protein –Energy – Malnutrition Scheme
PEPs	Public Employment Programmes
PDA	Provincial Department of Agriculture

QLFS	Quarterly Labour Force Survey
RDP	Reconstruction and Development Programme
SPWQ	Self-perceived wealth question
UN	United Nations
UNICEF	United National Children's Fund
WHO	World Health Organisation

EXECUTIVE SUMMARY

Purpose and scope of the research

The purpose of the research was to investigate the food security system and how resources of a household determine its access to food and nutrition. The focus was to assess the role of civil society organisations participation in improving household food security in South Africa. The outcomes of the research would contribute to the National Development Agency (NDA)'s food security strategy focused on supporting civil society organisations to enable them to help the food security status of poor households in South Africa. Furthermore, the outcomes would encourage policy debates on food security and identify areas for more research in order to have holistic understanding of household food security in the country.

The scope of the research as agreed with the NDA Research Unit was to explore the following areas:

1. Government role in ensuring and improving access to food security – programmes, policies and coordination
2. Food security definitions, measurements and recent initiatives in South Africa
3. Models of food security interventions for the poor people and communities
4. Gendered dimension of food security including the impact of food security on marginalized groups such as women, children, youth, people living with HIV and people with disabilities.
5. Households' ability and access to secure nutritious food
6. Role of private sector and business in ensuring household food security

Methodology

To address the objectives of this research, the analyses presented were based on desktop review and discussion of relevant scientific literature and a scan of grey literature (policy documents, reports, web resources, etc. including resources provided by the NDA Research Unit. The analyses were also based on literature from previous HSRC research projects and publications. In addition, the project used international published data on food and nutrition security, models of food security etc. The research process involved continuous sharing, exchanges and meetings between the HSRC research team and the NDA Research Unit.

Findings and recommendations

Definitions and measurements of food security: The Food and Agriculture Organization of the United Nations defines food security as a condition which exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and health life. The dimensions for food security are multiple and complex making measurement a challenge. While South Africa has several national instruments which measure different dimensions of food security it lacks a national survey that measures all the dimensions of food and nutrition security. As a result the extent of food insecurity at household level in South Africa is incomplete. This has serious negative implications for policy and targeting.

Recommendations:

1. There is need to establish a common food security target for South Africa. The motivation for a national food security target would to enable more effective pro-poor policy responses and to ensure efficiency in fiscal spending in relation to food and nutrition security interventions (Jacobs, 2009). Civil society organisations (CSOs) have a key role to play in advocating for a clearly defined food security target to be established.
2. The state must be prevailed up to urgently establish a proper monitoring and evaluation system including impact assessment ex-post for the food and nutrition security programme which can feed in to policy development, programme design and learning.
3. CSOs capacity to engage with food security policy, definitions and measurements of food security needs to be strengthened to facilitate local community communication. Better understanding of these issues will also ensure that CSOs engage at the same levels with government and other stakeholders.
4. The role of civil society in actively lobbying for improvements to current national instruments is recommended. The NDA is urged to consider providing strategic support to CSO's in advocacy around the development of a national monitoring and evaluation framework.
5. Investment in Qualitative In-depth Studies is required to help us understand how households respond to different contexts, including shocks. CSO's, particularly those who have the capacity for research need to be supported to engage in such types of research

Government's role in ensuring food security: Government has since 1994 prioritised food security as reflected in policy, programming and resourcing around specific elements of food security. The government recently developed an overarching food security policy for South Africa led by the Department of Agriculture Forestry and Fisheries (DAFF). However, much more needs to be done to integrate the various policies and programme development initiatives which are also focussed on addressing food security. The institutional location for coordinating a national response, within the DAFF limits the possibility of a holistic multi-dimensional response emerging. Clearly a holistic and comprehensive approach to food and nutrition security requires the engagement with and coordination of multiple ministries and it remains unclear how a Directorate within DAFF would achieve this.

Recommendations:

1. There is need for more coordinated planning, implementation, monitoring and evaluation of food security policies and programmes.
2. CSOs need to actively engage with government as well as providing monitoring services to government plans, programmes and resource allocations to ensure that food security interventions effectively meet their goals.

Models of food security interventions for the poor: Interventions for food and nutrition security are important and several efforts have been made by both developed and developing countries to develop the relevant models for interventions. Some interventions have focused on policies and programmes, agricultural production, value chains, market regulations, and land security. This led to food security and nutrition focus on rural agricultural approach, with limited and no focus on urban areas, which are equally affected by food insecurity. The list of CSO participation (and models used) in food security and nutrition issues at the global level is endless and impacts differ from country to country, based on prevailing conditions in the countries where projects are undertaken. However, the challenge for food and nutrition security clearly shows that governments alone cannot tackle this issue without local interventions where CSOs can play a significant role. In South Africa, a number of CSOs, non-governmental

organisations (NGOs) and community based organisations (CBOs) are playing significant roles in driving the food and nutrition security agenda in various parts of the community. Most interventions in South Africa are guided by policy initiatives and relevant strategies on food and nutrition security, where to some extent, CSOs work in close cooperation with government or through government institutions like the NDA. However, a smooth coordination and healthy relationship between CSOs and government remains the main challenge towards the successful implementation of food security projects and programmes, especially at the community levels.

Recommendations:

CSOs seem to have various platforms at which they can articulate for policies and other strategic interventions in food security, both globally and nationally depending on the prevailing conditions in each country. However, while CSOs can participate in the global framework on food security agenda, some of the suggestions made by CSOs at the last 39th session of the Committee on World Food Security (CFS) show the need for action and the seriousness to tackle the core issue, which is “the right to food security”. Among the suggestions made, the following are worth noting:

1. The CSOs call for the need to be treated as partners in all initiatives and at all stages of action, through active collaboration and coordination between government, CSOs, agencies, communities and other relevant institutions.
2. They argue that for strategies to be effective, they should be community driven and include marginalised groups, such as women, children, youth, small holder farmers, indigenous peoples, pastoralists and fisher folk.
3. The CSOs can facilitate community organisations through the support of empowerment and capacity building to address structural challenges of food insecurity.

Overview of the gendered dimension of food security: The Food and Agriculture Organisation defines four main dimensions of food security: availability, access, utilization and stability. While the four dimensions are crucial to understanding food security at the household or community level, the gendered dimension of food security needs to be highlighted as a cross cutting issue in all the dimensions, given the role played by women towards food security for their households. Women are key role players in ensuring that every individual in the household have access to food and consumes all the nutritious food required for a healthy lifestyle as well as improving the food security status of any household. Traditionally, women have little or no say in the economic affairs of a household, such as food provision through farming, labour income or other sources, stemming from the male dominance of men as heads of households. Most men, particularly in the rural areas are the decision makers on household economic affairs, while the women’s responsibility is centred around preparing the food and caring for the vulnerable members of the family, especially children. Findings from the literature show that relatively high proportions of both female headed and/or female-centred households are more vulnerable to poverty and, hence to food insecurity. Women become more and more vulnerable to food insecurity because they often have limited access and control of resources, which restricts them from producing their own food and acquiring the necessary resources in order to become self sufficient and this compromises their food security status.

Recommendations:

1. There is a serious call for interventions in the form of direct participatory methods that promote the empowerment of women must be stressed.
2. Another technique that can be used to enhance food security especially in urban areas is job-creation and gender equity social protection programmes/policies.

3. Educational programmes that are directed to woman (since they are key role players in preparing food for children) is necessary in order to inform them on the different ways of improving the nutritional content of the food they eat.

The Impact of HIV/ AIDS on food security and nutrition in South Africa: The impact of HIV/AIDS on food and nutrition security is a serious problem for South Africa. The situation is even worse for poor rural and urban communities characterised by poverty and high inequalities. More effort is required to improve the food security situation of the poor, especially those affected by HIV/AIDS. Evidence from empirical studies shows that households affected by HIV/AIDS morbidity and mortality lose assets, income and skills. The interaction of the loss of household labour, assets, income etc. from HIV/AIDS related sickness and deaths exacerbates the food and nutrition insecurity of most poor rural and urban households. In addition, HIV/AIDS through increased nutritional requirements adversely impacts on food and nutrition security of many poor rural and urban households. The impacts place a double burden of higher nutritional requirement on pregnant women, making them even more vulnerable to food insecurity. Also, high HIV/AIDS prevalence makes it difficult for people and households affected by the disease, especially women to be food secure. This is even worse in situations where women participate in household agricultural production activities to ensure food availability and access.

Recommendations:

1. A large proportion of the poor rural and urban households are at risk of food insecurity as a result of HIV/AIDS. Adequate consumption of nutritious food is vital for everyone on anti-retroviral medication. Challenges facing CSOs include inadequate and project oriented capacity building for civil society organizations to strengthen and better enable their capacity as HIV/AIDS response units. There is also limited information on the number and type of civil society organizations, actively involved in HIV/AIDS related activities, making it more difficult to assist them. Profiling the CSOs involved in HIV/AIDS and food security related work would help planning and coordination of their work to facilitate complementarity and avoid duplication of activities.

The role of subsistence agriculture and impact of smallholder and community based food production on improving food security: Subsistence and smallholder farming is important for many South African households as a means towards food security. An estimated 2.5 to 3million people are engaged in smallholder agriculture in the country. The bulk of subsistence and smallholder farmers are poor and are mainly women. Despite the potential role of smallholder farming role in promoting food security, its current contribution is very limited due to various factors such as lack of resources like land and other (quality) inputs such as seeds and fertiliser. However, households that engage in smallholder farming tend to have access to more nutrients and micronutrients such as carbohydrates and vitamin A, making them less prone to malnutrition.

Recommendations:

1. Encourage the introduction of micronutrient-rich crop varieties and livestock production in smallholder agricultural production.
2. CSOs have an important role to play in assisting smallholder farmers to increase their production capacity through assisting them to access more resources and better utilise them to increase their yields in order to be food secure.
3. Furthermore, CSOs should provide training services to smallholder farmers ranging from raising awareness of the importance of own food production, potential for income generation from agriculture, diversity of crops to produce and to achieve food and

nutrition insecurity. These activities should be used in demonstration food production activities and training of local champions to ensure sustainability of the initiatives.

Households' ability and access to secure nutritious food: Access to food in itself is not a sufficient condition for nutrition security. This is particularly the case if the diet does not reflect diversity of the different food groups that ensure that the body receives essential micronutrients, vital for growth, development and well-being. Micronutrient deficiencies have adverse impacts on the body, affecting growth, development and well-being. Reviewed evidence shows that the majority of South Africa's poor rural and urban households lack dietary diversity and hence are vulnerable to nutrition security. The traditional focus on food security interventions on rural poverty nodes tend to neglect the increasing urban food and nutrition insecurity in rapidly urbanising towns and cities across the country.

Recommendations:

1. Integrate nutrition counselling and stronger public awareness raising the importance of dietary diversity, particularly for smallholder farmers (targeting women, youth and other marginalised groups).
2. Promote dietary diversity in crèche and school feeding menus to ensure that children receive all the essential nutrients. There is need to ensure that social protection interventions must focus on dietary diversity to ensure that low-income households are nutritionally secure.
3. Ensure that vulnerable household members consume diverse food groups and address cultural and other factors that constraint use and consumption of certain foods.
4. Target food security interventions to urban poverty pockets, particularly in metro's and in informal settlements and backyard shacks.
5. Enhance capacity of CSOs involved in making food accessible to poor and vulnerable households e.g. through improving current initiatives in providing support for smallholder farming, communal gardens and distribution of food parcels to poor households and direct feeding in schools and crèches. CSO should promote dietary diversity and assist with public awareness campaigns on the importance of dietary diversity and household nutrition security.

Challenges affecting household ability to be food secure: Poverty, unemployment, inequality and food security are integrally linked. Hunger is strongly prevalent in households with little or no income. The majority of South Africa's poor are reliant on incomes to access food. However, the unprecedented levels of unemployment in South Africa combined with large number of "working poor" makes achieving food security challenging. The South Africa's extensive social assistance programmes are recognised to contribute to reducing food insecurity and act as an important safety net for most poor and vulnerable households. Although the state has an ambitious plan to enhance employment in South Africa, mainly through short term public employment programmes, these are low paying jobs and hence cannot contribute effectively to addressing food and nutrition security. A further challenge is that fewer people in South Africa rely on access to land and involvement in agriculture to grow food for own consumption. Other challenges affecting food and nutrition security include high prices and the main concern is food price inflation that often exceeds the general inflation. Furthermore, climate change is considered a major greatest threat to agriculture and food security in the 21st century, particularly in many of the poor, agriculture-based countries of sub-Saharan Africa with their low capacity to effectively cope. The impacts of climate change already being experienced in many parts of the world are expected to lead to disproportionately negative food insecurity effects in regions already experiencing food insecurity.

Recommendations:

1. Promote more income generating activities for poor rural and urban households to ensure that they get income to access food.
2. CSOs can advocate for improving minimum wage levels and compliance thereof across all sectors. The recent Marikana tragedy and Western Cape Farm strikes are indicative of the volatile situation arising from the discontent if the poor are unable to afford a decent basket of food and other basic needs.
3. Addressing stability in food pricing and making basic foods affordable to the poor are important considerations. Food pricing has a direct bearing on household's ability to access food. Food prices appear to be escalating even when global market prices have remained the same or dropped. Many options are available such as fair price shops and price control on certain products. Addressing high cost of food in rural areas is an important area requiring attention.
4. CSOs need to strengthen and expand access to the social wage for vulnerable households- evidence suggests that up to 50% of households eligible for social assistance are not receiving it.
5. In addition, CSO and government should monitor food pricing and cartel actions which increase the cost of food for poor households and ensure that culprits are held accountable.
6. CSO can play an important role in helping increase local adaptive capacity in agriculture both to long-term climatic trends and to increasing variability to help reduce the adverse impacts of climate change on food insecurity, livelihoods and economies.

Private sector/business role in food security: The activities of the private sector and businesses affect household food security both positively and negatively. The private sector plays multiple roles in the field of food security from food availability (commercial agricultural production and agro processing and food distribution) to food access (retailing and food pricing) and in food utilisation (food fortification and marketing). Under the corporate social investment (CSI) responsibility banner, many private sector institutions are supporting development programmes in South Africa. However, on the negative side, the structure of the South African economy has created a situation of limited competition and high level of centralisation of the economy by a few large corporates. This has negatively impacted on food pricing, job creation and enterprise development. The highly centralised and capital intensive agro-industries tend to limit or exclude new entrepreneurs. Although competition does exist it's mainly between large producers and there have been cases of anti-competitive practices of retail cartels in inflating the price of retail goods. Such practices adversely affect food access and affordability, especially for poor households making them susceptible to food and nutrition insecurity.

Recommendations:

1. Undertaking research to better understand the impacts of private sector engagement in food security is necessary for better regulation and policy development. Examples of the role of government in regulating such industries include the recent regulatory developments related to advertising and marketing of tobacco industry products and more recently in respect of marketing of milk supplements for infants.

Coordination between relevant stakeholders and challenges facing food security implementation efforts: While government and CSOs are both working towards ensuring food and nutrition security for the South African communities, lack of coordination among the various players is cited as one of the challenges limiting effective impact of policy at community level. In addition, while CSOs acknowledge that government departments are faced with complex situations affected by the wider political economy dynamics, in addition to financial and institutional

capacity constraints, they feel that these delivery setbacks need interrogation and remedy, which can be achieved through effective coordination with key stakeholders. Where plans and food security strategies don't bear results, other alternatives to these national plans need to be introduced, with the help of other external partners to combat hunger. Further, recognition is given to the fact that at a national level, the South African government has clearly set strategic objectives to either reduce or eliminate poverty and mal-nutrition in the country and several food security programmes highlight the progress that has been made by government institutions towards achieving food security for all. However, there seems to be little evidence made available to the public to show actual implementation of these national food security programs and their potential impacts on communities. The government is blamed for not sharing information on programmes implemented and their outcomes, as extension officers operating at community level don't provide the CSOs or the respective communities with those details.

The issues below highlight some key questions required to be asked when assessing the success of each strategy – for it to have an impact:

1. Have community interests and priorities been put first in these strategies?
2. Would more use of participatory and rural appraisal methods have helped gather better baseline data to inform these strategies?
3. Are the requirements of adequate professional coordination, meticulous and comprehensive planning and the availability of the resources of time, labour, finance, etc. available to implement and monitor these programmes?
4. Have appropriate and realistic development methods and indicators been set to achieve the programme goals?
5. How would one go about modifying these interventions to accommodate long term sustainability?
6. How does government ensure that other institutions, such as NGOs, get informed about its food security programs? and
7. Does government create a network with other stakeholders whom it can learn from and share findings on these programmes?

BACKGROUND AND INTRODUCTION

The World Food Summit in 1996 identified extreme poverty and food insecurity as key development priorities and called for a reduction by half of the number of the hungry globally. This target was subsequently incorporated into the Millennium Development Goals as the first target (MDG 1) (Windfuhr et al, 2005). Rural and urban communities throughout the world face food insecurity challenges wherever access to food supplies is constrained by poverty. In 2009, at the height of the global economic crisis it was estimated that the number of people hungry and malnourished in the world surpassed the 1 billion mark (IFPRI et al., 2010) Food insecurity leads to human suffering and contributes to degradation and depletion of natural resources, migration to urban areas and across borders and political and economic instability (Beddington et al., 2011).

Since the establishment of a democratic government in 1994, South African government has strived to address the legacy of Apartheid, including high levels of poverty combined with social inequity, high unemployment, and associated social ills. Various factors linked to poverty and inequalities are responsible for the food security vulnerability of large numbers of food insecure households in the country. While progress has been made in this regard, significant development challenges remain. There is high social inequality in the population of about 50 million people, revealed by Gini coefficient of between 0.66 and 0.69; and several poverty and human development indices emphasise this (DEA 2011). For example, despite South Africa being a net exporter of food, an estimated 35% of the population is vulnerable to food insecurity and a quarter of children under the age of 6 years suffer from malnutrition (HSRC, 2004).

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 (Altman et al., 2009). To understand household food security status in this country, it is necessary to investigate how the workings of the food distribution system and how resources of a household determine its access to food. There are distributional and accessibility problems that need to be understood. Ideally, poverty and food insecurity would be addressed by expanding employment opportunities thereby enhancing household incomes. Employment has expanded substantially since the mid-1990s, but not enough to meaningfully address income poverty. Income security is an essential ingredient to address food insecurity. The evidence shows that social grants have played an important role in improving household food security since 2001; but that improvements in employment status are also important (see Aliber 2009; Van der Berg 2006).

In the context of large scale poverty and unemployment, as well as the present economic downturn, it is probable that reliance on grants will continue, if not increase. In a highly unequal middle income country with high unemployment, this redistribution through income transfers is essential. However, it makes poor households vulnerable to national policy choices and politics. It is essential that creative and meaningful solutions are found to draw marginalised work-seekers into economic participation as part of a long term poverty reduction and food security strategy. The National Development Agency (NDA) is interested in understanding these dynamics as they pertain to the existing environment in South Africa with relation to food security. With this background, the National Development Agency (NDA) is committed to conducting and undertaking research focused on how best to assist Civil Society Organisations (CSOs) to play a functional role in the fight against food insecurity; poverty and inequality in South Africa.

TERMS OF REFERENCE FOR THE RESEARCH

Objectives of the research

The aim was to assess the role of civil society organisations participation in improving household food security in South Africa. The outcomes of the research would contribute to the National Development Agency (NDA)'s food security strategy focused on supporting civil society organisations participation in improving food security. Furthermore, the outcomes would encourage policy debates on food security and identify areas for more research in order to have holistic understanding of food security in the country.

Specific objectives include:

1. To undertake research that address key priority areas in policy formulation and stakeholder engagement for civil society organisations participation in food security activities.
2. To participate together with the NDA Research Unit in consolidating the different areas of the status of the report.
3. To make presentations together with the NDA Research Unit to the Technical Team and Reference Groups on the specific areas on the status of food security report.

Scope of the research

The scope of the research as agreed with the NDA Research Unit was to explore the following areas:

1. Government role in ensuring and improving access to food security – programmes, policies and coordination
2. Food security definitions, measurements and recent initiatives in South Africa
3. Models of food security interventions for the poor people and communities
4. Gendered dimension of food security including the impact of food security on marginalized groups such as women, children, youth, people living with HIV and people with disabilities.
5. Households' ability and access to secure nutritious food
6. Role of private sector and business in ensuring household food security

RESEARCH APPROACH AND METHODOLOGY

To address the objectives of this research, the analyses presented were based on desktop review and discussion of relevant scientific literature and a scan of grey literature (policy documents, reports, web resources, etc. including resources provided by the NDA Research Unit. The analyses were also based on literature from previous HSRC research projects and publications. In addition, the project used international published data on food and nutrition security, models of food security etc. The research process involved continuous sharing, exchanges and meetings between the HSRC research team and the NDA Research Unit.

Overview of food security definitions, measurements and recent initiatives in South Africa

Definitions of terms: approaches to and measurement of food security

Various concepts and terminology have been used in the literature to discuss food security and hunger concepts. These include: food and nutrition security, food insecurity, hunger, malnourishment/malnutrition, undernourishment/under-nutrition, the right to food and food sovereignty. The meanings of these concepts and terms have evolved over time since the 1970's when the notion of food security was first mentioned in the build-up to the World Food Conference in 1974 (FAO, 2003). Since food security is defined differently in the literature, elaboration of these concepts is necessary to better understand them.

Defining food security

The Food and Agriculture Organization of the United Nations defines food security as a condition which exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and health life (FAO, 2012). The definition was agreed to at the 1996 World Food Summit. (According to the Food and Agriculture Organisation (2006), food security exists in four dimensions, namely: availability, access, utilization and stability as discussed below. If any of the dimensions is weakened, then food insecurity will occur. Although these food security dimensions are interrelated, they can exist in isolation because food security on one dimension does not imply the same for all other dimensions.

- Food availability refers to the production and procurement of sufficient quantities of food available on a consistent basis. However, availability of food on its own does not ensure food security as food surpluses can exist alongside hunger and malnutrition.
- Food access refers to the availability of sufficient resources to obtain appropriate food/s for a nutritious diet. This relates to promoting sustainable farming practises, enabling access to land for agricultural production and employment for income generation; promoting agriculture by small scale farmers and subsistence farming and implementing social protection measures for the poor and vulnerable.
- Food utilisation refers to appropriate use of food based on knowledge of basic nutrition and care, as well as adequate water and sanitation. Interventions focussing on maternal and child health, programmes to improve infant feeding and access to health care for the prevention and treatment of diseases all contribute to improved food utilisation.
- Stability of availability and access to food refers to sustained access to nutritious food despite suffering shocks such as conflict, droughts, or death or unemployment at household level.

This notion of food security draws on the work of Sen (1981) who introduced a broader concept of food security away from a focus only on availability of food supplies to household's ability to access food. Sen focussed on entitlements and capabilities in ensuring access to food. This was subsequently developed by Chambers (1989) and others in respect of the sustainable livelihoods framework. The latter defined livelihoods as comprising of capabilities, assets (material and social) and activities required to generate a means of living. Hall (2007) drawing on the work of Frank Ellis refers to the Livelihoods "pentagon" which depicts the interdependent relationship between the five dimensions of critical assets or resources to make a living:

- Human capital –education, skills, knowledge, ability to labour, good health and physical capabilities.

- Social capital - relationships and networks upon which people draw then pursuing different livelihood strategies.
- Natural capital – land, water, air
- Economic or financial capital - money, loans, savings, credit/debit and other economic assets
- Physical capital – infrastructure, equipment, technologies and other productive assets essential for the pursuit of livelihoods

The dimensions of livelihoods are key factors that affect households' ability to access and utilise food and nutrition. The lack of these capabilities, assets (material and social) and activities required to generate a means of living is usually associated with poverty that translates into food and nutrition insecurity for most households.

Devereaux (2006) argues that food insecurity must be understood as a continuum with chronic food insecurity and transitory food insecurity at both ends and cyclical or seasonal food security in the middle. Chronic food insecurity refers to long term and persistent food insecurity and which is linked to structural factors such as poverty and inequality, unemployment and underemployment and the lack of assets. Transitory food insecurity refers to sudden, short term, temporary periods of extreme food scarcity. These arise as a result of natural and other disasters, conflicts and the related displacement and economic crises. A third dimension or a sub-dimension of transitory food insecurity is seasonal or cyclical, where hunger is experienced recurring generally prior to harvest and lasts about 2-3 months. During periods of cyclical or transitory food insecurity poor and vulnerable households may consume accumulated assets thereby depleting them and this could lead households into a situation of chronic poverty into the future.

The right to food is a fundamental human right enshrined in international law in a number of legal instruments including the International Declaration of Human Rights (Article 25), International Covenant on Economic, Social and Cultural Rights (Article 11), the Convention on Elimination of Discrimination against Women (CEDAW, Article 12) and UN Convention of the Rights of the Child (UNCRC, Articles 24 and 27) (Motala, 2010). The right enables individuals to hold government accountable for its acts and omissions related to food security. The right to food upholds respect for human dignity in the manner in which people access food. However, the right to food does not imply that government has to provide food for all, but that government has an obligation to ensure that people have access to resources and an enabling environment within which they can feed themselves. This right enjoins on government the obligation to respect, protect and fulfil the right to food. Respecting the right to food include government not taking actions which would harm or diminish enjoyment of food. Protecting the right to food include actions such as ensuring that standards are maintained in the handling of food to prevent food contamination. In addition, fulfilling the right to food could involve distribution of food in emergency situations. The right to food can be progressively realised by governments through the adoption and implementation of policies and programmes.

Food sovereignty is an alternative radical political understanding of the food security question which emerges from the advocacy work of La Via Campesina, a movement of farmers, peasants, fisherfolk and indigenous communities in Latin America in 1996. The advocacy rose from the growing frustration with the manner in which global food systems and markets are being run by multi-national corporations who have little or no regard for the growing number of hungry in the world. The movement defined food sovereignty as the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and

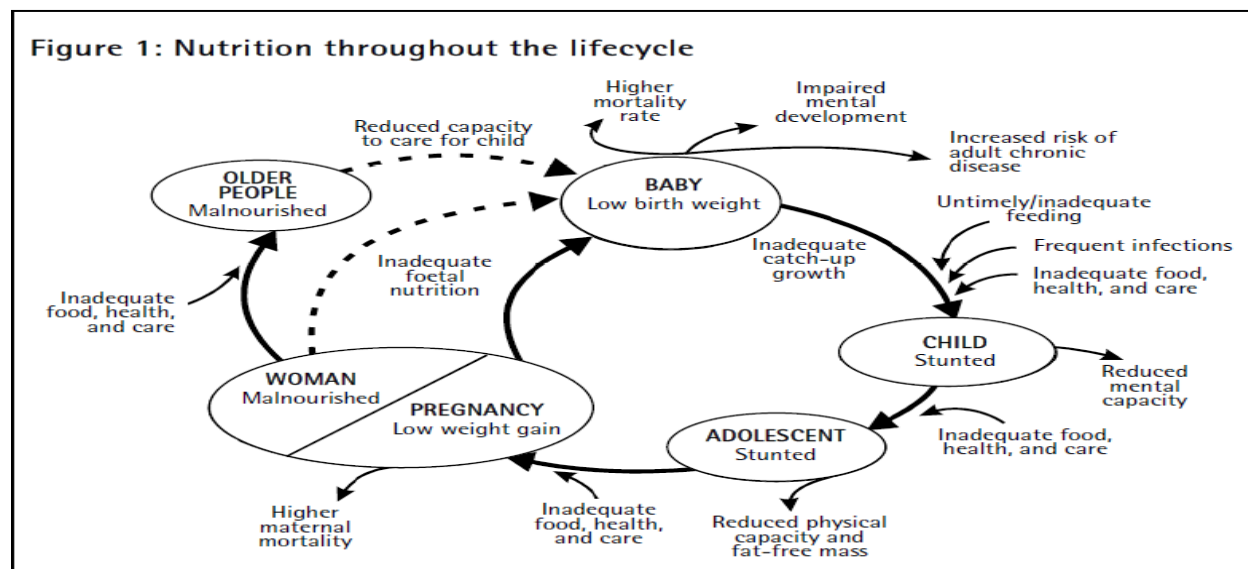
trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant; to restrict the dumping of products in their markets; and to provide local fisheries-based communities the priority in managing the use of and the rights to aquatic resources. Food sovereignty does not negate trade, but rather promotes the formulation of trade policies and practices that serve the rights of peoples to food and to safe, healthy and ecologically sustainable production (War on Want, 2011).

Defining nutrition security

The State of Food Insecurity in the World Report (FAO, 2012, p57) defines nutrition security as “a situation that exists when secure access to an appropriately nutritious diet is coupled with a sanitary environment,adequate health services and care, in order to ensure a healthy and active life for all household members. Nutrition security differs from food security in that it also considers the aspects of adequate caring practices, health and hygiene in addition to dietary adequacy”.

Nutrition is critical across all stages in the life cycle and the burden of malnutrition can be perpetuated through the lifecycle and across generations (Figure 1). For example, a child born to an undernourished mother is likely to be stunted, her development and growth milestones may falter, her cognitive abilities maybe impaired and thus diminish her potential for learning and also she maybe more susceptible to diseases and illness and in this way the lifecycle is perpetuated across generations. This is an important issue to be taken into account in planning and targeting interventions in order to break out of a negative cycle.

Figure 1: Nutrition throughout the lifecycle

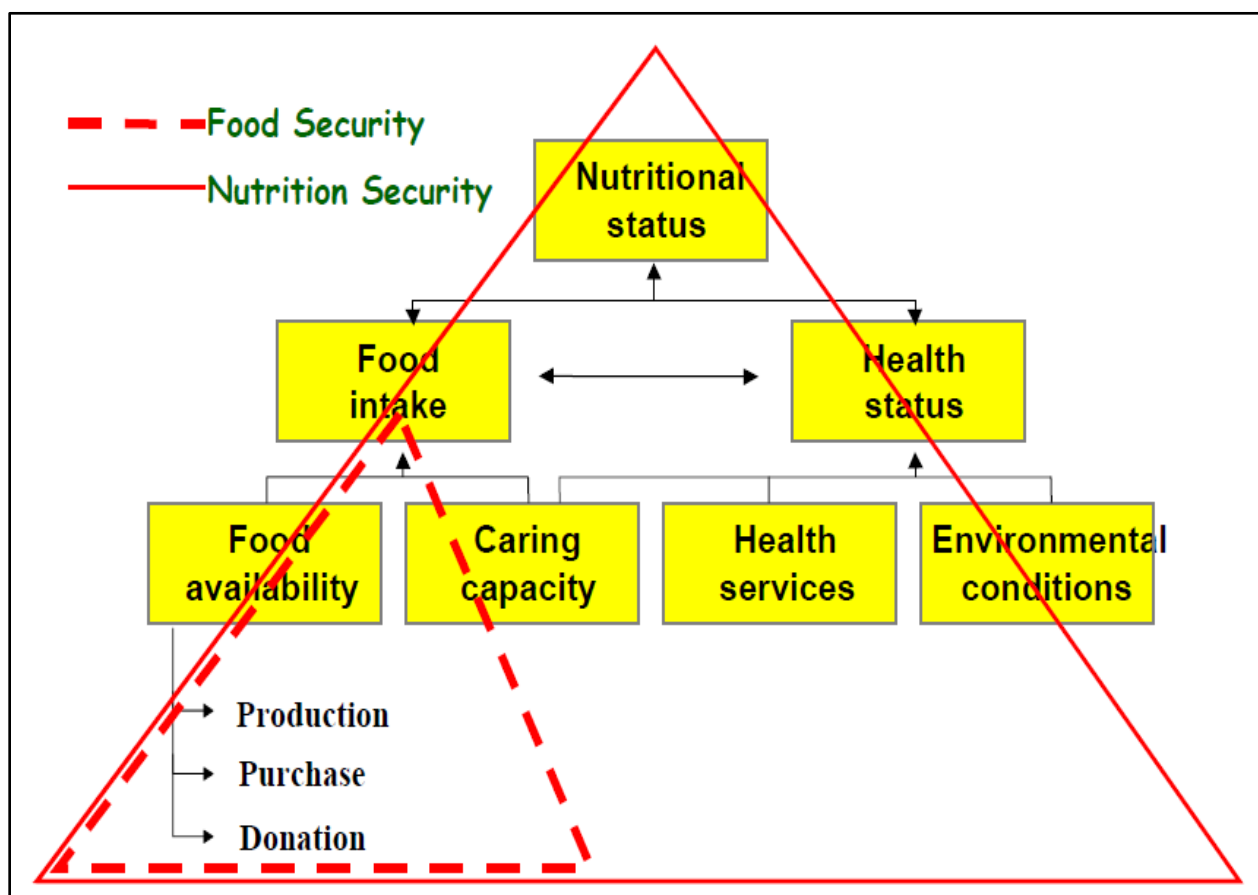


Source: Benson (2004)

The inclusion of nutrition in the conceptual understanding of food insecurity has evolved over time. Nutritional security is achieved when a household has sufficient and secure access to food together with access to good health care, water, sanitation, knowledge and ability to ensure healthy life for family members. Nutrition security is concerned not only with access to food but

also with the utilization of the food within the household. It is focussed on the individual's ability to reach their maximum potential. The framework below (Figure 2) emphasises the difference between food security and nutrition security. The framework offers a model for linking nutritional status with health status of the person.

Figure 2: Conceptual framework for nutritional status at household level



Source: Gross et al (2000)

The following section briefly defines various concepts of food security and hunger:

1. **Undernourishment** relates to the lack of sufficient food.
2. **Under-nutrition** is a description of the status of a person whose food intake regularly provides less than their minimum energy requirements and/or by poor utilization of nutrients due to disease. Referred to as the minimum dietary requirement (MDER), the determination of the MDER level is context specific and varies from country to country and from year to year and is dependent on gender and age structure of the population. The MDER is based on a calculation of the amount of energy required for light physical activity and which will allow the body to maintain an acceptable weight for height ratio (FAO, 2010). Although hunger and under nutrition arise from inadequate food intake, they differ markedly in that hunger is associated with not eating enough food, while under-nutrition refers to deficiencies in micronutrients such as vitamins and minerals. According to the Lancet Series on Maternal and Child Under-nutrition (2008) the effects of under-nutrition manifest in children in the form of stunting and underweight- low birth

weight (low weight for age), stunting (low height for age), wasting (low weight for height) and less visible micro- nutrient deficiencies. Lancet series evidence suggests that the impact on children can be irreversible in terms of cognitive development, increased incidence of morbidity, impairment of immune systems, weak educational performance and even diminished economic potential.

3. **Micronutrient deficiency** – relates to the lack of or insufficient amounts of minerals and vitamins obtained in the diet. It is also referred to as “hidden hunger”.
4. **Malnutrition** of which under-nutrition is one form, is concerned with either consumption of insufficient food, too much food (obesity), referred as over-nutrition as well as the consumption of the wrong types of foods.
5. **Secondary malnutrition** arises as a result of mal-absorption of nutrients or the inability to use nutrients properly due to disease and ill health (WHO).

Food and nutrition security in South Africa

Food security is enshrined in the Constitution of South Africa (1996) in articles 27 and 28 which indicate the right of every South African citizen to sufficient food, water and social security. It has been a key priority of all post-apartheid administrations since 1994 and is aligned to South Africa’s Millennium Development Goal of halving the number of people who are hungry in South Africa between 1990 and 2015. The South African government has committed to halving poverty between 2004 and 2014 and achieving household food security is a critical component in meeting that objective (RSA, 2010). In keeping with internationally accepted definitions of food security, South Africa recognises the three dimensions of food security namely availability, access and utilisation as elaborated above (DAFF, 2011). The concept of food insecurity is seen as closely linked with levels of poverty, employment and unemployment.

The strategic framework for action to address food security was outlined in the Reconstruction and Development Plan for South Africa (RDP, 1994) in which food security was identified as a basic need. The framework recognised the difference between national food security and household level food security and gave priority to achieving household food security. The development of an Integrated Food Security Strategy for South Africa was informed by the conflicting conceptual interpretations and definitions of food security in South Africa among key stakeholders including government, researchers, international community and the civil society (DoA, 2002). The South African food security policy adopts fully the FAO definition: “the right to have access to and control over physical, social and economic means to ensure sufficient, safe and nutritious food at all times to meet the dietary food intake requirements for a healthy life by all South Africans” (DoA, 2002, p15). The policy further elaborates that food security has the following components:

1. Ability to be self-sufficient in food production through own production
2. Accessibility to markets and ability to purchase food
3. Utilisation and consumption of safe and nutritious food
4. Equitable provision of food to points of demand at the right time and place.

Measurements of Food Security

Key determinants in measuring food security

South Africa is considered food secure as a country. The country produces sufficient amounts of staple foods and has the ability to import foods where required to meet the nutritional needs of

the population (FAO, 2008, du Toit, 2011). Evidence suggests however, that at the household level a large number of households are food insecure although the extent of food insecurity is unknown. This is due largely to the lack of good quality data as well as the lack of an accepted measure of food security in South Africa (Altman, 2009; Hart, 2009).

South Africa lacks a national survey which assesses all dimensions of food insecurity although it uses a number of instruments to measure household food security. The national instruments used in South Africa to measure the dimensions of food and nutrition security include:

1. October Household Survey: this was implemented annually between 1994 and 1999. The survey included a question on the ability of the household to feed children as an assessment of food insecurity.
2. National Food Consumption Survey (NFCS): This national survey was conducted twice, in 1999 and 2005. The focus of the survey was households with children between the ages of 1 and 9 years. The survey assessed food procurement, anthropometric indicators and food inventories of households. The sample population for this study was drawn from the national census sampling framework. According to Hendricks (2005), the instruments used to assess nutritional status included the following:
 - a. Socio-demographic household factors related to the environment in which the child lived.
 - b. A 24-hour recall of food consumption for the child.
 - c. A qualitative food frequency questionnaire for the past six months.
 - d. An inventory of food procurement and household food stocks.
 - e. A hunger scale questionnaire providing information on actual hunger experienced (or not) by the child.
3. Food insecurity Vulnerability Information and Mapping System (FIVIMS): a regional study conducted in 2005 in selected areas (Mpumalanga and Limpopo) measured hunger in households.
4. General Household Survey (GHS): is a large national study which asks general questions and which focus on hunger over time. Between 2002 and 2008, the GHS asked households to indicate whether and how often adults and children went hungry because there was not enough food in the household. The question was discontinued in 2009 but reinstated in the 2010 questionnaire. Since 2009, the GHS questionnaire included a set of questions based on the Household Food Insecurity Access Scale (HFIAS) to determine households' access to food. These questions aim to measure household food access by asking households about modifications they made in their diet or eating patterns during the previous month because of limited sources to obtain food (Stats SA, 2012).
5. Income and Expenditure Survey (IES): explores the extent of poor household's expenditure on food. The IES provides information on the food spending and home food production patterns. This national survey collects information on income levels and sources of households and expenditure patterns. In the 2005/6 survey the diary method was used for the first time together with the recall method. Households were requested to record in a diary provided all the acquisitions of that household over a period of 4 weeks.
6. The Integrated Food Security Strategy (IFSS): the IFSS used adequacy of daily energy intake (set at 2000 kcal/day), based on World Health Organisation's (WHO) as the best direct measure of food insecurity. The IFSS estimated that 39% of the population did not meet their daily energy requirement (2000 kcal/day) (DoA, 2002). Also, the IFSS used income earning capacity of households to measure food insecurity. The IFSS used the average price of the food basket compared to household income and expenditure to assess food insecurity at household level.

7. The South African Medical Research Council (MRC) measures food insecurity in relation to undernourishment. The MRC classifies someone as food insecure if they receive less than 2261kj per day. In monetary terms this is R 211 per person based on 2000 prices.

A strong call for establishing a common household food security target for South Africa has been made with the motivation that a food security target will enable more effective policy response and will ensure efficiency in fiscal spending in relation to food security interventions (Jacobs, 2009). According to Jacobs the development of a household food security target should take into account the following:

- Household composition: household size and the number of children (to account for economies of scale in consumption)
- Wealth and livelihood strategy: income and assets (land, livestock, labour etc.)
- Geography: rural/urban location and formal/informal settlements
- Institutions: markets, the state, social capital/networks
- Time: whether the food security condition is transitory or chronic
- Risk: shocks that are weather-related, health-related and so forth, commodity price movements

Composition of required food nutrition - the basket and composition of food available to the poor: both rural and urban

A nutritionally adequate basket of food requires dietary diversity which is measured in terms of food groups. The Income and Expenditure Survey identifies a number of categories of food: bread and cereals, meat, fish, dairy, fats and oils, fruit, vegetables, sugar (jam, chocolate etc.), tea & coffee and non-alcoholic beverages. Evidence suggests that only 1 in 5 households spend sufficiently for a nutritionally adequate food basket and that 1 in 10 rural households compared to 1 in 4 urban household can afford this basket. The difference between urban and rural is linked to the type of foods purchased with rural households spending more on grain, fruit and veg and less on meat in comparison with urban households in the same decile. Rural households also spent less on animal products such as milk and eggs (Aliber, 2009).

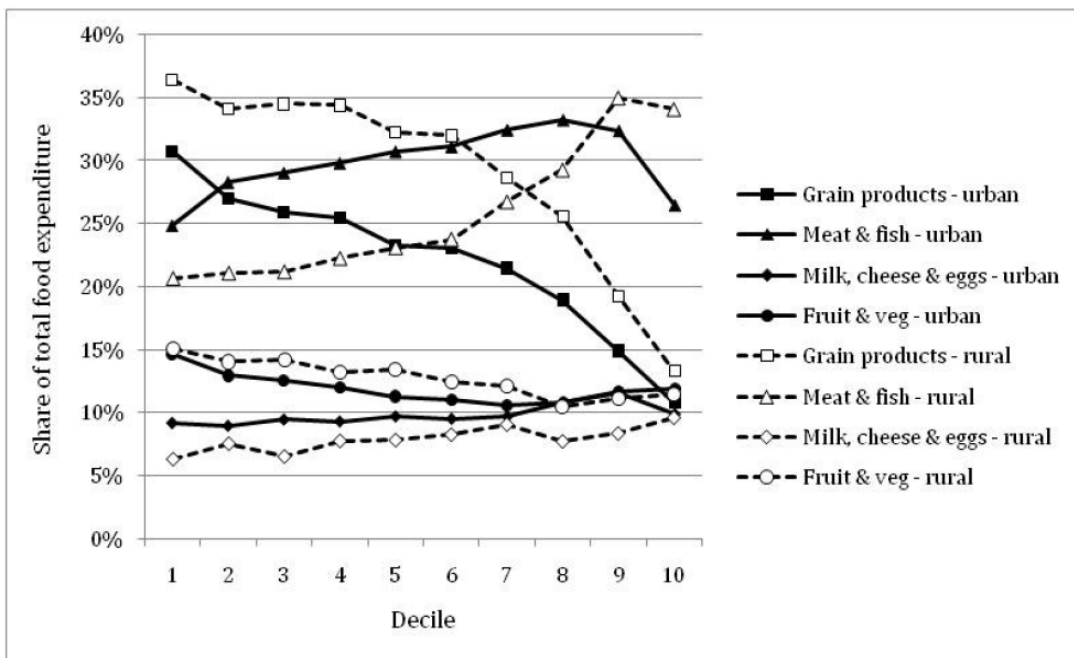
Figure 3 and

Figure 4 provide clear evidence of the relationship between economic status and dietary diversity with poorer households' diet being less diverse.

Figure 3: Dietary Diversity by food groups, across urban and rural households and by income deciles

Source: Aliber (2009)

Figure 4: Dietary Diversity by food groups across deciles in South Africa



Source: Aliber, 2009

Implications for civil society organisations

Civil society organisations have a key role to play in advocating for a clearly defined food security target to be established and for the state to establish a proper monitoring and evaluation system including impact assessment ex-post for the programme which can feed into learning. Furthermore, CSOs need to have a better understanding of the definitions and measurements of food security to facilitate local community communication with civil society. The importance of accurate data for planning cannot be sufficiently emphasised. Better understanding of these issues will also ensure that CSOs engage at the same levels with government and other stakeholders.

Dimensions of Food security

Overview of the gendered dimension of food security

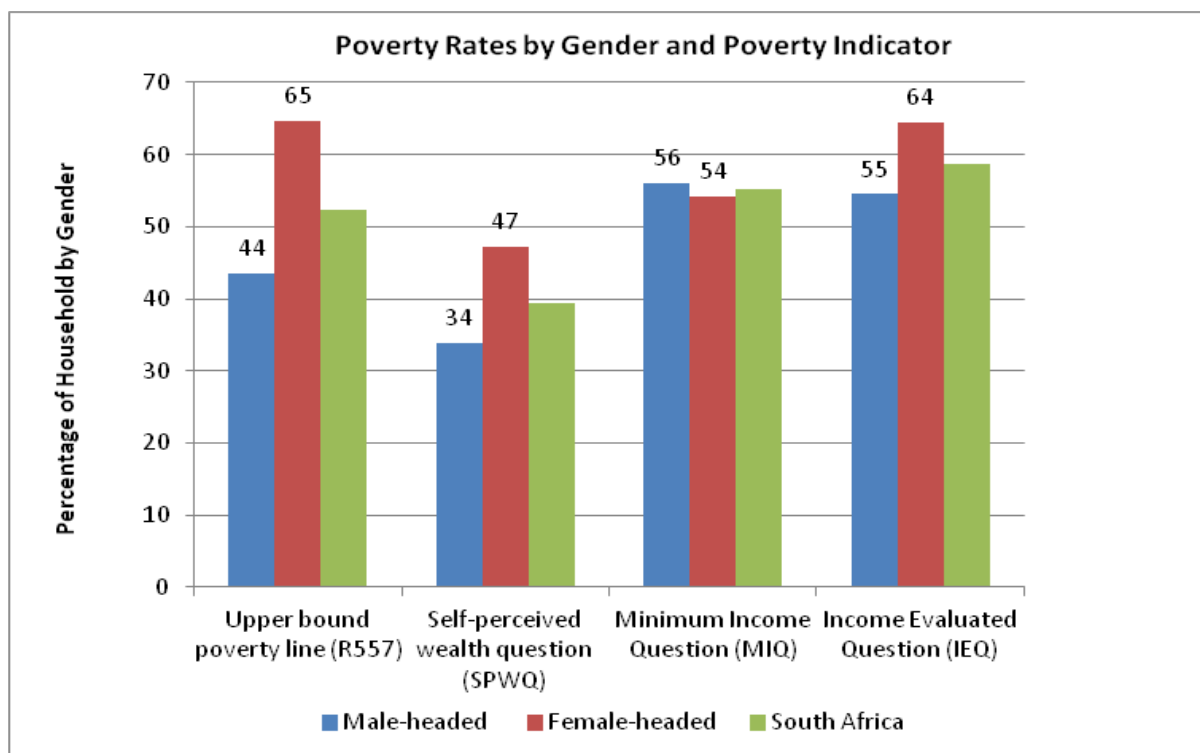
While the four dimensions are crucial to understand food security at the household or community level, the gendered dimension of food security needs to be highlighted as a cross cutting issue in all the dimensions, given the role played by women towards food security for their households. Women are key role players in the production of food and in ensuring that every individual in the household have access to food and consume all the nutritious food required for a healthy lifestyle as well as improving the food security status of any household.

According to FAO, women account for more than half the labour required to produce the food consumed in the developing world and as high as three quarters of the food consumed in Sub Saharan Africa. Despite their important contribution, women face many challenges in agricultural production including unequal access to land, agricultural inputs, access to technology, extension support and to finances for production (Quisimbing et al., 1995). Traditionally, women have little or no say in the economic affairs of a household, such as food provision through farming, labour income or other sources, stemming from the male dominance of men as heads of households. Most men, particularly in the rural areas, are the decision makers on household economic affairs, while the women's responsibility is centred around preparing the food and caring for the vulnerable members of the family, especially children. For this reason, the roles of both women and men are analysed in terms of the four dimensions.

The need to focus on the gender dimension of food security is supported by findings from the literature that show relatively high proportions of both female headed and/or female-centred households being more vulnerable to poverty and, hence to food insecurity (AFSUN, 2009; Stats SA, 2009 and 2012, Reddy and Moletsane, 2011). The traditional survey approaches and those used for national statistics focus on the binary household typology of female- versus male-headed households for poverty analysis, as reflected in

Figure 5.

Figure 5: Poverty Rates by Gender and Poverty Indicators



Source: Constructed from Stats SA, 2012

Figure 5 above presents poverty rates by gender according to the objective and subjective measures or indicators of poverty defined by Statistics South Africa¹ (Stats SA, 2009). In the 2008/2009 Living Conditions Survey (LCS), the objective measures refer to monetary value² in terms of monthly income (i.e. the upper bound poverty line of R557 per month) for a household to survive, while the subjective measures (e.g. SPWQ, MIQ, and IEQ) are based on households views of their poverty levels.

According to the upper bound poverty indicator of R557 per month, the results show that the poverty rates for individuals (both male and female) living in female headed households is much higher at 64.7% compared to 43.5% for male headed household. On the other hand, the poverty profile of the female versus male headed households differs substantially according to the three subjective indicators of poverty, namely: the SPWQ, the MIQ and the IEQ as shown in

Figure 5 above. Nevertheless, the high poverty rates for female headed households are consistent across all the poverty indicators. This clear incidence of poverty among female headed household is an indication of their vulnerability to food insecurity.

The traditional approach to food security study of focusing on the binary typology of household along male- female headship, particularly in the rural areas, are now being expanded and replaced with a four-fold³ typology, that focus on female-centred households, especially in the urban areas (AFSUN, 2009). The distinction between the different types of households is necessary to show that the proportion of female centred households is relatively higher, an indication of single parenthood burdens of food security on women. This distinction of typology is also useful for the illustration of the gendered dimension of food insecurity, given the vulnerability of women in general. To illustrate the fact that there are more women centred households in most Southern African cities, survey data collected from poor urban neighbourhoods in eleven cities by the African Food Security Urban Network (AFSUN⁴), show

¹ These measures come from the results of a 2008/2009 Living Conditions Survey.

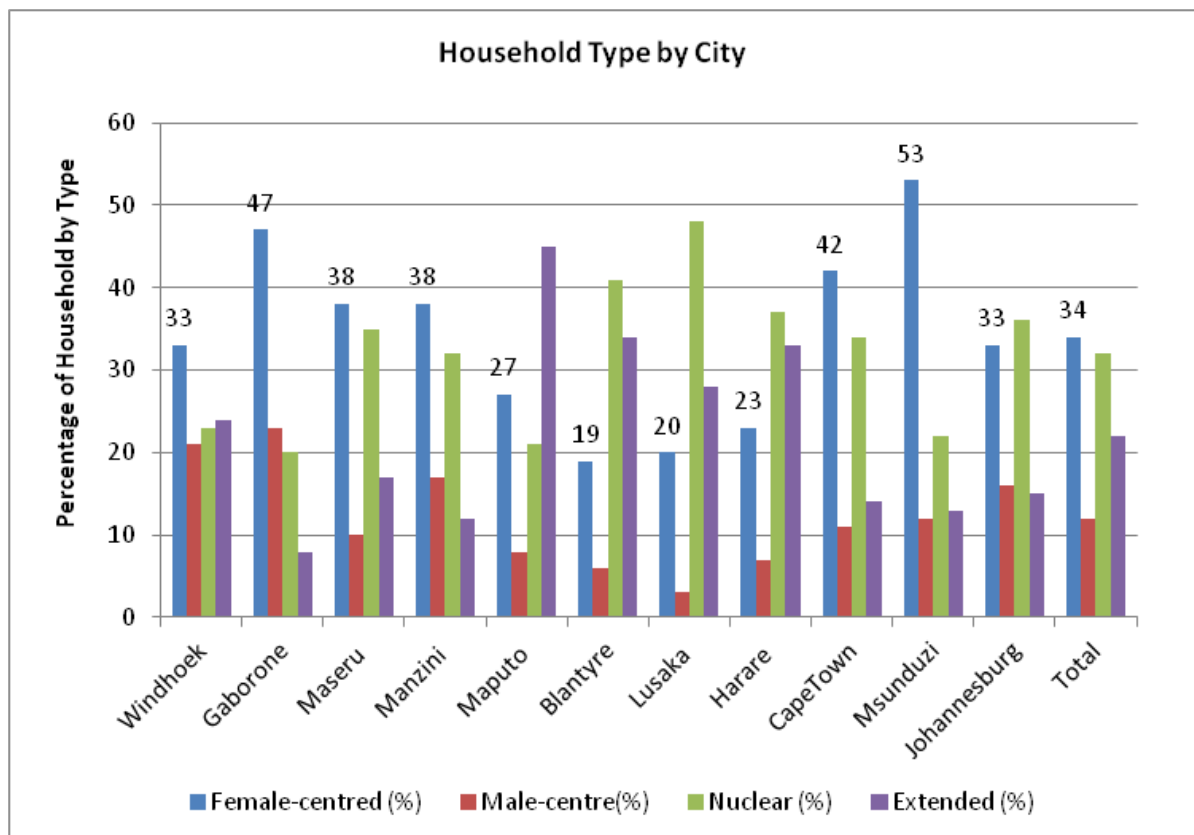
² See Stats SA, 2012 for detailed definitions of the poverty indicators/measures.

³ The four-fold typology refer to: a) female centred households as those with no husband/male partner, but include relatives, children and friends; b) male-centred households as those with no wife/female partner, but include relatives, children and friends; c) a nuclear household have both husband/male and wife/female partners with or without children; d) extended families have both husband/male and wife/female partners and children and relatives.

⁴The urban food security survey representing 6,453 households and 28,771 individuals was conducted simultaneously in late 2008 and early 2009 in eleven cities in nine countries: Blantyre (Malawi), Cape Town, Johannesburg & Msunduzi (South Africa), Gaborone Botswana), Harare (Zimbabwe), Lusaka (Zambia), Maputo (Mozambique), Manzini (Swaziland), Maseru (Lesotho), and Windhoek (Namibia). The surveyed cities represent a

high incidence of female centred households, an indication of possible correlation between gender and poverty (Figure 6).

Figure 6: Household Types by City



Source: Constructed from AFSUN, 2009

The high proportion of 34% for female-centred households followed by 32% of nuclear households (which include women), is a relevant finding for analysing the gendered dimension of food security in general, and in the urban areas in particular (AFSUN, 2009). Across all the nine cities surveyed, the ratio of female centred household is higher, with Msunduzi in South Africa recording the highest ratio of 53% followed by Gaborone of 47% and Manzini and Maseru at 38% respectively. On the contrary, the ratio of male centred household is less than 25% for all the cities (AFSUN, 2009), justifying the need for a gendered dimensional analysis of poverty and food insecurity.

The impact of food security on marginalized groups - woman, children, youth and people with disabilities

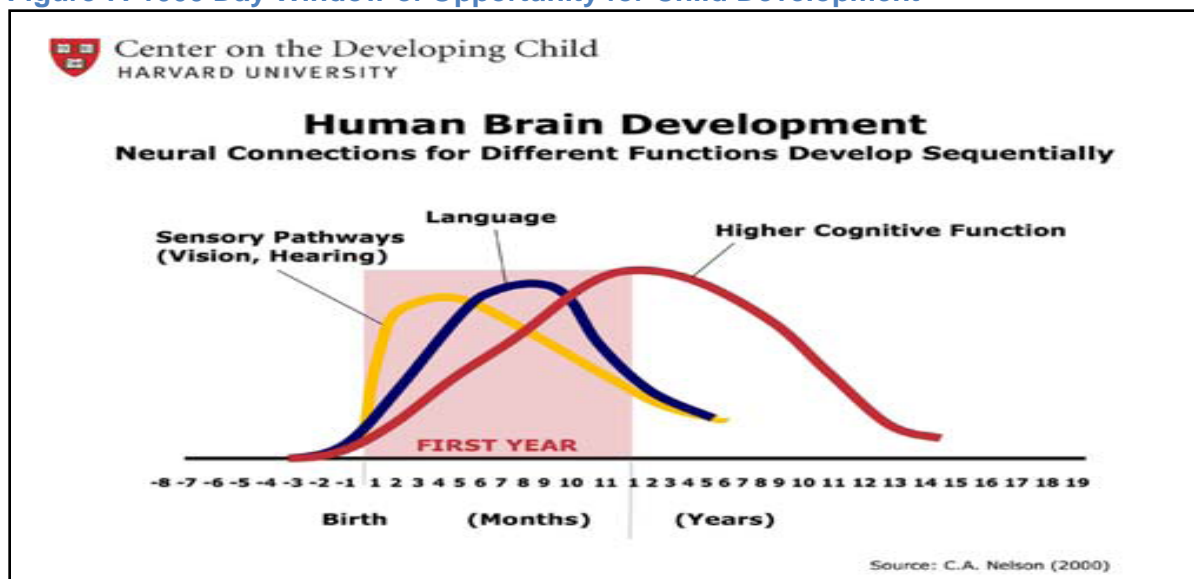
mix of large and small cities; cities in crisis, in transition and those on a strong developmental path; and a range of local governance structures and capacities as well as natural environments.

A direct consequence of food insecurity is the shocking reality of the percentage of malnourished children due to nutritional deficiencies. In South Africa there are approximately 14 million people who are vulnerable to food insecurity and 1.5 million children under the age of 6 years old are stunted by chronic malnutrition. Most poor households consume monotonous diets consistently and very often they are not concerned much about the nutritional component of the food they consume as long as they get something to eat. Their diet often consists of food with a low level of micro-nutrients with a high content of starch (Altman et al., 2009).

The 2007 Lancet Series on Maternal and Child Nutrition highlighted the 1000 day window of opportunity from pregnancy to 23 months as a critical period in the development of the child and noted that failure to address the needs of children during this period have an irreversible impact on the child's future wellbeing. Addressing food and nutrition security of children is critical to their development (Nelson, 2000) (

Figure 7).

Figure 7: 1000 Day Window of Opportunity for Child Development



Source: Nelson (2000)

The nutritional requirement of children below the age of five is high and there is a need of diversification of diets in order to ensure that they acquire all the necessary nutrients they need as they develop. In poor households or food insecure homes, the children are more at risk of diseases that are attributed to a lack of micro nutrients and other essential nutrients that foster growth. In some households there are structured periodic meal times and children often only eat when the adult is eating, and since children have a higher energy requirement, because they are more active than adults, they might suffer from nutritional deficiencies.

Some households are characterized by the presence of both under- nutrition and malnutrition because of the variation in the energy requirements of the different individuals in a household. Educational programmes that are directed to woman (since they are key role players in preparing food for children) may be necessary in order to inform them on the different ways of improving the nutritional content of the food they eat. Children with nutritional deficiencies are

mostly vulnerable to disabilities which could have been prevented if they had access to the right kind of food. The impact of food insecurity on young children carries over to the youth because it affects their ability to concentrate at school, their ability to learn and thus affecting the overall level of education. Poor levels of education affect the income that they will be able to earn in the future and this will result in a food insecurity cycle that is generational.

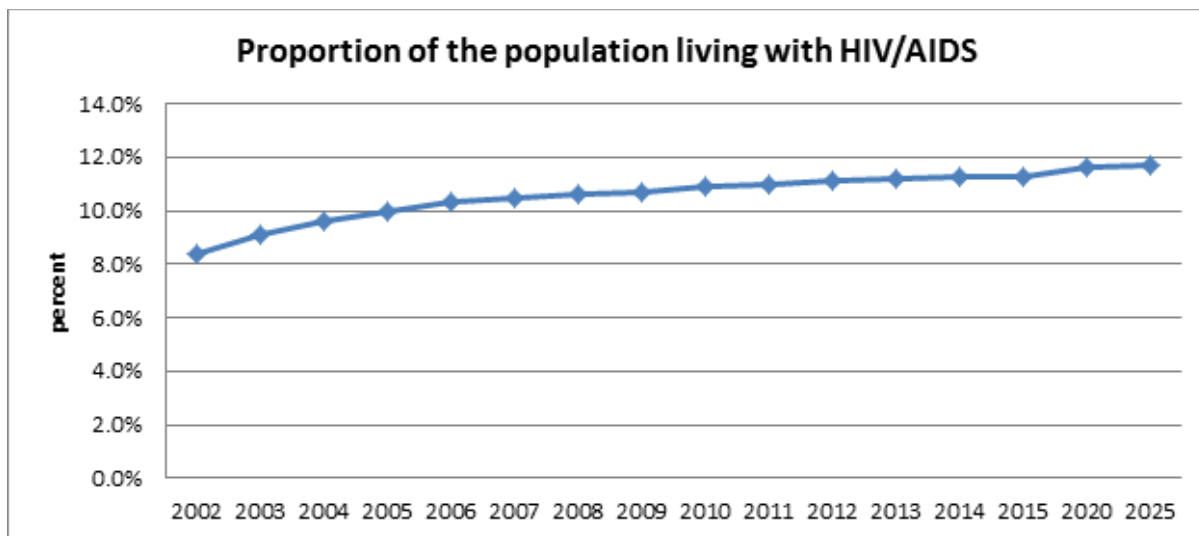
People with disabilities have a high nutritional requirement and most of them do not have people that are looking after them to ensure that their nutritional needs are met and this creates vulnerability to food insecurity. This also affects their productivity and learning ability which makes them even more vulnerable to poverty and food insecurity. Another impact of food insecurity on people living with disabilities is that it creates more vulnerability to other forms of disease such as organ malfunction or problems associated with mental utility. This will affect their ability to earn income and thus they become more vulnerable to poverty and food insecurity.

There is a serious call for interventions in the form of educational programmes, research and development, food aid programmes in order to assist the more vulnerable members of the rural as well as urban households and individuals. Another technique that can be used to enhance food security especially in urban areas is job-creation and income generation strategies that are equitable to both men and woman and the support of woman's engagement in food production as well as marketing.

The impact of HIV/AIDS on food security and nutrition in South Africa

The impact of HIV/AIDS on food and nutrition security is a serious problem for South Africa. The situation is even worse for poor rural and urban communities characterised by poverty and high inequalities. Figure 8 shows the proportion of the South African population living with HIV/AIDS. Results show a gradual increase of the population living with HIV/AIDS from about 8% in 2002 to about 11% in 2013. Projections to 2025 show a continued slight increase to about 12%. A large proportion of the poor rural and urban households are at risk of food insecurity as the result of HIV/AIDS. More effort is required to improve the food security situation of the poor, especially those affected by HIV/AIDS.

Figure 8: Estimated HIV prevalence rates, 2002 - 2025



Source: South African Institute of Race Relations, Health and Welfare, 2010/2011

Table 1 below summarises the impacts of HIV/AIDS impacts on food security and rural livelihoods (see Hosegood, Preston-Whyte, Busza, Moitse and Timaeus, 2007; HSRC, 2004; de Waal and Whiteside, 2003; Drimie, 2003 etc.). De Waal and Whiteside (2003) argue that the HIV/AIDS epidemic is the reason why households in southern Africa are experiencing food shortage. Household-level studies clearly show a decline in agricultural production as a result of the HIV/AIDS effect. Evidence from empirical studies show that households affected by HIV/AIDS morbidity and mortality lose assets, income and skills. For example, households with a chronically-ill member/s experience an average reduction of their annual income of 30 to 35% (De Waal and Whiteside, 2003). HIV/AIDS forces households to alter their livelihoods strategies. For instance, households often resort to cultivating smaller areas of agricultural land and desert more high input high output activities for those that require less labour. Empirical evidence shows a close correlation between access to food and household labour availability (De Waal and Whiteside, 2003).

Furthermore, the HSRC summarised the potential impact on agricultural productivity of households affected by HIV/AIDS to include (HSRC, 2004: 21):

1. A decrease in the area of land under cultivation at the household level (due to a lack of labour stemming from illness and death among household members).
2. A decline in crop yields, due to delays in carrying out certain agricultural interventions such as weeding and other inter-cultivation measures as well as cropping patterns.
3. Declining yields may also result from the lack of sufficient inputs, e.g. fertiliser and seeds.
4. A reduction in the range of crops produced at the household level.
5. A loss of agricultural knowledge and farm management skills, due to the loss of key household members due to AIDS.
6. Decline in livestock production for affected households as the need for cash and the loss of knowledge and skills may force some families to sell their animals.

Therefore, the interaction of the loss of household labour, assets, income etc. from HIV/AIDS related sickness and deaths exacerbates the food and nutrition insecurity of most poor rural and urban households.

Table 1: Impacts of HIV/AIDS on food security and rural livelihoods

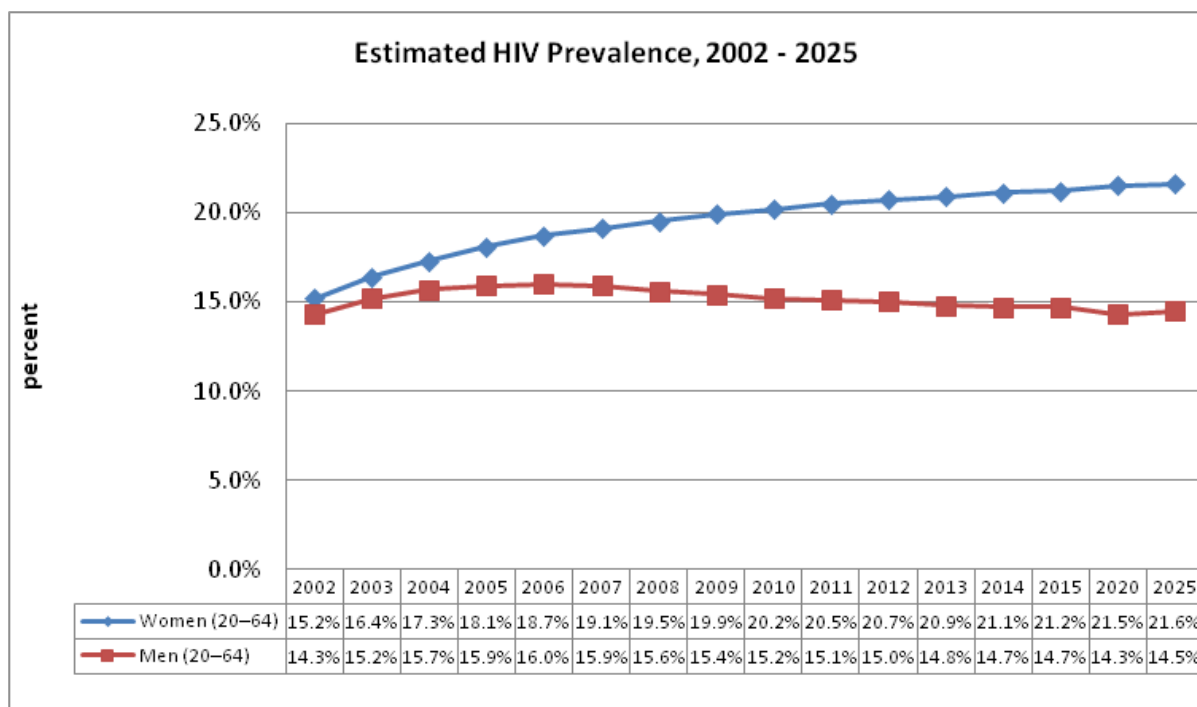
Impacts of HIV/AIDS on food security
Decrease in the agricultural labour force
Chronic illness or death of a household member
Change in household composition
Increase in the number of orphaned children
Change in household nutritional status
Acute decline in household income
Decrease in credit availability and use
Decrease in aggregate community income and assets
Loss of agricultural knowledge, practices and skills and their transmission from one generation to the next
Decrease in access to natural resources, especially land
Exacerbation of gender-based differences in access to resources
Change in social resources
Increase in social exclusion
Decrease in tangible household assets
Degradation in public services

Source: *FAO HIV/AIDS Programme (2002) cited in HSRC (2004)*

Gendered dimension of HIV/AIDS in relation to food security

Figure 9 below presents the estimated prevalence of HIV/AIDS among men and women aged 20 to 64 for the period 2002 to 2025. Results show that in each year and for the same age group, there are more women infected with HIV/AIDS than men. For example, in 2012, the HIV/AIDS prevalence was 5.7% higher for women compared to men. The results imply that women are more vulnerable to HIV/AIDS impacts on food security than men. For example, the food availability and access dimensions of household food and nutrition security would be severely affected when the affected are women who have been ensuring food availability and access.

Figure 9: Estimated HIV prevalence in men and women aged 20 to 64, 2002 – 2025



Source: South African Institute of Race Relations, Health and Welfare, 2010/2011

The presence of HIV/AIDS raises the nutritional requirements of a household as people living with the disease have a higher than normal nutritional requirement to support their compromised immune system (Reddy and Moletsane, 2009; de Waal and Whiteside, 2003). In addition, the nutritional requirements of pregnant women increase to support the development and growth of the baby. Therefore, HIV/AIDS through increased nutritional requirements adversely impacts on food and nutrition security of many poor rural and urban households. The impacts are even worse for pregnant women affected by HIV/AIDS. For example, about 28% of pregnant women in 2007 were living with HIV/AIDS (Labadarios et al., 2009). It is evident that HIV/AIDS places a double burden of higher nutritional requirement on pregnant women, making them even more vulnerable to food insecurity.

High HIV/AIDS prevalence makes it difficult for people and households affected by the disease, especially women, to be food secure (Reddy and Moletsane, 2009). This is even worse in situations where women participate in household agricultural production activities to ensure food availability and access. For example, when male household member/s become sick and later succumb to AIDS, other family members, especially women, have to take care of the sick. This reduces the time and labour available to engage in agricultural production activities and combined with other factors such as loss of assets directly affects food availability and access of the household. However, if the woman household member falls sick and dies due to HIV/AIDS, males are usually not caregivers and male household labour is not affected. In some cases, the males are not involved in agricultural production activities and even when their labour is not affected, the household will suffer from food insecurity as the main provider (the sick female member) won't be able to ensure provision of food for the household. Given that women take most of the burden of care in the context of HIV/AIDS, they are more negatively affected by food insecurity than other groups in households and communities (Reddy and Moletsane, 2009).

Implications for civil society organisations

There are a number of civil society organizations in South Africa involved in the fight against, the treatment of, and looking after those affected by HIV/AIDS. The CSOs focus on prevention; treatment, care and support; impact mitigation; management; policy, advocacy and research. The Centre for AIDS Development, Research and Evaluation (CADRE) (2010) argues that over at least the past decade there have been localized projects that have been emerging across South Africa to fill gaps in HIV/AIDS service provision in nearly all areas including in impact mitigation through such activities as food-gardening and support for orphans and vulnerable children (which all go towards improving food security for those affected).

Challenges facing South African civil society organisations include inadequate and project oriented capacity building for civil society organizations to strengthen and better enable their capacity as HIV/AIDS response units. There is also limited information on the number and type of civil society organizations, actively involved in HIV/AIDS related activities, making it more difficult to assist them (CADRE, 2010). Profiling the CSOs involved in HIV/AIDS and food security related work would help planning and coordination of their work to facilitate complementarity and avoid duplication of activities.

Households' ability and access to secure nutritious food

Poverty

The United Nations Expert Group on Poverty Statistics posits that there are three approaches to determine poverty lines:

Absolute poverty line: the absolute poverty line is linked to a specific welfare level either income or expenditure.

Relative poverty line: the relative poverty line is based on a predetermined cut off point below which a %age of the population can be located.

Subjective poverty line: subjective lines are based on people's perceptions of what would constitute a minimum adequate household budget.

The absolute poverty line is the common approach used in countries like South Africa where poverty levels are extremely high. The absolute poverty line is determined through two components – food and non-food expenditure based on a “cost of basic needs” approach developed by Ravillion. Based on calculations of the average national energy requirement for an individual South Africa defines 2261 kcal per capita, per day as the minimum requirement for an adult. To determine the cost, a “reference food basket” is defined and costed. South Africa has a total of 31 items included in the “reference food basket” and the costs are estimated based on expenditure shares on these foods for deciles 2 to 4 (StatsSA, 2008) (Table2).

Table 2: Reference Food Basket

Group	Food item
Beverages	Instant coffee
	Ceylon tea
	Rooibos & herbal tea
	Aerated cool drinks
Dairy products and Eggs	Fresh Milk
	Milk powder & whiteners
	Buttermilk, maas/sour milk
	Eggs
Fats and Oils	Margarine
	Cooking oils
Fish, Meat, Poultry and their products	Mutton
	Beef
	Chicken
	Boerewors
	Canned fish
Grain products	White bread
	Brown bread
	Cake flour
	Bread flour
	Rice
	Mealie-meal

	Samp
Fruits & Vegetables	Apples
	Bananas
	Oranges
	Onions
	Tomatoes
	Cabbage
	Fresh potatoes
Miscellaneous	White sugar
	Brown sugar
	Salt
	Soup powder

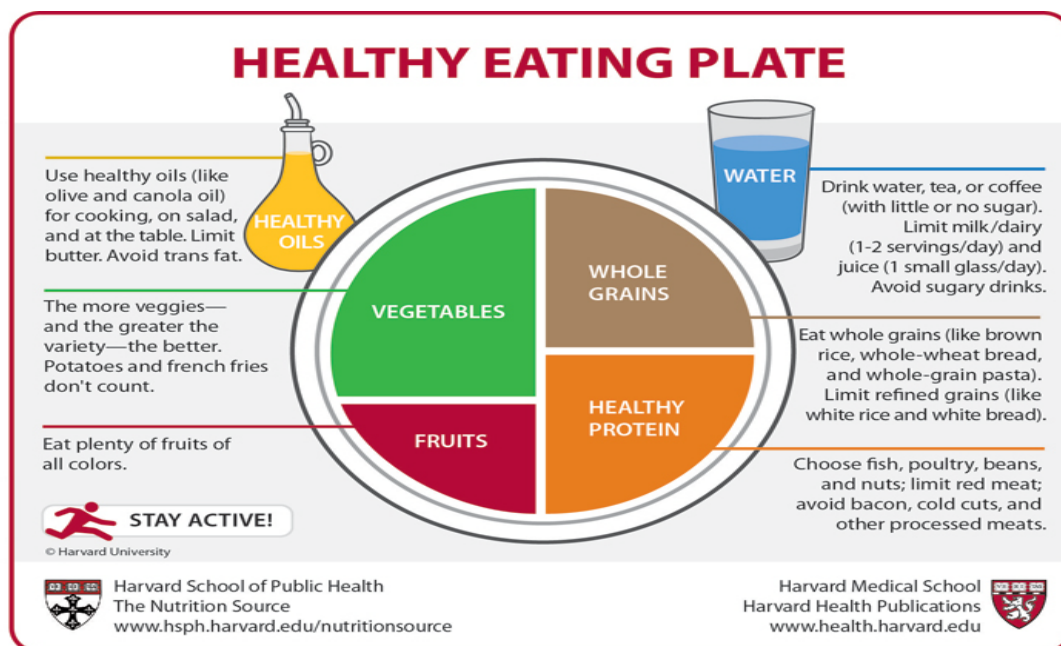
Source: Stats SA (2008)

- The Living Conditions Survey (Stats SA, 2008/2009, p 5) uses several poverty lines as listed below-:
- Food poverty line = R305 (in March 2009 figures) per person per month. The food poverty line
- refers to the amount of money that an individual will need to consume the required energy
- intake.
 - Lower-bound poverty line = R416 (in March 2009 figures) per person per month. This refersto the food poverty line (R305) plus the average amount derived from non-food items ofhouseholds whose total expenditure is equal to the poverty line.
- Upper-bound poverty line = R577 (in March 2009 figures) per person per month. This refersto the food poverty line (R305) plus the average amount derived from non-food items ofhouseholds whose total food expenditure is equal to the food poverty line.
- International Poverty Line \$1.25 per day = R4.81 (in 2005 figures) per person per day adjusted for Purchasing Power Parity (PPP)
- International Poverty Line \$2.50 per day = R9.63 (in 2005 figures) per person per day (adjusted for PPP)

Access of micro-nutrients that are critical for the proper functioning of the body

The quality of diet is central to addressing food and nutrition security. Micro nutrients which are found in natural, processed and fortified foods are essential for healthy and normal growth although they are only required in small quantities. Micro nutrients can influence adult and child health outcomes, promote wound healing, develop and strengthen our immune systems and are necessary for production of blood and energy production (FAO, Micro nutrients Flip Chart, undated). Key micro nutrients include iron, iodine, vitamin A, vitamin B, zinc and calcium. A food pyramid or food plate has been widely used to indicate what makes up a healthy diet (Figure 10).

Figure 10: Healthy Food Plate



Source: www.hsph.harvard.edu/nutritionsource

The World Health Organisation recommends regular intake of at least 400-500 grams of fresh fruit and vegetables daily to reduce nutrient induced illnesses. Micro nutrient deficiencies (also referred to as “hidden hunger”) are widespread globally with higher levels of prevalence in developing countries and among subsistence farmers in particular. According to FAO (2002) three micro nutrients deficiencies which have significant implications for public health are Vitamin A, iron and iodine. Vitamin A deficiencies, mostly found in young children can lead to blindness, while iron deficiencies which affect children and child bearing women can lead to anaemia which is a strong factor in maternal and neonatal morbidity. Iodine deficiencies can lead to mental retardation and in its extreme form to cretinism (a form of arrested development both physical and mental with dystrophy of the bones), still births and birth defects. A dietary diversity score has been developed which measures the mean number of food groups consumed by a person over a prescribed period. According to Labadarios et al (2011) a poor diversity score was when a person consumed 4 or less of the 9 food groups

Improper food storage, handling and preparation of fruit and vegetables can impact on the nutritional value of the food in terms of food safety. Overcooking and holding food for a while

before consuming can also lead to nutrient loss (Steyn et al, 2011). These losses can be addressed through provision of nutritional education. Knowledge of essential components of diet is important for nutritional disease prevention and mitigation. A number of civil society interventions are focussed on making food accessible to poor and vulnerable households through providing support for smallholder farming, communal gardens and through distribution of food parcels to poor households and direct feeding in schools and crèches. Very little is known about the extent to which these practices are informed by the need to promote dietary diversity. A study undertaken by Motala and Jacobs(2011) pertaining to the rollout of the Community Work Programme, found little evidence in the food garden development work of an appreciation for dietary diversity in the selection of crops to be grown. Similarly the study found that crèches that provided nutrition for young children did not actively promote dietary diversity.

Possible interventions which CSO can promote include the following:

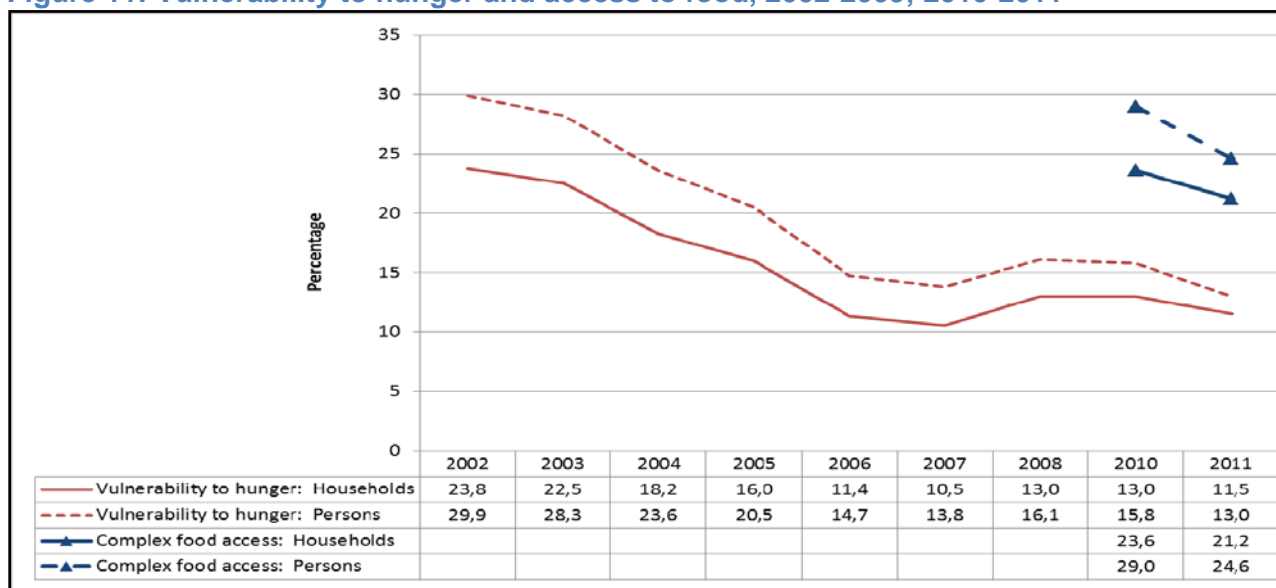
1. Engaging in policy advocacy to ensure that nutrition is actively incorporated into food security policies, programmes and interventions.
2. Integrate nutrition counselling in all food security interventions- including through agricultural extension, particularly when women are counselled.
3. Promote dietary diversity in crèche and school feeding menus to ensure that children receive all the essential nutrients is highlighted
4. Encourage the introduction of micronutrient-rich crop varieties in agricultural production;
5. Explore the potential for promoting animal food production to improve access to protein and dairy produce;
6. Ensure that vulnerable household members consume the foods produced. Cultural and other factors need to be addressed in this regard.

Profile of households with ability and access to food security

South Africa still faces high degrees of socio-economic inequalities and this worsens poverty levels, hunger, morbidity linked to racial groups (DAFF, 2012). Food insecurity is directly linked to poverty which is also directly linked to income generation opportunities and ownership of capital assets. There are comparatively few individuals or households in the case of homestead or subsistence farmers who are totally self-reliant for food throughout the year (De Klerk *et al.* 2004; Gregory *et al.* 1999).

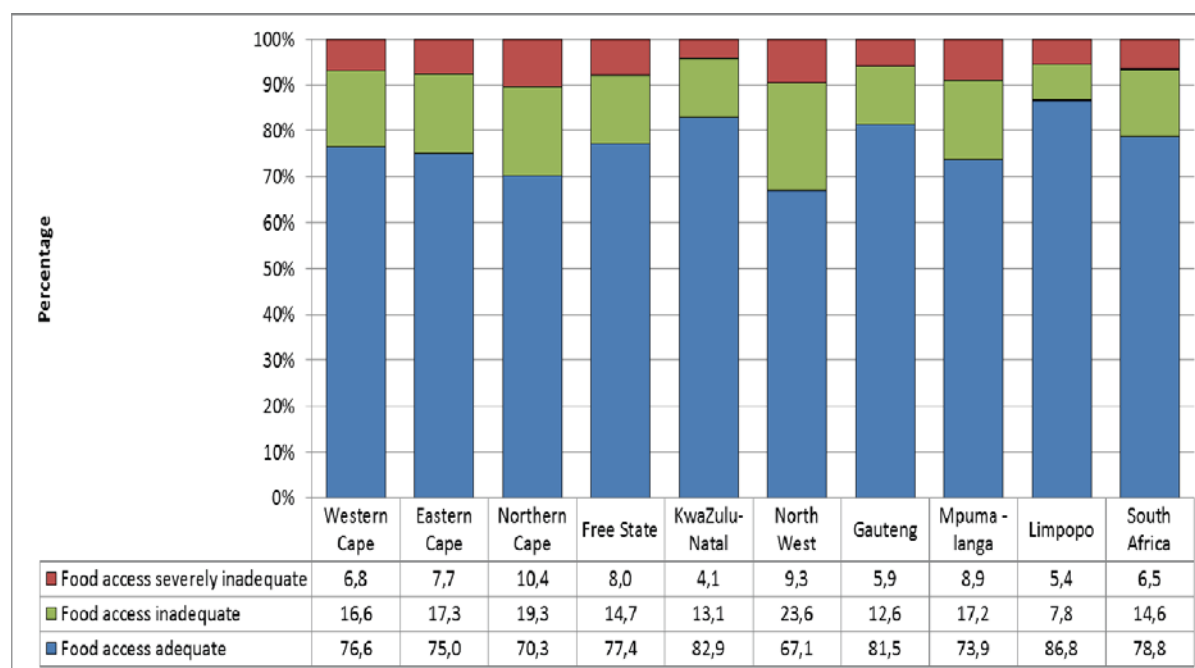
The 2011 GHS shows that the percentage of people vulnerable to hunger declined from 29.9% in 2002 to 13% in 2011 (Figure 11). According to Vella (2012) despite many improvements in South Africa over the past two decades, food security and nutrition remain key obstacles to achieving national equality. The country still faces challenges of food insecurity as evidenced by some indicators of food insecurity such as malnutrition rates among children which have not improved since independence. Furthermore, South African women are severely affected by lack of security in food with about a quarter of females in the country without adequate levels of nutrition and vitamins (ibid). Rising food prices are a significant threat to food security, especially among the poorest in South Africa. Recent years have seen food prices rising faster than the economy's consumer inflation level. For example, in 2011 annual inflation was 5%, within the reserve bank's target range, while food inflation was recorded at 10.3% in January 2012. Higher food prices erode the purchasing power of households constraining purchase of food and alternative livelihood strategies aimed at achieving food security (ibid). Rising food prices lead to lack of affordability and render millions of poor South Africans food insecure.

Figure 11: Vulnerability to hunger and access to food, 2002-2009; 2010-2011



Provincial analysis of food access from the 2011 GHS showed that the North West had more serious problems of food access with 32.9% households with inadequate or severely inadequate access to food. The other provinces which experienced high inadequate food access include Northern Cape (29.7%), Mpumalanga (26.1%), Eastern Cape (25%), Free State (22.6%) and Western Cape (22.4%). On the other hand Limpopo province had the highest food access with 86.8% household having access to food, followed by KwaZulu-Natal (82.9%), and Gauteng (81.5%) (Figure 12).

Figure 12: Percentage of households experiencing food adequacy/inadequacy by province, 2011



The role of smallholder agriculture and impact of community based food production on improving food security

Smallholder farming forms an important part of the South African agricultural sector. An estimated 2.5 to 3million people are engaged in smallholder agriculture (Aliber, 2009). The 2011 General Household Survey (GHS) (StatsSA, 2012) shows that in 2011, almost 23% of South African households were involved in agricultural production activities (Figure 13). About 90% of these households created backyard gardens and only 9% cultivated farmland. According to Aliber and Hall (2012) smallholder farming is concentrated in a few districts countrywide: Vhembe District in Limpopo, OR Tambo District in the Eastern Cape; Ugu District in KwaZuluNatal; and Enhlanzeni District in Mpumalanga account for 26% of all small black farmers in the country. Quality extension support to smallholder farmers has been identified as seriously lacking and requires urgent attention.

Figure 13: Household involvement in agricultural activities by province, 2011

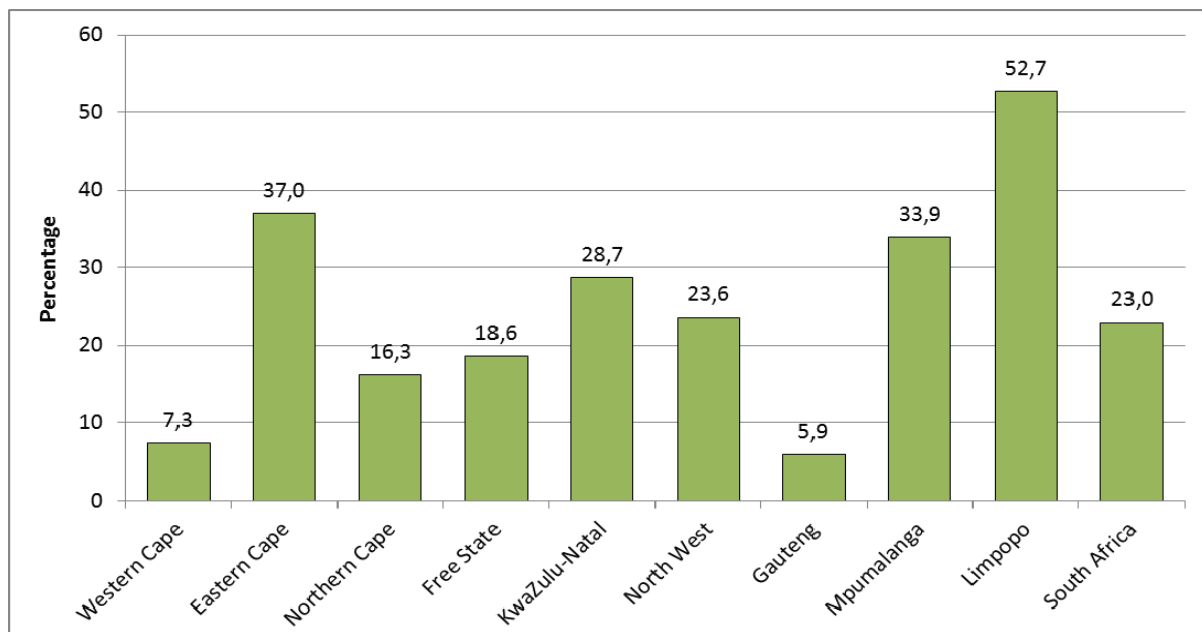
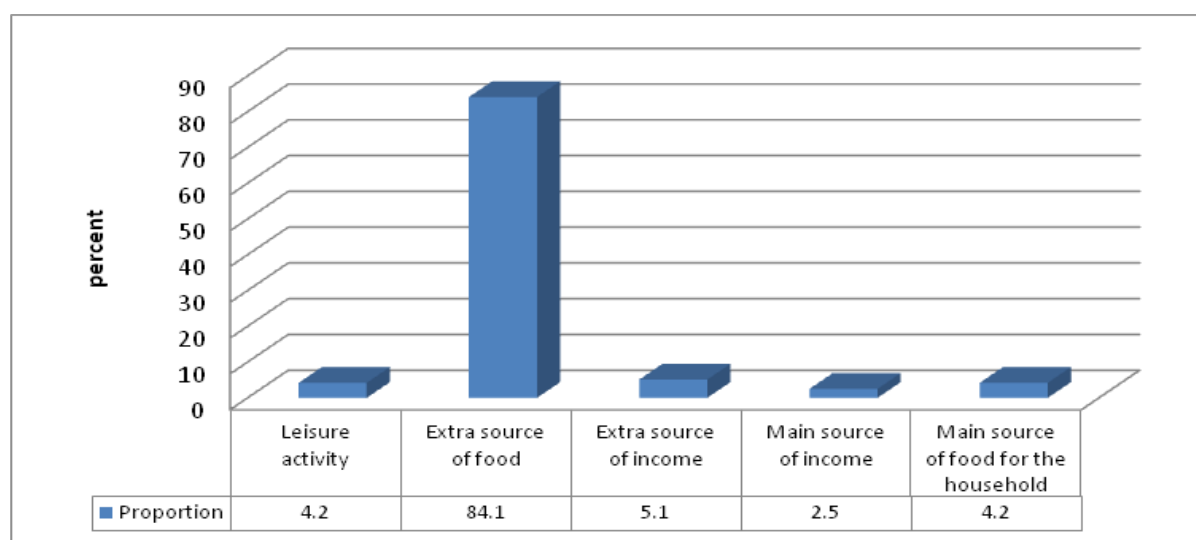


Figure 14 summarises the main reasons for engaging in agricultural activities. The results show that about 84% of the households reported that they were involved in agriculture in an attempt to secure an additional source of food. According to the 2011 GHS this was the case especially in Limpopo (95%) and Eastern Cape (91%). However, most households in Western Cape (31%) engaged in agricultural as a leisure activity and in Northern Cape agriculture was used as an additional source of income (29%) (StatsSA, 2012).

Figure 14: Main reason for agricultural involvement by province, 2011



The majority of smallholder farmers are the poor. Matshe (2009) indicates that 50% of the world's hungry are smallholder farmers, with the landless rural population making up 20% of these. In South Africa, women, who comprise 61% of farmers, make up the majority of subsistence farmers. In addition, young people make up the majority of small-scale farmers, with approximately 1.9 million of them (aged 15 to 29) involved in smallholder farming (Altman, Hart and Jacobs, 2009; and Aliber and Hart, 2009). Targeted interventions focused on women, youth and other disadvantaged groups will result in better food and nutrition security in such instances.

The ability of smallholder farming to promote and ensure food security has been limited in South Africa. For example, Aliber and Hart (2009) analysed agricultural activity at the Molati village in Limpopo (which comprises 830 households). The results showed that of the 830 households, 90% are involved in agricultural activity (90% were involved in crop production and 59% in the production of livestock). Furthermore, among those engaged in crop production, 83% did it as an extra source of household food and 5% as a primary source of household food. Among those engaged in the production of livestock, 29% did it as an extra source of household food while 26% do it as a primary source of household food (see Table 3). Despite the high involvement in agriculture for the purpose of food provision, 49% of Molati residents were reported to be experiencing hunger at some point or another in the twelve months leading to the survey for the study.

This case study, although it cannot be generalised for the whole country, provides an example typical of many smallholder farmers in other parts of the country. Although smallholder farmers are engaged in household food production, usually they are left with food deficits to carry them to the next harvest and would require off-farm income to buy food for the household. Aliber and Hart (2009) argue that off-farm income is normally sought and is essentially part of being a smallholder farmer in South Africa. The majority of the country's smallholder farmers are engaged in other income generating activities in order to diversify their incomes and hence their livelihood sources.

Table 3: Household involvement in agriculture in Molati village in Limpopo, 2009

Household Involvement in Agriculture	Proportion of Households Involved
Production of crops <ul style="list-style-type: none"> • Extra source of household food • Primary source of household food 	90% 83% 5%
Production of livestock <ul style="list-style-type: none"> • Extra source of household food • Primary source of household food 	59% 29% 26%

Source: Aliber and Hart, 2009

Despite the various constraints in smallholder agriculture, the sub-sector plays an important role in providing supplementary food availability for many households. Altman, Hart and Jacobs (2009) argue that there has been considerable increase in the number of black households involved in agriculture between 2001 and 2004; and a slight decrease after that. The increase is argued to be driven by the need to supplement available food to feed larger groups of dependents for most households. Baiphethi and Jacobs (2009) argue that while smallholder farming is important for household food security in South Africa, the productivity of smallholder agriculture is very low. This is one of the factors why both rural and urban households abandon farming for other non-farm income generating activities. The low productivity of the smallholder farming sector is influenced by limited use of high-yielding crop varieties that are used extensively in other parts of the world (Rockerfeller Foundation (2006). Ensuring that smallholder farmers have access to better seeds, fertiliser and technologies, would significantly reduce the inefficiency in their production and food shortage risks (Baiphethi and Jacobs, 2009).

However, Matshe (2009) argues that efforts have been made to bolster smallholder agriculture in Sub-Saharan Africa with little success. Some of the little success examples highlighted include: in Zimbabwe in the 1980s and Malawi in the early 2000s, where these countries had better success driven by direct support almost exclusively to smallholder farmers. These cases provide learning examples for South African smallholder agriculture interventions. However, a detailed analysis of the constraints is required to drive any possible interventions to boost South African smallholder agriculture and its contribution to household food and nutrition security and livelihoods at large.

The basket of goods that are targeted in smallholder production and their impact on eradicating malnutrition

The nature of agricultural activities undertaken by households in 2011 is summarised in Table 4. The results from the 2011 GHS show that the main agricultural activities undertaken by households include poultry production (46%); livestock production (44%); grains and food crops production (42%) and fruit and vegetables (41%). Further analyses of the GHS data showed that the highest percentage of households involved in the production of livestock were in Northern Cape and Eastern Cape with 71% and 63% respectively. In the production of poultry, the highest percentage of households involved was in Eastern Cape (70%) and North West

(52%). For grains and food crops Limpopo (60%) and Eastern Cape (55%) were the leading producers. Fruit and vegetable crops are mainly produced in Mpumalanga (67%) and Free State 66%).

Table 4: Nature of agricultural activities undertaken by households, 2011

Production activity	Number	Percent*
Livestock	1479	43.9
Poultry production	1542	45.8
Grains and food crops	1410	41.9
Industrial crops	9	0.3
Fruit and vegetables	1367	40.6
Fodder grazing/pasture grass of animals	24	0.7
Forestry	9	0.3
Fish farming/aquaculture	1	0.0
Game farming	2	0.1
Other	16	0.5

* A particular household can be involved in more than one activity and therefore percentages do not add up to 100%
Source: Stats SA, GHS, 2011

Questions are usually raised on the ability of household food production's ability to result in improved household nutrition. Kirsten, Townsend and Gibson (1998) used survey data to investigate the relationship between agricultural production and the nutritional status of households in rural KwaZulu Natal. The study looked at the basket of goods produced by smallholder and subsistence farmers and the basket's impact on the respective households' nutrition. Kirsten *et al* (1998) found that the main crops grown by the sampled households were maize, dry beans, pumpkin, white potatoes and cabbages in addition to livestock rearing (about 51% of the households). The production of these crops was mainly for subsistence purposes with a relatively small proportion of the households selling some of their produce. Kirsten *et al* (1998) analysed the impact of these agricultural activities on nutrition using anthropometric indices. The indices focused on children aged between 0 and 60 months (the most vulnerable group) from the sampled households in order to find the link between own production and nutrition. The study revealed the presence of a positive correlation between household food production and household nutrition. Households that had access to seeds and fertiliser and were highly involved in agriculture were less likely to have stunted children (indicating the presence of malnutrition in the household) and were regarded to be better nourished.

van Averbeke and Khosa (2007) used a similar approach to investigate the contribution of own food production on the nutrition of three rural settlements in Limpopo's Waterberg District Municipality. The study showed that households were able to obtain nutrients from food produced from a wide range of dry-land agricultural activities. The food produced by the households was found to contain large enough quantities of nutrients to significantly contribute towards satisfying household nutritional requirements. In addition, through food grown in irrigated home gardens, households were able to obtain and raise their intake of vitamins A and C. van Averbeke and Khosa (2007) argued that there is a direct and positive relationship between food production and household nutritional intake in terms of micronutrients. In addition, smallholder farming also improves household nutrition indirectly by making money available for the purchase of energy fruits, vegetables and dense foods, either through saving on food expenditure or via the sale of produce (van Averbeke and Khosa, 2007).

However, some studies on this subject have raised doubts about the contribution of smallholder farming to household nutrition arguing that savings on food expenditure as the result of own food production does not necessarily go towards the purchase of high quality food, but on non-food items (van Averebeke and Khosa, 2007). Labadarios et al (2011) argue that small-scale agriculture still require more attention and further evaluation regardless of the lack of access by the majority of people. Numerous studies have indicated that in South Africa, food prices are highest where the poor live, and overall, the majority of South African consumed a diet that is low in dietary variety.

Civil society organisations can play an important role in promoting and facilitating smallholder production of nutritious mix of agricultural products that cater for household dietary requirements. In addition, CSOs can also assist farmers' access to inputs such as seeds, fertilisers, etc. to productively use the land they have to produce food for their household as well as for the market. CSO can also play an advocate role to ensure that government provides access to land and other inputs for smallholder farmers to be productive. Also, CSOs can be influential in raising awareness and educating farmers on nutritious dietary requirements for their households and provide training in producing some of the crops.

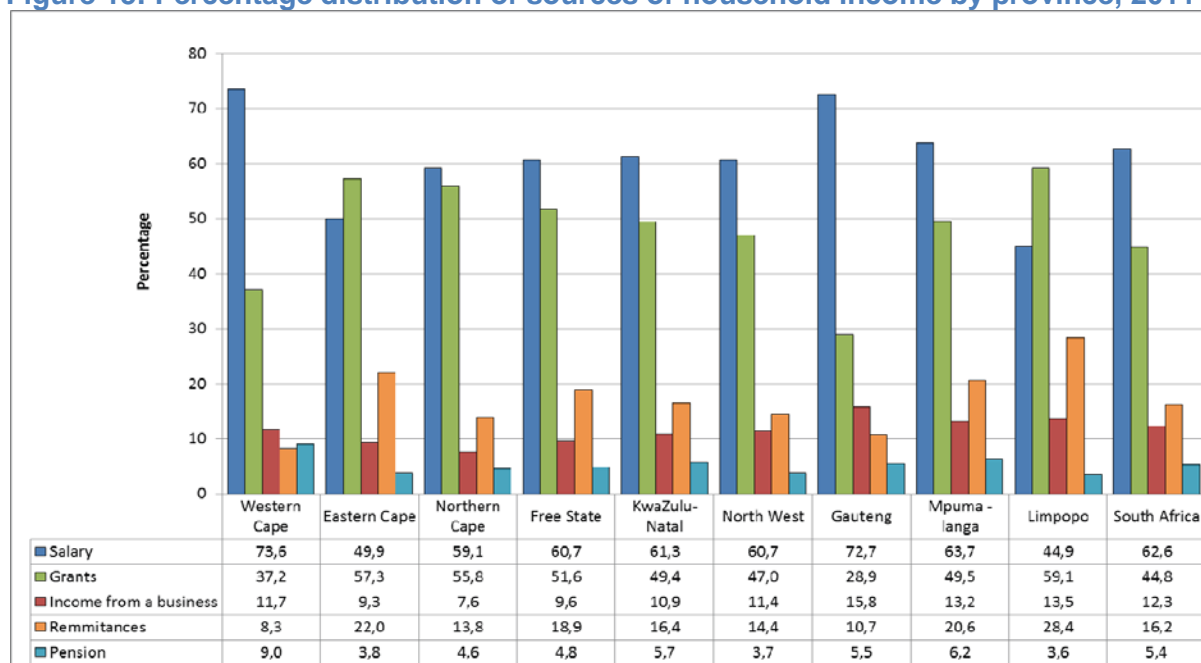
Challenges affecting households' ability to access food and nutrition needs

Household food security is influenced by many factors such as household composition (age, gender, size of household members), wealth and livelihood strategies pursued by adults in the household (wages, grants, remittances and assets), geographical location (urban or rural) and institutions (markets) and social networks (Jacobs, 2009). Some of these factors are discussed below.

Income and sources of income

Figure 15 summarises various sources of income reported by households in the 2011 GHS. Results show that; at the national level the main source of income reported by households include salaries (63%) and grants (45%). Few households reported remittances (16%); income from business (12%) and pension (5%) as sources of income. At the provincial level, the largest percentage of households that reported salaries as main source of income was from Western Cape (74%) and Gauteng (73%). Limpopo (59%) and Eastern Cape (57%) reported the highest percentages of grant income. These two also have the highest poverty levels in the country. Remittances were reported as one of the important sources of income in most provinces, especially in Limpopo (28%), Eastern Cape (22%) and Mpumalanga (21%). Based on these results, the challenges that are faced in the employment sector with people losing their job for example in the mining sector has serious implications on household food security especially for the poor. Altman (2006) estimated that approximately 65% of the labour force earned very low incomes below R 2,500 in 2004 and 83 % were Africans. This means that for those who reported salary as a source of income, in cases where the salaries are very low as is the case with many of the semi-skilled and unskilled employees, other economic pressures like rising price inflation means that household food and nutrition security are threatened even worse. Furthermore, despite grants not being earmarked for food and nutrition security, as a main source of income, research is necessary to investigate their contribution to household food and nutrition security.

Figure 15: Percentage distribution of sources of household income by province, 2011



A specific household can have more than one source of income. Percentages therefore do not total 100%

Source: Stats SA, GHS, 2011

Furthermore, empirical evidence shows that income levels for the majority of South African households are low with many surviving on an estimated average income of less than R 1000 per month (Labadarios et al., 2009). According to the 2005 Labour Force Study (LFS), 65% of working people earn less than R 2500 per month and income inequality in South Africa is among the highest in the world (Altman, 2007). In 2005 the labour force distribution reflected 40% of the workforce was in permanent employment in the formal sector, while 14% were engaged in informal work, 7% were domestic workers and 10% were temporary workers (Altman, 2007). The LCS 2008/09 data revealed that 38.9% of poor households had no adult employed compared with the national average of 25,5% of adults in a household who were employed. Further, the above findings show that household income has serious implications on household food security.

Table 5 below illustrates the relationship between income sources and experience of hunger and it can be seen that a higher proportion of those households receiving salaries and wages never experienced hunger while the highest proportion of those households which were always hungry were households in receipt of grants and pensions.

Table 5: Households reporting experiences of hunger among adults by main (primary) household income source, GHS 2008

Household income Sources	main	Never hungry	Seldom hungry	Sometimes hungry	Often hungry	Always hungry	All households
Salaries & wages		7 175 687	224 358	622 493	79 725	26 153	6 128 416
%		88.28	2.76	7.66	0.98	0.32	
Remittances		947 792	39 550	193 167	22 907	23 865	1 227 284
%		77.23	3.22	15.74	1.87	1.94	

Pensions & social grant	2 358 809	138 983	504 737	78 937	50 297	3 131 763
%	75.32	4.44	16.12	2.52	1.61	
Farm income	75 541	1 077	17 733	0	1 625	95 976
%	78.71	1.12	18.48	0	1.69	
Other non-farm incomes	207 405	5 666	35 210	3 595	2 592	254 469
%	66.48	2.23	13.48	1.41	1.02	
Zero/no income	181 709	10 649	54 225	16 571	10 162	273 316
%	66.8	3.9	19.84	6.06	3.72	
Total income	10 946 946	420 283	1 427 565	201 736	114 694	13 111 224
%	83.49	3.21	10.89	1.54	0.87	

Source: Stats SA GHS 2008

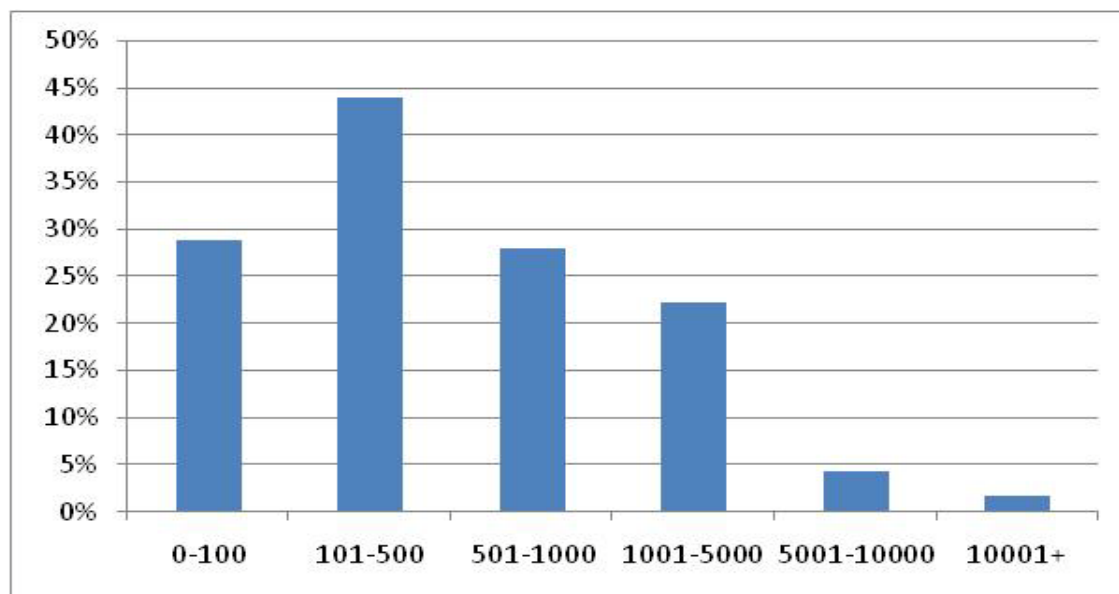
Agricultural employment levels in South Africa are reportedly low at just under 600 000 in 2012 compared with 1.8 million employed in 1971 (NPC, 2012). Approximately 38% (19.14 million) of the country's population reside in rural areas, a decrease of 10% since 1994 (World Bank, 2012) mainly as a result of migration from rural areas to small towns and cities. South Africa's unemployment rate is amongst the highest in the world with an expanded unemployment rate of 40%⁵ and with women bearing a higher unemployment burden (46%) compared with men (34%). In some of rural areas unemployment is as high as 70% compared to 46% nationally (Jacobs, 2010). Also, these results imply that the rural poor and unemployed rural and urban are most vulnerable to food and nutrition insecurity.

In terms of the informal economy NIDS data indicates that there were just over 2.5 million workers in the informal sector, with another 1, 45 million informally employed in formal sector firms most of whom would be concentrated in urban areas. South Africa's informal enterprise sector makes up a very significant fraction of South Africa's economy, comprising 22% of all national employment and with informal workers inside the formal sector counted, it rises to 36% (Davies & Thurlow 2009). Informal sector employment is mainly self-employment and although there are higher end informal sector enterprises which generate large incomes most of the entrepreneurs in this sector are survivalist and with women tending to predominate. In the survivalist sector, profitability is very low relative to formal business expectations (SALDRU, 2008).

Figure 16 below reflects that the informal economy does not provide sustainable incomes with over 70% of all informal businesses reporting a profit of less than R 500 per month illustrating the survivalist nature of the sector. Informal businesses offer poor returns, require long hours of labour and are precarious by nature as they are prone to risks. In addition to low income levels, workers in this sector are not afforded protection against illness nor do they enjoy employment benefits such as leave provisions, income protection or unemployment benefits. While generating more employment is necessary it must be accompanied by efforts to enhance the quality of work through establishing minimum wage floors and regulation of employment conditions.

⁵Unemployed (expanded definition): Persons who did not work, but were available to work in the reference period.

Figure 16: Profit from informal sector enterprise (ISE) activities



Source: National Income Dynamics Study (2008)

Social wage in South Africa includes a massive cash transfer programme targeting the elderly, children and the disabled. Special provisions are also provided for war veterans. Currently there are an estimated 14.6 million grant beneficiaries receiving R 80 billion from the national fiscus annually with the majority being children in receipt of the child support grant. Despite the wide coverage, the social assistance programme excludes large numbers of adults who are unemployed. Evidence suggests that social grants have been an important contributor in reducing poverty and food insecurity in South Africa, particularly among poorest households (van der Berg, 2006). Aliber (2009) drawing on the 2007 GHS found that 51% of seriously hungry households who appeared to qualify for access to grants did not receive them. Some of these households (about two thirds) receive some grants but were eligible to receive more, while the remaining third received no grants at all. Work undertaken by a non-governmental organisation, ACCESS (Alliance for Children's Entitlement to Social Security) identified the lack of vital identification documents; the 13 digit bar coded identity document was the single largest barrier to access to grants (Giese et al, 2008). According to the report, the main problem related to the lack of identity documents of the mother or the absence of the mother due to illness or death and the difficulties in registering the birth of the child. McEwan and Woolard (2010) also found similar results based on a review of data from the National Income Dynamic Study that over 600 000 maternal orphans who were not in receipt of any grants.

Unemployment in South Africa

Employment is one of the key components for reducing poverty and inequality in South Africa. Over the last decade South Africa's chronically high unemployment rate has hovered at around 25% and is ranked amongst the highest in the world. Using an expanded definition of unemployment (including discouraged work seekers) this rate jumps to approximately 37% affecting predominantly unskilled and semiskilled workers (about 4.4 million to 7.1 million unemployed people). In 2008 an estimated 70% of the bottom quintile was unemployed. The employment situation is particularly challenging for rural dwellers, youth, those living in informal

settlements and townships. Disproportionately large numbers of youth are unemployed with 36% being youth below the age of 24 and 73% being below the age of 34. Unemployment has a strong racial (almost all of whom are African) and gender dimension with two thirds of discouraged work seekers being women. About 61% of the unemployed have been searching for employment for over 3 years leading to discouragement. Despite the lower level of participation of women in the economy women share disproportionately in the rate of unemployment (Department of Treasury, 2011).

Factors contributing to this high level of unemployment include lack of jobs being created as a result of slow growth and mainly capital intensive growth, spatial location of jobs (with jobs and people being dislocated) and perhaps most importantly the education system in South Africa which is not producing skilled youth for the job market (Department of Treasury, 2011). There is a clear mismatch between South Africa's economy which is skills based and the annually expanding low skills labour force. An estimated 500 000 to 750 000 youth leave the education system annually and join the ranks of the unemployed, and only a small fraction are absorbed into learnerships, tertiary education or employment either formal or informal. Again, the challenges of unemployment threaten household food and nutrition security especially for the women, youth and other marginalised groups who find it difficult to get employment. The situation is even worse for most of these groups as they usually don't have any other sources of income and the little they get is usually stretched to meet many basic needs.

Percentage of income spent on food security

Household access food through own production and/or purchasing from the market. Most South African households depend on income of various sources as the main means to access household food and nutrition (

Table 6). Empirical evidence shows that poor rural households spend a larger share of their income on food than urban households although the per capita spending is lower in rural areas than for urban households (Aliber, 2009; Jacobs 2010). Results from

Table 6 shows that in 2008 households where adults were always hungry spent R131 per capita on food compared with households where adults were never hungry whose food expenditure per capita was R330 per capita. The LCS 2008/09 (Statistics SA, 2010) data showed that the total average annual household consumption expenditure was R 71 910 and that the annual household consumption expenditure on food (unadjusted) was found to be R 9 939. This represents average of 14.6% as food expenditure to household consumption expenditure annually.

Table 6: Female headed households' total household spending and food spending patterns against reported adult hunger experienced

	Adults never hungry				
	2006	2007	2008	Δ 2006-2007	Δ 2007-2008
Food spending per ADEQ	234.22	256.80	330.36	22.58	73.56
Average household food spending	514.93	581.83	736.42	66.90	154.59
Food expenditure share (%)	53.7%	50.3%	53.2%	-3.3%	2.9%
	Adults seldom/sometimes hungry(moderately)				
	2006	2007	2008	Δ 2006-2007	Δ 2007-2008
Food spending per ADEQ	138.07	152.30	117.28	14.23	28.47
Average household food spending	360.33	395.73	506.12	35.40	110.39
Food expenditure share (%)	58.9%	57.0%	61.0%	-2.6%	3.9%
	Adults often/always hungry (Seriously)				
	2006	2007	2008	Δ 2006-2007	Δ 2007-2008
Food spending per ADEQ	105.10	102.94	131.41	-2.16	28.47
Average household food spending	296.41	3692.01	408.52	15.60	65.51
Food expenditure share (%)	64.0%	61.4%	61.8%	-2.6%	0.4%

Source: StatsSA, various years, GHS ADEQ= Adults 0
Source: Jacobs (2010)

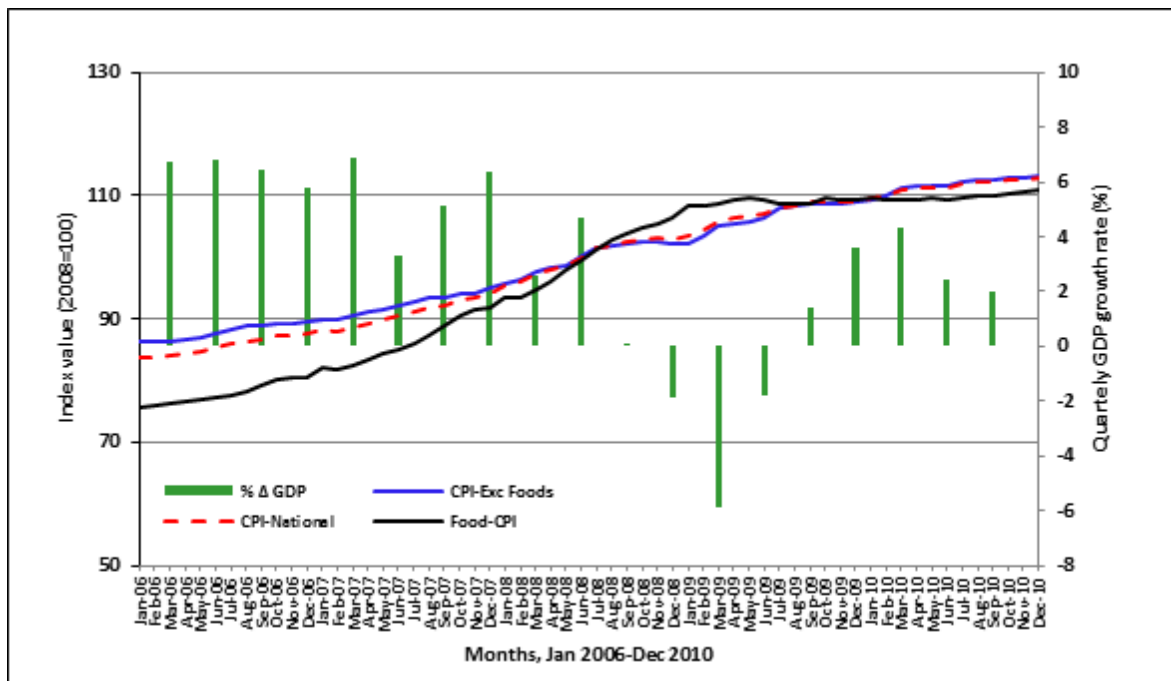
Research findings by HSRC for Oxfam in 2010 showed that with the economic downturn globally the share of people experiencing hunger increased by 2-3 percentage points between 2007 and 2008. Drawing on the GHS data the study also showed the disproportionate negative impact on female headed households, despite these households comprising less than 40% of South African households. The gap between male and female headed households who never experienced hunger was 5 percentage points reflecting higher level of vulnerability of female headed households to food insecurity than male headed households (HSRC, 2010). The study also found that hunger shares increased in 7 of the 9 provinces including all the provinces with the highest share of rural residents (Eastern Cape and KwaZulu-Natal) and that female households living in huts in rural Eastern Cape and KwaZulu-Natal experienced the largest increases in hunger.

Affordability: Transport, food prices and other related costs

South Africa has experienced three waves of food price increases over the last 15 years. The first was in 2001, the second wave in 2008 and a third in August 2012. The second wave was accompanied by a sharp economic downturn as reflected in the negative economic growth of in GDP. Food prices inflation began to be noticed in 2007 and with the global economic downturn in 2008 affected the whole country (Jacobs, 2010). Evidence from the National Agricultural Marketing Council (NAMC 2008 & 2009) shows that while farm gate prices may have stabilised or dropped domestic retail food prices continued to rise. The implications of food prices has briefly covered in the previous section and overall the trend that emerged is that food price inflation increased faster than general inflation from the latter part of 2007 (

Figure 17).

Figure 17: Food Price Trends and Economic Growth Mapped for 2001 to 2010



Source: Jacobs (2010)

Table 7 below reflects the percentage changes in retail prices of major food groups between 2007 and 2008 measured over the calendar year and the last six months of the year. The results show higher increases in staple grain and vegetable food prices. The NAMC Food Cost Survey also found that the prices of popular foods were higher in rural areas and that they rose faster than in 2008. This raises the costs of living in rural areas and several studies have confirmed that location impacts on food security status (Aliber, 2009; NAMC, 2009; Jacobs, 2009) with higher levels of household food insecurity in rural areas.

Table 7: Percentage change in average retail prices for selected food groups, 2007-2008

Food product group	2007		2008	
	July –Dec.	Jan-Dec.	July-Dec.	Jan-Dec.
Wheat	9.19	21.95	1.24	30.41
Maize	-1.13	23.87	17.74	16.7
Fresh vegetables	9.61	26.17	14.01	11.78
Processed vegetables	2.03	2.03	0.44	14.91
Fresh meat	8.53	12.5	5.23	6.44
Processed meat	-2.14	7.47	8.06	16.03
Fruit	16.99	21.14	11.38	-8.24

Source: NAMC (2007, 2008) food cost reviews

Food pricing is influenced by many factors including the cost of production and non-food costs such as labour and transportation. According to the NAMC at farm level non-food production costs contribute approximately 90% of the total cost of production. Although fertilizer prices decreased in 2010; other farming inputs (e.g. costs of machinery and implements) increased by 16.4% between 2009 and 2010. At the manufacturing level total non-food production costs constitute up to 55% of the costs. Between 2000 and 2010 costs for packaging, energy and water all increased by varying degrees. Gas and water costs increased by 149%, electricity costs increased by 134%, coal increased by 126% and cardboard packaging increased by 61%. Electricity costs are expected to continue rising over the next few years as expansion is planned. Another factor which is likely to influence food pricing is the growth of the biofuel industry in South Africa. Agricultural products such as corn, sugarcane and sorghum are extensively utilised in the production of biofuels. The growth of this market is largely driven by the need to shift reliance on petroleum products due to the increasingly high prices as well as the volatility of that market. However concerns have been noted regarding the potential impact this may have on pricing of essential food items especially maize (a staple food for more than 60% of the households in the SADC region. Research conducted in the USA found that biofuel production had increased the cost of food by conservative estimates of between 2-3% (TIPS, 2011). More research is required to investigate the impacts of the growing biofuel industry on food prices and food security.

Civil society organisations need to be focussed on multiple levels including:

- Strengthening and expanding access to the social wage for vulnerable households;
- Monitoring food pricing and cartel actions which increase the cost of food for poor households
- Advocating for minimum wage levels and compliance in many sectors.

- Supporting and enhancing synergies between various government interventions to strengthen food security in South Africa. One example of this is the extensive roll out of food gardens as part of the Community Work Programme.

Climate change impacts on food security

Climate change, is considered as posing the greatest threat to agriculture and food security in the 21st century, particularly in many of the poor, agriculture-based countries of sub-Saharan Africa (SSA) with their low capacity to effectively cope (Shah et al., 2008; Nellemann et al., 2009). African agriculture is already under stress as a result of population increase, industrialisation and urbanisation, competition over resource use, degradation of resources, and insufficient public spending for rural infrastructure and services. The impact of climate change is likely to exacerbate these stresses even further (Ludi, 2009). Furthermore, climate change amplifies environmental and socio-economic drivers of food insecurity and the impacts vary spatially (Beddington et al., 2011). The IPCC Fourth Assessment Report (2007) states with high confidence that agriculture production in Africa is vulnerable to current and expected changes in climate change and variability. The impacts of climate change already being experienced in many parts of the world are expected to lead to disproportionately negative food insecurity effects in regions already experiencing food insecurity. There is an urgent need to increase adaptive capacity in agriculture both to long-term climatic trends and to increasing variability to help reduce the adverse impacts of climate change on food insecurity, livelihoods and economies (Beddington et al., 2011).

South Africa is already experiencing climate change, with increases in surface temperature evident over both South and southern Africa (Kruger and Shongwe 2004, New et al 2006). In addition, the projected increases in temperatures and changes in precipitation timing, amount and frequency have critical implications of the South African agricultural sector. Agricultural systems are generally responsive to climate variability and the Department of Environmental Affairs (2011) argue that degradation of South Africa' natural agricultural capital may be worsened by climate change. Both crop (dryland and irrigated) and livestock agricultural systems are expected to be adversely affected by expected increases in evaporation and water scarcity.

Empirical evidence of climate change impact studies (Schulze et al 1993; Du Toit et al 2002; Kiker 2002; Kiker et al 2002; Poonyth et al 2002; Deressa et al 2005; Gbetibouo and Hassan 2005; Benhin 2008) on the agricultural sector in South Africa show that climate change will adversely affect agricultural production, induce (or require) major shifts in farming practices and patterns in different regions of the country and have significant effects on crop yields. For example some of the marginal western areas are predicted to become unsuitable for the production of maize, the main staple crop (Kiker 2002). However, the higher production levels predicted in the east are likely to offset decreases in marginal western regions (ibid). An increase in pests and diseases will also have a detrimental effect on the agricultural sector.

Furthermore, empirical evidence shows that despite being recognised as a relatively significant contributor to global climate change, South Africa along with other developing countries is extremely vulnerable and exposed to the impacts of climate change and variability due to the socio-economic and environmental context (GoSA 2011). Climate change and variability, including the increased frequency and intensity of extreme weather events, will disproportionately affect the poor (IPCC, 2007). South Africa is already a water-stressed country and faces future drying trends and weather variability with cycles of droughts and sudden

excessive rains. With this background, the South African government regards climate change as one of the greatest threats to sustainable development and believes that climate change, if unmitigated, has the potential to undo or undermine many of the positive advances made in meeting South Africa's own development goals and the Millennium Development Goals (MDGs) (GoSA 2011).

The NCCRP argues that, should multi-lateral international action not effectively limit the average global temperature increase to below 2°C above pre-industrial levels, the potential impacts on South Africa in the medium- to long-term are significant and could be catastrophic. Even under emission scenarios that are more conservative than current international emission trends, it has been predicted that, by mid-century the South African coast will warm up by around 1 to 2°C and the interior by around 2 to 3°C. By 2100, warming is projected to reach around 3 to 4°C along the coast, and 6 to 7°C in the interior (DEA, 2011; GoSA, 2011). With such temperature increases, life as we know it will change completely: parts of the country will be much drier and increased evaporation will ensure an overall decrease in water availability. This will significantly affect human health, agriculture, other water-intensive economic sectors such as the mining and electricity-generation sectors as well as the environment in general. Increased occurrence and severity of veld and forest fires; extreme weather events; and floods and droughts will also have significant impacts. Sea-level rise will negatively impact the coast and coastal infrastructure. Mass extinctions of endemic plant and animal species will greatly reduce South Africa's biodiversity with consequent impacts on eco-system services.

Notwithstanding the effectiveness of any strengthened international response to the climate change crisis, a certain amount of climate change is already observed and further climate change will be inevitable due to the slow response (or inertia) of the climate system to changes in the concentration of GHGs in the atmosphere (GoSA, 2011). Therefore South Africa will have to adapt to these impacts by managing its climate and weather-related risks, reducing its vulnerability and increasing the resilience of her society and economy to the adverse effects of climate change and variability. Given South Africa's high vulnerability, there is urgent need to strengthen the resilience of the economy to climate change and variability impacts and to develop and implement policies, measures, mechanisms and infrastructure that protect the most vulnerable. The vulnerability arises from significant exposure to current climate variability and anticipated climate change (notably increased temperatures, changes in rainfall, and increased incidence of erratic and extreme weather); high sensitivity of rural and peri-urban livelihoods⁶ to these changes and very low adaptive capacity at the local community levels. Without better management of the climate risks that affect rural and urban livelihoods, South Africa is likely to see efforts to address poverty, inequality and unemployment as well as to promote sustainable development being undermined. It is in this context that this project is developed and as a direct response to urgent and immediate adaptation needs identified in the NCCRP.

⁶ Change impacts are not likely to be experienced evenly throughout the country. However, as a large proportion of South Africa's society is impoverished, it is rendered particularly vulnerable to impacts of climate change. At least 30% of South Africa's population (particularly the rural and peri-urban poor) is highly vulnerable to both sudden and harmful climatic shocks, with low levels of endogenous resilience, adaptation, and coping skills. The characteristics of this population include a unique disease complex burden, high mobility, a subsistence-level existence, and informal settlement housing. Without adequate adaptation strategies, the impacts would manifest as worsening food security, exacerbation of existing disease burdens, and increased vector-borne and emergent diseases and destructive social consequences (DEA, 2011).

According to Beddington et al (2011) in the face of climate change, food systems must transform current patterns of food production, distribution and consumption to better meet human needs and balance with planetary resources in the long term. Ensuring food security require investments, innovation and sustained efforts to empower poor rural and urban communities to adapt their food systems to establish climate-resilient agricultural production systems, develop low-waste supply chains, make efficient use of resources, ensure adequate nutrition and encourage healthy eating choices (Beddington et al., 2011).

Models of food security interventions for the poor

Global recognition of CSOs in food security issues

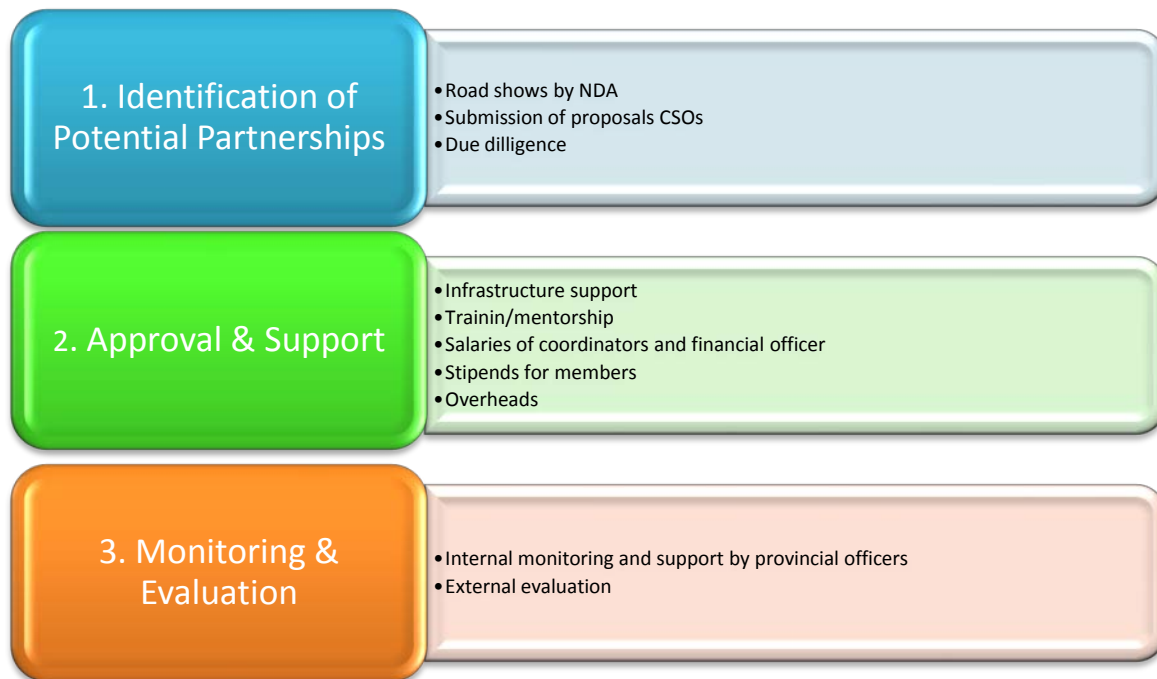
Food and nutrition security has received global attention, to an extent that it has been elevated to the level of international organisations like the United Nations (UN) Food and Agricultural Organisation (FAO) interventions. The establishment of the Committee on World Food Security (CFS) is one testimony to that effect. The focus on food and nutrition security has also seen the elevation of the role of civil society organisations (CSOs) globally increasing to address the issue of food security as a global agenda. The CFS gave a platform for participation of CSOs from around the globe in the form of Food and Nutrition Security Civil Society Mechanism (CSM) Forum. The Forum is a space where CSOs can discuss and present cohesive and policy interventions that have been developed during the CSM annual meetings. The forum is open to all interested CSO participants dealing with food security and nutrition emphasising the inclusive participation of social movements (FAO, 2012), which includes diverse organisation representing all members of society affected by food security and malnutrition.

For example the latest 39th Session of the CFS saw over a 150 CSOs and social movements, representing farmers, fisher folks, Indigenous Peoples, pastoralists, agricultural workers, youth and those affected by food and nutrition security in attendance (FAO, 2012). This is a remarkable achievement in terms of creating a platform for CSO participation on food and nutrition security at the global arena. Maybe the question then remains on - the extend this global high level participation impacts on food security challenges and associated or expected interventions at the national and local levels of countries represented by those CSOs.

The NDA Model of Food Security

The NDA model for food security is similar to its other models for poverty eradication; the NDA is a statutory organisation that was established under Act 108 of 1998 of Parliament, and one of its major functions is the eradication of poverty through fund granting to CSOs. To fulfil its mandate of working towards poverty eradication and improving the overall livelihoods South Africans, the NDA has sought to implement a programmatic approach to community development instead of a project-oriented focus. Food security is one of the four programmes, and the others are Income generation, Early Childhood Development (ECD) and Capacity building, and to implement them, the NDA works through CSOs in order to reach those people that require assistance. Figure 18 below depicts a model used by the NDA for this purpose, i.e. contributing towards poverty alleviation through CSOs. This model has three main pillars: (a) the identification of potential partners (b) the approval and support of projects, and (c) monitoring and evaluation.

Figure 18: The NDA Poverty Alleviation Model with CSOs



Source Own construction from NDA, March 2012

The NDA model for food security recognises the important link between subsistence food production and the market food system, i.e. the NDA is aware of the need for the creation of economic pathways for small scale food producers by connecting them to distribution networks, for example, retailers. This means that among other envisaged outcomes, retailers will buy locally, especially from these small scale food producers. The following are the three levels of programming that the NDA aims to implement under food security:

1. Backyard food gardens: this involves giving starter packs, training and support on food production.
2. Community food gardens: this is for gardens up to 5 hectares.
3. Small grower support: this is to support emerging farmers.

Although there are four different programmes that are pursued by the NDA in fulfilling their mandate of poverty eradication, these programmes are not entirely independent from one another. For example, looking at one of the NDA food security projects; household food security programme in Ward 1, Intsika Yethu District Municipality in the Eastern Cape. Although the project's main objective is to increase access to sustainable food for 420 people in this area by the end of 2014 (food security), the projects is going about this by also building capacity (one of the NDA four pragmatic approaches to poverty alleviation) by training 42 community members who will become household food security facilitators to work with household members on the programme. The aim of the NDA to connect its food producers with the market also means that this programme of food security is also linked to the income generation programme as income

can then be derived by small scale food producers by selling their produce to retailers, which goes further towards poverty alleviation.

Box : Ikhephu Secondary Co-operative

The objective of this NDA funded co-operative when it was established in 2008 was to create market linkages in order to build a commercially viable cattle farming initiative in the Sakisizwe Municipality in the Eastern Cape.

The NDA's support for this project involved the provision of skills for the members, the institutional development of the co-operative, and the establishment of mentoring programmes, and therefore the NDA's model for the assistance of this programme is in line with its aim of capacitating and strengthening CSOs in order to boost food security. The ikhephu secondary co-operative's other main functions is to coordinate a team comprising amongst others, the Department of Agriculture, Veterinary Services, the Comprehensive Agricultural Support Programme (CASP), etc. for the upliftment of the member farmers. Although one of the key programme aims was to provide the necessary training for the farmers, it was discovered that there were delays in providing this training, which then resulted in a lot of time wasted, especially by the board as they then had to spend time learning about managing the co-operative before it could commence, (NDA, n.d.)

Looking at the wide range of projects that the NDA has and is undertaking in the sphere of food security, and bearing in mind that the food security issue is of high relevance in South Africa (e.g. an estimated 35% of the population is food insecure, HSRC, 2004), there would appear to be an important role still for the NDA in food security. However, the NDA needs to put more emphasis on CSOs work, and hence work more with these organisations in promoting food security as these can work better at grass roots levels, and hence better reach those people that these programmes are intended for, i.e. the very poor who are most vulnerable to food insecurity.

As mentioned before, the NDA's model for food security is one that aims to promote backyard food gardens, community food gardens as well as giving support to emerging farmers, and for people to be able to get involved in these NDA supported food security initiatives, they need land. For this, the NDA needs to advocate for and assist in making the required land available for households and communities. The NDA model for income generation also needs to speak to broader developmental issues such as the empowerment of marginalised groups such as women, and be specific on how it plans to go about this through its programme projects.

On moving forward, the NDA's vision is for its models includes linking the youth wage subsidy (this subsidy was announced by President Zuma during his 2010 State of the Nation Address) to household and community food security. The NDA endeavours to be involved in this potential project as it sees this as an opportunity to target the youth component of the food insecure population. Another project which the NDA wants to pursue in its efforts to combat food insecurity is the linking of skills development with household and community food security, and therefore will be incorporated in the NDA's food security model. This project if it rolls out entails bringing in unemployed youth who are not enrolled in any Further Education and Training (FET) programme. These will then be trained in food security courses, nutrition, sustainable natural resource use and resource management, and working with households on these, (NDA, 2012).

International CSO models of food and nutrition security interventions for the poor

The FAO argues that the world produces enough food to feed at least 270 kilocalories per day, but ironically countries, especially in the developing world continue to suffer from chronic food insecurity (FAO, 2006). The majority of those affected are found in sub-Saharan Africa (SSA), where the number of the undernourished people has been rising and is projected to reach 30% of the region's population by 2015, up from 20% in 1992 (FAO, 2006). This challenge clearly shows that governments alone cannot tackle the issue of food and nutrition security, without local interventions where CSOs can play a significant role.

The list of CSO participation in food security and nutrition issues at the global level is endless and impacts differ from country to country, based on prevailing conditions in the countries where projects are undertaken. A few examples of CSO participation can be drawn from a number of other countries. The first example is drawn from Brazil, where government has made significant effort to reduce hunger and food and nutrition insecurity through CSO interventions and advocacy for relevant policies. This example is illustrated in box 1 below.

Box 1: Small Farms and Sustainable Rural Development for Food Security: Brazilian Experience

Brazil has made progress in reducing poverty rates for the majority of its population through relevant policies and CSOs interventions. Brazil managed to reduce food insecurity and malnutrition and achieved the first Millennium Development Goal (MDG1) of halving poverty and hunger by 2009. Between 1995 and 2008 over 12 million people have been taken out of poverty through targeted government programmes to small family farmers. Civil society institutions such as the unions, workers party and social movement structures such as the Landless Peoples movement and a wide range of CSOs were key to shaping the development of food security and rural development policies in Brazil since 1980's. Their cumulative efforts resulted in the adoption by Brazil's parliament in 2010 of an amendment to the constitution recognising the Right to Food (Rocha *et al*, 2012). Advocacy efforts by civil society organisations in 1986 ensured that a wider definition of food security, integrating nutrition security was incorporated into official policy.

The enactment of the National Law on Food and Nutrition Security (LOSAN) in 2006 created an institutional space for organised civil society to participate with government in the development and implementation of plans and programmes to advance the human right to food. Brazil's submission to the World Food Summit held in Rome in 1996 was prepared by a tripartite commission which involved government, civil society organisations and private sector. A national council on food security which serves to advise the president was established in 2003 and almost two thirds of its representatives come from civil society. While this council operates at a national level, similar councils have been established at regional and municipal level and even in school meal councils were representatives monitor school governing structures compliance with relevant legislation. In addition other civil society organisations which contribute to food security in Brazil include the Articulação Nacional de Agroecologia (ANA), and Associação Brasileira de Agroecologia (ABA) which promote greater environmental sustainability in agrarian practices. ANA in particular has actively championed the gender issues in relation to food security (Rocha *et al*, 2012).

Box2: Local and Global Action for Food Security in Africa” (LAGAFA)

The LAGFA project is implemented in Malawi, Burundi and Zambia and is designed as a 36 months initiative to develop better food security and nutrition policies and programmes in the three countries. According to the CARE (n.d.) network, the choice for the three countries was based on their level of chronic food insecurity and the need for comprehensive and effective national policies where local interests are reflected through enhanced inter-country interaction and knowledge exchange. The main goal of LAGAFA is to strengthen CSO networks through coordination and improved grassroots linkages to ensure that the voices of communities affected by food insecurity are heard and reflected in policy interventions. The program relies on innovative methodologies through the Integrated Food Security Phase Classification (IPC) aimed at strengthening capacity of CSOs and Networks in food security and nutrition policies. LAGAFA helps CSOs to build capacity in policy and programme analysis, development, implementation and monitoring, information sharing and knowledge exchange through local and global experiences (CARE, n.d.)

Another example of CSOs to fight and end global hunger is illustrated by the InterAction, an alliance of 198 US based CSOs, who pledged more than one billion dollars over the next three years from 2012 to improve food and nutrition security worldwide (Shrier, 27 September, 2012). The work of these CSOs is reflected through the US government’s global hunger and food security initiative, “Feed the Future”, which operates in a number of countries and was highlighted as a success story in Malawi. The success of the programme lies in the fact that the Malawian government has elevated agriculture and nutrition as key national policy priorities, based on effective leadership through stable governance and economic growth. This is in line with the goal of Feed the Future, which focuses on smallholder farmers, particularly women, by supporting partner countries in developing their agriculture sectors to boost economic growth and reduces hunger, poverty, and under nutrition (Feed the Future, http://www.feedthefuture.gov/sites/default/files/resource/files/ftf_factsheet_malawi_jan2013.pdf). Their target is to reach significant numbers of children with highly effective nutrition interventions to prevent stunting and child mortality.

Interventions for food and nutrition security are important and several efforts have been made by both developed and developing countries to develop the relevant models for interventions. Some interventions have focused on policies and programmes, agricultural production, value chains, market regulations, and land security. This led to food security and nutrition focus on rural agricultural approach, with limited and no focus on urban areas, which are equally affected by food insecurity as articulated by Dodson, et al., (2012). Some of the theoretical elements suggested in the literature for the conceptual framework of an ideal model for food security interventions propose the inclusion or consideration of the following points (Lemba, 2009):

1. Start by identifying the problem in the form of:
 - a. Analysis of household vulnerability context
 - b. Analysis of food policy framework
2. Development and Identification of food security objectives
 - a. What is the objective that the intervention wants to achieve and at what level?
3. Planning and implementation
 - a. It involves identifying the needed resources in the form of inputs
4. Monitoring involves the expected outputs, and
5. Evaluation looks at outcomes

The above points are what Lemba (2009) used to develop a theoretical model for food security intervention and evaluation in the Kenyan dry land agriculture. Another example of CSOs role in food security issues on the continent is highlighted in the African programme presented in box 2.

The New Partnership of Africa's Development (NEPAD) of the African Union (AU) introduced an agricultural programme called Comprehensive Agricultural Development Programme (CAADP) which aims to achieve for an average annual growth rate of 6% in agriculture by 2015 (<http://www.caadp.net/how-caadp-works.php>). The Comprehensive Africa Agriculture Programme (CAADP) is a country specific approach that focuses on fostering change and monitoring progress in terms of the plans that each country has set to address issues of concern in those respective countries such as poverty and hunger, low productivity, sluggish economic growth. Most African countries face similar challenges such as high rates of poverty and low economic growth, The CAADP initiative aims to help African countries to work together to promote agriculture-led growth in order to achieve the Millennium Development Goals (MDGs) especially MDG 1 which addresses the issue of halving poverty and hunger by 2015 (<http://www.caadp.net/how-caadp-works.php>).

Poverty reduction has been one of the aspects that countries left for donors to address because they believed they do not have sufficient funds for such programmes and most of them were designed with the intension of getting funds either by donations or investments. These poverty reduction strategies were usually more focused on the donor than on the people affected by poverty, these strategies were designed in isolation without any involvement of the affected parties and as a result there was very little success on these programs. These poverty reduction strategies were often compiled with an intension of receiving sponsorships from donors and the funds received from these would be used for food aid instead of other unsustainable programs which would leave countries in more debt and with little progress in achieving the economic growth goal.

Box 3: The CAADP initiative is based on four pillars given below:

Pillar 1: Extending the area under sustainable land management

Pillar 2: Improving rural infrastructure and trade-related capacities for market access

Pillar 3: Increasing food supply and reducing hunger

Pillar 4: Agricultural research, technology dissemination and adoption

The third pillar of CAADP speaks directly to food security issues and CAADP has designed a framework of food security, known as "The Framework of African Food Security (FAFS)" in order to assist the different countries with regard to monitoring and evaluation and to improve their food security status relative to other African countries.¹

The framework focuses on three key challenges:

- a. Inadequate food supply.
- b. Widespread and persistent hunger.
- c. Inadequate management of food crisis.

In order to achieve these goals African countries have committed to increasing public investment in agriculture by the minimum of 10% of their national budgets and to raise agricultural productivity by at least 6%. Most of the African countries have made a commitment or have initiated the CAADP framework and have made enormous progress in addressing pressing issues and achieving MDGs namely Ghana, Nigeria, Gambia, Cote d'Ivoire, Malawi, Uganda, Swaziland, Kenya and Zambia.

The CAADP has helped most of the African countries in eradicating hunger and poverty and thus improving the food security status of households through agriculture; this has provided a more sustainable initiative since the countries have committed to invest in agriculture thus improving food security. Since the CAADP framework is country specific, it allows each country to take ownership of their own progress and to adjust their policies to be in line with the four pillars of the CAADP (<http://www.caadp.net/how-caadp-works.php>).

South African examples of food and nutrition security interventions: the role of CSOs

In the case of South Africa, CSOs and non-governmental organisations (NGOs) are playing significant roles in driving the food and nutrition security agenda in various parts of the community and listing all success stories from civil society is beyond the scope of this report. It is however, worth acknowledging that most interventions in South Africa are guided by policy⁷ initiatives and the relevant strategies on food and nutrition security, where to some extent, CSOs work in close cooperation with government or through government institutions like the NDA. However, as will be highlighted under challenges in the section that follow, a smooth coordination and healthy relationship between CSOs and government remains the main challenge towards the successful implementation of food security projects and programmes, especially at the community levels.

Examples of food security and nutrition models in South Africa focused on multiple approaches that focus on agricultural as well as urban food security issues. A few can be illustrated as shown in the boxes below.

FoodBank South Africa

While various CSOs and NPOs carry out several tasks to ensure and improve access to food security for communities, FoodBank South Africa (FBSA) is an NPO and the largest food rescue and distribution initiative in South Africa (<http://www.foodbank.org.za>). FBSA was established in 2008 after the National Forum on Food Security, where leading hunger relief initiatives such as Feedback Food Redistribution, Lions Food and Robin Good, merged to form a national food banking entity, known as FoodBank South Africa. The organisation currently represents about 1 700 NPOs and CBOs and has a national office based in Cape Town and operates in three regional offices based in Johannesburg, Port Elizabeth and Durban. FBSA uses an Agency Information System to track food distribution and consumption and provide for a total of 305,245 beneficiaries in six provinces⁸ as at end of October 2012 (<http://www.foodbank.org.za/>). The box below presents the four programmes of FBSA.

FBSA Programmes

The Food rescue Programme

This programme is an in-kind donation from retailers and manufacturers of food items which are within their expiry dates. The programme put to good use huge volumes of food which is rescued or donated by sorting and repackaging the food based on the needs and specifications of the various agencies (i.e. the 1700 NPOs and CBOs) supported by the food bank network system.

The Food Procurement Programme

This programme buys food items through financial support donors to compliment the Food Rescue Programme. FBSA purchases and assembles a 'basket' of basic food items based on an agency Needs Analysis and with input from nutritionists.

The Food Distribution Programme

FBSA uses a fleet of cars and various warehouses across the country to distribute food items to its agencies.

⁷ Details on policies and strategies are given in the section on government's role in ensuring food security.

⁸ The Provinces covered are: Gauteng, Eastern Cape, Kwazulu-Natal, Limpopo, North West and Western Cape.

The Outreach Programme

It involves community development, lunch buddies, sandwich jams to enhance capacity of the respective agencies both in terms of skills as well as initiatives to create food and distribute to the needy in their networks.

The Agri-foodbank Programme

Although FBSA's core activities are centred in urban and peri-urban areas, it remains deeply concerned about the number of hungry people in rural areas and has now started to focus on programme to assist rural communities. This is through partnership with the relevant NPOs specialising in training small-scale farmers in order to expand its distribution network into rural areas. This programme guides emerging farmers through agricultural and business skills training, negotiating access to land, facilitating collaboration with local communities and cost-effectively purchasing seed, fertiliser and equipment. Through its involvement, FBSA ensures financial sustainability for small-scale farmers by creating a niche market for their products through its urban food banks.

Source: <http://www.foodbank.org.za>

The FBSA model representing a number of agencies is expected to have positive impacts on food security access and efforts to alleviate hunger in South Africa. However, the agency model of involving so many players could also lead to bureaucracy that could affect and limit access of food for the very needy and poor people it is intended for. Such concerns have been raised by (Warshawsky, 2011) and further studies could look at the potential impacts of the food bank model in a developing country like South Africa.

Box 3: My World, My Garden programme

The programme is based in South African communities and schools under the theme: *"My World in a Garden"*, an initiative of the NGO, My Arms Wide Open. The programme helps communities set up a farming system that can feed every community member and address indigenous nutritional needs. This program goes beyond feeding communities by delivering lifelong skills that enable communities to turn their crops into organic sustainable micro-gardens that nourish and create sustainable enterprises for future generations (My Arms Wide Open, n.d).

My World, My Garden also helps foster healthy eating habits through daily meals in community kitchens for the young and elderly. Meals are available for purchase by other members of the community. Working with schools and crèches, the programme ensures improved access by the either meals or fresh ingredients to produce meals for the majority of the most vulnerable members of society.

Another example of food security in South Africa comes from Cape Town.

Box 4: The Abalimi Bezekhaya

Based in vast informal settlements of Cape Town (e.g. Khayelitsha, Myanga, Phillipi-Browns farm, Crossroads and Gugulethu) is another successfully initiative that has reduced hunger and food insecurity through gardening and support self-sufficiency. For over 30 years, the Abalimi organisation has been offering support through urban, organic micro-farming among the poor and unemployed.

Abalimi also offers basic micro-farmer training courses to any individual who wishes to start a vegetable garden through mentorship; resources training as well as advice (Ashoka, 2012). This has helped many individuals to be able to produce food for their households as well as for income purposes. The organisation is sustained mainly by donors and they have been successful in assisting small-scale farmers with seed, manure, compost and other necessary resource that have enabled them to create part time employment in Khayelitsha, thus reducing hunger and food insecurity.

The main challenge that is faced by this organization is the lack of incentive that young people have for agriculture especially farming. Most young people in the area do not have interest in the gardening projects and this leaves most of burden of food production on the elderly. Another challenge is the unfavourable climatic conditions with extremes of 40 degree drought in summer, floods in the winter season and prevailing winds in between (Ashoka, 2012).

Implications for civil society organizations challenges and opportunities in improving food security

CSOs seem to have various platforms at which they can articulate for policies and other strategic interventions in food security, both globally and nationally depending on the prevailing conditions in each country. However, while CSOs can participate in the global framework on food security agenda, some of the suggestions made by CSOs at the last 39th session of the Committee on World Food Security (CFS) show the need for action and the seriousness to tackle the core issue, which is “the right to food security” (FAO, 2012).

Among the suggestions made, the following are worth noting:

1. The CSOs call for the need to be treated as partners in all initiatives and at all stages of action, through active collaboration and coordination between government, CSOs, agencies, communities and other relevant institutions.
2. They argue that for strategies to be effective, they should be community driven and include marginalised groups, such as women, children, youth, small holder farmers, indigenous peoples, pastoralists and fisher folk.
3. The CSOs can facilitate community organisations through the support of empowerment and capacity building to address structural challenges of food insecurity.

These suggestions reflect and are echoed by the challenges facing CSOs in effective implementation of food security programmes at the community levels where coordination with government and the private sector is needed, but lacking. This lack of coordination is reflected in the challenges highlighted in the next section of the report.

Challenges affecting Effective Implementation of Food Security Initiatives

Some of the challenges affecting food security relate to theoretical and empirical measures of household food (in)security in South Africa. This is based on the complex nature of household food security or insecurity indicators and their classification. According to Hendriks (2005), various methodologies have been applied to food security studies – influenced by the objective of the analysis, data and other resource availability and the researcher’s or analyst’s background and preference. This makes it difficult to have a similar outcome of results for food security affecting communities at different time periods.

Another challenge is on the understanding of common terminologies perceived to influence food insecurity and related interventions. Misselhorn (2009) questions whether a focus on social capital is useful in considering food security interventions, using a case study of CSO interventions in Kwazulu-Natal (KZN) province. There are various perspectives of social capital, making it to differ and change according to the respective communities understanding of the term. The term is based on three different views, namely: the communitarian view; the networks view; and the institutional view of social capital. Each view is likely to lead to different outcomes of the same thing, thus making implementation a challenge.

Government role in ensuring and improving access to food security

Policies and programmes on food security

Historically food security has been a policy priority of government dating back to 1994. The introduction of the Reconstruction and Development Program (RDP) included the implementation of several measures to address food insecurity and poverty. The measures included:

1. Free health care for children under 6 and pregnant and lactating mothers;
2. Introduction of the child support grant in 1998 for children under 6 years of age;
3. School feeding program;
4. A range of interventions to enhance land and agrarian reform such as loan schemes for emerging and resource poor farmers and legislative reform to enhance tenure security.

The Integrated Nutrition Programme (INP) launched in 1994 and led by the Department of Health (DoH) aimed at reducing the prevalence of malnutrition amongst South Africans. Specific objectives of the programme included ensuring optimal growth of infants and young children through promoting breast feeding, promoting women's health with a particular focus on pregnant and lactating mothers, improving community capacity to address malnutrition and hunger and to improve multi-sectoral collaboration and community ownership of nutrition programmes. According to the INP its understanding and response to nutrition insecurity was informed by the United Nations Children's Fund (UNICEF)'s conceptual framework on Nutrition.

The programme had three main components:

1. A Community-Based Nutrition Programme (CBNP), which included the school feeding programme and supporting a health environment as well as strengthening household food security;
2. Health Facility-Based Nutrition Programme (HFBNP), focused on growth monitoring through the use of the Road to Health card for young children, micronutrient and food supplementation as well as nutrition education. The Protein –Energy – Malnutrition Scheme (PEM) was a core part of this programme;
3. A Nutrition Promotion Programme which would focus on nutrition promotion through policy development, advocacy, legislation and improved communication. Priority areas included a focus on food fortification and promotion of breast feeding.

The National School Nutrition Programme (NSNP) was launched in 1994 focussing initially on primary school children. In 2009 the programme was extended to some secondary schools countrywide. The target is all children in quintile 1, 2 and 3 from Grade R to secondary level education. However, Grade R schools run in community facilities do not access the NSNP. The NSNP guidelines stipulate that each meal provided to learners should fulfil at least 30% of their daily nutritional requirements per meal (DoE, 2009). The guidelines also stipulate the need for dietary diversity to be promoted in the provision of meals. Schools are encouraged to establish food gardens as a means of ensuring programme sustainability and for encouraging dietary diversity. The 2009/10 Annual Report on the NSNP (Department of Education (DoE), 2009/10) reflected that the programme's reach was extensive with over 6,1 million primary school children and 950 000 secondary school children benefiting from the programme. Furthermore, on average children received food for 191 days per year. An evaluation of the programme in 2008 found that "needy" children were provided with food to take home (UNICEF and DoE, 2008). Responsibility for the implementation of this programme was transferred from DoH to DoE in 2004.

Rural development, poverty alleviation and food security and reform have been identified as key priorities for creating a better life for all in South Africa (Department of Rural Development and Land Reform (DRDLR), 2012). The South African government as part of its broader rural development plan has committed itself to halving poverty between 2004 and 2014. Achieving household food security remains a critical component for meeting this objective. Outcome Seven of the current administrations Plan of Action aims to promote “*vibrant, equitable and sustainable rural communities and food security for all*” as a means for combating marginalisation of rural poor communities. It sets out to achieve this through several outputs including a focus on sustainable agrarian reform, improving access to affordable and diverse food, enhancing rural services and sustainable livelihoods, promoting rural job creation linked to skills training and economic livelihoods (DRDLR, 2012). Prioritising rural development, poverty reduction and chronic food insecurity is informed by the reality that South Africa remains among the most unequal societies in the world with unprecedented levels of absolute poverty and unemployment.

The Integrated Food Security Strategy (IFSS) of 1996, which was launched aimed at consolidating and improving coordination of the diverse and multifaceted food security interventions being implemented by different stakeholders within the three spheres of government. This strategy was informed by FAO guidelines for food security interventions and more importantly guided by constitutionally enshrined obligations and commitment to achieving the MDG targets. The IFSS informed the development of an Integrated Food Security National Plan with the following strategic pillars:

1. Increasing food production and trade;
2. Improving nutrition and food safety;
3. Improving income generation and job creation opportunities;
4. Increasing safety nets and food emergency management systems
5. Improve the analysis and information management systems
6. Provide capacity building

In terms of food production and trade being increased the focus was on supporting resource poor farmers and subsistence farmers to improve production via training, technology support, access to easy loans, agro-processing and capacity building for farmers. Developing market channels for food production by emerging farmers was another key priority. It is recognised that government procures approximately R10 billion worth of food for hospitals, prisons and school feeding schemes. Opportunities need to be created for small emerging farmers to sell produce to the government. A target of 35% has been set for government food procurement from small emerging farmers. Improving nutrition and food safety would be facilitated through food fortification, food safety measures, access to water and sanitation and health care, promotion of healthy lifestyles and public awareness on food and nutrition security. Income generation and job creation opportunities would be improved through expanding public employment programmes such as EPWP and CWP and value chain employment opportunities in the food sector. Skills training and learnerships would also support income generation. Increasing safety nets would be supported through school feeding, cash transfers, emergency relief (Social Relief of Distress), food banks, soup kitchens and cooperatives. A core cluster of departments led by agriculture and including social development, health, public works, water, transport, education, housing, land affairs, provincial and local government, science and technology and environmental affairs were tasked with implementation of the national plan.

Some of the key developments following the implementation of the IFSS were:

1. In 2002 FIVIMS, the food insecurity and vulnerability information mapping system was implemented;

2. In 2003 as part of the IFSS food fortification was introduced which compelled millers by legislation to fortify maize and white and brown flour with micro nutrients;
3. National School Feeding Programme was transferred from DoH to DoE and schools were encouraged to establish food gardens as part of a sustainable food production system.
4. The social grant system for children was progressively expanded to include children over the age of 6 and the means test threshold was reviewed to include more vulnerable children
5. The Expanded Public Works Programme was implemented to address short term unemployment and introduced a social sector component focussing on home and community based care and early childhood development.

The 2006 review of the IFSS noted the following challenges from the implementation of the program:

1. The lack of capacity to implement the intentions of the IFSS
2. Lack of effective coordination mechanisms between government structures – it was recorded that the Task Team coordinating the IFSS known as the IFSNPTT did not function well due to lack of commitment by members to attending and the poor quality of reporting of the TT to the DG Social Cluster Forum
3. Concern over duplication of services – for example several government departments (Agriculture, Health and Social Development) are implementing food garden initiatives and distributing starter packs with little coordination between them
4. Programme coordination involving so many government departments was complex and extremely slow, lacking effective communication procedures.
5. Other challenges that the IFSS faced included:
 - a. Increasing number of food emergencies resulting in an increase of dependency on direct food distribution;
 - b. Limited access to safe drinking water and poor sanitation increasing the occurrence of chronic diseases;
 - c. High prevalence of HIV/AIDS aggravating vulnerability and food insecurity;
 - d. Illiteracy or low level of education leading to a low level of awareness and access to information as slow adoption of technology; and finally
 - e. General poverty leading to insecurity and discouraging small farmers to invest.

Alongside the implementation of the IFSS government introduced in 2000 the Integrated Sustainable Rural Development Programme (ISRDP) in response to the problem of uncoordinated development which arose under the RDP. The ISRDP was aimed at promoting sustainable development through economic improvement, provision of social amenities and development of viable institutions. Similar to the IFSS the ISRDP did not have an independent budget. In 2009 government launched the Comprehensive Rural Development Programme (CRDP) as an effective poverty and food insecurity response through maximising the use and management of natural resources. The three pronged strategy of the CRDP is focussed on coordinated agrarian transformation, rural development and improved and integrated land reform (DRDLR, 2009). A central component of this strategy is job creation. In 2012 the Department of Agriculture, Forestry's and Fisheries published a Food Security Policy, with limited consultation. The stated goal of the policy is to improve South Africa's adequacy and stability of access to safe and nutritious food at national and household level. The strategic objectives of the Food Security policy are to:

1. Harmonise agricultural development with land reform
2. Ensure easy access to support for resource poor farmers
3. Promote domestic trade

4. Ensure existence of market environment to promote food security at national and household level
5. Improve management and utilization of food

The New Growth Plan (GoSA,2009) and the National Development Plan Vision 2030 (GoSA, 2012) both articulate a vision of an integrated rural economy with land reform, job creation and rising agricultural production contributing to this vision. The New Development Plan (NDP) specifically outlines the potential of agriculture to generate 1 million jobs in agriculture through an effective land reform programme and growth of irrigated and land based agriculture.

Land and Agrarian Reform have been identified as key components of the rural development and food security response in the National Development Plan 2030 as access to land is a necessary condition for strengthening food production by small scale and subsistence farmers. This is seen as one of the mechanisms for ensuring household and food and nutrition security and for creating employment opportunities. A target of 1 million direct and indirect jobs in the agricultural sector is envisaged.

Also, in 2012 the Chief Directorate for Food Security introduced the Zero Hunger Strategy which remains under discussion. Some of the objectives of the Zero Hunger Strategy are:

1. To provide an effective mechanism for the coordination and collaboration of national, provincial and Non-Governmental Organisation (NGO) inputs and resources in the pursuance of the common goal of increasing household food security and rural development.
2. To ensure the establishment of effective support structures for famers through capacity building and institutional strengthening for their improved participation.
3. To demonstrate opportunities for diversification and increasing income through the production of vegetables, small stock and small scale aquaculture.
4. To build an effective capacity at local level through intensive training and access to information that will provide effective support services to the farming communities.
5. To evaluate the impact of the interventions, to identify gaps and quantify any constraints that still need to be addressed and make recommendations for extending pilot activities into a broader development initiatives.

The Zero Hunger Programme has short term, medium and long term responses and identifies the lead agencies in the implementing of the different components of the programme. Under the Zero Hunger Programme, nutrition security interventions would be led by the DoH, while improving food production activities would be led by DAFF.

Relevance and effectiveness of government policies and programmes on food security

The Integrated Food Security Strategy (IFSS) has been largely considered a failure mainly due to the fact that food insecurity remains a pressing concern with over 14 million food insecure people in South Africa and very little progress in realisation of the Millennium Development Goal target of halving those in hunger by 2015. While the objectives were and remain laudable the lack of real integration of policies and programmes across the various Ministries and the lack of effective implementation are reasons for its failure. The absence of an appropriate institutional framework and functional coordination structure led to a fragmented response. The Integrated Food Security Strategy for South Africa provided a relevant multi-sectoral framework for addressing food security. However its lack of implementing and coordinating power diminishes its potential for effecting substantive change. A key achievement is that Food Security has been

made a national policy priority across all government departments and reflected also in the fiscal contribution to food security programmes.

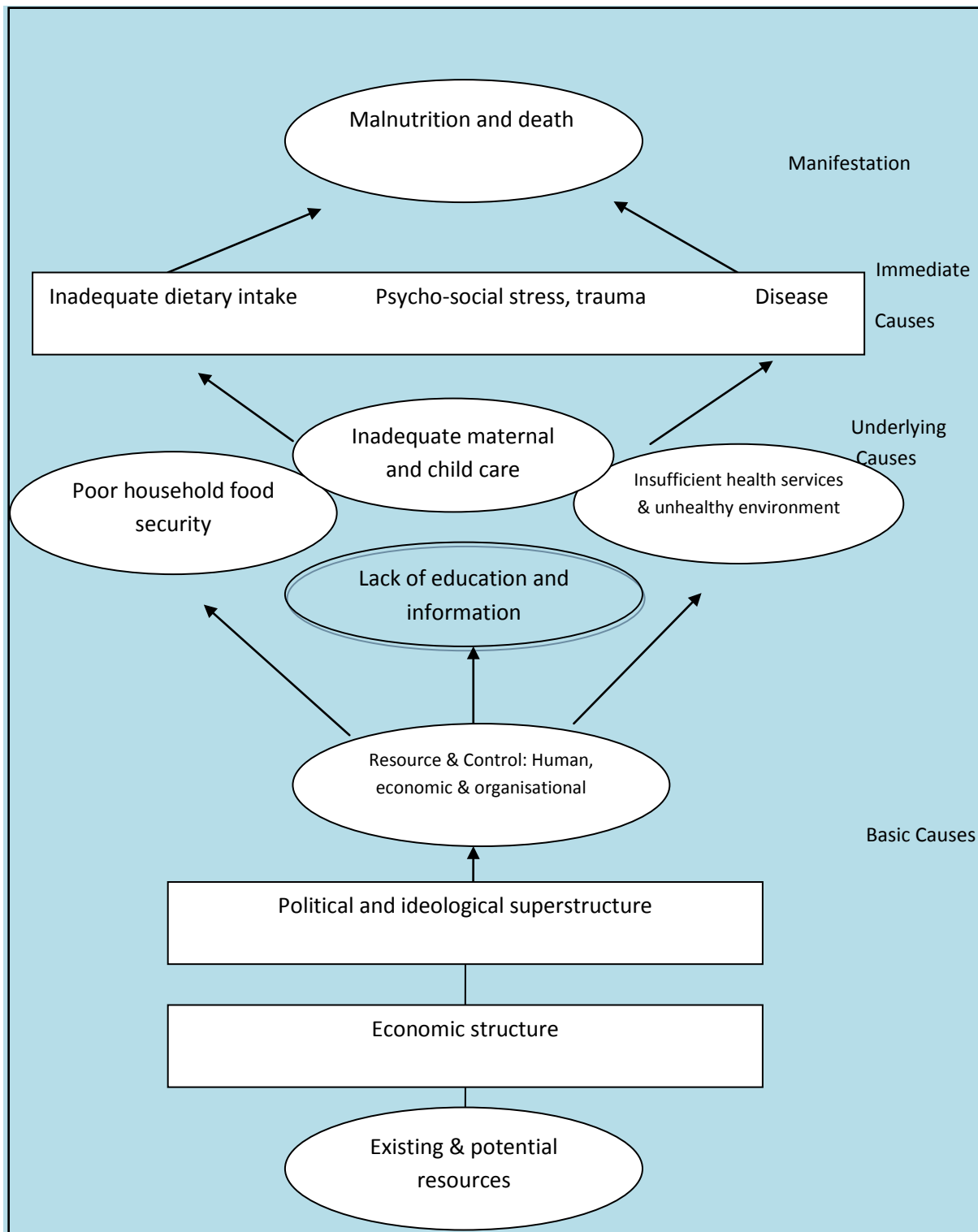
Programs targeted at BROAD-BASED FOOD AND NUTRITION AWARENESS INTERVENTIONS on nutritious eating

Nutrition education is defined as “learning experiences designed to facilitate the voluntary adoption and eating and other health related behaviours that contributes to the public’s well-being and health” (Labadarios et al., 1999).

Figure 20 shows the role of education and information on nutrition, or how the lack of education and information can result in malnutrition. Clearly, nutrition education plays a pivotal role in overall household nutrition and health (

Figure 20). South Africa has a number of public awareness programmes targeting nutritional eating and covering a number of areas. The INP, for example, targets nutritionally vulnerable individuals, groups and communities, and one of its main focus areas is nutrition promotion, education and advocacy (DBSA, 2008, DOH, 2003, DOH, 2009). The INP was developed based on the recommendations of the Nutritional Committee, which had been appointed by the minister of Health in 1994 to develop a nutritional strategy for the country. The INP food and nutrition security interventions include education and promotion of school gardens and micronutrient-rich foods, as well as nutrition guidelines for sectors caring for children such as crèches and AIDS orphans (Henderson and Saavedra, 1995).

Figure 20: UNICEF conceptual framework of causes of malnutrition and death in children, as adopted by the South African Department of Health



Source: Own construction from Faber and Wenhold (2007)

The overall aim of the INP is to enhance effective communication in improving awareness and the significance of good nutrition, and eventually those practices that impact nutrition related behavioural change in the public (Bourne *et al.*, 2007). The National Nutrition Directorate of the Department of Health developed educational and promotional material on micronutrients, food

fortification, food-based dietary guidelines (FBDGs), breastfeeding and TB/HIV. For example, there are eleven FBDGs for adults and children older than 7 years of age that are based on food that is locally available. This includes supportive text that go with the messages addressing the prevention and management of both under- and over-nutrition (Voster, 2001). The material comprises of booklets, sheets and flip charts. However, data on the current status of the material's usage and impact targets for this particular focus are not available. Bourne *et al* (2007) argue for the need for studies that show the usage and impact of these nutrition education materials.

Another program is the IFSS aimed at eradicating hunger, under-nutrition and food insecurity by 2015 (directly relates to Millennium Development Goal 1). The IFSS program's focus on nutrition awareness aims to empower South Africans to make the best choices for safe and nutritious food. In addition, the NSNP introduced in 1994 (integrated into the INP and IFSS) initially covered learners in primary school only, but has since been extended to secondary school learners. The NSNP roles include nutritional education awareness at schools (Bourne *et al.*, 2007 and DOH, 2009).

Based on a review of global school nutrition interventions, Steyn *et al* (2009) found that a nutrition-based curriculum offered by trained teachers at school in general improved behavioural outcome. Empirical studies indicate that encouraging and instilling an appropriate mindset and behaviour in mothers and caregivers towards the care of children is important in promoting nutrition and therefore healthier children (Labadarios *et al.*, 1999). According to Labadarios *et al* (1999) poor maternal schooling is the most consistent limiting factor for proper child feeding and general health care. Given high access and ownership levels of radio, televisions and various media and ICT technologies, it is important to provide widespread nutrition education materials using these various channels to educate the mothers and caregivers.

Despite early engagements, CSOs' involvement in nutrition educational programs wane over time (Health Systems Trust (HST), 1997). Identifying areas to strength CSOs support and engagements with community nutrition educational programs is important for ensuring food and nutrition security. In addition, there is need for coordination and collaboration of CSO and government interventions to ensure that they complement each other for greater societal food and nutrition security. CSO can also play an important role in training women, youth and other marginalised groups as champions of nutrition education in the communities. This is important to enhance widespread and sustainable adoption of nutrition interventions at the community level. In addition, through advocacy, CSOs can help ensure more government accountability and involvement in providing food and nutritional security to poor rural and urban communities. Also, CSOs can provide monitoring and evaluation services to assess progress towards achieving targets and keeping government aware of the shortfalls and areas that need to be strengthened and or improved.

Gaps in government promotion of access to food security

The absence of clear definitions relating to food and nutrition security in South Africa has been noted. The Food Security Policy introduced in 2012 attempts to address the problem of lack of clarity on the internationally defined concept of food security. Hendricks (2011) argues that this has fostered competition between government departments, particularly the Health Sector, where officials compete for the ear of government regarding nutrition.

In 2002 the Department of Agriculture Forestry and Fisheries (DAFF) (formerly Department of Agriculture) established a Directorate of Food Security charged with primary responsibility for food security. In April 2011 arising from restructuring a Chief Directorate for Food Security was established with three Directorates namely Subsistence Farming, Small-Holder Development and Infrastructure Support. According to the Food Security Policy document the development of a national policy on household food security will be located with the Directorate for Subsistence Farming (du Toit, 2011 cited in Hendricks 2011). The Zero Hunger programme which is expected to address all food security issues will be administered by a Directorate in DAFF which focuses on smallholder farming.

In parallel with these developments 'War on Poverty' programme, housed in the Ministry of Rural Development and Land Reform focuses on coordinating service delivery to address poverty in rural areas. The Departments of Labour, Economic Development and Local Government are addressing issues of job creation and economic development. What is clear is that a holistic and comprehensive approach to food and nutrition security requires the engagement with and coordination of multiple ministries and it remains unclear how this Directorate will achieve this. An example of a more comprehensive approach to food security is the DAFF managed Comprehensive Agricultural Support Programme (CASP) which is aimed at the provision of agricultural support and services particularly targeted to emerging and resource poor farmers. A key condition of the programme is that 10% of the budget allocation to Provincial Departments of Agriculture (PDA) is directed to food security programmes.

Nutrition monitoring and surveillance is important for assessing the impact of interventions and for identifying targets. The first national nutrition survey was conducted in 1999 and repeated in 2005, with the second survey focused on assessing the impact of the compulsory fortification of maize and wheat products. However the survey is not an on-going one. The establishment of FIVIMS - Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS) in 2000s failed as it did not provide clear food security indicators and was data intensive. In addition it did not integrate the various food security information systems into a single system. South Africa's report on progress towards MDS noted as a concern the lack of information on food and nutrition security. It is important however to recognise that FIVIMS was successful in identifying 'hunger hot spots across the country. With the establishment of the Department of Performance Monitoring and Evaluation (DPME) in the Presidency in 2010 efforts have been made to define indicators and ensure regular monitoring of progress towards improving the lives of people in South Africa. The DPME has a well-documented plan for improving the measuring of performance including the signing of performance targets for each Ministry and the overall review of information architecture of South African government.

Coordination challenges facing food security implementation efforts

While government and CSOs are both working towards ensuring food and nutrition security for the South African communities, lack of coordination between the two is cited as one of the challenges limiting effective impact of policy at community level. As noticed by Mtembu (n.d.), "the impact of South African government interventions aimed at addressing malnutrition and hunger amongst other economic and social plights have often gone unnoticed by the public because there is no delivery to be noticed. There is therefore dire need to ensure that programs such as the Integrated Food Security Strategy (IFSS) and Integrated Nutrition Programme (INP) do not end up as superfluous government

programs but as plans that deliver measurable sustainable outcomes that prosper rural people's livelihoods" (n.d.).

While CSOs acknowledge that government departments are faced with complex situations affected by the wider political economy dynamics, in addition to financial and institutional capacity constraints, they feel that these delivery setbacks need interrogation and remedy, which can be achieved through effective coordination with key stakeholders. Where plans and food security strategies don't bear results, other alternatives to these national plans need to be introduced, with the help of other external partners to combat hunger. It is in the government's interest to attempt to learn more, develop its capacity and renew its commitment to serve the people (Mtembu, n.d.).

Further, recognition is given to the fact that at a national level, the South African government has clearly set strategic objectives to either reduce or eliminate poverty and mal-nutrition in the country and several food security programmes highlight the progress that has been made by government institutions towards achieving food security for all. However, there seems to be little evidence made available to the public to show actual implementation of these national food security programs and their potential impacts on communities. This government is blamed for not sharing information on programmes implemented and their outcomes, as extension officers operating at community level don't provide the CSOs or the respective communities with those details. This concern is echoed in the next sentence. "As civil society organizations working on the same objective, of achieving food security at the household level, it would be useful to get feedback about the opportunities and constraints, which arise from implementing these programmes" (Mtembu, n.d.).

The points/questions listed below highlight some key elements required in assessing the success of each strategy – for it to have an impact (Mtembu, n.d.):

- Have community interests & priorities been put first in these strategies?
- Would more use of participatory and rural appraisal methods have helped gather better baseline data to inform these strategies?
- Are the requirements of adequate professional coordination, meticulous and comprehensive planning and the availability of the resources of time, labour, finance, etc. available to implement and monitor these programmes?
- Have appropriate and realistic development methods and indicators been set to achieve the programme goals?
- How would one go about modifying these interventions to accommodate long term sustainability?
- How does government ensure that other institutions, such as NGOs, get informed about its food security programs? and
- Does government create a network with other stakeholders where they can learn from each other and share findings on these programmes?

Role of private sector and business in food security

The private sector plays multiple roles in the field of food security from food availability (production and agro processing) to food access (retailing and food pricing) and in food utilisation (food fortification and marketing.) Under the corporate social investment (CSI) responsibility banner many private sector institutions are supporting development programmes in South Africa. A study showcasing best practice in CSI of South African/German companies

provided many examples of business involvement in food security. Examples include the BMW SA SEED project (Schools Environmental Education and Development) whose schools garden initiative reached learners in several provinces. The programme is aimed at enhancing food security, environmental protection and promoting nutrition and environmental education to school learners (South African – German Chamber of Commerce and Industry, undated). Another initiative is the Woolworths “we can change our world” initiative that promotes the development of permaculture gardens in schools and greening of school environments.

Another dimension of food availability which the private sector contributes to is commercial agricultural production, agro-processing and distribution of food products. Philips (2011) documented how the structure of our economy has created a situation of limited competition and high level of centralisation of the economy by a few large corporates. This has negatively impacted on food pricing, job creation and enterprise development. The highly centralised and capital intensive agro-industries tend to limit or exclude new entrepreneurs. Most agricultural products and non-food products are mass produced. Although competition does exist it's mainly between large producers. A factor influencing retail pricing has been anti-competitive practices of retail cartels in inflating the price of retail goods. The Competition Commission has investigated and prosecuted many such cases, the most well-known being the bread cartel in which a fine of R 195 million was levied against Pioneer foods, one of the four member cartel (Competition Commission, 2010).

References

- Aliber, M. and Hall, R. 2012. Support for smallholder farmers in South Africa: Challenges of scale and strategy, *Development Southern Africa*, 29:4, 548-562
- Aliber, M. 2009. Exploring Statistics South Africa's national household surveys as sources of information about household-level food security *Agrekon*, Vol 48, No 4 (December 2009)
- Aliber, M. and Hart, T. G. B. 2009. Should Subsistence Agriculture be supported as a Strategy to Address Rural Food Insecurity? *Agrekon*, Vol. 48, No. 4 (December 2009).
- Altman, M. 2007. Low Wage Work in South Africa
- Altman, M., Hart, T. G. B. and Jacobs, P. J. 2009. Household Food Security Status in South Africa. *Agrekon*, Vol. 48, No. 4 (December 2009).
- Antonopoulos, R. 2008. "Impact of Employment Guarantee Programmes on Gender Equality and Pro-Poor Economic Development": POLICY BRIEF - Case-Study on South Africa
- Ashoka, 2012. farmers of home the people's garden centre Isenta ye gadi yabantu. issue 39. page 1
- Baiphethi, M. N. and Jacobs, P.J. 2009. The Contribution of Subsistence Farming to Food Security in South Africa. *Agrekon*, Vol. 48, No. 4 (December 2009).
- Beddington, J. R., Godfray, H. C. J., Pretty, J., Thomas, S. M., Warham, E. J. 2011. Linking Policy on Climate and Food. *Science* **331** (6020): 1013–1014.
- Benson, T. 2005. Africa's Food and Nutrition Security Situation: Where are we and how did we get here?
- Bourne, L. T., Hendricks, M. K., Marais, D. and Eley, B. 2007. Addressing Malnutrition in Young Children in South Africa. Setting the National Context for Pediatric Food-Based Dietary Guidelines. *Maternal and Child Nutrition* (2007). 3, pp. 230-238.
- Centre for AIDS Development, Research and Evaluation (CADRE), 2010. Community entry points: Opportunities and strategies for engaging community supported HIV/AIDS prevention responses. Johannesburg, South Africa.
- Chambers, R. 1989. Vulnerability, coping and policy. *IDS Bulletin* 20(2): 1-7.
- Competition Commission, 2010. Press Statement: TRIBUNAL IMPOSES PENALTY OF R195 MILLION ON PIONEER
- Cross, C., Mbhele, W., Masondo, P., Zulu, N. and Mngadi, M. 2000. Employment issues and opportunities in the informal economy: women home-based workers in Durban's shacks and
- DAFF, 2012. Food Security Policy for South Africa.

- DAFF, 2012. Zero Hunger Programme, Implementing the Food Security Policy for South Africa.
- Davies, R, and Thurlow, J. 2009. 'Formal-informal economy linkages and unemployment in
- De Waal, A. and Whiteside, A. 2003. New Variant Famine: AIDS and Food Crisis in Southern Africa. *Lancet* 2003; 362: 1234-37.
- Department of Agriculture (DoA). 2002. The Integrated Food Security Strategy (IFSS) for South Africa. Pretoria: Department of Agriculture, Pretoria, South Africa.
- Department of Agriculture (DoA). 2006. A Status Report for Integrated Food Security and Nutrition Task Team. Pretoria: Department of Agriculture CAADP.n.d view 22 February 2013 from <http://www.caadp.net/how-caadp-works.php>
- Department of Agriculture, Forestry and Fisheries (2012) Food Security Policy for the Republic of South Africa. Pretoria, South Africa.
- Department of Agriculture, Forestry and Fisheries (March 2011) Food Security. Pretoria, South Africa.
- Department of Education, 2009. National School Nutrition Programme: A Guide for Secondary Schools. Pretoria, South Africa.
- Department of Health, 2003. Integrated Nutrition Programme (INP) – Foundation for Life. Available at: http://www.westerncape.gov.za/text/2003/inp_foundation_for_life_1to12.pdf [Accessed 8 February 2013]
- Development Bank of Southern Africa, 2008. Combating Malnutrition in South Africa: Input Paper for Health Roadmap. Available at: http://www.dbsa.org/Research/Documents/South%20Africa%20Nutrition_%20input%20paper_roadmap.pdf?AspxAutoDetectCookieSupport=1 [Accessed 9 February 2013]
- Devereux S (2006). Identification of methods and tools for emergency assessments to distinguish between chronic and transitory food insecurity, and to evaluate the effects of the various types and combinations of shocks on these different livelihood groups. Rome: United Nations World Food Programme.
- DFID, 2000. Sustainable livelihoods guidance sheets. London, Department for International Development.
- Dodson, B., Chiweza, A. and Riley, L. 2012. Gender and Food insecurity in Southern African cities, AFSUN Urban Food Security Series No. 10, Cape Town and Kingston, 2012
- Drimie, S. 2003. HIV/Aids and Land: Case Studies from Kenya, Lesotho and South Africa. *Development Southern Africa*, Vol. 20, No. 5, December 2003.

Faber, M. and Wenhold, F. 2007. Nutrition in Contemporary South Africa. Water SA, Vol. 33, No. 3 (Special Edition) 2007.

FAO (2010) The State of Food Insecurity in the World: Addressing food insecurity in protracted crises

FAO. 2002. Human Vitamin and Mineral Requirements: Report of a joint FAO/WHO expert consultation

FAO. 2003. Trade Reforms and Food Security: Conceptualising the Linkages

FAO. 2002. The state of food insecurity in the world 2002. Rome. Rome: FAO

FAO. 2006. The state of food insecurity in the world 2006. Rome: FAO

FAO. 2012. The State of Food Insecurity in the World 2012. Rome: FAO

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Rome, 2010

Feed the Future, n.d. Accessed in April 2013 at http://www.feedthefuture.gov/sites/default/files/resource/files/ftf_factsheet_malawi_jan2013.pdf

Frayne, B., Battersby-Lennard, J., Fincham, R., Haysom, G., 2009. Urban Food Security in South Africa: Case study of Cape Town, Msunduzi and Johannesburg. Development Planning Division Working Paper Series No.15 , DBSA: Midrand.

Giese, S. and Smith, L. 2008. Rapid Appraisal of Home Affairs Policy and Practice Affecting Children in South Africa. Report commissioned by ACESS.

Gross, R., Schoeneberger, H., Pfeifer, H. and Preuss, A. 2000. The Four Dimensions of Food and Nutrition Security: Definitions and Concepts.

Hall, R. 2007. The Impact of Land Restitution and Land Reform on Livelihoods. Published by the Programme for Land and Agrarian Studies, School of Government, University of the Western Cape, 2007

Hart, TGB. 2009. Exploring definitions of food insecurity and vulnerability: time to refocus assessments Agrekon, Vol 48, No 4 (December 2009)

Hausman, R., Tyson, L.D & Zahidi, S. 2008. The Global Gender Gap Report. World Economic Forum, Geneva, Switzerland.

Health Systems Trust (HST), 1997. An Evaluation of South Africa's Primary School Nutrition Programme. Durban, South Africa.

Hendirks, S. L., Ngidi, M. and Freude, B. 2011. The Food Policy Capacity of South Africa: Commissioned by the International Food Policy Research Institute (IFPRI).

Hendriks, S. L. 2005. The challenges facing empirical estimation of household food (in)security in South Africa, *Development Southern Africa*, 22(1), pp. 103-123

Hosegood, V., Preston-Whyte, E., Busza, J., Moitse, S. and Timaeus, I. M. 2007. *Social science & Medicine* 65 (2007) 1249-1259.

Human Sciences Research Council, 2004. *Food Security in South Africa: Key Policy Issues for the Medium Term*. Pretoria, South Africa.

IFPRI, Concern Worldwide & Welt-Hungerhilfe (2010) *Global Hunger Index*. Washington DC, USA.

Jacobs, P. (2010) Household food insecurity, rapid food price inflation and the economic downturn in South Africa in *Agenda* 86, 2010 – Gender Food and nutrition security – in the context of the global economic crisis (p 38 to 51)

Kirsten, J., Townsend, R. and Gibson, C. 1998. Determining the Contribution of Agricultural Production to Household Nutritional Status in KwaZulu-Natal, South Africa. *Development Southern Africa*, Vol. 15, No. 4, summer 1998.

Klennert, K. 2005. Editor: *Achieving Food and Nutrition Security Actions to Meet the Global Challenge A Training Course Reader*.

Koch, J. 2011. *The Food Security Policy Context in South Africa*. International Policy Centre for Inclusive Growth United Nations Development Programme

Kramer, K. and Zimmerman, M. B. 2007. *Nutritional Anemia. Sight and Life*, Basel, Switzerland.

Labadarios D., Mchiza Z, Steyn P, Gericke G, Maunder E, Davids Y & Parker W. (2011) Food security in South Africa: a review of national surveys in *Bull World Health Organ* 2011;89:891–899

Labadarios, D., Davids, YD., Mchiza, Z. and Weir-Smith, G. 2009. *The Assessment of Food Insecurity in South Africa*. Human Sciences Research Council, South Africa.

Labadarios, D., Maunder, E., Swart, R., Bagriansky, J., Steyn, N. P., MacIntyre, U., Gericke, G., Huskisson, J., Dannhauser, A., Voster, H. H. and Nesamvuni, A. E. 1999. *The National Food Consumption Survey (NFCS): Children aged 1-9 years, South Africa, 1999*. Department of Health, South Africa.

Labadarios, D., Steyn, N. P. and Nel, J. 2011. How Diverse is the Diet of Adult South Africans? *Nutrition Journal* 2011, 10: 33.

Labadarios, D., Swart, R., Maunder, E. M.W., Kruger, H.S., Gericke, G.J., Kuzwayo, P.M.N., Ntsie, P.R., Steyn, N.P., Schloss, I., Dhansay, M.A., Jooste, P.L., Dannhausser, A., Nel, J.H., Molefe, D. and Kotze, J.W. 2007. Executive Summary of the National Food Consumption Survey Fortification Baseline (NFCS-FB-I) South Africa, 2005. Department of Health, Pretoria, South Africa.

Ladzani, R. 2009. The Impact of HIV and AIDS on Food Security and Nutrition in South Africa. Human Sciences Research Council, South Africa.

Matshe, 2009. Boosting Smallholder Production for Food Security: Some Approaches and Evidence from Studies in Sub-Saharan Africa. *Agrekon*, Vol. 48, No. 4 (December 2009).

McCord, A. 2012. The politics of social protection: why are public works programmes so popular with governments and donors, Overseas Development Institute (ODI)

McEwan, H. and Woolard, I. 2010. Presentation to Overcoming Inequality and Structural Poverty in South Africa, September 2010.

Motala S. 2010 Giving realisation to the right to food. In Gender, food and nutrition security in the context of the global economic crisis. *AGENDA*, No 86. 2010

Motala, S. and Jacobs, P. 2011. Making the Community Work Programme (CWP) work for young children through identifying Innovations to Enhance Early Childhood Development Outcomes for Children.

Mthembu, N., n.d. The government's response to combating food insecurity: Are there opportunities for collaboration with civil society? AFRA. Att: <http://www.afra.co.za/default.asp?id=1169>

NAMC and DAFF, 2010. The South African Food Cost Review 2010.

National Treasury, 2011. Confronting Youth Unemployment: Policy options for South Africa: Discussion Document.

NDA, 2012. Mid-Term Evaluation Report of Lethimpumelelo Agricultural Cooperative in KwaZulu Natal. Johannesburg, South Africa.

NDA. n.d. Paper on the Social Enterprise Development (Income Generation) Programme approach – through Job Creation. Johannesburg, South Africa.

NDA. n.d. Proposal Summary Sheet: Household Food Security Programme – ward 1. Johannesburg, South Africa.

NDA. NDA Food Security Programme: Working Together to promote Household and Community Food Security. Johannesburg, South Africa.

Nelson, C. A. (2000) 1000 Day Window of Opportunity, Center on the Developing Child, Harvard University. www.developingchild.net.

Philips, 2011. Inequality and economic marginalisation: How the structure of the economy impacts on opportunities on the margins.

Quisimbing, A; Brown, L; Feldstein, H; Haddad, L; & Pena, C (1995) Women the Key to Food Security, IFPRI, Washington DC, USA.

Reddy, V. and Moletsane, R. 2009. The Gendered Dimensions of Food Security in South Africa: A Review of the Literature. Human Sciences Research Council, South Africa.

Rocha C., Burlandy L. and Maluf R., 2012. Small farms and sustainable rural development for food security: The Brazilian experience. Development Southern Africa Vol. 29, No. 4, October 2012

RSA (2010) Millenium Development Goals, Country Report 2010

SALDRU (2008) National Income Dynamics Study, Wave 1. Cape Town, South Africa.

Sen, A. K. 1981. Poverty and famines: an essay on entitlement and deprivation. Oxford: Clarendon Press.

Senefeld, S and Polsky, K. 2005. In AIDS. Poverty and Hunger: Challenges and responses. Highlights of the International conference on HIV/AIDS and Food and Nutrition Security. Durban. Published by IFPRI: Washington DC

South African – German Chamber of Commerce and Industry (undated). Corporate Social Responsibility as practiced by South African and German Companies.

South African Institute of Race Relations, 2012. South African Survey 2010/2011: Health and Welfare. Johannesburg, South Africa.

Statistics South Africa (Stats SA), 2009 Living Conditions Survey 2008/2009, Statistical Release P0310. Pretoria, South Africa.

Statistics South Africa (Stats SA), 2011. Quarterly Labour Force Survey, Q2 2011, Statistical Release P0211. Pretoria, South Africa.

Statistics South Africa (Stats SA), 2012. Quarterly Labour Force Survey, Q3 2012, Statistical Release P0211. Pretoria, South Africa.

Statistics South Africa (Stats SA), 2013. Quarterly Labour Force Survey, Q4 2012, Statistical Release P0211. Pretoria, South Africa.

Statistics South Africa, 2008. Measuring Poverty in South Africa. A technical report. Steyn, N. P., Lambert, E. V., Mchiza, Z and De Villiers, A. 2009. S Afr J Clin Nutr 2009; 22 (3): 145-152.

Steyn N.P., Labadarios D. and Nel. J.H. (2011) Factors which influence the consumption of street foods and fast foods in South Africa-a national survey in *Nutrition Journal* 2011, **10**:104

TIPS, 2011. The impact of biofuels on food prices in the Southern African Customs Union: www.tips.org.za/programme/sadrn

Unicef and DoE, 2008. Evaluation of the School Nutrition Programme Provincial Report: KwaZulu-Natal.

Van Averbek, W. and Khosa, T.B. 2007. The Contribution of Smallholder Agriculture to the Nutrition of Rural Households in a Semi-Arid Environment in South Africa.

Van der Berg, S. 2006. Fiscal Incidence of Social Spending in South Africa, 2006. University of Stellenbosch, Cape Town, South Africa.

War on Want, 2011. Food Sovereignty: Reclaiming the Global Food System.

Warshawsky, 2011. State, Civil Society and Food Insecurity in post-Apartheid Johannesburg. <http://digitallibrary.usc.edu/cdm/compoundobject/collection/p15799coll127/id/621150/rec/1>

Windfuhr, M. and Jonsen, J. (2005) Food Sovereignty: towards democracy in localised food system. FIAN International.

World Bank, 2012. Changing Dynamics of Child Grants in South Africa in the context of high adult mortality; SA Economic Update: Focus on Inequality of Opportunity.



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ISBN: 978-0-621-41968-9



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