

**FOOD SECURITY DEFINITIONS,  
MEASUREMENTS AND RECENT  
INITIATIVES IN SOUTH AFRICA AND  
SOUTHERN AFRICA**

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## **Acronyms and abbreviations**

AsgiSA	Accelerated and Shared Growth Initiative for South Africa
CLG	Clinic Garden Project
CPEG	Centre for Poverty, Employment and Growth
DoA	Department of Agriculture
DRC	Democratic Republic of the Congo
FAO	Food and Agriculture Organisation of the United Nations
FIVIMS	Food Insecurity and Vulnerability Mapping Information Systems
GDP	Gross Domestic Product
GHS	General Household Survey
HSRC	Human Sciences Research Council
IES	Income and Expenditure Survey
IFPRI	International Food Policy Research Institute
IFSNP	Integrated Food Security and Nutrition Programme
IFSNP-TT	Integrated Food Security and Nutrition Programme Task Team
IFSS	Integrated Food Security Strategy
IMF	International Monetary Fund
kcal	kilocalories
MDGs	Millennium Development Goals
NAMC	National Agricultural Marketing Council
NFCS	National Food Consumption Survey
NGO	non-governmental organisation
NSNP	National School Nutrition Programme
PEM	Protein Energy Malnutrition Scheme
SADC	Southern African Development Community
SAFEX	South Africa Futures Exchange
SAVACG	South African Vitamin A Consultative Group
USDA	United States Department of Agriculture
VAC	Vulnerability Assessment Committees
WFS	World Food Summit

## **Executive summary**

This paper reviews the international debate on food security and notes how this has changed during the past thirty years, culminating in a more robust but nuanced way of understanding and measuring the dynamics of food security. The paper then looks at the various challenges faced in Southern Africa and the recent attempts to develop ways to address these challenges.

This is followed by a discussion of food security in South Africa, which opens with consideration of the research difficulties, especially the multiple methods and instruments that are used to determine the levels of food security in South Africa. The paper then focuses on the Integrated Food Security Strategy in South Africa and looks at how this is being implemented. The focus is largely on the achievements to date, and on some of the more pressing constraints encountered in the implementation of the strategy at various levels.

The paper concludes with some suggestions for the way forward with regard to more integrated future research, and the need for closer collaboration among the parties contributing to improved food security in South Africa.

## 1. Introduction

According to recent research by the International Food Policy Research Institute (IFPRI) the world food situation is being rapidly redefined (Von Braun 2007). The new driving forces, namely income growth in some countries (e.g. China), globalisation, increased urbanisation and migration, climate change, inadequate access to production inputs, land and water, and decreased public sector investment in agriculture and rural infrastructure in developing countries, unprecedented energy and food price increases, demand for and subsidised biofuel production, and the increasing role of the private sector in national and global food systems have the effect of drastically changing food consumption, production and market patterns (FAO, 2008; Gillespie, 2008; Von Braun, 2007).<sup>1</sup> While some of these may be viewed as temporary shocks (e.g. oil and food price increases, both of which had dropped significantly by the end of 2008, at least globally) most will be around for a long time and prices may again rise as a result of demand, scarcity or speculation. The impact of these new driving forces will be long-term and will represent a major challenge to food security (Evans, 2009), especially for the 923 million chronically hungry people worldwide (FAO, 2008). This is an increase of more than 80 million people since 1990–1992, the baseline period for the World Food Summit (WFS) and Millennium Development Goals (MDGs) hunger reduction targets. Consequently, progress towards achieving these targets has suffered a significant setback in terms of the prevalence of hunger and the number of undernourished (FAO, 2008).

The heightened interest of the Centre for Poverty, Employment and Growth (CEPG) in food security arose from the drastic global and national energy (especially oil) and food price increases during 2007 and 2008, and the realisation that new driving forces will affect the local food security situation over the long term. Rising food prices, particularly prices of maize and wheat which are the staple diet of the poor in South Africa, pose serious problems for the urban and rural poor, as most are net buyers of food. Recent International Monetary Fund (IMF) data and those of independent sources suggest that food prices will increase steadily over the next decade, even if there are some fluctuations and the occasional drop in prices (Evans, 2009; Gillespie, 2008). Poor households will increasingly be forced to allocate a greater proportion of their expenditure to food, with the result that diets will become less diverse and lower in quality, and energy intake (calories consumed) will be less as they try to cope with the situation. Inadvertently some of these households will have to sell off some or all of their assets in order to procure food at higher prices. Most severely affected will be the urban and rural poor, the landless and female-headed households (FAO, 2008).

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<sup>1</sup> These changes sparked off renewed interest in the “self-sufficiency” debate – should countries aim to achieve food security by growing their own food or by growing/producing other things which they export for foreign exchange to import food? The debate is about comparative advantage, and about the merits of exchanging agricultural production risk for the risks of depending on international markets. Any decision would need to be based on a particular country’s access to economic and natural resources as well as markets and ensuing trade agreements, amongst other determining factors.

Within Southern Africa the situation is becoming increasingly serious (Maunder and Wiggins 2007). In addition to the various political, economic and social ties that connect these countries, virtually all of them are also linked by the common denominators of water scarcity, high incidences of HIV infection and AIDS, and high levels of unemployment. All of these have a significant impact on people's ability to achieve and maintain food security. Shocks such as high food prices further exacerbate the situation.

In this paper, an overview of the current understanding of food security and the situations in Southern and South Africa are explored. While the focus is largely on the South African situation and strategies aimed at achieving food security there, the situation and associated strategies in other Southern African countries are noted. The paper begins with a review of the progressive thinking behind and understanding of food security and the factors that contribute to insecurity. This is followed by a brief synopsis of what is taking place in other parts of Southern Africa at present, including the food insecurity situation in a few countries, along with the strategies that are being implemented at various scales. The next section focuses on the current situation in South Africa and looks at research obstacles and the implementation of the Integrated Food Security Strategy (IFSS), a government initiative aimed at determining and reducing food insecurity and vulnerability in the country. The final section looks at the way forward and makes suggestions for areas of further research.

## **2. Current thinking about food (in)security**

### **2.1. Introduction**

Historically, food security started to make a serious impact on the development debate in the 1970s and has continued to do so for the last three decades. The term originated at the 1974 World Food Conference, which defined food security as:

*[the] availability at all times of adequate world supplies of basic food stuffs...to sustain a steady expansion of food consumption...and to offset fluctuations in production and prices...*  
(UN, 1975)

This definition, emphasising security in terms of food supply at international and national levels, has been revised over the last thirty years as a result of deeper understanding of the nature of the food problem and changes in thinking about food security. Three paradigm shifts regarding thinking about food security and insecurity have taken place (Devereux & Maxwell, 2003). Firstly, there was a shift from concern about global and national food security to the household and individual levels. Secondly, there was a shift from a food-first perspective to a livelihood perspective. And thirdly, there was a shift from the exclusive use of objective indicators for determining food security to the inclusion of the subjective perception of those affected. These gradual shifts coincided with changes in both global and local policy and practice. Local changes were often influenced by global changes. More recently there appears to have been a shift towards issues of governance within national and international food security strategies. These include rights to food security, social protection, appropriate and timely interventions, and the management/mitigation of crises (see Devereux, 2009; Maunder and Wiggins, 2007; Von Braun, 2009).

### **2.2. Changing policies and practices**

#### ***2.2.1. From national to household and individual food insecurity***

From the World Food Conference of 1974 up until 1980, the emphasis was on global food security, sparked off by high international food prices. During this period there was an increasing development focus on poverty and basic needs, in the tradition of Maslow, and food was considered a primary need (Maxwell, 2003). Between 1981 and 1985, the Food and Agriculture Organisation of the United Nations (FAO) developed an approach which focused on the balance between the demand for and the supply of food in the food security equation. This subsequently led to a focus on household and individual food security, largely sparked off by the work of Amartya Sen (1981) which highlighted the effect of personal entitlements (resources used for production, labour,

trade and transfers) in ensuring access to food.<sup>2</sup> During the same period World Bank structural adjustment policies had the effect of subordinating poverty reduction and basic needs to concern for better national debt management, “fiscal balance, macroeconomic stability and internal and external liberalisation” (Maxwell, 2003: 25). Despite improved concepts of food security and increased food needs (the latter a result of structural adjustment policies – see Cornia et al., 1987) structural adjustment resulted in the diverting of the resources required for practical action towards structural adjustment programmes. These policies and programmes transformed livelihood systems (Bryceson & Bank, 2001), requiring many households to diversify livelihoods and to shift towards non-agricultural sources of income to secure the means to purchase food (Drimie et al., 2008).

The African famine of 1984/85 renewed global attention towards hunger and its causes. The World Bank *Report on Poverty and Hunger* (1986) is regarded as highly influential in promoting a focus on food security during the period 1986–1990. This is partly because hunger was used as a proxy for poverty, and because a number of World Bank, FAO and European Commission food security studies were subsequently implemented in Africa (Maxwell, 2003: 25). The 1986 report introduced the distinction between *chronic* and *transitory* food insecurity. Both refer explicitly to the temporal dimension of food insecurity, and only recently have the severity dimensions of food security been carefully examined (see Devereux, 2006).

Chronic food insecurity is long-term or persistent in that it can be considered to be an almost continuous state of affairs. It is closely related to structural deficiencies in the local food system or economy, chronic poverty, lack of assets and low incomes which persistently curtail food availability and access over a protracted period of time (DFID 2004; FAO 2005). It is often a normal state of affairs. Transitory food insecurity, on the other hand, is usually sudden in onset, short-term or temporary and refers to short periods of extreme scarcity of food availability and access (Barrett & Sahn 2001). Such situations can be brought about by climatic shocks, natural disasters, economic crises or conflict. Experiences of transitory food insecurity may arise through smaller shocks at the household level (e.g. loss of income and crop failure). While not the normal state of affairs shocks can be severe and unpredictable.

Food insecurity has a third temporal feature. Seasonal or cyclical food insecurity may be evident when there is a recurring pattern of inadequate access to food such as prior to the harvest period (the ‘hungry season’) when household and national food supplies are scarce or the prices higher than during the initial post-harvest period (Devereux et al. 2008). It is generally considered to be more easily predicted than transitory food insecurity as it is a known and regular occurrence. Devereux (2006:4) suggests that because of its limited duration (2–3 months), it is better understood as a form of recurrent transitory food insecurity, which has important linkages to chronic food insecurity. During this seasonal period, poorer households may consume or sell their limited assets to acquire food in order to survive. The depletion of assets can

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<sup>2</sup> Sen’s seminal work on the issue sought to explain certain puzzling aspects of the great Bengali famine of 1943–44; in particular, to address the question of why so many households had gone hungry while the country as a whole had adequate food stocks.

result in a shift from a situation of food security to one of insecurity. For those already chronically food insecure this will worsen their situation (Devereux 2009) as the depletion of assets may make future experience of food insecurity more severe.

Except perhaps for seasonal food insecurity, which sometimes has a natural time frame, the other two definitions do not specify absolute time periods. This creates the fuzziness that prevents us from determining exactly when the transitory food insecurity ends and chronic food insecurity starts. As a means of resolving this dilemma Devereux (2006:5) suggests that rather than being distinct conceptual and empirical categories, 'they could be seen as lying at two ends of a continuum, with cyclical food insecurity in between'. But this seems to oversimplify the matter as a further problem persists in that the intensity dimension is not adequately captured in current definitions.

Understanding the intensity, rather than the duration, of food insecurity may be initially critical for correct targeting of the food insecure at the time of a shock with the most appropriate immediate intervention. A focus on intensity informs us of the magnitude of the food gap (usually measured in terms of energy intake), while a focus on the duration can tell us something about the nature of the causes and assists with long-term development planning. However, a focus on intensity is also required under normal conditions as this will tell us not only how severe the existing situation is, but what it might be like in the future if conditions gradually get worse or a shock is experienced.

Due to the gradual nature of chronic food insecurity, it is often referred to as moderate food insecurity and the implication is that it is less serious than transitory food insecurity (WFP 2005a). This suggests that less attention is likely to be given to situations that have been determined to be chronic in nature. As it results from a sudden shock, transitory food insecurity is often referred to as acute food insecurity, implying a greater food gap and greater severity (HSRC 2007; WFP 2005a). Consequently, emergency relief measures tend to focus on the latter, while largely ignoring the former, to the further detriment of the poor (Prendiville 2003). This is despite the fact that a focus on the factors that cause gradual change in food security status might actually prevent shocks from resulting in extremely severe food insecurity. Devereux (2009) argues that the food crises in Malawi, Ethiopia and Niger, during this century, could have been prevented if attention had been paid to the gradual effect of stressors that brought about the situation prior to the shocks that triggered the crises.

The practice of considering transitory food insecurity to be more serious than chronic food insecurity is questionable. While both are associated with an inability to meet basic food consumption requirements, chronic has been linked to the persistent inability to do so and transitory only to a temporary inability (Devereux 2006). A further assumption is that transitory food security is a rapid change from a level of food security to one of food insecurity. According to a recent World Food Programme definition (WFP 2004) 'transitory food insecurity affects households that are able to meet their minimum food needs at normal times, but are unable to do so after a shock.'

More likely, being moderately chronically food insecure prior to a transitory or cyclical shock increases the risk of becoming severely food insecure. A subsequent WFP

publication reports that: ‘A large number of chronically food insecure households are affected by shocks’ (WFP 2005b).

To clarify the lived experience of food insecurity, this state can be separated into four categories relating to the intensity and temporal dimensions. These range from long-term moderate experiences to short-term severe emergencies requiring relief/humanitarian intervention, as shown in Figure 1. Such a separation corrects the perception that chronic implies moderate and transitory implies acute. Rather both chronic and transitory food insecurity can have moderate and severe intensities. The figure suggests why the usual practice of focusing on transitory food insecurity ignores those who experience severe chronic food insecurity. Without separating out the intensity dimension, chronic situations are considered moderate. Consequently, severe chronic situations may be seen as normal conditions and moderate transitory situations are understood as severe and seen as warranting emergency intervention (see Prendiville’s (2003) analysis of prevailing conditions in 2002 that saw the supply of food aid to Southern Africa but not to Somalia).

**Figure 1 – Combined temporal and severity dimensions of food insecurity**

TEMPORAL	SEVERITY	
	Moderate	Severe
Chronic	Moderate chronic food insecurity <i>(chronic hunger)</i>	Severe chronic food insecurity <i>(high infant mortality rate and crude mortality rate [CMR])</i>
Transitory	Moderate transitory food insecurity <i>(e.g. seasonality)</i>	Severe transitory food insecurity <i>(emergencies)</i>

Source: Devereux (2006:7)

Devereux (2006) argues that there are strong negative synergies between chronic and transitory food insecurity and between moderate and severe food insecurity. There are transitory-to-chronic linkages by virtue of chronic food insecurity and poverty being the products of consecutive rapid shocks, rather than only gradual changes, which result in the depletion of assets and the undermining of livelihoods. These lead to situations in which people are unable to return to their previous lower level of food insecurity (see Carter et al. 2004 for examples). There are also moderate-to-severe linkages in that most of those households which are susceptible to food crises already lead a marginalised existence and experience chronic moderate food insecurity. Even a minor shock can imperil their ability to respond positively (see Devereux 2009 for examples). Gradual processes, such as declining land availability, the spread of HIV and Aids and related policies that do not effectively deal with these stressors, gradually erode the resource base of this kind of household. This loss of assets undermines the ability of marginal households to cope with future shocks and changes.

The interaction between chronic and transitory food insecurity is captured in Devereux's (2006) concept of *composite* food insecurity. Households that experience composite food insecurity are moderately chronically food insecure most of the time and as a result are also highly sensitive to periodic food shocks. Consequently, the intensity of their experience of food insecurity is likely to fluctuate between moderate and severe. At a fundamental level household vulnerability to chronic and transitory food insecurity are often inseparable (Devereux 2006:11). The World Food Programme (WFP n.d.) argues that in many countries vulnerability to food insecurity is best understood as a synthesis of past and current circumstances and events. Therefore, an exclusive focus on the effects of the current (crisis) situation is inadequate and food insecurity vulnerability assessments should include those who are currently moderately chronically food insecure during normal times. While this increases the complexity of the concept of food insecurity, it corrects the assumptions about severity usually inherent in the terms "chronic" and "transitory" food insecurity. Similarly, it provides us with a target population in which we can start to identify who are the most vulnerable to future shocks.

### ***2.2.2. Livelihoods and vulnerability***

The work of Dreze and Sen (1989) introduced the distinction between *entitlement promotion* and *entitlement protection*. Entitlement promotion involves helping people to secure long-term entitlement to food, and entitlement protection means the provision of a safety net against shocks. During the late 1980s the idea of vulnerability started to emerge, and considered households' sensitivity and resilience to shocks as important for determining their ability to recover quickly from different shocks. This coincided with the gradual emergence of the ideas of sustainable livelihoods and vulnerability amongst development practitioners (Chambers 1989, Chambers & Conway, 1992; see also Chambers, 1997).

The golden age of food security studies during the latter half of the 1980s was short-lived, and in the early 1990s the focus moved towards poverty, largely prompted by the World Bank Development Report (1990) on poverty. Donors moved away from food security interventions to those focusing more broadly on poverty (Maxwell, 2003). The characteristics of famines and food emergencies in Africa had also changed. In the 1980s these were largely a result of natural disasters (droughts) although some, for example the civil conflicts in Ethiopia and Mozambique, had human-induced dimensions. During the 1990s African famines increasingly started to take on stronger political dimension, e.g. wars in Somalia, Southern Sudan, Rwanda, Liberia, Sierra Leone and Angola. During the 1990s the results of studies carried out in the late 1980s started reinforcing the idea that a livelihoods perspective, rather than a food-first perspective, was a more accurate way of looking at food security (Maxwell, 2003). People were observed to go hungry in order to prevent the sale of important household assets during periods of transitory food insecurity, as a way of ensuring that livelihoods remained secure. Academics and practitioners such as Chambers and Conway (1992) popularised livelihoods approaches in development studies. Livelihoods approaches brought with them the important concepts of vulnerability and of coping with and managing risk. As the link between food insecurity, starvation and crop failure diminished in the 1990s, so the analysis of food insecurity as a social and political construct emerged (Devereux, 2000). In recent years the link between famines and socio-political factors has been strengthened –

particularly, in the African context, in the recent famines in Malawi, Ethiopia and Niger (see Devereux, 2009).

The above examination of the temporal and severity dimensions of food insecurity along with the interconnectivities between them, which result in the notion of composite food insecurity, enable a better understanding of the concepts of food insecurity and vulnerability. Both vulnerability and food insecurity are functions of households' exposure to stressors and their ability to cope with these. Households with livelihoods that do not enable accumulation of the assets required to cope with shocks or gradual changes brought about by the systems of which they are a part will gradually deplete such assets as they have, thereby increasing their level of vulnerability to and experience of severe food insecurity. In this instance, food insecurity is an outcome of vulnerability, which acts a stressor (Du Toit & Ziervogel 2004). Those who are most vulnerable to further food insecurity are those who are already experiencing food insecurity, i.e. the chronically food insecure. Consequently, in such situations vulnerability equates with the current experience of food insecurity. The assumption that vulnerability refers to the risk of moving from a food-secure status to an insecure status is too narrow and does not capture the reality of the situation experienced by most of the food-insecure (Devereux 2006). However, such a narrow assumption may well explain why food insecurity is most often only addressed when it becomes a crisis (Maunder & Wiggins 2007; Devereux 2009).

### ***2.2.3. Changes in measurements and indicators***

While these changes in the understanding of the multiple dimensions of food insecurity and its complex causes were taking place, there was a growing realisation that objective measures and associated indicators of food security (e.g. daily calorie and micronutrient intake targets) were proving problematic. Food security is often determined by one's nutritional status, and levels of undernourishment are used to determine food insecurity.<sup>3</sup> Undernourished persons have access to less than the minimum amount of foods required to meet the physiological requirements for good health and growth. Most proxies focus on children under the age of five years. A proxy for chronic food insecurity is the anthropometric indicator of height-for-age, whereby a low height-for-age in comparison to a reference population indicates stunting (stunted growth). This is caused by the persistent inadequate intake of food over a protracted period (Devereux, 2006). A proxy for transitory food insecurity is the anthropometric indicator of weight-for-height, whereby a low weight-for-height in comparison to the reference population indicates wasting (recent weight loss). This is caused by the current or recent inadequate intake of food. Another anthropometric indicator for transitory food insecurity is the measure of the child's mid-upper arm

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<sup>3</sup> Energy (calorie / kilojoule) intake measures, do not necessarily reflect on the quality of food consumed (micronutrient intake) but rather on the level of macronutrients/energy. Researchers generally accept that a low-energy diet (a diet that is low in macronutrients) is almost invariably associated with an inadequate intake of micronutrients. Determining dietary diversity and micronutrient intake are a more useful approach in assessing associations between diet and disease risk than food security. Because a low-energy diet is often associated with an inadequate intake of micronutrients many international organisations, such as the FAO, refer in their reports to undernourishment in terms of inadequate energy intake as a means of determining both chronic and transitory food insecurity.

circumference. Children who are stunted are often vulnerable to being wasted, and this interaction, termed composite food insecurity, is partly captured using the anthropometric indicator of weight-for-age (Devereux, 2006). A low level of weight-for-age indicates that the child is underweight and that this might be related to the interaction between chronic and transitory food insecurity. Adult nutrition status is important because parents may well consume less to ensure that children eat more during periods of food shortage. It is monitored by using body mass index and chronic energy deficiency as indicators. The FAO (FAOSTAT 2008) describes undernourished people as those

*...[whose] dietary energy consumption is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out a light physical activity with an acceptable minimum body-weight for attained-height.*

As many of the statistics cited in reports do not often distinguish between stunting, wasting and underweight, particularly with regard to adults, and refer solely to undernourished people, I use the FAO definition of undernourishment throughout most of this paper to refer to people who are food-insecure. Despite awareness of the limitations involved, this is done for practical purposes. Where reported data distinguish between different proxies, these are noted. Devereux (2006: 4) suggests that none of the proxies are perfect:

*... chronic food insecurity can be reversed, for instance, while stunting is very difficult to reverse after three years of age. Also, anthropometric outcomes can reflect problems with health, sanitation or child care, not just inadequate food intake, so caution should be applied in interpreting anthropometric data in isolation from other indicators.*

This statement alludes to issues of the scale at which measurement is undertaken (global, national, regional, household and individual) and the ability to decide which indicators reflect accurately at which scale (Stephen and Downing 2001, Webb et al. 2009).

During the 1990s objective measures and associated indicators of food insecurity were considered problematic for at least two reasons. Firstly, using nutritional adequacy (e.g. daily calorie and micronutrient intake targets) as an indicator is problematic as the nutritional requirements of individuals vary in relation to age, health, size, environment, work and behaviour patterns (see Payne and Lipton, 1994). The FAO introduced a minimum energy requirement for each person, which is now based on the age and gender distributions of individual countries. The FAO (2008) suggests that this value ranges from 1 600 to 2 000 kilocalories (kcal) per person per day, depending on the country. The United States Department of Agriculture (USDA) uses a higher and constant cut-off point of 2 100 kcal per person per day (FAO 2008). The FAO does not provide a cut-off value for South Africa. Devereux (2006: 6) uses the USDA figure as the minimum average daily energy requirement in his discussion on food security and the severity of food insecurity. He suggests that food-secure people are those who consistently consume above 2 100 kcal per day. Mildly food-insecure persons are those who consume between 1 800 kcal and 2 100 kcal per day. The moderately food-insecure are those who consume between 1 500 kcal and 1 800 kcal

per day. The severely food-insecure are those who consume less than 1 500 kcal per day.<sup>4</sup> The use of these and other estimated reference standards in determining nutritional requirements for average people under average conditions requires that they be continually revised. These estimates therefore appear to be value judgements, and beg the question as to who is to make such value judgements and on whose behalf (Pacey & Payne, 1985). Citing experience in rural development, Maxwell (2003) suggests that it is most likely that the value judgements or experiences of the food-insecure will be disproportionately weighted in favour of those made by health and other development professionals (see Chambers, 1997 for a review of how the experiences, opinions and practices of the poor are generally ignored by development professionals).

The second concern was the omission of qualitative aspects from quantitative measures of food security. Cultural factors, and peoples' choices regarding what they eat and how they respond to perceived risks and threats to food security, along with the importance they attach to these, are integral to an understanding of food security. This brought into the debate the idea of *food sovereignty*, whereby people not only have the right to food but also the right to choose what food they want to produce and consume, and how they wish to do so. This idea was strengthened during the 1990s in retaliation against the intensification of research on transgenic crops, and is captured in more recent definitions of food security as "food preferences" (see FAO and other definitions discussed below). While nutrition is an important condition it is not sufficient to ensure food security, and this has led to an increasing awareness of the importance of subjective perceptions of food security and insecurity (Maxwell, 2003: 21). This has had the effect of increasing our awareness of the multiple factors contributing to and involved in understanding food security. These include understandings of households' acquisition and allocation behaviour, sensitivity and resilience to shocks, coping strategies, and perceptions and experiences of hunger. Qualitative measurements broaden our understanding and awareness of the multiple factors involved in understanding food security, but also make determination increasingly complex. Just how important qualitative and subjective factors are, and how complex they make our understanding of food security, is captured by Maxwell and Smith (1992: 4):

*...flexibility, adaptability, diversification and resilience are key words. Perceptions matter. Intra-household issues are central. Importantly...food security must be treated as a multi-objective phenomenon, where identification and weighting of objectives can only be decided by the food insecure themselves.*

#### **2.2.4. The right to adequate food**

The 1996 World Food Summit acknowledged the importance of peoples' rights to food and to make choices regarding the food they prefer to consume. In doing so, the ethical and human rights dimension of food security was brought into focus. The

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<sup>4</sup> Devereux (2006) notes that a more detailed definition of moderate and severe food insecurity, which incorporates the quantities of macro- and micronutrients consumed and the adverse consequences that various means of accessing food have for households and individuals, are discussed by Dhur (2005).

formal adoption of the Draft Code of Conduct on the Right to Adequate Food (1997) pointed the way towards a possible rights-based approach to food. Article 4 of the Code is considered to provide the current definition of the right to food. It states:

*The right to adequate food means that every man, woman and child alone and in community with others must have physical and economic access at all times to adequate food using a resource base appropriate for its procurement in ways consistent with human dignity. The right to adequate food is a distinct part of the right to an adequate standard of living.*

Currently over forty countries, including South Africa, have the right to food entrenched in their constitution. The FAO's Voluntary Guidelines on the Right to Adequate Food (2005) commit signatory states to taking action to ensure food security. While entrenchment in national constitutions and signing of the Draft Code are important steps taken by many developing countries, just how effective these are in ensuring the food security of their citizens still remains to be seen. Concerns have been raised around the lack of social protection, appropriate and timely interventions, and the management/mitigation of crises and the nature of the world food system and the international and multinational institutions that attempt to manage the system (see Devereux 2006, Devereux, 2009; Maunder and Wiggins, 2007; Von Braun, 2009).

### **2.3. A more robust definition**

These gradual shifts, triggered by research on agricultural, food security and poverty issues, coincided with changes in both global and local policy and practice. Local changes were often influenced by global changes. The result is the current definition of food security, stemming from the 1996 World Food Summit. It is far more encompassing than that tabled at the 1974 Conference and incorporates the many changes in thinking and understanding about food security that arose during the intervening years. This definition forms the basis for the vision of the Integrated Food Security Strategy (IFSS) of the South African Government (DoA 2002:13).

*"Food Security exists, at the individual, household, national, regional, and global levels 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 a healthy and active life"* (FAO 2001).

This definition indicates that food security now has at least four dimensions (FAO 2006)<sup>5</sup>:

1. *Availability of food*: Food must be available in sufficient quantities and of appropriate quality either by means of domestic production or imports. This includes food aid when necessary.
2. *Access to food*: Individuals must have access to adequate resources and entitlements (ability to grow and/or purchase food, to be given food or to work for food) that

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<sup>5</sup> Koc et al (2007) refer to the five *A*'s of food security, namely: *a*vailability, *a*ccess, *a*dequacy, *a*ceptability and *a*gency. All of these are included in the FAO's four dimensions.

enable them to acquire appropriate food for a nutritious diet. They should be able to access the food they prefer<sup>6</sup> in a socially acceptable way. Awareness of cultural factors and peoples' choices regarding what they eat, how they procure and prepare food, and the significance they attach to these aspects, are deemed important to understanding food security. Consequently, food security status is now also determined by how people make use of entitlements, select foodstuffs, and prepare food. For example, two households with similar member composition and entitlements may differ significantly in terms of food security depending on what portion of income they spend on food, which foodstuffs they select and how they prepare these.

3. *Utilisation of food*: People must be able to select, store, prepare, distribute and eat food in ways that ensure adequate nutritional absorption for all members of the household. The potential to do this is related to issues of food safety and quality, sufficient individual intake of food and the body's ability to efficiently convert food and absorb nutrients. The ability to reach a state of nutritional health where all physiological needs are met is influenced by availability of safe water, sanitation, refrigeration, nutrition education and health care services. Consequently, it is now realised that non-food inputs, such as social sector services and infrastructure, are necessary to ensure food security<sup>7</sup>.
4. *Stability of availability and access to food*: A food secure person, household or population must have sustained access to adequate nutritious food at all times. People should not be anxious about food supply. Access should not be lost as a result of sudden political, economic or climatic shocks such as war/conflict, high food prices or droughts/floods. Similarly, household level periodic shocks such as the death or unemployment of a member should not obstruct supply and access. Cyclical events such as seasonal food insecurity should not prevent the availability and access to adequate food. Stability involves entitlement promotion and protection. Entitlement promotion involves helping people to secure long-term entitlement to food, and entitlement protection means the provision of a safety net against shocks (Dreze and Sen 1989).

These four dimensions are interconnected and all must be present for people to be food secure, as no single element is able to ensure and sustain food security on its own (Faber et al. 2008). Food insecurity occurs when one or more of these elements is weakened and can impact on the national, household and individual levels. Food security at one level does not indicate food security at another. As Pinstrup-Andersen (2009) has indicated, household food security does not mean individual food insecurity.

To address the multidimensionality of food security, the FAO proposes a mutually reinforcing "twin-track" approach to fighting hunger which is presented in Table 1. This approach is rather generic, and how it is implemented depends largely on the specific country, its context and its ability to draw upon the necessary resources.

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<sup>6</sup> See Pinstrup-Andersen (2009) for a brief discussion on the implications of the ambiguity of food preferences in the FAO definition of food security.

<sup>7</sup> Pinstrup-Andersen (2009) has argued that access to sufficient food on its own will not ensure good health and nutrition and that social sector services are vital.

Coordination between sectors and agencies appears to be key to implementation, given the multiple dimensions of this approach.

**Table 1 – Twin-track approach to ensuring food security**

<b>Twin-track approach</b>	<b>Availability</b>	<b>Access and utilisation</b>	<b>Stability</b>
Rural development/ productivity enhancement	Enhancing food supply to the most vulnerable Improving rural food production especially by small farmers Investing in rural infrastructure Revitalisation of livestock sector Resource rehabilitation and conservation Enhancing income and other entitlements to food	Re-establishing rural institutions Enhancing access to markets Ensuring access to land Reviving rural financial systems Strengthening the labour market Mechanisms to ensure safe food Social rehabilitation programmes	Diversifying agriculture and employment Monitoring food security and vulnerability Dealing with structural causes of food insecurity Reintegrating refugees and displaced people Developing risk analysis and management Reviving access to credit and saving mechanisms
Direct and immediate access to food	Food aid Seed/input relief Restocking livestock capital Enabling market revival	Transfers: food- /cash-based Asset redistribution Social rehabilitation programmes Nutrition intervention programmes	Re-establishing social safety nets Monitoring immediate vulnerability and intervention impact Peace-building efforts

*Source: FAO, 2006*

## **2.4. Conclusion**

The broader understanding and definition of food security is vital, as it incorporates important aspects that need to be considered and put in place to ensure food security at all levels and for all people. Furthermore, it enables the consideration of a wide range of causes of food insecurity. But it is also challenging for those involved in ensuring and monitoring food security. No longer is availability at national level sufficient; all people must be able to access sufficient nutritious food at all times, no matter how marginal the areas in which they reside. This requires that people have the necessary resources (endowments) to produce/purchase the food they prefer<sup>8</sup>.

<sup>8</sup> See Pinstrup-Andersen (2009) for a discussion on the implications of the ambiguous use of food preferences in the FAO definition of food security.

Nutrition and consumption targeting and associated indicators are also no longer sufficient forms of measurement. People's choices, preferences and perceptions are increasingly important. Similarly, food security is no longer seen as an exclusively agricultural undertaking, although agriculture has an important role to play at global, national and local levels. Sustaining food security requires the provision of a number of infrastructural (transport, roads, markets) and social (water, sanitation, health and education) services, along with social protection in the form of transfers (food or cash) and safety nets, to ensure that the vulnerable do not become food-insecure in times of shocks. This requires good governance to ensure not only that these services are available, but also that people can readily access them to experience sustained food security. Political stability and accountability are required to ensure that conflict does not arise and place people at risk of food insecurity. Furthermore, government and relief agencies must be in a position to effectively intervene and restore food security when shocks occur or threaten to make people food-insecure. To ensure food security within a particular country, therefore, requires the integration of all service providers (government, research, civil society and private enterprises) involved in both the food chain as well as social and infrastructure service provision. Due to globalisation and the impact of national and international policies on the food security of individuals around the world, similar integration is required at the sub-regional, regional and global levels.

## **3. Recent food security trends in Southern Africa**

### **3.1. Introduction**

According to Devereux and Maxwell (2003), sub-Saharan Africa is the only region in the world that faces widespread chronic food insecurity. While 80% of Africa's people live on less than US\$2 per day, 50% live below the US\$1-per-day level set by the MDGs, 33% are undernourished, 25% of its children are underweight and 33% are stunted (Resnick, 2004). If we accept stunting as an indicator of chronic food insecurity (Devereux, 2006; Faber et al., 2008), then 33% of African children are chronically food-insecure. Using the FAO definition of undernourishment, then, 33% of the African population is food-insecure.

Southern Africa, as a sub-region, is particularly vulnerable to food insecurity, largely due to climatic conditions such as the general scarcity of water and recurring droughts in most countries in the region, but also because of the recent civil conflicts in Angola and the Democratic Republic of the Congo (DRC) and the ongoing political and economic crisis in Zimbabwe. The sub-region has the highest prevalence of HIV and AIDS in the world, and this poses a serious long-term threat to food security in the region, as do tuberculosis, cholera outbreaks and frequent bouts of diarrhoea and endemic malaria (SADC FANR, 2006). While much of the food insecurity in these countries can be considered chronic, there are areas in which transitory food insecurity occurs on a frequent or seasonal basis. The gravity of the situation and the widespread erosion of the region's resilience to shocks are largely due to the deterioration of livelihoods and assets (Drimie et al., 2008). The total population for the region is estimated at 243 million. Table 2, a comparison time series trend for the region, in relation to the rest of the world, the developing world, Africa and developing Africa, indicates that the prevalence of undernourishment in total population in the region is not only higher than the other regions but is increasing, while that of the other regions is gradually decreasing. Although the 2003–2005 figure for the region was 39%, it is possible that the recent food and energy price crises, since 2007, have increased this figure. However, no data are available to confirm this possibility.

**Table 2 – Comparison of the prevalence of undernourishment in total population in SADC with Africa and the world, 1990–2005**

Region	1990–92	1995–97	2003–05
World	16%	14%	13%
Developing world	20%	18%	16%
Africa	27%	27%	24%
Developing Africa	28%	28%	26%
SADC	30%	38%	39%

*Source: FAOSTAT, 2008*

Given South Africa’s location within Southern Africa and the numerous political, economic, social and historical ties it has with other countries in the region, it is relevant to look at the food security situation in the region and the various strategies employed to reduce food insecurity.

### 3.2. Overview

Despite significant diversity among the fourteen countries in the region, Southern Africa as a whole can be characterised by a number of common features: a high population share that is rural, the widespread practice of subsistence and semi-subsistence agriculture, extensive rural poverty and food insecurity, steady if not rapid rural-to-urban migration, and growing settlement pressure on land in and around towns and cities (including informal settlements). These features are set out in Table 3.

Table 3 shows that even for the least rural country, South Africa, the share of the population that is rural is 42%; for the total population of the Southern African Development Community (SADC), the share that is rural is 62%. However, the rate of urban growth is high, achieving over 5% or more per annum for Angola, Malawi, Mozambique and Tanzania. The third column of figures reports the extent of undernourishment. The extremely high variation – with Lesotho and Mauritius at the low end and the DRC at the high end – suggest that multiple factors are at play; however there is a significantly negative statistical correlation, indicating that the larger the population share that is rural, the lower the population share that is undernourished. This correlation is even more strongly negative if one excludes the DRC, in which recent civil strife must have contributed to poverty and malnutrition. The implication is that, however marginal they may often be and however attractive city life is to rural-dwellers, a country that can offer more sustainable land-based livelihoods may well provide the poor with a supplementary source of food. A number of mitigating influences can either amplify or reduce this benefit. Table 3 reveals one of the threats to this benefit, namely the high degree of land degradation in some countries, which in some instances has itself been traced to the complexity and inefficiency of existing land tenure systems. These include lack of ownership or access to land, increased degradation and poor management of natural resources, to name a few.

**Table 3 – Selected statistics for SADC member countries, 1995–2005**

	Share of population that is rural <sup>1</sup> (2005)	Avg. annual growth rate of urban population <sup>2</sup> (1995–2000)	Share of population under-nourished <sup>3</sup> (2000–02)	Share of total land area degraded <sup>3</sup> (1988–89)	Agriculture share of GDP <sup>4</sup> (2003–05)
Angola	63%	5.0%	40%	9%	9%
Botswana	47%	3.2%	32%	8%	3%
DRC	67%	2.9%	71%	6%	56%
Lesotho	82%	1.4%	12%	36%	16%
Madagascar	73%	3.3%	37%	28%	29%
Malawi	83%	5.0%	33%	9%	39%
Mauritius	56%	1.6%	6%	6%	7%
Mozambique	62%	6.3%	47%	10%	26%
Namibia	67%	4.3%	22%	9%	11%
South Africa	42%	2.5%	na	36%	4%
Swaziland	76%	2.2%	19%	2%	16%
Tanzania	63%	6.1%	44%	12%	45%
Zambia	63%	0.9%	49%	11%	21%
Zimbabwe	64%	2.7%	44%	10%	17%
SADC	62%	3.7%	44%	13%	10%

*Sources: Michael Aliber, personal communication February 2009. Data calculated using: <sup>1</sup> FAO-STAT, 2008; <sup>2</sup> UN Department of Economic and Social Affairs, 2004; <sup>3</sup> UN Department of Economic and Social Affairs, 2007; <sup>4</sup> World Bank, 2008 and UN Department of Economic and Social Affairs, 2007.*

Some countries – e.g. South Africa, Botswana and Angola – appear to be relatively non-rural in terms of the low contribution of agriculture to Gross Domestic Product (GDP). For these countries, one might surmise that agriculture and rural livelihoods are relatively unimportant due to the presence of strong high-value non-agricultural sectors (e.g. gold, platinum and other minerals in South Africa, diamonds in Botswana and oil in Angola). However, it is important to point out that the national accounts do not convey a clear picture of the importance of land access on the ground. Thus, for example, about four-and-a-half million blacks in South Africa participate in agriculture in some form (understood broadly to include livestock production) (Jacobs et al., 2008), which constitutes more than five times as many people as are employed as wage earners in the large-scale commercial farming sector (Aliber et al., 2007). Many of those engaged in agriculture in South Africa, as elsewhere in Southern Africa, are involved in farming that is a low-input, low-output activity that provides a supplementary source of food for the household. However, Aliber (2009) has pointed

out that this type of production in South Africa may well account for a gross imputed value of about R2 billion in foodstuffs for rural households. In the case of Botswana, the low contribution of agriculture is in part a function of the harsh agricultural conditions that prevail there; however, another reason is the relative importance of other sectors such as diamond mining and tourism, which does nothing to diminish the importance of agriculture as part of a multiple livelihoods strategy, not least for the poor.

The countries of Southern Africa also share a common but not uniform historical context, i.e. colonialism, in which a major distinction can be drawn between those countries where land policy was distorted in favour of large settler populations, leaving a legacy of stark dualism, and those in which the rural/land sector was more generally the object of neglect rather than large-scale dispossession. In relation to efforts to redress these past injustices, Namibia, South Africa and Zimbabwe have followed different pathways. To date none of these have been successful, for a number of diverse reasons.

### **3.3. Food insecurity and some associated interventions**

The region has also been known for a number of recent climatic shocks (droughts and floods) that affected food security in several countries. While harvest failures, a result of drought and floods in different areas in the region, were considered the immediate trigger of what has become known as the 2001/2003 food crisis, most analysts emphasise multiple causes (Devereux, 2009; Maunder & Wiggins, 2007). These causes included weaknesses in governance, a population ravaged by HIV and AIDS and the escalation of chronic poverty. The populations of Malawi, Zambia, Mozambique, Zimbabwe, Swaziland and Lesotho, estimated at 57.5 million, were the most affected during this time. Maunder and Wiggins (2007) argue that, despite the appearance of a regional crisis, the underlying causes vary significantly between and within affected countries and therefore responses need to be context-specific rather than regional in focus.

The food crisis of 2005/2006 indicated that climatic shocks in some areas benefited people in other areas (SADC FANR, 2006). For example, heavy rains in some areas resulted in floods that destroyed crops and infrastructure, but in other areas high rainfall improved production and subsequent yields. Maunder and Wiggins go on to report that in these six countries, while shocks are often transitory and subsequent relief (food aid) is short-term, the majority of the hungry are chronically or structurally food-insecure; therefore relief efforts (such as food aid) are only a temporary solution. There is a serious need to address structural constraints. Following the 2005/2006 crisis it was reported that most of the 3.1 million food-insecure people in the rural areas of Malawi, Mozambique, Zimbabwe, Swaziland and Lesotho were in fact chronically rather than temporarily food-insecure (SADC FANR 2006). At a meeting in Gaborone during November 2006, the Vulnerability Assessment Committees noted that a number of problems and causes still persisted in the region (SADC FANR, 2006: 1), namely:

- *Excessive rainfall received in some areas had a negative impact by destroying crops, roads and making some areas inaccessible and thus affecting the availability of grain;*
- *Chronic vulnerability to food insecurity, particularly among populations dependent on rain-fed agriculture;*
- *Increased erosion of assets, resulting in weak resilience and failing livelihoods of the already poor households due to droughts, HIV and AIDS and other hazards;*
- *High morbidity and mortality as a result of water-borne diseases, such as malaria, cholera and diarrhoea, and the high prevalence of HIV and AIDS in the region;*
- *Current interventions are poorly targeted and not addressing the main constraints or shocks of communities;*
- *Poor implementation of coordinated programmes on health, education, HIV and AIDS, water and sanitation;*
- *Trade imbalance between those with political power and the poor (governance issues); and*
- *Inappropriate Government policies, e.g. policies discouraging trade and free markets.*

This assessment supports the arguments that while chronic food insecurity persists, responses need to be better targeted, a wide range of long-term services need to be provided, and governance issues need to be tackled. This is substantiated by recent evidence from FEWSNET (2008) which has estimated that about nine million people from Tanzania, Malawi, Mozambique, Zimbabwe, Swaziland and Lesotho are currently experiencing hunger, despite the months of October and November falling within the rainy season for most of these countries. Food security needs to be integrated into broader and long-term national and regional development programmes, which themselves may require adjustment and improvement.

Maunder and Wiggins (2007: 2) indicate that achieving adequate long-term food security is dependent on new ideas in development practice that have emerged from analyses of the recent Southern African food crises:

Changes in food security and nutrition policy.

- While the combination of food availability, access and utilisation are widely accepted as necessary for food security, this consensus has had little effect on strategic choices and action plans. Evidence of this is that in most Southern African countries agricultural development is erroneously believed to be the long-term solution to ensuring food security. The importance of other areas of development is often overlooked in food security strategies.

The longstanding distinction between relief and development activities.

- Despite being historically blurred, the distinction between humanitarian relief and development has been subjected to

rethinking about how they function and interact. This has gradually influenced the organisation and policies of government, donors and NGOs to the extent that budget guidelines are more flexible and there is a greater willingness to focus attention on the underlying causes of food insecurity within a humanitarian response to a shock, rather than merely concentrating on relief efforts. It is recognised that acute needs set off by shocks, are often not short-term and require more predictable and dependable delivery mechanisms and forms of assistance. Similarly, in highly vulnerable areas cyclical/seasonal vulnerability may be reduced if long-term strategies are put in place in conjunction with the short-term relief responses and remain in place after the relief aid has stopped.

#### Social protection

- An interest in social protection has grown out of the need to protect people from both transitory and chronic food insecurity and poverty. Chronic issues require predictable and dependable forms of social assistance and therefore need to be part of the national welfare system and funded within national budgets. While international donors and humanitarian NGOs have become interested in social protection, funding social protection pilot programmes that have led to the formulation of national policies in Malawi and Zambia, national governments have been more ambivalent in their commitments. Ambivalence largely stems from concerns about the costs involved in maintaining such a system, undermining local responses to shocks, and identifying the neediest. Consequently, the development of coherent national social protection policies is proving to be complex and requires increased consultation and negotiation.

#### Disaster risk reduction

- Despite risk reduction and mitigation, and emergency preparedness and response being rolled out at national level, they are seldom integrated into sectoral policies. Of particular concern is the need to mitigate the effect of local harvest failures on the price of staples, especially for landlocked countries in the region. Reduced domestic harvests can result in prices increasing to up to four times their pre-harvest levels. Obviously this causes acute problems for the poor, as it did during 2002 and also 2007/2008. There is a lack of consensus on how to address this problem, with some governments wanting greater government intervention in markets and control of grain reserves. Others feel that this can be achieved by working with markets as the cost of government intervention would be high.<sup>9</sup> In

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<sup>9</sup> A recent innovation was that undertaken by the Malawian government with support from DFID (Slater & Dana, 2006). During the 2005–2006 agricultural season, final food estimates indicated a food gap of around 400 000 tonnes. In response, the government of Malawi secured additional supplies of maize (60 000 tonnes) at a capped price from South Africa through an options contract based on the South Africa Futures Exchange (SAFEX) white maize prices. Increases in SAFEX prices did not affect the contract and this was a way of ensuring the availability of food at acceptable prices. Because most of this

the meantime grain prices fluctuate unacceptably, bringing no relief to the food insecure.

The overall challenge implicit in these ideas is for government and donors to develop consensual plans of action for development aid efficiency and emergency assistance, so that resources from different sources can be aligned to implement national programmes aimed at ensuring food security in the long term. So far, neither donors nor governments appear to have achieved consensus or increased their budgets to the levels required to address the chronic and structural aspects of regional food insecurity (Maunder & Wiggins, 2007).

Changes in thinking about food security and the causes of food insecurity currently remain nothing much more than ideas. Responses to the 2005/2006 crisis in Southern Africa remained largely similar to those of 2001/2003 and were again dominated by large-scale food aid (Maunder & Wiggins, 2007). In the ensuing years the piloting of social protection programmes was initiated in a number of Southern African countries. Some pilots provide the poorest people in a district with a cash transfer but this approach often raises problems of identification, and because the amounts are small the money is of little use when food prices rise once again. According to Devereux,<sup>10</sup> cash transfers in Malawi, Lesotho, Swaziland and Zambia have proved highly effective and are shifting thinking and practice away from emergency and non-emergency food aid towards cash-based social protection. An increasingly common programme involves cash transfers to the elderly, in the form of a basic old age pension that is included into the national budget. However, in households where this is the only source of regular income it may well prove insufficient in times of severe shocks. Maunder and Wiggins (2007) acknowledge that a number of collaborative programmes have been more development-focused, attempting to improve livelihoods and make them more resilient. Most of these have been agriculturally focused, centring on crop production improvement. Unfortunately, the more innovative programmes continue to remain pilot projects (Maunder & Wiggins, 2007).

One programme that has received attention is the introduction of “smart” agricultural input subsidies in Malawi since 2005. This programme aimed at supplying fertilisers to smallholder farmers at reduced costs, using a voucher system, with the purpose of increasing maize production and reducing food prices, without causing negative impacts on the demand for and commercial distribution of fertilisers (Dorward et al., 2008). While successful in a number of areas, the programme’s impact has been affected by variations in weather, rising international fertiliser prices and the fluctuating maize price. It has also been affected by structural constraints, such as inadequate rural infrastructure, agricultural research and extension support services. The lack of integration with other safety net and development programmes, and spiralling year-on-year costs as scale increased, contributing to overspending, have also limited the impact. While a number of valuable lessons have been learned from

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maize was used as food aid and did not reach the commercial market, its impact on retail prices was not determined.

<sup>10</sup> Personal communication, 17 March 2008.

this and other pilot projects, a serious constraint to long-term development in the region is that there is little consensus on how to achieve macro-economic growth and poverty reduction (Maunder & Wiggins, 2007), and until some agreement on this is reached chronic poverty will persist. Steps are being taken by a number of organisations, in partnership with governments and international donors, to find solutions to this and other problems. Some of these programmes work on specific issues and include IFPRI's RENEWAL network (HIV and AIDS-focused) and the Regional Hunger and Vulnerability Programme (social protection-focused). Other programmes, such as the Future Agricultures Consortium, involve countries in and outside the region, and look at the integration of a number of factors that impact on agriculture and food security in Africa.

A number of Vulnerability Assessment Committees (VACs) have been set up in some countries in the region, including Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe (SADC FANR 2006). These committees largely have the role of conducting food security needs assessments in rural areas at regular intervals (often biannually). While hailed as being extremely useful in providing credible and timely information during the periodic crises that have affected parts of the region, the VACs experience limitations in their functioning (Maunder & Wiggins, 2007) and they are not established in all countries in the region. They operate predominantly in rural areas, neglecting the poor in most urban areas, and focus on responding to transitory conditions by providing technical information, with their main focus being the provision of food during these periods. They do not consider broader long-term responses to food insecurity and do not evaluate previous responses to crises. At present their contribution to understanding chronic food insecurity and its underlying causes is small. This is largely due to the problems involved in transforming technical information on periodic vulnerability into wider long-term development concerns and actions. Moving into this arena is also politically contentious. According to Maunder and Wiggins (2007) national governments are usually only secondary clients, with the VACs providing information primarily to donors. Ultimately the challenge faced by the committees is for them to become primary providers to national governments in order to ensure overall accountability and responsibility for food security at this level, rather than working primarily with donors (Maunder & Wiggins, 2007). However, capacity and political constraints within national departments may well preclude this from materialising in the immediate future.

### **3.4. Conclusion**

This brief review of the situation in Southern Africa makes it evident that while there are improvements in addressing transitory shocks to food security in the region, chronic food insecurity remains high. Different pilot programmes, while not always leading to national rollout of development interventions necessary to address chronic food insecurity, are providing valuable lessons that can assist in bringing about an improved situation in the region. The experience gained from a variety of programmes and interventions, such as the VACs, indicates that it is necessary for governments and international aid donors to reach consensus on how to achieve macro-economic development that ensures poverty reduction and food security, rather than inadvertently increasing inequality. Until such consensus is reached it is

unlikely that resources will be shared to effectively improve the situation and to ensure that many of the services important for food security will be provided.

The review has also illustrated that context is important to resolving food insecurity. Programmes and development actions cannot be regional in application, given the different national and local contexts and circumstances in which chronic and transitory food insecurity occur. In those countries where significant proportions of the population are rural-based, increased agricultural development actions and budgets may well have a positive impact on rural livelihoods (see Meinzen-Dick et al., 2004 for examples). However, this could be ineffective if other services are inefficient or non-existent (availability and access to input and output markets, credit, transport, rural infrastructure, health, water and sanitation, etc.). Similarly, agro-ecological circumstances may differ greatly within a particular country, requiring different agricultural development actions in different parts. This may require re-training of extension and research officers to focus on pertinent context-specific constraints rather than on the uniform rollout of programmes. Policies and action plans need to recognise these needs and differences, and allocate resources accordingly.

## 4. The situation in South Africa

### 4.1. Introduction

The first MDG has two targets, namely to reduce by 50%, between 1990 and 2015, the proportion of people living on less than the international poverty line of US\$1 per day and the proportion of people who suffer from hunger. Sub-Saharan Africa is far from achieving these two targets. To meet the first target African countries need to achieve an annual growth rate of 7% or more. However, between 1997 and 2003 only 10 of the 37 African countries reached a 5% or higher average GDP growth rate (Resnick, 2004), and only 3 of these were from Southern Africa (Angola, Botswana and Mozambique). South Africa's GDP growth rate does not seem likely to rise to the desired level in the foreseeable future. In his budget speech on 11 February 2009 South Africa's Minister of Finance pointed out that GDP growth is projected at 1.2% in 2009 (dropping from an estimated 3.1% in 2008), but then rising to 4% by 2011 (Manuel, 2009). Business Monitor International forecasts that GDP growth will only be around 3.5% by 2015 (BMI, 2008). This will have implications for employment, poverty reduction, inequality and food security in the short to medium term, and also suggests that South Africa's economic growth will not be sufficient to reach that required in order to achieve the first MDG. However, GDP growth does not necessarily equate with widespread poverty reduction, and increases in GDP growth can bring with them greater inequality (Bhorat & Van der Westhuizen, 2008). This is often a redistribution of wealth issue, and makes consideration of social protection measures extremely important as part of a food security strategy, even at times when GDP growth is good.

As a middle-income developing country and one that typically is a net exporter of food/grains during most years, there is an assumption that South Africa is food-secure. While this may be strongly argued for food security at the national level, the same argument does not hold strongly at the household level. Although South Africa may well have sufficient food available at the national level, access is a problem for many South Africans. Recent data from various surveys, using different proxies to determine food security, indicate that chronic food insecurity exists at significantly high levels in South Africa. The 1995 Income and Expenditure Survey (IES), analysed by Rose and Charlton (2002), indicated that some 43% of households were subjected to food poverty and that 55% had low energy availability. The National Food Consumption Survey (NFCS) of 2005 shows that 52% of households experience hunger and that a further one out of three households (33%) is at risk (Labadarios et al. 2008). The General Household Survey<sup>11</sup> (GHS) of 2007 (Stats SA 2007) estimated, using an income poverty line of monthly household income less than R800 per month, that 41% of households are currently food insecure. Because the Department of Social Development and the South African Social Security Agency used an income range between R800 and R1 100 to determine the minimum monthly household

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<sup>11</sup> This annual survey was previously known as the October Household Survey and was initiated in 1994. However, there was no survey between 1999 and 2001.

income required for state social grants during the late 1990s,<sup>12</sup> the R800 cut-off amount can be considered to be out of date. Therefore I would argue that it is more realistic to use an estimate of household expenditure of less than R1 200 per month. However, this increases the number of food-insecure households to around 59%. The long-term implications of such high rates of food deprivation are cause for concern. As Roberts (2007: 1) argues:

*[T]he impacts on the development potential and quality of the labour force and hence on economic growth and poverty reduction [are] extraordinarily high. Not only do malnutrition and hunger represent critical risk factors for illness, but freedom from hunger is also a sound foundation for economic growth since well-nourished people learn better, produce more, and can provide better care for their children and the environment. There can be few investments with such rewarding long-term rates of return as adequate child nutrition. The eradication of hunger is an especially important development goal, as good nutrition is essential for the health and human capacity needed to achieve so many of the other Millennium Development Goals, such as those for child and maternal health, combating infectious diseases, empowering women and achieving environmental sustainability.*

The variation in the numbers of food-insecure is a result of the different types of indicators used. Both the IES and the GHS are nationally representative surveys conducted by Statistics South Africa and provide data on food expenditure, but they are not designed to enable understanding of hunger and nutrition deficiencies. They do not provide information on micronutrients or the quantity and quality of the food purchased. Furthermore, they do not provide any information on intra-household consumption patterns. However, the GHS does include some subjective questions regarding self-reported experiences of hunger within the household for adults and children during the preceding 12 months. The NFCSs of 1999 and 2005 were commissioned by the Department of Health. They are designed to enable understanding of hunger and health at household level and amongst children. However, the surveys are infrequent and the sample size is too small to permit generalisation at the district and municipal levels. Similarly, the time frames for subjective experiential reporting on hunger are far too short to prove useful. Furthermore, nutritional status alone might be inadequate as it is a historical measure of extreme food insecurity over time, and therefore will not necessarily indicate that an individual or household is currently food-secure. None of the existing data sets consider the contribution of own production of food to household food security.

Rose and Charlton (2002) have argued that quantitative indicators from the IES are useful for targeting the food-insecure. Spiegel (1995) has suggested that income and expenditure are often inadequate proxy measures of socio-economic status due to the existence of extensive family and community networks for the sharing of resources. This argument suggests that national surveys will not be able to tell us a lot about the dynamics at household level. Scale is an important factor in understanding the results of surveys and the design of research. Because of recent concerns (Hendriks, 2005; Roberts, 2007) about the ability of most existing surveys and data sets to comprehensively measure food insecurity and to cover the multiple causes, it is worth

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<sup>12</sup> Isabelle Schmidt, Statistics South Africa, personal communication February 2009.

discussing these before looking at the existing interventions undertaken to address food insecurity in South Africa. Current interventions are strongly based on the information derived from national surveys.

## **4.2. The research challenge**

South Africa's late entry into the global arena has not prevented many of the thoughts about, understanding of and shifting definitions of food security from influencing local understanding and practice. However, given that the country is generally considered nationally food-secure in terms of food availability, the relatively recent focus on food security and its complexity means that those concerned with the issue are still grappling to understand food insecurity and vulnerability, their causes and ways to identify, monitor and address the needs of households that are food-insecure or at risk.

Roberts' (2007) study concentrates on the ability of the various available surveys to assist in determining the measurement of South Africa's progress towards MDG-1. He notes that the baseline year for the MDG-1 was 1990 and that South Africa lacks data for this year. The first nationally representative data arises from a study by the South African Vitamin A Consultative Group (SAVACG) conducted in 1994. The focus was on malnutrition. The official MDG-1 indicator is the prevalence of underweight among children younger than five years, and this indicator is included in the SAVACG and subsequent nutrition-focused surveys using anthropometric measurements. The 1990 baseline requirement has been relaxed, and South Africa has data for two requisite data points (1994 SAVACG and 1999 NFCS). The country also has data for 2005 (NFCS). Roberts cautions that one of the problems inherent in these surveys is the inconsistencies in the methodology used in different surveys, and that this impedes our ability to confidently monitor progress towards MDG-1. It can also be added that while these studies often collect somewhat similar data, their different purposes can also impede the monitoring process. In his report Roberts also analyses the contributions of the IES and the GHS to monitoring food security. While the purpose of his study is to determine progress to MDG-1 he is also concerned with the ability of the existing data sets to report on and monitor trends in food insecurity. As he sums it up (2007: 1), the main data constraints that prevent regular and reliable reporting on trends in food insecurity and hunger are as follows:

- the lack of recent national data;
- the use of different methodologies and criteria for respondent selection; and
- the relatively long time period between nutritional surveys.

In conclusion, he warns that not only are national data problematic for determining progress towards MDG-1, but they also mask the intra-country differences, especially between the prevalence rates in the different provinces and among different groupings of people and households (e.g. farmworker households).

In a broader and more intensive study, Hendriks (2005) focuses on both national surveys – generally more quantitative in their measurements – and localised studies

that tend to be more qualitative and subjective. She also includes a review of the changes in international approaches to identifying the food-insecure and those at risk and notes that, although often analytically problematic, more subjective approaches are becoming increasingly popular because they illustrate the coping strategies or responses of individuals and households to shocks. Drawing on the work of Frankenberger (1992, cited in Hendriks, 2005) and others she acknowledges the costliness and complexity of food security measurements, and divides household food security measurements into direct and indirect indicators that reflect household supply, access and food security outcomes (Hendriks, 2005: 104–105):

Supply indicators include regional conflict, trade and agricultural production – including pest and disease management, access to input and output markets and institutional support structures such as research and extension.

Access indicators include entitlement to food and socio-economic indicators that illustrate the ability of households to respond to the various shocks and stressors arising from economic, social and environmental changes. These indicators are extremely valuable for assessing the severity of food shortfalls, household responses and their resilience to these, as well as the nature of food insecurity (chronic, transitory or composite), for monitoring changes in food security and livelihood status, and for assessing the impact of interventions.

Outcome indicators go beyond measuring food consumption and are divided into direct and indirect (proxy) indicators. The former measure the actual experience of food insecurity. They are best measured using longitudinal household studies, in conjunction with in-depth interviews with household members. Indirect indicators are typically used when information is not available or is costly to obtain. These include anthropometric indicators, dietary diversity, storage estimates at critical times and the subsistence potential of agrarian households. Given the multiple dimensions of food security and the need to consider causes of outcomes, Hendriks reports that most approaches to measuring food security therefore involve the use of both direct and indirect outcome indicators to develop scales or indexes that enable researchers to differentiate between food-secure and -insecure households or monitor the effects of various interventions or responses on households.

Riely (2000) has noted that even when the same set of indicators is used, differences in the methods of constructing indexes and scales can result in different conclusions. The lack of conclusive and comparative data on household food security in South Africa means that researchers often have to draw on poverty modules (Hendriks, 2005), many of which are based on household income and expenditure on food. However, poverty and food insecurity are not necessarily the same thing, although there is often a strong relationship between the two.

In her detailed review of the variety of national and localised studies implemented in South Africa since 1994, Hendriks notes that diverse survey instruments have been used to investigate food insecurity. These have included focuses on malnutrition, energy availabilities, food poverty and experiences of hunger. They have also invoked different methodologies. While some have used a mixture of quantitative, qualitative and experiential approaches, others have applied a single approach or used multiple

proxy indicators to determine food insecurity. She summarises the constraints in a variety of South African studies as follows:

*The National Food Consumption Survey [of 1999] used a mix of methodologies...but the time frame applied for experiential data was too short (five and 30 days). The study could have been significantly strengthened by inclusion of a seasonality chart to reflect seasonal experience of hunger. The seasonality of food insecurity and hunger has not been investigated, factors affecting household vulnerability to food insecurity have not been established, nor have the coping strategies employed by households facing food insecurity been documented apart from Mekuria & Moletsane's (1996) small study in Limpopo, Aliber & Modiselle's (2002) sample of 30 households, and Fraser et al.'s (2003) 16-household case study. Moreover, samples are often too small or narrowly targeted and the data not widely representative, fragmentary and not comparable between studies. No effort has been made to standardise data sets, employ comparable and tried and tested methodologies as used by neighbouring SADC countries, or plan for longitudinal studies. Without knowing the true extent of food insecurity or the trends in food security over time, there is little hope of effective policies and targeted programmes to address food insecurity in South Africa. (Hendriks, 2005: 115)*

Despite the limitations in comparability and ability to make generalisations from many of the surveys and localised studies, the various figures reported in these studies make it clear that food insecurity and hunger exist at unacceptable levels in South Africa. Hendriks surmises that the problem is a result of both internal and external influences. The general perception of South Africa as nationally food secure might have resulted in more attention and donor support being given to other Southern African countries. Consequently, South Africa might not have the resources to conduct similar and regular vulnerability assessments. Complacency regarding the national food security situation within the country may well be a reason for the lack of investment in representative longitudinal studies that focus on households, the local significance of which has only come to the fore in recent years through many of the studies she reviews. Furthermore, she suggests that empirical estimations of the real food insecurity situation may well have implications that government does not want to face, especially as the right to food is enshrined in section 27.1b of the South African Constitution. A better quantification of the extent of the problem could well be costly and will require wide-scale interventions. There is a need for longitudinal data specifically relating to food security to be collected in a standardised manner, which is not the case at present. Although current innovations in food security measurement may effectively reduce some of the costs involved, the existing diversity and inequalities experienced in South Africa will require a considerable sample in order to ensure national representation which can be drawn down to at least the district and metropolitan level. In addition, there is a need to integrate the existing, and forthcoming data from different data sets into a centralised database. This will necessarily include qualitative and quantitative data in order to improve identification and understanding of the food security situation. Qualitative approaches to measurement are becoming increasingly necessary, but are more resource-intensive given the need for greater coverage at the local level, than are national quantitative surveys. They also require greater skill to analyse, especially when attempting to do this in conjunction with quantitative data. Furthermore, the lack of methodological consensus at the international level compounds the problem by including innumerable variables and putting increased pressure on respondents, resource requirements and analysts.

A first step to improving the empirical situation in South Africa, according to Hendriks (2005: 118), would be:

*smaller in-depth local studies of food insecurity...using multidimensional approaches to investigate the experience of hunger, hunger cycles and food insecurity and how households cope with the stresses and shocks that threaten household vulnerability to food insecurity.*

The importance of such studies as a first step, in the absence of appropriate and relevant national data sets, is that they at least enable targeting of appropriate policies and interventions to those most seriously affected. They would also enable the development and testing of methodologies that could lead to the development of standardised survey question modules, which could then be included in larger, comparative surveys. Smaller, localised studies which consider the multiple dimensional nature and impact of stressors would enable the documentation of household levels of understanding of and responses to food insecurity in South Africa under 'normal' conditions i.e. during times when households experience gradual changes and seasonal fluctuations, rather than sudden temporary shocks. (Hendriks, 2005). Such studies will enable the determination of how households currently attempt to address existing chronic food insecurity, cyclical/seasonal food insecurity and how they may fare during a temporary shock or crisis situation. While illuminating context specific constraints they will also indicate the existence of commonalities across sites and thereby suggest the different scales of the sources of constraints. Therefore, this type of study will enable the broader understanding of the existing causes of chronic food insecurity, the differential impacts on various households, the possible effects of future shocks, and what developmental initiatives are required to ensure improved food security and resilience to stressors at different scales.

The general conclusion to be drawn regarding the methodological and technical concerns that exist in relation to the various nutrition, household and food security surveys at national and local levels, based on the studies by Hendriks (2005) and Roberts (2007), is that they are currently inadequate as tools for comprehensively understanding and subsequently addressing the complexity of food security. Specifically, they do not enable us to accurately determine prevalence of different types of food insecurity at multiple levels/scales; continual and regular monitoring is constrained; localised coping or response mechanisms are not regularly reported on at any scale; and they prevent accurate identification of those at risk in South Africa over time. As Drimie<sup>13</sup> has suggested, "what is missing in SA is consensus that a particular element of food insecurity is going to be the focus – or an agreement about an overarching framework to guide different measurement. It is also indicative of a lack of a comprehensive poverty policy in the country. Concrete measurement is only one of the ways in which food insecurity can be understood as there is a degree of inherent complexity that measurement cannot – and should not – dissipate. There cannot be one, single objective measure or indicator of food insecurity that can satisfy all the quantitative [and qualitative] needs involved with engaging the reality of hunger in SA". The next section considers just how difficult the implementation of food security policy is in South Africa.

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<sup>13</sup> Scott Drimie personal communication March 2009

### 4.3. Addressing food insecurity in South Africa

Interventions that intend to address food insecurity, such as policies, programmes and projects, are not only shaped by the social, political and economic factors of food insecurity at national and international level; they in turn shape the food security landscape of a particular country at all levels. Previously, it was noted that changes in policies and practices in the international arena, along with regional or local climatic, economic and political events, have shaped changes in global and national understanding of food security and the implementation of strategies to ensure food security. Furthermore, implementation strategies have subsequently shaped policies (or at least attempted to do so) and affected the food security of various countries. Bearing this in mind, it makes sense to look at how policies and practices shape and are in turn shaped by the food security situation in South Africa.

A recent HSRC study (2007) argues that rather than being a separate strategy, food security should form part of the government's integrated anti-poverty strategy, and this means that employment strategy, social grants, health, education, agriculture and other related policies and programmes should be included. The same study (HSRC, 2007: 49) also acknowledged that:

*the institutional structures currently designed to address food insecurity in South Africa are fraught with challenges that are severely constraining their effectiveness, and...are having deeply negative impacts on food security in the country.*

Drawing heavily upon parts of that study, this section looks at government initiatives, particularly the IFSS and the contextual and other challenges faced. Given CPEG's recent involvement with the IFSNP-TT at national level, some recent data are included where possible. However, obtaining data has proved problematic, further highlighting the problems within institutional structures.

Following the World Food Summit of 1996, the government has taken an interest in building a policy environment that is conducive to addressing food security in the country in a coordinated fashion. The IFSS was adopted by Cabinet in 2002. Its vision is for all South Africans to attain universal physical, social and economic access to sufficient, safe and nutritious food at all times to meet their dietary and food preferences for an active and healthy life (DoA, 2002). This vision coincides with the current FAO definition of food security cited previously (FAO, 2006). The IFSS acknowledges the food security challenges in South Africa, which are shaped by two inter-related challenges (DoA, 2002). Firstly, there is a necessity to maintain and increase the country's ability to meet its national food requirements. This is dependent on meeting the needs of domestic agricultural production and ensuring the ability to import foods that it cannot produce efficiently. Secondly, the inequalities and poverty that exist among the majority of households must be eradicated. These relate to inadequate and unstable food supplies, insufficient purchasing power, unemployment, poor nutrition, inadequate institutional support, inadequate safety nets and weak emergency response systems.

The IFSS has a number of strategic objectives that require related programme interventions from relevant government departments. These are collectively known as the Integrated Food Security and Nutrition Programme (IFSNP). Initially,

programmes from various government departments were grouped under the Social Services Cluster and the IFSS. The goal of the IFSS is to eradicate hunger, malnutrition and food insecurity by 2015 in terms of the following strategic objectives (DoA 2002):

- Increase household food production and trading.
- Improve income generation and job creation opportunities.
- Improve nutrition and food safety.
- Increase safety nets and food emergency management systems.
- Improve analysis and information management system.
- Provide capacity building.
- Hold stakeholder dialogue.

The structural basis of food insecurity in South Africa requires a response that penetrates all sectors; thus these objectives are a promising basis for achieving this and are comparable to global food security objectives. The IFSS approach desires to entrench public-private-civil society partnerships and to focus on household food security, without overlooking national food security. This approach and the intended outcomes of the IFSS, described below, also appear promising:

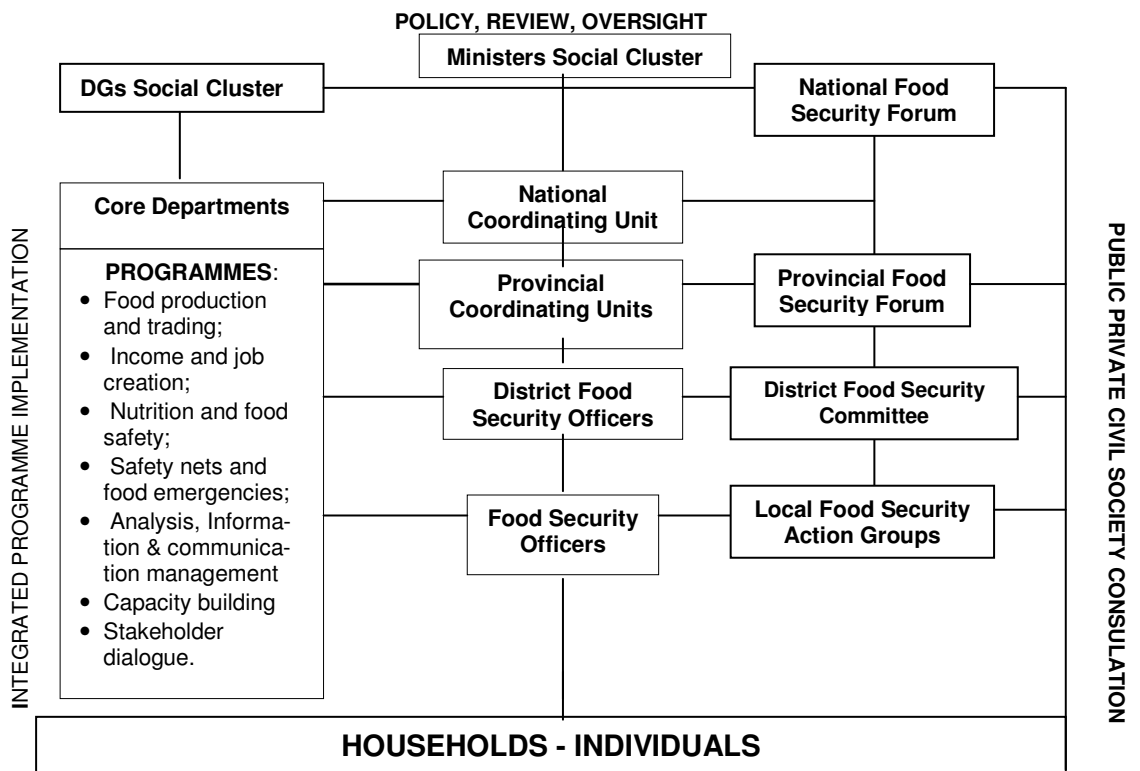
- greater ownership of productive assets and participation in the economy by the food-insecure;
- increased competitiveness and profitability of farming operations and rural enterprises that are owned and managed by or on behalf of the food-insecure;
- increased levels of nutrition and food safety among the food-insecure;
- greater participation of the food-insecure in the social security system and better prevention and mitigation of food emergencies;
- greater availability of reliable, accurate and timely analysis, information and communication on the conditions of the food-insecure and the impact of food security improvement interventions;
- enhanced levels of public-private-civil society common understanding and participation in agreed food security improvement interventions; and
- improved levels of governance, integration, coordination, financial and administrative management of food security improvement interventions in all spheres of government, and between government and the private sector and civil society.

The institutional arrangements for achieving these outcomes are outlined in Figure 2, and largely coincide with international best practice. The different organs at different levels have distinct but seemingly integrated roles and responsibilities. The Food Security Directorate of the national DoA has taken the responsibility to be the National Coordinating Unit and has helped to organise the National Food Security Forum, which is currently known as the IFSNP-TT. This has the purpose of coordinating the strategy at national level. The role of the Provincial Food Security

Forum is to prioritise projects and disburse funds. District Food Security Committees are responsible for identifying food-insecure areas at district level and for conceptualising and recommending projects for funding. They have the secondary purpose of monitoring and evaluating the effects of these projects. Local Food Security Action Groups are situated in municipal areas and consist of local government officers, traditional authorities and churches, as well as locally based NGOs. These action groups are responsible for the identification and quantification of vulnerable households. According to Kruger (2007) the function of Food Security Officers is to provide technical support in compiling business plans and submit these to the District Food Security Committees. They are also responsible for providing training and counselling to vulnerable groups. As the recent HSRC study (2007: 50–51) points out:

*...this institutional arrangement displays an innovative blend of interventions and mechanisms to implement and refine the IFSS. The IFSS would become a reality through clear programmes, coordinating units and multi-sectoral fora to stimulate and support interventions to engage creatively with food insecurity.*

**Figure 2 – IFSS institutional arrangements and organisational structures**



Source: DoA, 2002

However, it is clear from the same report and personal discussions with national task team members in December 2008 and January 2009 that the IFSS is having a number

of problems in implementing approaches and achieving intended outcomes. Despite some gains and commitment of resources, national departments experience resource and capacity constraints that prevent them from performing their responsibilities effectively. Most departments do not have a specific directorate tasked with food security and this, along with inter- and intra-departmental rivalry and the prioritisation of different activities, makes effective collaboration to achieve the outcomes of the IFSS in a coherent and coordinated fashion problematic. It was also reported that often one department would provide a service to the poor but that the necessary complementary services were not forthcoming. The HSRC (2007) report highlighted the fact that food security is still seen as the responsibility of the DoA and its provincial organs. However, within the department there is an overriding emphasis on the prosperous commercial agricultural sector, and even those activities aimed at reducing previous inequalities in the sector are heavily focused on better-resourced black farmers (Jacobs et al., 2008).

Of great concern is the fact that there are no dedicated central funds for government to spend on food security, at any level of government. Budgets are allocated by sector such as social development/welfare, health, agriculture, education, etc. and by programme within each sector. This prevents the development of collaborative food security-focused projects/programmes that are funded by a single entity. Tracking expenditure of budgets on food security is problematic. The examples of the Departments of Agriculture and Health demonstrate that this is often difficult to determine for various reasons.

Theoretically speaking, funds available for food security projects at provincial agricultural departments should consist of 10% of their allocated budget of the Comprehensive Agricultural Support Programme, which was initiated in 2004, plus equitable funds from the provinces. In reality the figures actually spent are reportedly less than the stipulated 10%, even when provincial contributions are included. The situation is further complicated because there are a number of different programmes that appear to engage in some form of contribution to food security in a very broad sense. National programmes cited by the DoA that contribute to food security include Land Redistribution for Agricultural Development, Natural Resource Management, Land Care, and Research and Development. There are also a number of other programmes in specific provinces that are implemented as food security activities. Given the often broad objectives of national and provincial programmes, it is impossible to evaluate their direct contribution to food security and the actual budget expenditure that directly relates to food security. A further concern is the reported lack of impact that some of these programmes have on the poor, for example land reform (HSRC, 2007; Jacobs et al., 2008), as they often (intentionally or unintentionally) target better resourced individuals and groups, rather than the most vulnerable.

The Department of Health has a number of programmes that focus on food security by providing people either with meals or with food which they prepare at home. These programmes include the National School Nutrition Programme (NSNP), the Clinic Garden Project (CLG) and the Protein Energy Malnutrition Scheme (PEM). The NSNP involves providing targeted schools with agricultural skills, inputs and equipment so that they can produce crops to feed learners. The CLG provides the members of food gardens, located at public health facilities, with the resources to

produce food for their households. Membership includes individuals and families affected by HIV and AIDS and by tuberculosis, and households with children admitted into the PEM. The PEM provides nutrient-dense meals to clients who have been identified as malnourished. The Department of Health was only able to provide budget figures allocated to the provinces to carry out the NSNP, but not the total amounts involved. In the 2008/2009 financial year this allocation amounted to approximately R1.7 million. The programme currently reaches 6.2 million learners.

While collaborative approaches are part of the IFSS objectives, a further concern is that these, and sufficient integration within programmes, do not seem to be forthcoming. Neither civil society nor private sector organisations are represented in the IFSNP-TT. Given their vital role in food security in South Africa, this is a grave omission. While civil society plays multiple roles in food security, for example as consumer groups, providers of relief and food aid, sanitation, education and agricultural support, etc., private sector companies are firmly entrenched throughout the food chain and are also largely responsible for carrying out infrastructure development. Kruger (2007) reports that a number of local, national and international civil society organisations are at work in food security projects in KwaZulu-Natal. However, neither their activities nor those of the provincial governments are coordinated, and activities are often ad hoc and duplicated without any real understanding of how and what projects can and do contribute to local food security (Kruger, 2007). Coordination and integration therefore seem to be problematic at numerous levels of the institutional framework. Discussions with national departments indicate that some are in contact with a few national and international civil society organisations, but it is not clear what the nature of these relationships is. Some of the international agencies are advisors from the UN, and while the departments do receive funds from some of these agencies the exact relationship with local civil society organisations is unclear. Drawing on evidence from Malawi and Swaziland, Drimie et al. (2008) argue that in order for the activities of NGOs to be effective at community level over the long term, they must engage with state structures so that the state can facilitate an enabling environment. A comprehensive food security strategy requires collaboration amongst civil society, private sector and the state.

Attempts to develop a list of civil society organisations that might be directly or indirectly involved in food security in South Africa in some way have proved highly problematic. The South African National Non-Government Organisation Coalition (SANGOCO) was contacted, and when they finally provided a list of thousands of organisations this did not indicate the activities or sectors in which they are engaged. A number of NGOs also appeared to be absent from their list. The information provided in the national database was insufficient to identify the actual activities of these organisations. To attempt to try to identify the possible organisations involved in food security activities in any manner would have required contacting at least a thousand organisations. In view of the limited resources available to conduct such a broad and in-depth study, it was decided not to pursue this line of enquiry. However, it is something that needs to be done in the future so that active civil society organisations can be co-opted into the national food security strategy.

The coordination of food security interventions is increasingly becoming a concern for those directly and indirectly involved in development in South Africa, as the

current implementation of the IFSS is failing to achieve this. Despite further progress made in 2006 with the establishment of Provincial Food Security Fora in all provinces, the selection of Provincial Coordinating Units has not yet been completed. The recent HSRC report (2007) and discussions with the Food Security Directorate in March 2009 indicate that many of these units are still in the process of being set up and identifying a common work plan. Coordination at provincial level appears to also be a constraint in at least half of the provinces. The HSRC (2007) also reports that the Directors-General and Social Cluster Ministers have not been seen to provide essential guidance in the implementation of the IFSS. That report and an earlier one by the South African Human Rights Commission (2006) recommended that the IFSNP be housed within the Office of the Presidency, as that office is believed to have the necessary political power to ensure commitment and coordination. A possible option may be to have a central structure to coordinate resources and facilitate a conducive environment for collaboration at the national level. Such a structure could be the Presidency, but the role should be confined to making resources available to the IFSNP at national level, and oversight to ensure that departments collaborate effectively. This differs from the suggestion that the entire IFSS be located within the Presidency. Despite an innovative institutional framework that is derived from international best practice, the IFSS appears to be challenged in actually carrying out its functions. Members of the task team have noted that there is no actual system to monitor the contributions of the various departments, nor is there an evaluation system that can track the food security situation. Furthermore, project lists are not compiled and shared with other departments to ensure integration and collaboration and also to allow for coordination and oversight at the national level. Another worrisome factor is that the Social cluster interventions proposed by the IFSS may well be weakened by their lack of integration with the Economic Cluster. This is especially a concern as access to food is a primary component of food security and depends directly or indirectly on income.

It was pointed out in subsection 4.2 that the availability of a good information system and relevant research databases is necessary in order to track food security progress and to understand what takes place at household level. Using its own funds and those received from the World Food Programme, the Food Security Directorate has collaborated with a number of universities and research organisations, including the HSRC, the Agricultural Research Council and the Medical Research Council to pilot the Food Insecurity and Vulnerability Mapping Information Systems (FIVIMS) in two phases in 2004 and 2006. A strong motivation for this was that existing South African data sets and surveys do not provide sufficient information; they do not involve tracking of progress on food security; they do not focus on household activities and responses to food insecurity; and they are generally inadequate for coping with the multidimensionality of food security. FIVIMS is an internationally developed tool with the purpose of providing decision-makers with reliable information about geographic areas and sectors of the population that suffer from hunger and malnutrition, or may be at risk. It has been implemented in four other Southern African countries (Malawi, Mozambique, Namibia and Swaziland). While some successes were recorded in Mozambique, its overall failure has been attributed to a general lack of coordination amongst the various role-players. The first phase of the South African study highlighted the need for institutional cooperation if the system was to be effective (HSRC, 2007). A number of other problems concerned the

purpose of FIVIMS. It was pointed out by some of those involved in the piloting that there was a lack of consensus as to:

*... whether FIVIMS was to serve as an early warning system, a measurement system or a monitoring system. (HSRC, 2007: 56)*

The second phase of the project focused on two components. One involved the generation of chronic food insecurity profiles for all 13 Integrated Sustainable Rural Development Programme nodes. Existing national survey data were used to do this. A comprehensive baseline survey was further developed to provide insights into the longer-term characteristics of society. The second component focused on the analysis of transitory food insecurity and vulnerability. Much of the data from the profiles was integrated into an existing geographic information system, namely the Agricultural Geo-Referenced Information System. Unfortunately, these data from the FIVIMS study are often mistakenly interpreted as South Africa's FIVIMS system. To be clear, FIVIMS as a system does not yet exist in South Africa. Despite the work put into the pilot study it is apparently constrained by a lack of capacity and resources to implement and maintain the system. Also, some researchers note problems with the scales used. Schönfeldt et al. (2005) acknowledge that the hunger scale used in the 1st Phase was not validated, and therefore a cut-off value for the number of positive responses, required to distinguish the food-secure from insecure households, could not be established. This was improved for the 2nd Phase of the pilot. Roberts (2007) argues that one of the scales used, the Household Food Insecurity Access Prevalence scale, overestimates the percentage of households that are food insecure. Faber (2007: 39) has indicated that this instrument requires further refinement.

Collaboration with other countries in the region on food security policy is seen as important to South Africa (HSRC, 2004). South Africa is seen as being significantly affected by events in other Southern African countries, particularly its closest neighbours, but also those further afield. Changes in food markets and the food security situation in these countries impact on South Africa's economy, administration, political relations with other countries, humanitarian responsibilities, and the demand on the country's infrastructure (HSRC, 2007). Currently the DoA has a Technical Assistance Programme for Africa in conjunction with agricultural departments in some other sub-regional countries; however this particular programme does not concentrate on food security, which is one of at least eight areas of collaboration outlined by the programme. During discussions, other departments did not acknowledge ties to other countries that involve food security activities. South Africa could well learn from the experiences of recent initiatives, pilots and VACs in other parts of Southern Africa as discussed in section 3.

While government policies and practices are moving in line with international policies, these are severely constrained at the level of meaningful implementation. This can largely be attributed to poor coordination at most tiers of implementation and possibly to inadequate coherence in determining what needs to be done and how best to achieve this, in light of the multidimensional nature and causes of food insecurity. The fact that South Africa is considered to be nationally food secure has probably delayed the onset of a direct focus on food security in the country. Similarly, early attempts by the post-1994 government focused on poverty reduction rather than on food security per se, which may also have delayed the directing of sufficient attention

to the aspects of access to, utilisation and stability of food supply, especially at household level. As research has gradually suggested a worsening food security situation in the country (or at least drawn our attention to the plight of the food-insecure and the inability of government to adequately address this), so it appears that interest has increased. This was also triggered by commitments made at the 1996 World Food Summit. However, it took a further six years before Cabinet approved the IFSS. While the IFSS is largely based on international best practice, historical inter-departmental rivalry, poor commitment to the strategy, and departmental lack of capacity and resources have constrained the functioning of the IFSNP. This may in turn be a result of the erroneous belief that food security is the responsibility of the DoA. The fact that the DoA is the only department with a food security directorate probably reinforces this perception and enables others to shirk responsibility. FIVIMS was partially piloted in order to improve coordination, but it was realised that this was in fact a prerequisite for the functioning of FIVIMS (HSRC, 2007) or any other integrated means of measuring and monitoring food security. However, coordination and collaboration require a clear focus and practical strategies to achieve objectives.

Lack of commitment to the IFSS could be a consequence of different departments not being fully aware of the multidimensional nature of food insecurity and therefore not understanding the need for commitment to a coordinated and integrated process. The IFSS was the first government document that indicated the multidimensional nature of food security. In particular, the roles of the different departments and their programmes in such an integrated process might remain unclear. For example, the links between ensuring that people have enough food, malnutrition and social grants might not be adequately understood. Similarly, the country's resource constraints (natural, social and financial) require that different solutions are provided to different groups of people, either in the same or different areas, and are dependent on their circumstances. Failure to understand this will further constrain the ability of the IFSS to achieve its objectives. Historically, different departments and state organs have focused on different aspects of food security and this further reduces collaboration. Apart from the piloting of FIVIMS, the different studies commissioned by different departments have largely focused on departmental interests rather than on integrating the broader issues relating to food security, further ignoring the need for integration and inter-departmental collaboration.

#### **4.4. Conclusion**

Although South Africa is gradually moving along a path towards food security similar to that in other countries, at its current level of functioning the IFSS is unlikely to achieve AsgiSA targets and the MDG-1 within the current time frames. This is mainly a result of two primary constraints that impede realisation of greater food security. The first constraint is the lack of resources and coordination within the IFSNP. While much has been said about this at national level, and in particular about the functioning of the IFSNP-TT, there is evidence to suggest that a similar situation prevails at all levels, as some of the proposed task teams and fora at different levels have not been established and are thus not yet functioning, seven years after the inception of the programme. The lack of centralised funds and the current system of financing food security activities and interventions make it difficult to ensure that collaborative projects are developed. This also makes it difficult to monitor budget spending and

the programme activities. No standardised systems exist at present to monitor programme activities and to monitor the food security progress.

The second constraint relates to the unavailability of comprehensive data to guide delivery, and this further constrains the capacity of the IFSNP to deliver on food security. The available national data sets are insufficient as a result of the use of different indicators, methodological approaches and sampling frames which make comparative analyses extremely problematic. These also make it difficult to monitor the food security situation and to determine the impact of interventions. While a number of the data sets have been used to determine changes in income poverty in South Africa, their use has recently been criticised as a result of the different analyses that emerged using the same data sets.

Probably the greatest concern about current research is that given the multiple definitions of food insecurity and the very wide variety of indicators, there is no agreement about an overarching framework to guide and make coherent use of the different food security measures. In order for the resulting measurements from surveys and other more qualitative studies to have greater meaning there is a need to ensure that these focus on a particular element of food security. Currently, they often give the appearance of stand alone studies, which are not linked in any meaningful manner.

While FIVIMS has been piloted in one particular district, it still requires some fine-tuning. Consequently, there is no system in South Africa that tracks vulnerability in the country. In addition, there are concerns relating to coordination, capacity and resources that are delaying the national rollout of FIVIMS. It may well be worth looking at an alternative and more cost-effective way of identifying the chronically food insecure and monitoring vulnerability. Possibly the approach set out in the institutional framework of the IFSS would be more appropriate – the use of Local Food Security Action Groups to perform this function, or at least oversee it at the local level. Even complete collaboration and coordination between government departments would still not enable them to do all the work required at different levels. Given that most civil society organisations operate at village level, it is important that they be included in the functioning of the IFSNP at all levels. Once the various systems are in place, these organisations, along with community structures, could do a lot of the vulnerability monitoring. There is a serious need for the current level of functioning of the IFSNP to be reformed in order to address the coherent delivery of food security in the country.

However, the multidimensional nature of food insecurity (and vulnerability) has implications for national level assessment frameworks of vulnerability to food insecurity that rely almost exclusively on quantitative data (e.g. Food Insecurity and Vulnerability Information Mapping Systems, Integrated Food Security and Humanitarian Phase Classification Framework). Such frameworks are unable to adequately collect and interpret qualitative information (Du Toit 2005). Rather, in order to fit the framework, the preference is for:

*'information that is readily quantifiable and standardised, that abstracts from local complexity and appears to sidestep non-transparency - [and which] leads not to an accurate grasp of the dynamics of a situation, but to distorted and misleading accounts that miss crucial dynamics' (Du Toit 2005:12).*

By design, these assessment frameworks are unable to grasp the complexity and multidimensional nature of stressors, and the diversity of household sensitivity and resilience. Far more promising are local studies that adopt a more combined and multidimensional approach to understanding the effects of multiple stressors as proposed by Hendriks (2005). These should be part of the IFSNP in order to advise service delivery.

## **5. Where to from here?**

To improve the effectiveness of food security endeavours in South Africa there is a need to address a number of the constraints that have been identified in this paper. Suggestions for a way to do this are briefly highlighted in this section. These should be understood in conjunction with the recommendations made in the two previous HSRC reports (2004 and 2007).

There is an urgent need to understand the constraints experienced at all levels of the IFSNP in South Africa, including the apparent lack of oversight by ministers and directors-general in the involved ministries. At the same time it must be determined if all sector departments involved are aware of the importance of their departmental programmes to the implementation of the IFSNP. To this end it must be ensured that they are aware of the multidimensional nature of food security and the importance of their activities being implemented in a coherent and integrated fashion. A detailed and in-depth investigation of these and other constraints that negatively impact on the functioning of the IFSNP is urgently required.

Given the constraints inherent in current national research tools these need to be refined, and food security modules should be developed that can be included in national survey instruments. Instruments need to be inter-disciplinary and inter-sectoral in focus. More localised and in-depth studies need to be conducted in order to get a better understanding of the different types of food insecurity encountered and experienced at household level, and the nature of the multiple causes and their origins and impacts at different scales. These studies also need to identify and focus on the vulnerable, including children under five, orphans, older persons, female-headed households, etc., and their responses to shocks. Of particular importance is the plight of vulnerable households experiencing HIV and AIDS as this could move them into chronic food insecurity (see Ladzani, 2009). Similarly, climate change needs to be given special attention in these endeavours, along with social protection. Research also needs to focus on developing monitoring and vulnerability assessment techniques that are simple and low in resource costs. A centralised group of research specialists needs to be set up in order to coordinate these research activities, and funding needs to be made available for research. Research in South Africa needs involvement from specialists working in other Southern African and sub-Saharan African countries.

Greater collaboration with other countries in Southern Africa, at both research and government levels, would enhance understanding of the multiple dimensions of food security and also increase awareness of how the situations in different countries impact on one another. Lessons learned in different countries would also ensure that informed decisions can be made and that there is awareness of best practices in multiple contexts.

While the NAMC monitors food prices and consumption trends annually, there is a need to integrate this information with social data to determine the impact of food price fluctuations on the chronically food-insecure and the vulnerable. This would enable the determination of policies to reduce the impact of price fluctuations for specific households within specific locations.

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