Forum for Food Security in Southern Africa

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CONSULTATION DRAFT

Achieving Food Security in Southern Africa: Policy Issues and Options

Synthesis Paper

05 April 2004

Please send comments to foodsecurity@odi.org.uk

Preface

This paper synthesises the findings to date of the Forum for Food Security in Southern Africa. The paper will be revised in the light of comments received from stakeholders; we particularly welcome comments, amplifications or further examples relating to the analysis and evidence presented in the paper. Please send comments to foodsecurity@odi.org.uk or via country consultations in Lesotho, Malawi, Mozambique, Zambia and Zimbabwe during March and April 2004.

The aim of the Forum is to contribute to analytical and strategic thinking on longer term food security options following the 2001–3 Southern African crisis by providing a platform for improved linkages between food security analysis, policy making and implementation in the Southern Africa region. The Forum is a consortium of international and regional institutions committed to achieving food security for all in Southern Africa.

To find out more about the work of the Forum for Food Security in Southern Africa, the consortium, or to access full versions of the Forum's Country Issues Papers, Theme Papers, and other information products on which this Synthesis Paper is based, visit:

www.odi.org.uk/food-security-forum

This Synthesis Paper and the other information products produced by the Forum for Food Security are intended to stimulate informed debate about issues and options for food security policy in the countries of Southern Africa. They do not necessarily represent the views of all Forum consortium members and funders.

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Acronyms

CAP	UN Consolidated Appeal
CDF	Comprehensive Development Framework
CIF	Cost Insurance Freight
CIMMYT	International Centre for Maize & Wheat Improvement
CIP	FFSSA Country Issues Paper
C-SAFE	Consortium for Southern Africa Food Security Emergency
DFID	UK Department for International Development
EMOP	FAO Emergency Operation
EWS	Early Warning System
FANRPAN	SADC Food, Agriculture and Natural Resources Policy Network
FANTA	Food and Nutrition Technical Assistance
FAO	UN Food and Agriculture Organization
FEWS(NET)	Famine Early Warning Systems (Network)
FFSSA	Forum for Food Security in Southern Africa
FIVMS	Food Insecurity and Vulnerability Mapping System
FOB	Free On Board
GM	Genetically Modified
HSRC	Human Sciences Research Council, South Africa
HYV	High Yielding Variety
IFPRI	International Food Policy Research Institute
LSO	Learning Support Office
NGO	Non Governmental Organisation
NR	Natural Resources
NR IV	Natural Region IV, Zimbabwe
OCHA	UN Office for the Coordination of Humanitarian Affairs
ODA	Overseas Development Assistance
ODI	Overseas Development Institute
PLWA	People Living With Aids
PRSP	Poverty Reduction Strategy Paper
RNFA	Rural Non Farm Activities
RNFE	Rural Non Farm Economy
SADC	Southern African Development Community
SARPN	Southern African Regional Poverty Network
SCF	Save the Children Fund
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNICEF	UN Children's Fund
USAID	US Agency for International Development
VAC	Vulnerability Assessment Committee
WFP	World Food Programme
WHO	World Health Organization

1 Introduction

In 2001–3 in many countries in Southern Africa national grain stocks had been run down and grain imports were slow to arrive, so that localised harvest shortfalls quickly resulted in three- and four-fold increases in food prices which, for the large number of vulnerable people in the region, spelled crisis. In the end, the donor and government response but equally importantly the response of the commercial sector and people's own 'coping' strategies meant that large-scale famine-related deaths were avoided in 2002 and 2003 but unacceptable levels of chronic food insecurity remain.

Thus many of the countries of Southern Africa remain 'on the edge of the table' and it is clear there cannot be a return to 'business as usual' based on the economic development models that governments and donors have been using in the region over the last two decades. Recent research by IFPRI (Hazell and Johnson, 2002) amongst others shows that if the countries of Southern Africa continue with the agricultural and food policies they have pursued up to now and continue to invest only at current levels, poverty, food insecurity and child malnutrition will worsen significantly, resources will become more degraded, land productivity will further decline in many areas and the region will become increasingly vulnerable to famine.

Many of the countries of Southern Africa have seen two major food crises within the space of ten years. After the 1991–2 crisis, there were high hopes that new thinking on food security in the context of structural adjustment and market liberalisation to generate economic growth would make the countries and populations of the region less vulnerable to food crises in the future. So what went wrong? Why did a lesser drought in 2001–3 threaten a more serious crisis?

In the early twenty-first century it appears there is a set of systemic factors keeping many of the countries of Southern Africa on the edge of economic crisis: the failure of market liberalisation as originally conceptualised; chronic human vulnerability; weaknesses in institutional accountability and governance; and weaknesses in regional integration and coordination, although the impact of these has been felt differently in different countries. In particular, economic and agricultural growth rates have not been as high as was hoped since 1991/92 and the difficulties of market liberalisation in the region have been underestimated.

The events of 2001–3 in Southern Africa prompted much reflection on the causes of the apparent increased vulnerability to food insecurity in the region and appropriate policy responses. There is much relevant high quality research-based evidence and analysis on many aspects of economic development in the countries of Southern Africa, but this is not being adequately synthesised and fed into public policy processes for food security.

Accordingly, the Forum for Food Security in Southern Africa was set up to try to provide a platform for improved linkages between food security analysis, policy making and implementation in Southern Africa and thus to support efforts by governments and donors to improve food security in the region over the medium- to long-term. The Forum has focused on five specific countries: Lesotho, Malawi, Mozambique, Zambia and Zimbabwe. The Forum's objective is to try to facilitate evidence-based analysis and discussion by all stakeholders of longer-term options for food security, drawing on longitudinal research in the region and comparative international evidence. We hope that this might help to draw

together thinking about food security in the region that goes beyond individual institutions' sectoral mandates.

As such, the Forum is as much about contributing to the process of policy development as to research content, of which there is already plenty in Southern Africa. It has brought together as many stakeholders as possible from government, official donors, NGOs, civil society, the private sector, and international and regional researchers concerned with food security in the region. The Forum has tried to support dialogue between some 500 individuals and organizations on specific country issues and more generic regional issues/themes through publications, electronic discussions and in-country discussions.

The contribution of all stakeholder groups to the food security debate in Southern Africa is particularly important now that is it widely accepted that liberalised economic development as perceived by the international financial institutions has not worked well in the region. There is an urgent need for strategic thinking around modified policy options that address the realities of stakeholders' situations, for implementation by governments and donors. This must involve dialogue not only between governments and donors, but also between private and public sector actors, and must involve civil society organizations and the groups they represent.

The focus of the Forum is on exploring the impact of systemic factors on longer term food security and what is in the policy toolbox for addressing the constraints and opportunities these factors present. This is closely related to poverty reduction and economic growth. The Forum has not examined humanitarian operations during the 2001-03 crisis, except to the extent that they impact on longer term food security issues and options.

Two assumptions under-pin the Forum's investigation of food security in Southern Africa:

1. A large proportion of individuals and households in Southern Africa are less food secure and their coping strategies are more constrained now compared to 1990;
2. This results more from policy choices made during the period 1980–2000 than from exogenous factors such as drought.

The basis for these assumptions is discussed in Chapter 3. The Forum defines 'policy' to include both the technical content of policies and their implementation.

This Synthesis Paper sets out methodological issues in understanding food security in Southern Africa (Chapter 2); facts and figures on the nature of the 2001–3 crisis (Chapter 3); and discusses options from the policy 'toolbox' that could be appropriate for addressing the major long-term food security issues highlighted by the 2001–3 crisis, and principles for policy choice (Chapter 9). In Chapters 4–7, the Synthesis Paper develops material originally presented in Country Issues Papers and in Theme Papers produced by the Forum on the four systemic factors underlying the crisis: politics in the policy process; market development; human vulnerability; and social protection; as well as other evidence and analysis relating to regional coordination and integration, and to research-policy linkages which is presented in three Discussion Papers. Annex 1 contains summarized data relating to the Forum's major themes. All Forum publications and other outputs are available on the Forum website.

The Theme Papers bring together economic, institutional and political analysis of evidence from the region, informed where relevant by evidence from other parts of the world, to explore the policy implications of the priority food security issues raised in Country Issues

Papers produced for the Forum by resident specialists in Lesotho, Malawi, Mozambique, Zambia and Zimbabwe. The focus has been on identifying generic policy options for strengthening long-term food security in the countries of Southern Africa, as a contribution to more detailed debate within individual countries on specific priorities and options at country level.

This Synthesis Paper draws on evidence from the region and relevant international experience, and takes into account comments received from participants in the Forum's e-discussions and from international peer reviewers. It will be revised in the light of comments received from stakeholders; we particularly welcome comments, amplifications or further examples relating to the analysis and evidence presented in the paper. Please send comments to foodsecurity@odi.org.uk or via country consultations in Lesotho, Malawi, Mozambique, Zambia and Zimbabwe during March and April 2004.

Whilst aiming to present a balanced view, the Forum publications inevitably reflect the authors' professional opinions. They do not – indeed could not, given the complexity of the issues involved – pretend to evaluate all competing interpretations of the selected issues nor necessarily represent the views of all Forum consortium members and funders.

References and further reading

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2 Understanding Food Security in Southern Africa: Methodological Issues

This Chapter summarises the main methodological issues involved in examining food security in Southern Africa. It starts with an exploration of the meaning of food security and its three critical components, then discusses the relationship between food security, vulnerability and poverty, and concludes with observations on analytical approaches to understanding the options for strengthening food security in the region. None of the methodological issues is new, and indeed many were originally identified from work in Eastern and Southern Africa in the 1980s, but some – notably the importance of enabling access to food as well as food availability – appear to have been under-emphasised during the most recent crisis.

2.1 What is food security?

Maxwell (1996) identified three shifts in thinking about food security since the first World Food Conference in 1974:

- **From the global and national to the household and individual**: the World Food Conference focussed on the crisis in supply but by the early 1980s ideas about access or 'entitlement' led to a focus on individual access;
- **From 'food first' to livelihoods**: after the analysis of the Sudanese famine in 1984–5, the idea that people try to obtain food above all else was questioned and a livelihoods perspective came to be seen as useful for understanding food security. The resilience and sensitivity of households to shocks came to be seen as key factors;
- **From objective indicators to subjective preference**: the value of objective indicators of food security compared to subjective preference of the vulnerable has been questioned in recent years. Vulnerable people, it is argued, are food secure when they feel confident of their ability to obtain food regularly that they prefer to eat, in ways that are socially acceptable.

Thus, the 1996 World Food Summit adopted the following widely used definition of food security:

> 'when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle' (www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/fs_en.htm)

A development of this which is particularly appropriate for many countries in Southern Africa is:

> 'a society which can be said to enjoy food security is not only one which has reached a food norm …. But which has also developed the internal structures that will enable it to sustain the norm in the face of crises threatening to lower the achieved level of food consumption' (Oshaug, 1985:5–13).

This definition is useful because it emphasises the importance of having structures in place that allow individuals and groups to withstand (inevitable) shocks, and the importance of the consumption component of food security.

2.2 Food availability, access and utilisation issues in Southern Africa

It is helpful to place the issues relating to food security in Southern Africa in comparative context with other regions of the world. To do this we organise the discussion around what are generally accepted to be the three critical components of 'food security'.[1]

- **Food availability:** the sum of domestic production, imports (both commercial and food aid), and changes in national stock;
- **Food access:** people's entitlement to food, namely the amount they can produce, purchase or otherwise receive (e.g. through formal and informal food distribution systems);
- **Food use and utilisation:** both the way that food is prepared and distributed between individuals within the household, and the individual capacity to absorb and utilise nutrients in the food consumed.

In many regions of the world, food availability is no longer the key issue: access and utilisation are priorities. In many countries in Southern Africa, issues relating to food availability remain central.

2.2.1 Food availability

The data in Annex 1 show that there is cause for concern in many countries in Southern Africa about all four sources of food availability: domestic production; food aid; commercial imports; and stocks. In theory international trade (supplemented by food aid) should make food available almost everywhere and at any time; in the case of many countries in Southern Africa this is not the case. High costs of transport from ports mean that imported food may only be available at high cost. Delays arising from limited transport and cumbersome border controls can mean that food is not available when needed. In the last two major food crises in the region, these problems have also affected food aid which has accordingly accounted for a small percentage of total food available, whilst at the same time raising concerns about its negative impact on domestic markets and prices. Hence domestic production, supplemented by intra-regional trade and stocks, has to be a key component of food availability in the region. There is significant evidence that intra-regional trade could play a more significant role in ensuring the region's food supplies; this is discussed in Chapter 5.

In theory, food availability positively affects food access because, if the market is functioning efficiently, increased food production translates into increased food supplies and hence lower food prices. Being able to predict these kinds of impacts depends critically on how well markets are working. In many countries in Southern Africa, significant market failures due to poor economic integration mean that these effects are moderated. Chapter 5 discusses the scope and requirements for strengthening food security through market-based development in the region: this has both domestic and intra-regional aspects.

[1] For more on this, see www.ifad.org/gender/thematic/rural/rural_2.htm

2.2.2 Access to food

Following the work of Sen (1981), it is now recognised that there is a critical distinction between the *availability* of food and people's *access* to food. Sen pointed out that people's entitlements to food arise from their assets, stores, networks and skills ('endowments'), from their own production, from selling their produce and labour, and from transfers ('entitlements'). People are food insecure when the combination of entitlements is not sufficient to enable the individual or household to acquire minimum food requirements. Increasing food production nationally will not increase food security for people and groups without effective entitlements to that food.

Entitlements are affected by poverty and vulnerability, the latter being one aspect of the former. Vulnerability describes how prone individuals or particular groups within populations are to being unable to cope with uncertain adverse events that may happen to them (for more on this, see Chapter 6). Thus food insecurity is a form of vulnerability ~ a proneness to falls in the level of food availability and access to it.

Typically the vulnerable constitute those whose access to assets (land and labour being of greatest concern) and entitlements (through changes in social, cultural and political mediation) are compromised. Vulnerability can thus arise at various levels – entire communities (e.g. proneness to climatic, economic shocks), and particular households and individuals within households (e.g. arising from age, gender, political affiliations, health or other intra-household discrimination).

Specific examples of vulnerable groups in Southern Africa include those:

- With low incomes who cannot save, accumulate assets, buy insurance premia, or maintain social relations and civic behaviour (including paying taxes and national insurance) that entitle them to reciprocal help or state assistance;
- Who live in areas that suffer more frequent extreme natural phenomena – for example, arid and semi-arid lands, unstable hillsides, etc.;
- Who live in communities and states that have frequent conflicts, discrimination, volatile markets, and abrupt policy changes;
- Who depend for their incomes on activities that are particularly susceptible to hazards;
- Who are incapacitated or immobile and so cannot undertake some coping strategies;
- Who are discriminated against so they cannot draw on social entitlements, or are otherwise prevented from undertaking one or other coping measure? Put otherwise, their *rights* are attenuated.

Food insecurity can be chronic or acute. Chronic food insecurity is a state of recurrently having insufficient food to meet the nutritional demands of a healthy life. It is primarily a function of poverty. Acute or transient food insecurity is episodic and is most commonly associated with vulnerability to climatic shocks; however shocks can be of an economic or political nature too. It is a recurring theme of the Forum's analysis that non-climatic shocks were major factors contributing to the 2001–3 crisis in the countries of Southern Africa. The different forms of food insecurity are often inter-linked and mutually reinforcing.

2.2.3 Food use and utilisation

There is much less written and discussed about food use and utilisation issues in Southern Africa, compared to the literature on food availability and access. Key issues include:

- The division of food within the household between different members. Even if a household has access to sufficient food, individuals may still suffer deprivation if food is divided inequitably;
- Preferred diets and preparation of food. Some cooking practices cause the loss of water- and fat-soluble vitamins. Nutritionally unbalanced diets can also lead to loss of nutrients: the more restricted the diet, the more likely is it that it will be protein-inefficient. A wide range of beliefs and practices also influence food utilisation. Some of these can be counter-productive, for example taboos against certain groups eating particular foods. A critical factor here is the way that pre-school children are fed;
- Micronutrient intake (especially iron, Vitamin A and iodine), which must be sufficient in quantity and balance to allow healthy functioning as well as adequate absorption of available macronutrients';
- The health status of individuals that affects appetite, energy needs, and ability to use nutrients in the food consumed. Contamination of drinking water, poor sanitation and lack of appropriate hygiene practices contribute to poor health, particularly of young children who can suffer badly from diarrhoea and gastro-enteric complaints.

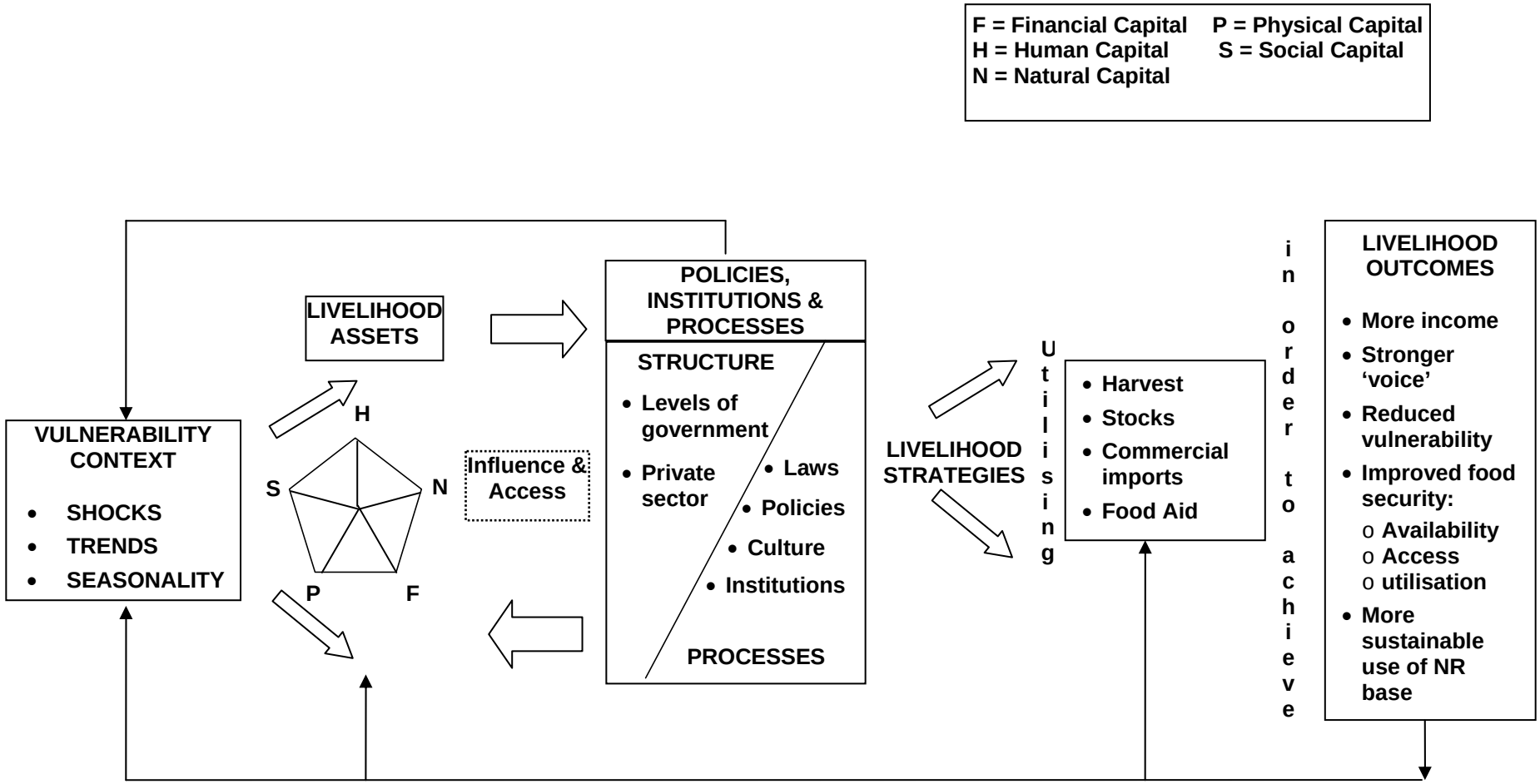
Discussion of the food utilisation status of individual vulnerable groups is needed if averages are not to disguise problems. In the countries of Southern Africa, certain social groups are of particular concern, including pregnant and lactating women, weaning children and also importantly HIV/AIDS victims. There is a large literature on the food needs of people affected by HIV/AIDS (see for example, Piwoz and Preble, 2000; WHO/FAO, 2002; and the FANTA website). At present the main WHO recommendation is for up to 30% more dietary energy depending on whether symptomatic or not.

2.3 Food security and livelihoods

We suggest that livelihoods approaches (Carney, 1998) are essential for understanding the complex inter-relationships that influence food security in the countries of Southern Africa. Figure 1 shows the conventional livelihoods framework with food security issues highlighted. Livelihoods approaches emphasise that food security (amount of food consumed, its nutritional quality, and the reliability of access to it over time) is only one desired outcome of household livelihood strategies alongside others such as more income, stronger 'voice', reduced vulnerability, and more sustainable use of the natural resources base. Although all are crucial in the long run, in the short run food security may at times be traded off against other goals and vice versa. Available information on coping strategies employed by vulnerable groups suggests that this was indeed the case during the 2001–3 crisis in Southern Africa (for more on this, see Chapter 6).

Thus an advantage of using livelihoods approaches to consider food security issues in Southern Africa is that they highlight the need to understand better *all* the various factors influencing livelihoods in order to strengthen availability, access and utilisation of food successfully. Although they are primarily a descriptive rather than analytical tool, livelihoods approaches do have the advantage of allowing us to place the range of systemic factors, triggers and operational contexts affecting food security in the countries of Southern Africa in some sort of context that can contribute to principles for policy choice.

Figure 1 The livelihoods framework applied to understanding food security in Southern Africa



Source: Carney (1998)

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3 The Southern Africa Crisis 2001–3

This Chapter investigates the key components of the 2001–3 crisis in Southern Africa in order to identify the deeper-rooted trends and issues in food security that lay behind the crisis headlines.

3.1 What happened: crisis and response

This section draws heavily on factual information in Slater (2003) and Mano et al. (2003), and data presented in Annex 1 derived from FAOStat and SADC FANR; the interpretation is our own.

The 2000–1 harvest was relatively poor (down overall 10–25% on the previous five-year average) in those parts of the region affected by heavy rains, notably Malawi. At the same time, the strategic grain reserves in Malawi and Zimbabwe were being significantly reduced. In the absence of sufficient commercial imports, this resulted in very low stocks in the SADC region for the 2001–2 marketing year[2], down from 3 million tonnes in the 2000–1 marketing year to less than 400,000 tonnes.

The 2001–2 harvest was also down by 10–20% on the previous five-year average across the region as a whole. This was due to erratic rainfall in places (Southern Zambia, Southern Mozambique, and Botswana, Lesotho, and Swaziland), which was only partially compensated by relatively good harvests in northern Zambia, northern Mozambique, and South Africa, and due to the calamitous 70% drop in harvest in Zimbabwe, which gave credence to concerns about the impact of Zimbabwe's land reform arrangements on harvested output. Table 1 summarises the situation in the six worst-affected countries as at September 2002.

Table 1 2002–3 domestic cereal gap and import progress, as estimated in September 2002 (tonnes)

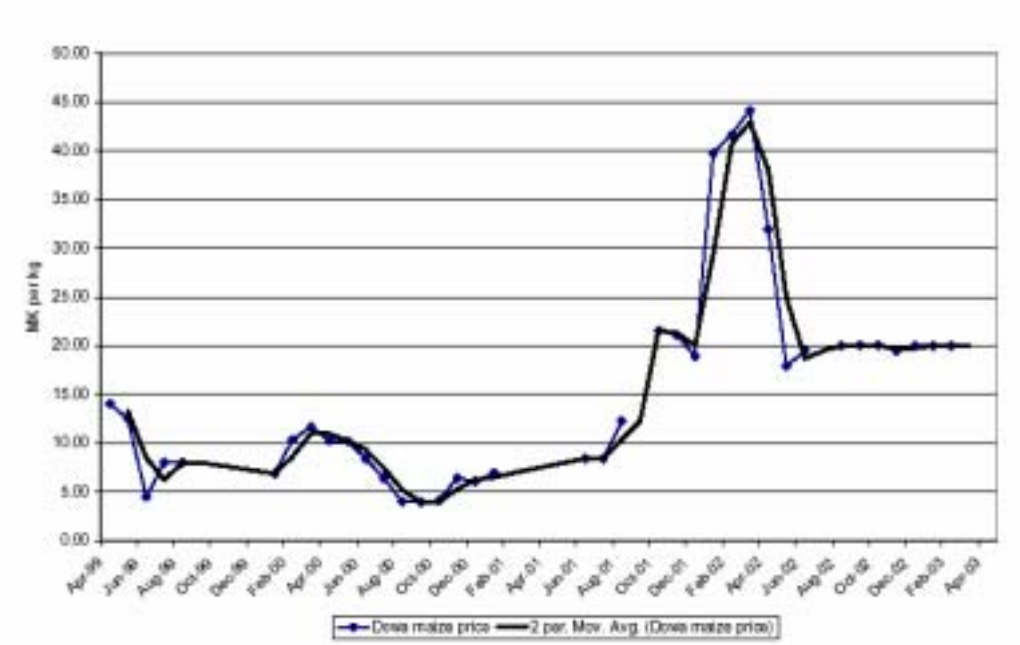
Country	2001–2 cereal production	Opening stocks	Domestic requirements	Commercial imports received	Food aid imports received	Remaining cereal gap/surplus
Lesotho	121,500	18,500	395,500	56,500	3,000	196,000
Malawi	1,759,000	88,000	2,124,000	42,000	24,000	211,000
Mozambique	1,767,000	109,000	2,256,000	233,000	63,000	84,000
Swaziland	70,000	2,500	193,500	28,000	5,000	88,000
Zambia	738,000	23,000	1,445,000	43,000	16,000	625,000
Zimbabwe	759,000	170,000	2,583,000	335,000	71,000	1,248,000
TOTAL	5,214,500	411,000	8,997,000	737,500	182,000	2,452,000

Source: SADC FANR VAC (2002), p.4

In this way, two relatively poor harvests in parts of Southern Africa *combined with* reduced stocks led to maize prices soaring (example data from Malawi is shown in Figure 2) which, combined with increased vulnerability across the region, resulted in severely constrained access to food in localised areas including Southern Mozambique, parts of Malawi, Southern Zambia and parts of Zimbabwe.

2 In Southern Africa the marketing year runs from May to April following the cropping year which starts with planting in the previous Nov–Dec and ends with harvest in April–June.

Figure 2 Dowa maize price, April 1999 to April 2003



Note: The series is broken in places owing to field staff failing to collect/report the data.
Source: FEWS (using MoAIFS price data).

In the initial absence of comprehensive region-wide vulnerability assessments (as distinct from needs assessments), the available information from NGO reports on selected areas and from the crude UN rapid needs assessments in six countries generated alarming statistics suggesting that 12.7 million people (22% of the population) would need food aid during 2002–3 (ultimately revised by the SADC FANR Vulnerability Assessment Committee Emergency Food Needs Assessments to 15.2 million (SADC FANR VAC, 2003)).

Individual countries declared emergencies in the period February to May 2002 and, following the WFP/FAO needs assessment conducted for the UN in May 2002, it was decided in July to move beyond individual country WFP Emergency Operations (EMOPs) to a regional EMOP within a UN consolidated appeal (CAP) for US $ 611 million to cover six countries in Southern Africa.[3] This 2002 CAP included US$500 million for 1 million tonnes of food distributed through the WFP EMOP plus US$111 million for health, water and supplies for agricultural recovery. A number of NGOs and bilateral donors put in place their own additional arrangements for a large-scale humanitarian response in the region, including for example the UK's DFID through its Southern Africa Humanitarian Crisis Unit and the US through funding for the C-SAFE consortium of NGOs. National governments also responded in various ways. SADC institutions, however, were notable for their lower profile compared to the 1991–2 crisis, when SADC played a crucial role in reducing the predicted impact of the harvest failure by coordinating and facilitating grain movements into and within the region and associated logistics and cross-border arrangements. In 2001–3 the dislocations caused by the re-structuring and centralisation of SADC appear to have effectively paralysed key institutions. These included the Transport & Logistics Committee and the Food, Agriculture & Natural Resources Secretariat, and the vulnerability assessment process which became dependent on staff seconded from other organisations. A second UN CAP was launched in July 2003 for US $ 530 million, again

3 Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe.

substantially devoted to food. At the time of writing the humanitarian response is on-going, although on a smaller and more diversified scale than during 2002–3.

It is notoriously difficult to establish accurately the total size of response to humanitarian crises. Nonetheless, the available data suggest it is safe to assume at least US $ 1.5 billion will have been disbursed by multi- and bilateral donors in direct response to the Southern Africa crisis. It is worth pointing out that this is equivalent to 70% of total ODA to the region in 1998 (World Bank, 2002).

3.2 A regional crisis?

The 2001–3 crisis was not pan-regional in nature or severity. There was a set of common systemic factors (declining governance, poor economic growth, the HIV/AIDS pandemic) increasing the vulnerability of many people in many countries across Southern Africa to shocks, but the specific crisis triggers and the operational context were significantly different. Box 1 summarises findings on this from the Forum's Country Issues Papers.

Box 1 A regional crisis? Similarities and differences between Lesotho, Malawi, Mozambique, Zambia and Zimbabwe

Systemic factors:

***Poor economic growth*.** Rates of growth in real GNP/capita deteriorated from an already low base during the 1990s compared to the 1980s in all the Forum focus countries except Malawi and Mozambique, and even for these latter rates of growth were not substantial (see Annex 1).

Influence of politics on the institutional environment for food security policy making and implementation is significant. For example, in Lesotho the cabinet imposed input subsidies and distribution on a reluctant Ministry of Agriculture and Food Security. In Zimbabwe the roll-out of the land re-settlement had a number of overtly political aspects. Other politically-motivated initiatives influenced food security in a number of Forum focus countries.

Limited government capacity to implement policy. In Mozambique the government had the mandate to fix minimum prices for crops but lacked the capacity to enforce pricing policies. In Malawi, institutional capacity (and political factors) impeded macro-level stability and enabling environment.

The impact of HIV-AIDS on food security is increasingly serious across all countries, though there is a lack of information about the actual impacts on households and communities and on the macro-economy. Adequate methodologies for assessing the quantitative impact on agricultural output (at national or household) level have not yet been developed but experience is growing. There is concern in all countries about the impacts on women and children in particular.

Lack of financial capacity to implement large-scale social protection programmes in all countries. Existing social protection mechanisms for food security focused on protecting agricultural livelihoods (because agriculture is prioritised within food security policy). Examples included free or subsidised inputs, ploughing assistance and price control. Other key pillars for social protection are related to health and education, for example, supplementary feeding and take-home rations for school children. All countries are concerned about the increased demands placed by HIV/AIDS on social protection mechanisms.

Triggers:

There were both similarities and differences.

***Drought*:** in parts of Zimbabwe, Zambia and Malawi, drought was important but neighbouring parts of (northern) Mozambique shared similar weather conditions but were not severely affected. In Lesotho the trigger was one of climatic variability and extremities (including frosts, hail and floods) rather than drought.

Land re-settlement in Zimbabwe, which affected both domestic food availability and prices and the regional food situation, because of Zimbabwe's historical role as a net food exporter within the region.

Lack of stocks resulting from general run-down of national grain reserves as part of structural adjustment, and specific run down during the poor 2000–1 season.

***Vulnerability*:** declining purchasing power and increasing maize prices were common triggers and, whilst the causes were not always the same (for example, devaluations in currencies hit some countries (Zimbabwe) worse than others (Malawi)), uncertainty over maize production in Zimbabwe had a knock-on effect throughout the region.

Operational context:
Differences:
Sources of vulnerability. HIV/AIDS is a key underlying source of vulnerability through the erosion of household capital assets, but the dimensions of the problem varies between countries due to different infection rates and agricultural systems and dependence on agriculture. In Mozambique and Lesotho, the loss of income following retrenchments from South African mines in the 1990s was a key determinant of household vulnerability. Households in Malawi and Zambia were more vulnerable to structural and environmental shocks in agriculture.
***Levels and impacts of liberalisation*.** Zimbabwe suspended all trade in agricultural commodities in 2001, destabilising the grain supply to deficit areas, including urban areas. The Grain Marketing Board (GMB) monopoly did not increase deliveries to GMB. In Lesotho there has been only sporadic process towards liberalisation and the government remains responsible for example, for agricultural input supply. In Zambia, some government involvement remains in input distribution to small farmers but the government stopped controlling maize markets. In Malawi, ADMARC withdrew from remote rural areas but the gap was not addressed by private traders because of high transaction costs. In Mozambique, liberalisation has enabled the establishment of many small scale maize traders but there are fewer larger operators because of the lack of a commercial network, the isolation of farmers and poor internal infrastructure.
Suitability and outcomes of social protection mechanisms have varied from country to country. In Malawi subsidised inputs were relatively successful in boosting agricultural production whilst in Lesotho they have had either a negative or no impact on production because they are often sold at higher prices to farmers across the border in South Africa. In Zambia and Mozambique, the remoteness of some rural areas has been a significant obstacle for delivering social protection.
Growing/existing urban populations in some countries raised different kinds of challenges. In Zambia and Zimbabwe, urban populations found it increasingly difficult to get food. In both countries there was a purchasing power problem and in Zimbabwe this was compounded by food availability because trade to deficit areas declined significantly after 2001

Similarities:
Preoccupation with agricultural production within food security policy making and implementation, and lack of recognition of the roles of government departments outside Ministries of Agriculture**.** This resulted, in all countries, in a lack of coordination between different Ministries. Some countries are making progress towards a more multi-sectoral and integrated approach: for example, in Malawi a Food Crisis Joint Task Force was established. The danger is that multi-sectoral initiatives compete with Ministerial activities and are under-resourced in human and financial terms
Fledgling democracies exist in most countries (Lesotho since 2002, Malawi since 1994 and Zambia since 1991, whilst Mozambique continues to tread its path out of civil war) and some, arguably, are not democracies at all (Zimbabwe). This has implications for, for example, the identification of the crisis and the engagement of donors.
There is ***growing participation of civil society*** in most countries, something that was either weak or discouraged until recently in many countries in Southern Africa.
Growing recognition of the potential for decentralisation to better deploy resources and ensure participation of people at the local level, though countries are at different stages and problems with roll-out are being experienced.
Regional policy processes and regional governance issues have been wide-ranging and significant. Lesotho and Swaziland's membership of SACU had different implications for food imports and exports and for the price of food compared to more closed economies further north.
Neighbouring South African economy, which brings advantages and disadvantages. In terms of employment and income-generating activity outside the agricultural sector, the South African economy continues to present opportunities, and remittances from migrant labour remain important, particularly in Mozambique, Swaziland and Lesotho, and increasingly in Zimbabwe. However, in all countries, a large proportion of manufactured goods are imported from South Africa. This can mean low prices, particularly for SACU countries, but it makes it difficult for local producers to compete.

Source : FFSSA Country Issues Papers, http://www.odi.org.uk/Food-Security-Forum/Publications.html

3.3 Issues for long term food security

There are a number of aspects of the 2001–3 crisis and response that are systemic in nature therefore relevant to strengthening long term food security across the countries of Southern Africa. Some questions relating to the impact of the humanitarian response are given in Box 2 below, although this has not been a focus of the Forum for Food Security.

Box 2 Questions relating to the 2001–3 humanitarian response in Southern Africa

The proportionality and effectiveness of the humanitarian response to the Southern Africa crisis are subjects for humanitarian evaluations. Nonetheless, we make two observations here which we hope will be addressed during the up-coming round of evaluations.

Why so much food aid?
Looking at Table 2 below, over 80% of the 2002–3 UN CAP appeal, by value, was allocated to food aid – and the response to the food aid component of the appeal was significantly greater than to the non-food aid components (Slater, 2003). And yet it should have been clear from the outset from international comparative experience and available regional information that vulnerable groups' access to food was as much a constraint as food supplies per se. This implies much greater use of relief measures to support access to food (for more on this, see Chapter 7). Secondly, it was not until early 2003 that the need for a modified response in high HIV/AIDS environments was recognised. The prevalence of HIV/AIDS in the countries of Southern Africa also means special forms of assistance including appropriate types of food and non-food items.

Why ignore the private sector?
Many agencies, within and outside the CAP, appear to have largely ignored the independent contribution of the private sector and local organisations when making arrangements for the procurement and distribution of food. And yet from relatively early on in the procurement process it was clear that these actors had comparative advantage in some aspects of the chain. By January 2003, commercial imports had provided over 15% of domestic cereal needs in the six EMOP countries, compared to below 5% from food aid (SADC FANR VAC 2002, 2003).

This led not only to significant unnecessary costs as above but also to delays in the arrival and disbursement of food in the region. Reliance on internationally procured food also significantly disrupted the food aid pipeline to Zambia and to a lesser extent to Zimbabwe and Malawi whilst the GM debate was resolved4.

Table 2 Composition of UN 2002 CAP by sector

SECTOR	REQUIREMENTS (US$)
Agriculture	31,190,725
Coordination and Support Services	8,993,183
Economic Recovery and Infrastructure	1,949,000
Education	4,917,450
Family Shelter and Non-Food Items	900,000
Food	507,273,091
Health	48,267,057
Multi-Sector	1,229,462
Protection/Human Rights/Rule of Law	1,425,000
Water and Sanitation	5,195,300
GRAND TOTAL	**611,340,268**

Source: Slater 2003

We suggest the definition of 'crisis' to describe the events of 2001–3 requires reviewing. Although there is no benchmark definition of what constitutes a 'crisis' warranting an international humanitarian response, at first sight SADC FANR VAC estimates that over 20% of the population would not be able to access adequate food at times during 2002–3 were indicative of sufficient human suffering to justify definition as a crisis.

But very high proportions of the population in many countries in Southern Africa experience either chronic or transitory food insecurity even during 'normal' years over the last decade. As CARE SWARMU (2003) point out, even when harvests are good, most poor farming households in the region are out of food by December, and the very poor may not see their supplies last beyond September. Given the high fractions of the rural population that are poor, in a normal year large numbers of people have to look to market and other supplies to feed themselves, and consume less than the FAO recommended daily intake of 2,100 Kcal for part of the year. CARE estimates that the numbers depending on the market in the 2002–3 marketing year was perhaps twice the normal

[4] For more on this, see Schoenholtz et al, 2003; SADC, 2002

level: 16 million people instead of 8 million. The point is this: food insecurity is chronic and pervasive for the poor in any year but it was widened in 2002–3 to embrace a set of people with transient food insecurity.

Therefore, it is perhaps more relevant to think of the events of 2001–3 as a 'tipping point'[5] than as a crisis – namely as a time when it became clear that underlying poverty, vulnerability and food insecurity have reached unacceptable levels in many countries in Southern Africa and a re-thinking of development strategies for the region is required. The events of 2001–3 were not a one-off departure from an otherwise positive development trajectory.

It is critically important to understand that the 2001–3 crisis was *not* precipitated solely by the impact of adverse **climatic conditions** on maize harvests. We cited data earlier in this Chapter which showed the maize harvest in the six countries covered by the UN CAP was down overall by 10–25% on the five year average during 2001 and 2002 (including the 70% fall in Zimbabwe alone, to which the way the land reform programme unfolded almost certainly contributed). Contrast this with the comparable FAO Stat data (summarized in Annex 1) for the 1991–2 crisis, during which fewer people suffered, which show maize harvests down by 66% on the five year average[6].

Low stocks were a far more significant factor, as Table 1 shows, resulting from the combination of the running down of strategic grain reserves in some countries and the unwillingness of the private sector, where it had the mandate, to import sufficient grain early enough in the marketing seasons of 2001 and 2002. This kind of mismatch between private and public sector food import objectives can arise when private traders misjudge the risks, or accept risks that are unacceptably high for society as a whole, of running out of stocks and supplies; or when they try to rig markets to generate excess profits, by, for example, holding stocks off the market to drive up prices. How and why this can happen in many countries in Southern Africa – due to thin markets and weaknesses in economic coordination – is discussed in Chapter 5.

But the third ingredient in the 2001–3 crisis is the spread and depth of **human vulnerability** in many countries in Southern Africa during the 1990s. This means that significant population groups in the region are now at risk of food insecurity due to the inability to deploy assets to access adequate food. Whilst much of the necessary information collection is still underway in order to make an objective assessment of the degree to which the breadth and depth of human vulnerability has increased over the last decade, it is can be assumed that the deterioration in assets or the ability to deploy them productively (which is an important measure of vulnerability) has been significant. In Chapters 4 – 8, we discuss how the interplay of politics in the policy process, market liberalisation as currently implemented, economic coordination failures, and the HIV/AIDS pandemic has contributed to this. In short, it appears they have conspired, together with environmental decline related to failures in agricultural technologies, to stretch coping strategies to breaking point for significant population groups in the countries of Southern Africa and created a huge negative long-term impact on resilience.

It is important to remember that the human vulnerability that was such an important determinant of the 2001–3 crisis had its origins in the longer-term **macro-economic deterioration** in the countries of Southern Africa. Over the last two decades, the decline of

5 The moment 'when an idea, trend, or social behaviour crosses a threshold and 'when everything can change all at once' Gladwell (2000).

6 For more on climate and vulnerability in Southern Africa, see Clay et al (2003).

the mining sector, the disappointments of industrialisation, the apparent inability to sustain some agricultural liberalisation models, the influence of politics on the policy process, and – from outside the region – debt and adverse movements in terms of trade, have all contributed to a situation in which resources have been squandered, jobs have been lost, demand for farm output has stagnated, and the supply of government services to the rural areas has been cut back.

Added to this, mortality and morbidity from **HIV/AIDS** is a crisis in its own right in the countries of Southern Africa, as well as via its impacts on household livelihood strategies through reducing the availability and utilisation of labour assets. In terms of the 2001–3 crisis, relatively few deaths – perhaps a few thousand[7] – have been directly attributed to lack of food, but the scale of mortality from HIV/AIDS is alarmingly high, with hundreds of thousands of deaths every year (see Annex 1). The contribution of HIV/AIDS to food insecurity will be increasingly felt over the next two decades as there is already a wave of increasing mortality and morbidity on its way, whatever is done now to combat the spread of the epidemic in the future. This implies prevention and amelioration of this crisis needs to be as much part of governments' and donors' re-thinking of development strategies as do measures to build economic growth.

3.4 Conclusions

The events of 2001–3 in the countries of Southern Africa represented a crisis in *access* to food as much as in availability of food *supplies.* The crisis was substantially caused by the increasing poverty and vulnerability of the last decade combined with run-down of public and private stocks. Thus, the events of 2001–3 must be seen more as a 'tipping point' than a 'crisis' in the overall development trajectory envisaged for the region by governments and the international community.

We make the following observations about the impact of the 2001–3 crisis on livelihoods and food security, from the limited livelihoods analyses already conducted in countries in Southern Africa. More will become known through work currently underway including livelihoods studies by CARE and expanded Vulnerability Assessments through SADC VAC:

- The importance of climatic variability should not be over-estimated: it is only one aspect of the vulnerability context affecting livelihoods in the countries of Southern Africa, which is in itself only one component of the livelihoods framework alongside other important components including the underlying asset base and policies, institutions and processes;
- The asset base of large numbers of households in the countries of Southern Africa is being dramatically threatened by a wide range of other shocks and trends including: the effects of reduced government spending on agricultural inputs, infrastructure and social services; the (partly related) effects of environmental degradation on the quality of natural assets; and the impact of HIV/AIDS on human and social capital;
- Policies, institutions and processes are changing rapidly in the countries of Southern Africa, nationally and regionally, affecting the provision of essential public goods, how markets are working (or not), and the strength of community networks.

7 There are few reports of famine mortality other than those for Malawi in early 2002, where estimates have been made in the range of 300–3,000.

Important components of livelihoods, in particular human and social capital (HIV/AIDS); policies, institutions and processes; and the feedback effects from policies, institutions and processes to natural capital (agricultural technologies, inputs), to physical capital (roads, markets), and to financial capital (credit), need further attention in research and policy for strengthening food security in Southern Africa.

Thus livelihood strategies and entitlements have been compromised (there is evidence of falling demand for labour and thus wages; static planted area and low (in some cases declining) yields; reduced marketed production not off-set by higher prices due to economic coordination failures) and in any case the available food (from harvest, stocks, imports, and food aid) and food prices have changed fundamentally. All this means a dramatic deterioration in food security, but also and importantly for strengthening food security in Southern Africa in the future, deterioration in other livelihood outcomes such as income, 'voice', and sustainable use of the NR base.

Thus the food security debate in the countries of Southern Africa must not only be about supply aggregates and prices but also critically about livelihood strategies in difficult and uncertain environments and how people are able to respond to perceived risks and uncertainties. All potential policy changes need to be worked through in terms of their short and longer term impact on the different components of livelihoods for different groups in society. One requirement for improving food security is generating pro-poor economic growth – food security, poverty and vulnerability are intimately linked (see Chapter 5).

The detail of the appropriate policies to build long term food security in Southern Africa will vary from country-to-country because the triggers and operational context vary significantly from country to country and within countries. But the over-arching conclusion to be drawn from the events of 2001–3 is that there are systemic issues affecting long term food security which need fresh exploration and policy development:

- Politics in the policy process
- Weaknesses in economic coordination at national and regional level, which have led to failures in market liberalisation as originally perceived;
- Rising human vulnerability and the implications for safety nets;
- Gaps in research-policy linkages.

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4 Politics in the Policy Process in Southern Africa[8]

It has been recognised that food security is critically influenced by political factors at least since the influential Berg report *Accelerated Development in sub-Saharan Africa* (World Bank, 1981) and Robert Bates' work on agricultural markets, which argued that much public policy in Africa during the 1970s squeezed smallholder agricultural production in favour of the urban elites on which governments depend (first published as Bates, 1981). This political analysis was originally used to justify the market liberalisation that was rolled out during the 1980s, as a means of ending the anti-agriculture policy bias.

A key feature of the Forum's work is the importance we attach to politics in the policy process in food security in the countries of Southern Africa. As has been observed in relation to the broader international canvas:

> 'Are the 'new famines' more 'political' than historical famines, or are we simply recognising the centrality of political factors more than before?' (Devereux et al, 2002:1)

However, we take the view that the politics of policy is insufficiently debated, both by students of African politics and by economists interested in agriculture and rural development. With honourable exceptions (e.g. Bates, 1981, 1987; van de Walle, 2001; Jayne et al., 2002) there is little integrated thinking across the divide between the politics and economics of food insecurity and agricultural stagnation in the region. This is a critical gap, given that political economy and governance issues have continued to affect the formulation and implementation of market-based food policy in all the Forum focus countries during the 1990s. These issues contributed to the 2001–3 crisis by pre-disposing to policy failures in specific areas critical to agricultural development and food security – input provision, output marketing, import/export trade and the macro-economic environment, and infrastructure provision; and by influencing the interactions between government and donors. Some basic data on the political context in the Forum focus countries are given in Annex 1. The political underpinnings of agricultural policy in the Forum focus countries do not differ as much as one would anticipate as a result of their economy and demography.

It has been compellingly argued recently (Omamo, 2003) that the whole field of policy research on African agriculture has been overly concerned with the 'what' of policy, with major debates focusing on identifying the right mix of market liberalisation, government intervention and institutional development. Having arrived at recommendations on these issues, researchers treat the question of how to encourage their effective adoption as a second-order implementation issue that can safely be left to consultants and practitioners. However, the 'how' questions are far too important to be treated in this way.

We suggest the root cause is the existence of what has come to be termed the 'neo-patrimonial state': a nation state in-between patronage and bureaucracy, between presidentialism and liberal democracy see Box 3

8 See http://www.odi.org.uk/Food-Security-Forum/docs/PolProcesses_theme1.pdf for full text from which this Section is summarised.

Box 3 'Neo-patrimonialism': the concept and its significance

The concept of neo-patrimonialism is central to the nature of politics in Africa. The term has been used in major studies in the political science of Africa since the 1970s (for example, Waterbury, 1973; Levine, 1980; Médard, 1982; Callaghy, 1984; Sandbrook, 1986; Bratton and van de Walle, 1997). Other authors have analysed the same phenomena in a substantially similar way, while using different terminology (for example, Jackson and Rosberg, 1982; Joseph, 1987; Bayart, 1993; Bayart et al, 1997; Tangri, 1999; Chabal and Daloz, 1999). The concept refers to the hybridity of African states, in which patrimonial practices coexist with a modern state bureaucracy (van de Walle, 2001: 51).

Max Weber identified 'patrimonialism' as a type of traditional political authority in which the 'chief' uses his position for his own personal gain (Weber, 1974: 347). In a significant number of post-independence African states, state resources are constantly appropriated for private gain, through client–patron networks, rent-seeking and prebendalism (Chabal and Daloz 1999: 9; van de Walle 2001: 52). The authority of the ruling regime is effectively guaranteed by the distribution of socio-economic resources to clients, rather than by 'legal-rational' mechanisms, such as the rule of law, meritocracy and political accountability.
In most of sub-Saharan Africa, patrimonial practices of personalised exchange, clientelism and political corruption have become internalised in formal political institutions and provide 'essential operating codes for politics' (Bratton and van de Walle 1997: 63). In addition, African states are usually characterised as having:

1. a strong executive to the detriment of the judiciary, parliament and civil society – often with power concentrated in the hands of a president (Chazan et al., 1992: 161–68; Bratton and van de Walle, 1997: 63–65);
2. a large and inefficient civil service, prone to rent-seeking by civil servants using proximity to state resources for material advancement (Chazan et al., 1992: 54–57); and
3. a weak/marginalised civil society. Vertical social linkages of kinship tend to take precedence over horizontal linkages of class (Chabal and Daloz, 1999: 18–22). Even where formal associations (such as trade unions, community development associations or business associations) exist, these are either marginalised from the decision-making process or are co-opted by government into patron-client relations.

Source: FFSSA Theme Paper 1

On coming to power at independence, African governments inherited a state system established by former colonial rulers. This system lacked legitimacy, capacity and resources. It was geared towards law enforcement and control of 'native' populations, and secondarily to their welfare. Mechanisms of accountability did not exist and civil society was weak. Economies had been geared towards serving the needs of the coloniser rather than the needs of the colonised. It was in this context that the new governments used the state and its resources to establish their political authority (Tangri, 1999: 7–17).

In the process, new social layers were created and became dependent upon state resources for their continued livelihoods. However, as time went by the extractive pressures that an overgrown and inefficient state and parastatal apparatus imposed on the productive economy led to reduced economic growth. Wages and salaries began to lose value, and rent-seeking increased.

In addition to patronage, post-independence states relied, as colonial ones had done, on coercion as a means of eliminating alternative sites of political power. The overall effect was to weaken or marginalise civil society or effectively incorporate it into the patronage system of the rulers. These policies continued until the end of the 1970s, when the oil crisis coupled with the unsustainable cost of state involvement in markets and falling world market prices for primary African exports, sent African economies into a fiscal crisis. This made it difficult for African states to continue with the former level of expenditure and economic reform became necessary.

The distortive influence of neo-patrimonialism on the design and implementation of current policies influencing food security, including market liberalisation, needs to be taken very seriously by all those supporting food security analysis, policy design and implementation. That food insecurity requires a political and politicised response from governments and the international community is increasingly recognised globally (Howe, 2002).

Neo-patrimonialism detracts from issue-based political competition and affects policies influencing food security in the following ways:

- The political interests of ruling elites systematically conflict with maximising the welfare – including ensuring basic food security – of citizens;
- These interests are not controlled by effective domestic accountability. In particular, the regional and domestic media have been unwilling or unable to play their expected role, which should extend beyond reporting specific instances of corruption and political wrangling;
- These interests pre-dispose to large, symbolic gestures as a means of winning political support, rather than to the resolution of structural problems with policies that allocate economic resources efficiently;
- These interests also pre-dispose to state intervention in supply of agricultural inputs, pricing and food distribution that is significantly politically rather than economically determined, producing the 'partial reform' syndrome described by Jayne et al (2002) where national governments have 'tamed' structural adjustment;
- Intermittently but occasionally on a massive scale, state resources are diverted unofficially for political and personal gain.

Using evidence provided by the FFFSA Country Issues Paper, we find state interventions frequently affect the poor in negative ways, being:

- insufficiently targeted at the most vulnerable (for example, the distribution of fertiliser in Zambia; the two-tiered pricing structure in Zimbabwe; the channelling of maize through industrial mills in Zambia);
- inefficient (for example, input distribution arrangements in Lesotho; the operation of ADMARC in Malawi);
- resulting in excessive government control of key input and output markets; and
- crowding-out of the private sector (Food Reserve Agency in Zambia; GMB in Zimbabwe; maize trade restrictions in Zambia, Malawi, Lesotho and Zimbabwe).

Overall, compared to say East Africa, the average level of intervention in food-related markets in the countries of Southern Africa remains high and is particularly notable after two decades of supposed economic liberalisation. Adequate time, institutional support and infrastructure, and macro-economic stability for market development have not been put in place. While a technical case can be made for instituting some measure of official intervention to help make markets work for the poor (a point explored in more detail in Chapter 5), it is not the case that this is what is driving current policies, which have produced economically counter-productive forms of state intervention.

According to our analysis, donors were joint architects of the 2001–3 crisis, by enabling the policies of countries to become misshapen in neo-patrimonial forms. Adjustment funds have tended to take over developmental functions previously performed by the state; adjustment reforms, notably privatisation, have fuelled corruption; the adjustment regime has worked against the development of democratic accountability; and even when budgetary support is withheld in response to failures in conditionality, the ear-marked funds can find their way back into the national budget in the form of humanitarian relief. Thus external funding has shielded political elites from the market consequences of their actions. Donors and concessional lending agencies respond to incentive structures within their own organisations that can produce policy incoherence. These observations are

made not in a spirit of negative criticism but as a first step towards posing and answering an important question: can donors and IFIs move from being part of the problem to becoming part of the solution, and if so under what conditions?

In short, a combination of domestic political structures and processes, and patterns of action and inaction by major external actors, in the context of market liberalisation, were significant contributors to the 2001–3 Southern Africa crisis. This indicates that the influence of political economy on policy making and implementation must from now on be built into all support for strengthening food security in the region. Some observers suggest moving beyond recognising food as a fundamental human right towards putting in place systems to hold the international community accountable, such as making famine a crime against humanity assessable before an international 'famine tribunal'.[9] We highlight the importance of accountability to the policy formulation and review process, either through formal mechanisms and – or failing that – through media pressure.

In later Chapters we explore pre-conditions and policy options for building markets, reducing vulnerability and promoting food security in the countries of Southern Africa. At this point, however, we should flag up how, in the context of neo-patrimonialism, any policies – whether 'pro-market' or 'pro-state' – will be distorted by a tendency for public resources to be diverted for private or political gain, and the vulnerable are the least likely to be protected. The main focus of thinking about options for change therefore needs to be on ways of transforming the essentials of the aid relationship, not on correcting particular errors or excesses on either side.

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5 Scope for Market-based Development to Strengthen Food Security[10]

In this Chapter, we first outline the ways in which poor market functioning has affected food availability and access in Southern Africa over the last decade and more, and then analyse the changes needed for market-based economic development to strengthen food security. Policy options for achieving these changes are discussed in Chapter 9. We consider production and entitlements together, because the economic pulses influencing them are intertwined, followed by separate discussion of the issues relating to stocks (grain reserves), commercial imports and food aid.

5.1 Economic development model

Economic growth is critical for expanding poor people's opportunities to improve their livelihoods, and livelihood opportunities for most poor people depend on engagement in markets. However, markets often fail[11]. Market based economic growth in a poor economy involves two processes: the development of markets, and economic growth through those markets, although other social, political and technical factors are also vital.

Figure 3 summarises growth processes according to a long-standing theoretical and empirical literature. Both economic activities that will get the local economy going (growth drivers) and those which will generate greater, more sustained and more widely distributed benefits from the initial growth (growth supporters) are needed for pro-poor growth.

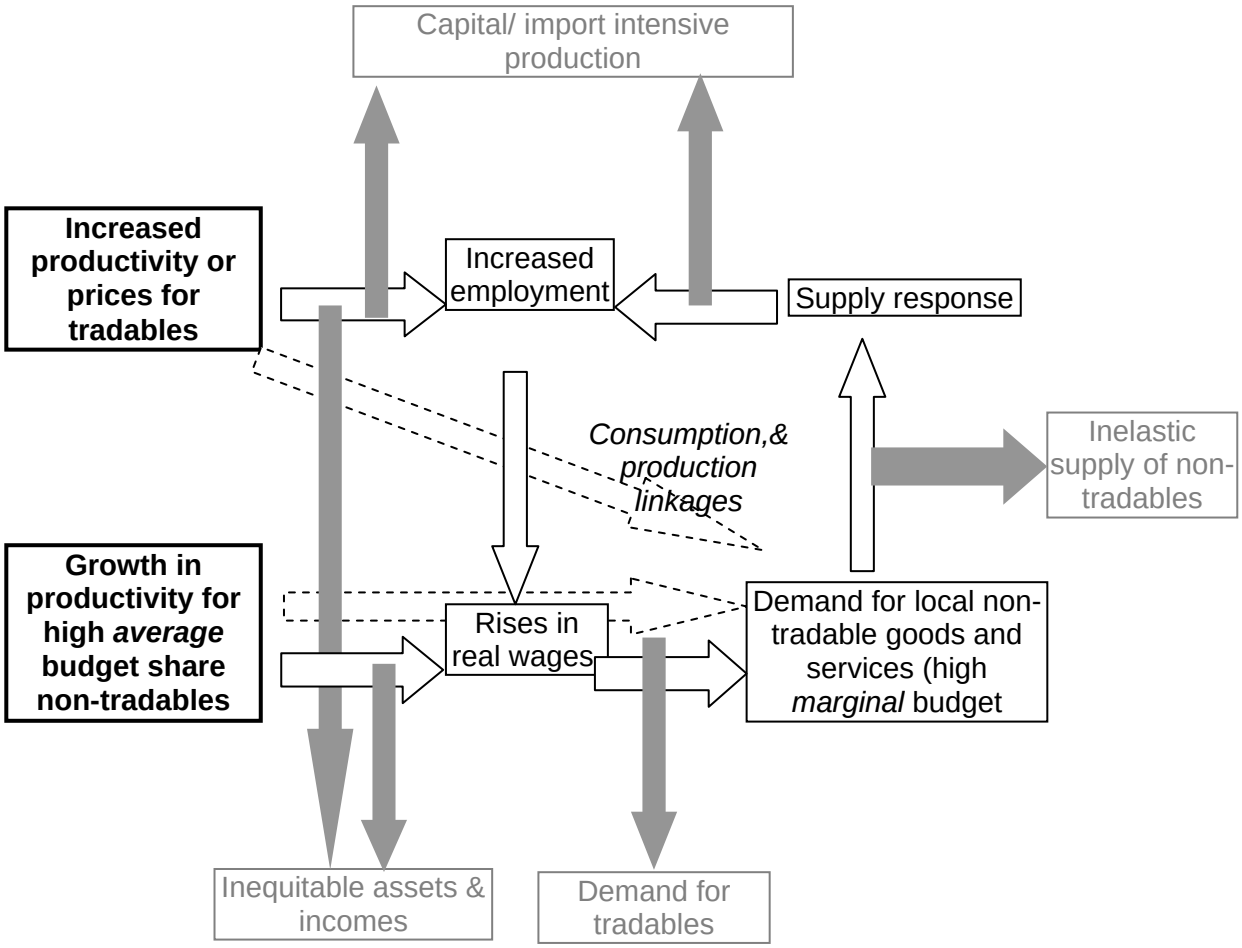
This model of growth processes – detailed in FFSSA Theme Paper 2 – shows how price and productivity changes in tradeables and non-tradeables affect real incomes depending on the extent of production and consumption linkages ('multipliers'). The effects of particular changes on a rural economy and the poor people within it depend crucially upon whether the good or service subject to the initial price or productivity change is a growth driver or a growth supporter.

The main pro-poor **growth drivers**, with examples from the rural economy in Southern Africa, are:

- price and productivity increases in tradable products with high labour input by the poor, e.g. cotton, tobacco or textiles;
- productivity increases in non-tradeable products (or falls in price for tradable products) which have a high average budget share in poor people's expenditure, e.g. from improved varieties of maize, sorghum or millets;
- changes in technology or reduced barriers to entry allowing poor people to produce non-tradeables with high average budget share or tradeables, e.g. through micro-irrigation, micro-credit;
- gains – arising from the above – to significant numbers of non-poor creating increased demand for goods and services produced by the poor.

10 See http://www.odi.org.uk/Food-Security-Forum/docs/Markets_theme2.pdf for full text on which this Chapter is based.
11 Omamo and Farrington (2004:1), for example, conclude that 'for the rural poor in Africa, market failure is more the norm than the exception'

Figure 3 Growth Linkages and leakages in a local economy



Source: FFSSA Theme Paper 2
Notes: Tradeables = goods and services that may be imported or exported to or from the local economy, e.g. primary commodities (cash crops, minerals), manufactured goods, migrant labour. Non-tradeables = items without an external market, e.g. local vegetable production, tailoring, brick-making. The distinction between tradeables and non-tradeables often varies with the size of an area, its accessibility and comparative production costs inside and outside the area.

Productivity changes may arise from technical change, improvement in human capital (health, education), development of and access to capital, skills and information; price changes may arise from changes in infrastructure and marketing systems, as well as supply and demand. Changes in risk and social norms can also have an effect.

Growth supporters are activities which increase linkages and reduce leakages in the local economy. They generally involve consumption linkages through non-tradeables on which people spend a large share of extra income, provided that production has high labour content and low barriers to entry.

The food security impacts of growth will depend on the type of economic activity and its impact on food production, non-food income, and accumulation of non-food stores in specific households or localities. The development of markets has far-reaching impacts on food security through their impact on household food production; on options for (and prices in) household exchange; on local food production; on the ability of food markets to meet demand; and on wealth (incomes and stores) required to import food into the area. The appropriate roles of markets in promoting food security will thus vary significantly across economies with different degrees of market development.

There are important debates about the contribution of agriculture to economic growth. Mellor (2000) and others maintain that history shows prior agricultural growth provides the pre-conditions for industrial take-off. Others, such as Fafchamps et al (2001) maintain that in the long run, rapid and sustained economic growth depends on the manufacturing sector, which history shows can grow reliably at 10-20% a year, whereas achieving 4% a year growth in agriculture regularly is much more difficult.

Unfortunately the recent history in many of the Forum focus countries has been one of poor economic growth, high incidence of poverty, declining contribution of agricultural to growth and employment (see Annex 1). In nearly all cases, industry too has been contracting rather than acting as a driver of growth. Some observers (e.g. Wood, 1997, blames this on Africa's basic factor endowments giving Africa very little comparative advantage in industrial development. Others (e.g. Fafchamps et al, 2001) place greater emphasis on high costs for utilities and basic services, and heavy burden of regulatory and bureaucratic costs.

High interest rates, as a result amongst other things of fiscal indiscipline have been a major problem in several Forum focus countries (Malawi, Zambia and now Zimbabwe). This is crippling for the agricultural sector, where capital is often only turned over through a season of 6–9 months (or more). High interest rates render borrowing for seasonal input unprofitable and make otherwise desirable strategic grain reserves a huge fiscal drain.

5.2 Scope for growth from different economic sectors

A sector must satisfy three conditions if it is to deliver pro-poor growth and food security:

- high potential contribution to growth or food security
- sufficient opportunities for market expansion
- ability to expand supply in response to market opportunities

Table 3 summarises our conclusions about differences in these conditions/potentials between sectors and main points are discussed below; more detail on a greater range of crops and sub-sectors is given in FFSSA Theme Paper 2. Details vary between and within the Forum focus countries – reflecting physical, economic and social diversity – but some broad principles emerge.

Table 3 Pro-poor growth and food security impacts of expansion in different economic sectors

SECTOR		Linkage Effects				Food Security Impacts				Market Opportunities		
						Household food sources		*Economy/ community food sources*				
		Growth Drivers/ Supporters	*Consumption linkages*	*Unskilled Labour Demand*	*Food Lower Prices*	Own production	Exchange	Own production	Exchange	*International*	*Regional*	*Domestic*
Smallholder Agriculture	*Cereals*	Driver (semi-tradable staples)	***	**	***	**	***	***	***	-	**	**
	Cash crops	Driver (tradables)	***	***	-	-	***	-	***	*	**	-
		Supporter (non-tradables)	***	***	-	-	**	-	**	-	-	?
	Livestock	Largely non-tradable supporter	**	*	-	**	***	*	**	-	-	?
Rural Non-Farm Activities	*Tradables*	Driver	**	**	-	-	**	-	**	*		-
	Non-tradables	Supporter if high marginal budget share	**	**	-	-	*	-	*	-	-	?
Commercial Agriculture	*Cereals*	Driver (semi-tradable staples)	*	*	***	-	**	***	***		**	**
	Other	Driver (tradables)	*	**	**	-	**	-	***	**	**	-
		Supporter (non-tradables)	*	**	-	-	*	-	**	-	-	?
Minerals		Driver (tradable)	*	-	-	R	R	-	R/***	***	-	
Industrial		Driver (tradable)	*	-	-	R	R	-	R/***	*	*	
		Supporter (non-tradable)	*	-	-	R	R		R	-	-	

Key: *** Very strong/very good; ** Strong / good; * Moderate; Very small; ? If economy growing; R remittances.
Source: FFSSA Theme Paper 2
Note: shows impacts of growth not current importance

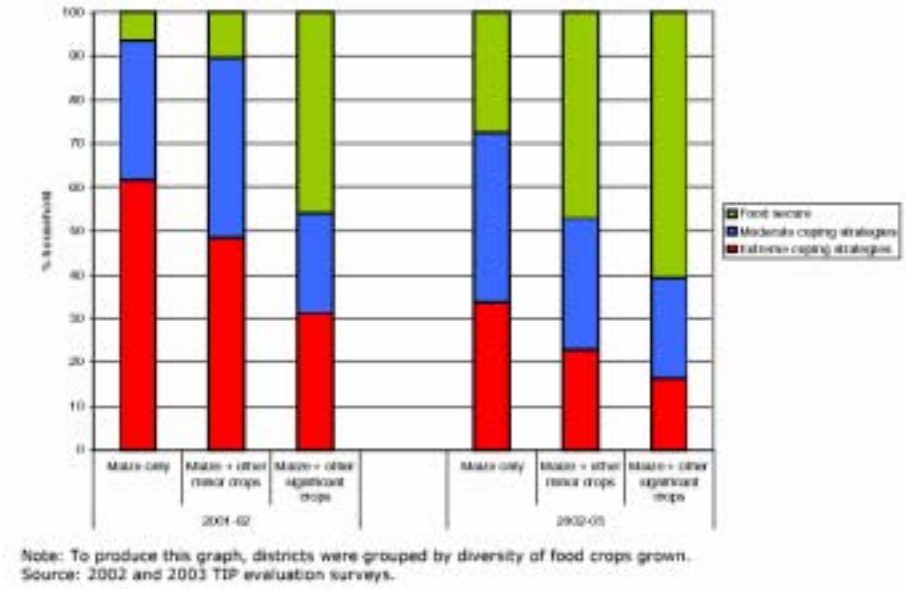
5.3 Smallholder agriculture: growth driver

In medium and high potential areas, if supply constraints can be overcome, then smallholder crop production (cereals, root crops and export crops) is a suitable growth driver, having the best linkages for pro-poor growth, the best food security impacts and among the most hopeful market expansion opportunities. For example, Bautista and Thomas (1999) calculated GDP multipliers[12] for Zimbabwe for four different sources of growth and found income from smallholder farming highest (1.92), compared to commercial export agriculture (1.5 – 1.6) and non-agricultural activity (highest being labour intensive light manufacturing at 1.49).[13] The key component of the multipliers were consumption linkages: smallholders spend more on locally produced non-tradeables than households in commercial farming or urban areas.

It has been counter-argued that agriculture often accounts for only about half of rural Africans' income so rural non-farm activities are also critical. We dispute this, using evidence from Malawi. Here, we have found recently that whilst only 30–40% of net income was derived from smallholder agriculture, it accounted for 60–70% of growth drivers in the informal rural economy (Dorward, 2003). On-going work in Zimbabwe is yielding similar results. Complementary growth is needed, therefore, in both smallholder agriculture and rural non-farm activities.

Efforts to intensify maize production in Malawi, Zambia and Zimbabwe in the 1980s most directly benefited households in higher potential and/or more accessible areas, whilst the majority of rural households faced higher consumer prices for maize. Although there were some benefits to poorer household in terms of increased demand for labour, consumption multipliers and greater local maize availability), in the short term as many households lost as gained from these efforts. Levy (2003, 32) shows how in Malawi food insecurity in 2001-03 was much worse in highly maize dependent farming systems.

Figure 4 Food security and diversity of food crops grown



Source: Levy (2003)

12 Increase in GDP stimulated by a given increase in income accruing to households or enterprises in the given production sector. Thus a multiplier of 1.92 indicates that a US $ 1 increase in smallholder income leads to a US $ 1.92 increase in GDP.

13 Note, however, that the two poorest groups in Zimbabwe – commercial farm workers and low income urban households – benefit less from growth in smallholder agriculture than from other potential growth paths.

In the future, **higher potential areas** need:

- production technologies that permit higher yields and returns at existing producer prices. 'Sustainable intensification' (Reardon et al 1999) is particularly important when agricultural growth depends on intensification rather than extensification. In Southern Africa, this latter only remains an option in northern Mozambique and parts of Zambia.
- mechanisms for recovering credit that do not tie production activities into high-cost marketing structures.
- protection for groups who may be disadvantaged by the higher prices needed to stimulate initial adoption of more intensive, costly and risky cereal production technologies

For households in **lower potential areas,** it is more difficult to identify local sources of growth and many households have traditionally relied on income from remittances and other transfers. In future, they need research and extension that will help them reduce their food deficits (by sustaining or raising yields of maize or other food crops in the face of population pressure), so as to reduce their dependence on underdeveloped maize markets – for example, improved soil and water conservation, drought tolerance, crops that respond to very low levels of external inputs etc.

Box 4 Holding size and agricultural growth in Southern Africa

Small holding size can be a constraint to agricultural growth in the context of weak economic coordination and the difficulty small farmers face in accessing markets and services. In Zimbabwe, the key issue is how to get services to people in resettlement areas. Here the retention/recovery of `core' estates may be opportune, with the advantage of also providing links into high value international markets. In Malawi there is much less potential for redistributing under-utilised land and it may be necessary to identify modalities for some household to relinquish land (on favourable terms) in order to create holdings of a minimum size necessary for viable agricultural intensification under conditions of weak economic coordination. This raises the issue of creating transferable rights to land – although not necessarily freehold tenure. However, given the current lack of growth in the rural non farm economy in Malawi and the variability in maize prices, this does not seem a feasible option in the short to medium term. In Zambia and Mozambique, increasing the utilisation of currently under-utilised land will require careful handling to ensure smallholders do not lose out from growth of large-scale commercial estates.

Source: FFSSA Theme Paper 2

The 'without intervention' scenario is a bleak one of declining soil fertility, increasing food deficits and, certainly for households without access to significant non-farm income streams, increasing food insecurity. Investment in smallholder crop production is justified for socio-economic as well as financial reasons: without it, rural areas will stagnate and social protection costs and dependency will further escalate.

Expanded cash crop production (e.g. cotton in Mozambique, Zambia and Zimbabwe, burley tobacco in Malawi), could contribute significantly both to rural growth (through consumption multipliers, expanded labour demand, and economies of scope) and to household food security (through generating cash with which to buy food or inputs, improving household access to fertiliser and animal traction etc). It will often benefit better-off smallholder households. Benefits to poorer households are more likely to be indirect (through multiplier effects). However, ongoing household modelling work for Zimbabwe by Poulton and Dorward (2003, using 1996 prices) suggests that, whereas the benefits of higher maize prices to producers were generally offset by the accompanying higher prices for poor consumers, increases across all commodity prices (including groundnuts, sunflower, market horticulture and cotton):

- Led to significantly higher demand for hired labour than raising maize prices alone
- Compensated many households for the impacts of higher maize prices
- Led to a decline in estimated income poverty figures, compared with a rise when maize prices alone were raised.[14]

Dorward (2003) reports similar findings in Malawi. This suggests that smallholder cash crops can be significant drivers of growth provided that there are sufficiently large international markets ready to buy smallholder produce at competitive prices, and that smallholders can gain an increasing share of those prices through better infrastructure and access to more efficient marketing systems.

Sorghum and millet production and smallholder livestock-keeping are growth supporters rather than growth drivers: important not so much for income generation but for contributing to household nutrition, crop fertility and acting as a domestic savings mechanism and insurance policy.

5.4 Rural non-farm activities: growth supporter

A wide range of activities that fall under the general heading of the rural non-farm economy are important in rural livelihoods in Southern Africa (Reardon, 1997; Ellis, 2000; Barrett et al, 2001). Because of this diversity, their potential contribution to future rural growth is disputed.

In our opinion, (eco-)tourism – for which all the Forum focus countries are well-endowed – is the only significant RNFA in Southern Africa producing tradables but because of its high leakages it has limited potential for acting as an independent driver of rural-growth. Further development of tradeable RNFA would require good rural infrastructure to attract investors – this has been a major stimulus for development of, say, the textile trade in parts of rural Asia – and political and economic stability. Thus the role of RNFA in Southern Africa at present is mainly supporting growth. Limited demand for non-tradable goods and services, rather than supply constraints, is the principal problem facing RNFA in poorer, stagnant economies. This is dependent on the fortunes of the agriculture sector. Problems with capital, information, skills and business networks can also act as barriers to entry for poorer households, and these require addressing through micro-finance and business development services.

5.5 Industrial and urban activities: growth supporter

It is important to recognise the interdependence of rural and urban activities, and particularly the importance of:

- urban centres as markets for rural produce;
- remittance flows from urban to rural areas; and
- industrial production of tradeables which can be used to finance imports of food and agricultural inputs.

[14] The poverty estimates primarily capture the direct impacts of changed cropping activities within different household types. Second order impacts, through labour markets and consumption multipliers are not allowed for in these results, but are likely to lead to greater poverty reduction impacts.

Studies of rural livelihoods and poverty consistently find that wage or remittance income is what defines non-poor households, and this is used to fund consumption and investment (Cavendish, 2000; Jackson and Collier, 1991; Nkum, 1998). This was a significant contributor to the continued expansion of intensive maize production in Zimbabwe in the 1990s after AFC credit ended (Durevall and Mabugu, 2000). It has been a major constraint in Malawi where urbanisation is low and migrant labour opportunities have dried up: many farm households struggle to find cash to purchase inputs and some observers (Barrett et al, 2001; Orr and Orr, 2002) suggest that increasing access to non-farm employment is the key to stimulating agricultural and rural growth.[15]

Even with several years of strong agricultural growth, domestic markets in individual Forum countries are unlikely to provide sufficient demand to stimulate rapid industrial growth. This will depend instead on either international exports (which is difficult in land-locked countries) or regional trade. The potential for this is summarised later in this Chapter and explored in more detail in *FFSSA Theme Paper 2* and *FFSSA Discussion Paper 2*.

5.5.1 Economic coordination and growth failures

The poorer, stagnant economies common in Southern Africa are caught in the kind of 'low-level equilibrium trap' described by Rosenstein-Rodan (1943), caused by lack of market opportunities ('thin markets'), resources to invest, reasonable returns on investment, and acceptable risks, in which context leaving the market to fend for itself will not work.

This trap relates particularly to problems of business risk, of which we identify four basic categories:

- production risks – from natural shocks, mechanical failures, etc;
- market price risks – from changes in supply and demand;
- economic coordination risks – due to absence of suppliers or buyers when needed;
- risks of opportunism – due to monopolistic or monsponistic market power being used to make business unattractive, or uncertain controls and rent-seeking.[16]

The first two are particularly problematic in economies such as many in Southern Africa which are poor, highly dependent on natural resources, with limited capital investment and thin markets. The latter two are less widely understood but a particular feature in situations of low economic activity and thin markets.

Worldwide, there are few if any instances of successful reliance on uncoordinated market development in poor rural economies. That market based approaches to food security and poverty reduction do not work in areas where markets are not functioning effectively was amply demonstrated by the 2001–3 crisis in many areas of Southern Africa.

[15] The intra-regional labour market is historically well-developed in Southern Africa, with labour from areas of smallholder farming moving to jobs in mines and estates throughout the region. Migration has been *de facto* a key dimension of the livelihoods of a substantial fraction of rural households of Southern Africa. However, these migration patterns have withered in recent years, partly due to the downturn in the mining economy. Official recognition of the extent of migration and the issues it raises are politically sensitive, although there is a draft SADC protocol on the free movement of labour within the region.

[16] For more on these risks, see Dorward and Kydd (2002).

We suggest part of the problem has been that, to date, market failures affecting economic growth and thus food security in poor rural areas are not conceptualised in ways that help policy analysis and formulation for goods and services with private good characteristics (Kydd and Dorward, 2003: 30). This results from weaknesses in neo-classical economic theory on which agricultural market liberalisation policies have been based in Africa, as Jayne et al 2002 amply describe. New institutional economic arguments, on the other hand, explain liberalisation's failures in terms of inherent difficulties in economic coordination in poor economies, difficulties which markets per se cannot overcome.

Sound and stable macro-economic conditions are a basic pre-requisite for getting out of this trap, together with good infrastructure and clear and enforceable property rights and contracts. Such conditions are, unfortunately, notable for their absence in most of the Forum focus countries.

The discussion in this Chapter so far has considered food security through the impact of markets on production and entitlements. The following sections deal with the potential for market development to contribute to other components of food security, namely imports, food price stabilisation and food aid

5.6 Commercial imports[17]

Southern Africa faces the twin problems of being isolated from world trading circuits and having costly overland transport, which can drive a wedge between prices in domestic markets and those in international markets by up to a factor of three. This is illustrated in Box 5. Hence there is ample scope for very great variations in domestic prices, even with free trade with the international market, in response to varying levels of harvests and stocks. Price variations of this magnitude serve neither farmers nor consumers well.

One possible response to this situation is to encourage trade in grains *within* the region (in recent years, in contrast, the region has been a net importer of cereals, with an average net deficit of some 2.6 million tons — equivalent to some 14% of the average annual consumption of cereals in the region (see Annex 1). This has the added advantage of providing incentives to farmers, meeting consumer preferences for white maize, and conserving foreign exchange within the region. High international transport costs could in fact be an advantage to any countries in the region that can turn itself round to generate regular grain surpluses for trade *within* the region.

Table 4 shows that there is substantial complementarity in food production and food consumption (i.e. different production and consumption patterns) between most Southern African countries, with the exception of: Mozambique–Tanzania; and Malawi–Zambia–Zimbabwe. Even between these sets of countries, trade might be sensible if there are significant differences in production costs. However, Table 5 shows that maize harvest co-variance is significant between South Africa–Zambia–Zimbabwe; and between Malawi–Mozambique–Tanzania. This implies intra-regional trade to cover for production shortfalls would need to be *between* these two blocks.

[17] More detail on commercial imports can be found in *FFSSA Discussion Paper 2*, http://www.odi.org.uk/Food-Security-Forum/docs/Regional_theme.pdf

Box 5 Maize prices in domestic markets in inland Southern Africa

The highest price that should arise in domestic markets is that marked by the cost of importing grain from the world market, the import parity price. The lowest price is defined by the returns to exporting grain, the export parity price. Given high overland transport costs, there may be a large difference between these two prices. To illustrate the degree to which maize prices may be insulated from international levels in landlocked states, here are two calculations of what might be import and export parity prices for white maize.

The import parity price is that at which US white maize could be sold in domestic wholesale markets, and so should mark the upper limit of domestic maize prices. Export parity is the price that domestic producers should receive if they sold their maize on international markets. It represents a floor price in the market. In this case, the export parity has been modelled on the case of Zimbabwean maize being sold at Mombassa. But the numbers would not look much different were the destination Chittagong, Jeddah, or anywhere else in the Indian Ocean.

Price of white maize inland Southern Africa: import parity, source US white maize

	US$/(metric) ton	**Source:**
International price, White Maize, US #2, FOB US Gulf Port	118	a
Shipping cost, US Gulf Port to South Africa, bulk	20	a
Durban - Harare	60	b
Sub-total, cif Harare	198	
Add: 10% for other costs	20	c
Total, cif Harare	**218**	

Price of white maize inland Southern Africa, export parity, destination Kenya

	US$/(metric) ton	Source:
International price, FOB US Gulf Port, White Maize, US #2,	118	a
Shipping cost, US Gulf Port to Mombasa	30	c
10% for other costs	15	c
White maize, cif Mombasa	**163**	
Other costs	- 15	c
Shipping cost, Durban-Mombasa	- 20	c
Harare-Durban	- 60	b
Maize value, wholesale, fob Harare	**68**	

Source of data: (a) Letrimex Traders, Oakland Aug 2003; (b) Westlake 1999 for Masdar; (c) Estimate

Source: FFSSA Discussion Paper 2

Table 4 Annual variations in maize production, 1972–2002, and net imports of cereals imports (other than wheat), 1971–90

	Lesotho					
Malawi	+Prod	**Malawi**				
Mozambique	+Prod	+Prod +*Import*	**Mozambique**			
South Africa	+Prod			**South Africa**		
Tanzania		+Prod	+Prod		**Tanzania**	
Zambia		+*Import*	+*Import*	+Prod		**Zambia**
Zimbabwe		+*Import*	+*Import*	+Prod		+Prod +*Import*

Source: FFSSA Theme Paper 2 for maize production, Weeks and Subasat (1998) for cereals imports
+*Import* = positive correlation on cereals imports, significant at 5% level
+Prod = positive correlation on maize harvest, significant at 5% level

Table 5 Correlations between maize harvests across selected Southern and Central African countries

		Congo, Dem. Rep.	Lesotho	Malawi	Mozambique	S. Africa	Tanzania, United Rep. of	Zambia	Zimbabwe
Congo, Dem. Rep.	Pearson Correlation	1	.217	.420	.517**	.060	.820**	-.138	-.008
	Sig. (2-tailed)	.	.241	.019	.003	.750	.000	.460	.965
	N	31	31	31	31	31	31	31	31
Lesotho	Pearson Correlation	.217	1	.364*	.517**	.409*	.172	.104	.139
	Sig. (2-tailed)	.241	.	.044	.003	.022	.354	.578	.456
	N	31	31	31	31	31	31	31	31
Malawi	Pearson Correlation	.420*	.364*	1	.685**	.134	.381*	.065	.107
	Sig. (2-tailed)	.019	.044	.	.000	.473	.034	.729	.567
	N	31	31	31	31	31	31	31	31
Mozambique	Pearson Correlation	.517**	.517**	.685**	1	.067	.363*	-.199	.012
	Sig. (2-tailed)	.003	.003	.000	.	.722	.045	.283	.949
	N	31	31	31	31	31	31	31	31
S. Africa	Pearson Correlation	.060	.409*	.134	.067	1	.083	.400*	.733**
	Sig. (2-tailed)	.750	.022	.473	.722	.	.656	.026	.000
	N	31	31	31	31	31	31	31	31
Tanzania, United Rep. of	Pearson Correlation	.820**	.172	.381*	.363*	.083	1	-.022	-.002
	Sig. (2-tailed)	.000	.354	.034	.045	.656	.	.906	.989
	N	31	31	31	31	31	31	31	31
Zambia	Pearson Correlation	-.138	.104	.065	-.199	.400*	-.022	1	.526**
	Sig. (2-tailed)	.460	.578	.729	.283	.026	.906	.	.002
	N	31	31	31	31	31	31	31	31
Zimbabwe	Pearson Correlation	-.008	.139	.107	.012	.733**	-.002	.526**	1
	Sig. (2-tailed)	.965	.456	.567	.949	.000	.989	.002	.
	N	31	31	31	31	31	31	31	31

Notes:
1) Based on FAOSTAT annual data covering the period 1972-2002.
2) These figures show correlations between total national production levels in the respective countries, not per capita production levels, which may give a better indication of the capacity to export. As noted in the main text, when per capita production is considered, the main additional consideration is that this has been on a downward trend for a decade or more in most of the countries considered. Therefore, the total surplus available for export at any one time is reduced.
Source: FFSSA Theme Paper 2

Overall, there are more opportunities for intra-regional trade to even out fluctuations in harvests between 'next-nearest' neighbours. Annex 1 data on the direction of cereals trade flows within Southern Africa show that this is indeed what happens in practice. Added to this, quantities traded informally by small-scale opportunistic traders are very significant locally (Whiteside et al, 2003) – up to 100,000 tonnes per annum in recent years from southern Tanzania and northern Mozambique into Malawi, for example. If there were fewer barriers to intra-regional trade and lower transport costs, it may be that most of the harvest

deficits experienced in the Forum focus countries could be covered by imports from South Africa, Tanzania, northern Mozambique, and possibly Kenya.

There are plans for a free trade zone by 2008 under the SADC Trade Protocol (all Forum focus countries) and a customs union with Comesa (Malawi, Zambia and Zimbabwe) during 2004. Current national policies, with the exception of Zimbabwe, tend to allow private trading in grains across borders. It is less clear that policies permitting grain exports are maintained at times of domestic shortage or high prices; and the profusion of overlapping trade agreements in the region creates confusion not to mention opportunities for corruption at border posts. In addition, wide fluctuations in domestic maize prices in net deficit countries provide inconsistent incentives to traders and producers in neighbouring surplus countries. For example, there is now strong evidence to suggest that this severely limited the otherwise significant role cross-border trade from Northern Mozambique could have played in meeting Malawi's food deficit in 2001–3 (Whiteside et al, 2003).

Regional integration in Southern Africa has been partial. Whilst the region's mining industry represents a longstanding example of close integration, in other respects economies have long been more aligned with distant trading partners in Europe and elsewhere, than with neighbouring countries. While politically some parts of the region have close links, in other respects there is limited commitment to regional integration. Few dispute that there are potentially useful gains to be made from increased co-operation between neighbouring countries. But – as has been demonstrated in other economic unions worldwide – it is difficult for politicians to surrender the levers of national control to supra-national authorities.

The policy challenges for increased intra-regional trade are thus:

- modalities for food deficit countries to encourage/compensate food surplus countries for sustaining production beyond national food self-sufficiency needs
- reducing policy variability within and between seasons concerning cross-border trade, to improve incentives to traders and producers;
- reducing transport costs;
- simplifying tariff structures and reducing non-tariff barriers to trade (paperwork, payment systems, etc);
- improving information flow through harmonisation of standards and grade, publication of tariffs, publishing market data;
- clarifying application trade regimes and regulations in situations of overlapping trade agreements;
- harmonising food trade policies and regimes between countries, to remove the 'small country' constraint.

5.7 Food price stabilisation

Based on the experiences of recent seasons in Southern Africa, new systems to coordinate and finance more stable national food supplies and prices over the short to medium term are urgently needed. There is a case for a degree of state intervention in staple food markets that goes beyond the minimal contingency stock, notwithstanding concerns relating to Africa's historical record, and current governance, capacity, financing and opportunity costs, and the very significant challenges in developing them.

Because of the current serious difficulties, described above, with reliance on markets and the private sector alone to address variation in regional and national maize deficits in Southern Africa, there is a case – at least in the short term – for a degree of state intervention in staple food markets in some countries that goes beyond the **minimal contingency stock** approach to strategic grain reserves, i.e. beyond merely protection against delays in private importation. This is particularly the case in land-locked countries currently trapped in what we referred to earlier as 'low-level equilibrium'. Here, the state has a key role to play in providing strategic direction and in some circumstances critical finance for importation and storage, whilst not weakening incentives for private sector involvement. Government needs to look for new ways of working with the private sector to achieve more effective and lower cost means of facilitating food imports, either through regulation, financing of market interventions, or implementation of them.

The rapid growth of SAFEX, with **futures and options markets**, and the capital and expertise of large, **multinational trading companies** present potential opportunities which need to be explored.

Sometimes **foreign exchange reserves** are promoted instead of physical stocks but this assumes minimal risk of increased international prices during times of national/regional scarcity (which can be reduced through the use of futures and options, as discussed above) and of delays and high costs of delivery, which is not the case for Southern Africa.

Stocks are needed in any food system because food is consumed daily but crops are harvested periodically, and because actual harvests can vary significantly from expectations. Three policy questions arise in relation to stocks:

- how large do stocks have to be to cope with fluctuating supply against steady demand? This is primarily a technical question.
- who should hold the stocks (public or private)?
- where should stocks be held: village, district, nation, region or world?

There are market-based or public regulation approaches to answering the latter two questions. Amongst the Forum focus countries and South Africa, only Malawi, Zambia and Zimbabwe are committed to the latter. Market-based approaches favour free trade in grains in order to reduce the size of stocks relative to the amount of grain traded, by relying on the private sector to respond quickly by drawing on regional or international stocks. Public stocks, on the other hand, are promoted when there are fears private traders may not respond quickly enough or may try to rig markets.

State holding of stocks addresses very real problems in Southern Africa. It is difficult to see how large scale inter year storage could become attractive for large scale private sector investment without substantial financial incentives from the state. Just because there have been (serious) problems with their management in the past, does not mean they should be abandoned. Useful lessons can be learnt from past experience in Africa as well as Asia. For example, strong management and prices that did not lead to consistent oversupply meant that ADMARC price stabilisation activities in Malawi n the 1970s and 1980s were not a major drain on its budget, unlike in, for example, Zimbabwe in the 1980s and more recently in Ethiopia. The management of public stocks needs to be transparent and accountable, for example through a largely autonomous public agency operating and reporting against published objectives and rules.

We suggest the highest level of intervention, to influence the mean **level of food prices** within a country over time, is justified in Southern Africa. Recent modelling of Malawian rural livelihoods suggests that subsidising consumer prices and raising producer prices is one of the more effective policy packages for promoting growth and poverty reduction (Dorward, 2003). Similar efforts in Zambia and Zimbabwe in the 1980s proved fiscally unsustainable although it is unclear how much this was due to the practice of the intervention (how prices were set, managerial efficiency, etc), or high interest rates prevailing at the time, or because such an intervention is inherently unaffordable. Options for achieving this are explored in Chapter 9.

5.8 Food aid and markets

Concerns have been raised since the start of the 2001–3 crisis that the more than 1.75 million tonnes of food aid requested for Southern Africa under the EMOPs in the 2002–3 and 2003–4 CAPs have detrimentally affected food markets in the region, through crowding out commercial imports, skewing national maize markets, and failing to reach those most in need.

Additional concerns have been raised about the motivations of some of the prime agents: have WFP and its major donors been seeking to expand the 'market' for food aid in the region; have some donors been seeking a use in the region for suspended budgetary support; have some governments in the region been securing food aid for their electorate as a campaign tool for upcoming elections?

These are very serious questions which require detailed collation and analysis of specific evidence. In the mean time, we can make the following observations. Food aid can help to reduce demand pressure in the maize market, and thus prices. This is important given the extent that all households rely on maize purchased in the market even during crisis periods (see below). However, is food aid the most satisfactory means of achieving this?

Food aid is extremely expensive compared to commercial imports and locally produced food. In Malawi, for example, in 2003 maize food aid was estimated to cost US $ 450 per tonne compared to US $ 220 per tonne for commercial imports and less than US $ 50 per tonne for maize produced domestically using free inputs (Levy, 2003:8 (32)).

There have been frequent, significant breaks in the food aid pipeline due to logistics (and in the case of the EMOP under the 2002–3 CAP, due to concerns about GM content) (WFP Emergency Reports, various dates). Not only does this mean food aid is not available when scheduled, but delays can have significant negative fiscal and/or market impacts.

Targeting of food aid to those most in need is difficult but blanket coverage reduces impact and increases costs. In any case after the 1991–2 crisis, it was subsequently established that staple food *received* through drought relief and food for work provided only about 15–25 % of average monthly per capita cereal requirements (Eldridge 2003:2 (33)). Official reports quoted amounts distributed which are almost always higher, and there were problems related to delayed distributions due to logistical and organisation constraints, and inadequate targeting (Tobaiwa, 1993).

Despite the disincentives provided by border controls and inconsistent policy statements, by January 2003 commercial imports nonetheless provided three times more food than

food aid in the six EMOP countries (SADC-FANR VAC, 2003) and at considerably lower cost.

Given that – we suggest – the key requirement is not delivering adequate food to all candidate households, which is unrealistic, but rather reducing market prices so that vulnerable households are not forced to engage in extreme coping measures in order to access food, then the question has to be asked whether the US $ 800 million requested for food aid under the 2002–3 and 2003–4 CAPs might have been more beneficially used, at least in part, to support an enabling environment for commercial imports and market access for the most vulnerable households? Box 6 lists some alternative intervention options.

Box 6 Intervention options during food crises in Southern Africa

The following interventions could be appropriate during a food crisis but will not impede the development of market-based economic growth and food security over the longer term:

- promote commercial supplies of staple food in affected areas (e.g. by publicising government intentions), rather than parallel and possibly less efficient public and NGO systems;
- stabilise maize prices at pre-crisis levels, and/or subsidise prices of inferior grains (sorghum, yellow maize);
- waive charges for education, health and agricultural inputs during the crisis, in order to protect the use of these services. Has the additional advantage of enabling school feeding as a particularly good entry point for protecting children's access to food;
- AIDS specific interventions for Southern Africa from now on.

Source: adapted from Eldridge (2003:9)

5.9 Conclusions

The conclusion of the analysis summarised in this Chapter is that conventional promotion of liberalised competitive markets is currently misplaced in many sectors in Southern Africa. **Short to medium term** policy must provide alternative, non-market mechanisms to promote secure and low-cost food availability and access. This is addressed in *FFSSA Theme Paper 4* and summarised in Chapter 7. We suggest policy for **medium to long term** poverty reduction and food security must contain market-based economic growth as a critical element (although other social, political and technical processes of change are also vital). Specific policy options for both these areas are discussed in Chapter 9.

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6 Addressing Human Vulnerability[18]

6.1 Vulnerability and coping

Vulnerability concerns risks. Following Devereux (2002), it may be defined as *'exposure and sensitivity to livelihood shocks'*, or perhaps more simply, as '*living on the edge'*. The combination of shocks or hazards that confront households and individuals, and their vulnerability, produces a set of risks. In this case the risk in question is that of food insecurity, that is of hunger and malnutrition.

Shocks that may increase the risk of food insecurity include those arising from nature – drought, floods, pests and diseases affecting crops and livestock, germs, contaminated drinking water, etc. – and those of human origin – war and civil strife, crime, low prices for produce or high prices for food, job losses, and even some government policies. To some extent, everyone faces a set of shocks.[19] But only some are exposed to the risk of hunger. The difference is vulnerability. This is determined by the ability to withstand shocks by coping.

To reduce risks, individuals and households may either try, before the event, to lower risks by reducing their sensitivity to shocks, or else cope with the consequences of the shock after the event. Examples of the former include planting crops or crop varieties that tolerate drought, or diversifying income sources so that a harvest failure affects only a small part of the household income. Coping strategies, the latter set of options, can be classified as shown in Table 6, with examples of these as seen in 2001–03 in the countries of Southern Africa.

Responses 1 to 3 may allow the shock to be weathered with no change to everyday living standards; strategies 4 and 5 involve some degree of extra work, sacrifice or discomfort; while options 5 and 6 can affect future welfare – in the worst of cases the household or individual could end up submerged in unpayable debt, or with no means to make a livelihood, and in both cases face destitution.[20]

[18] See http://www.odi.org.uk/Food-Security-Forum/docs/vulnerability_theme3.pdf for full text on which this Chapter is based.

[19] A common distinction made is to divide shocks and hazards into those that are 'co-variant', those that apply to entire communities, regions or even countries as whole – for example price movements in markets; epidemic disease, extreme weather, civil disorder and policy changes; and 'idiosyncratic' hazards that only affect particular households or individuals – for example, accidents (domestic, workplace, transport), fire, crime, addiction, physical disability, etc.

[20] de Waal (1989) reported how the people of Darfur, western Sudan when hit by severe drought in 1984–5 sought at all costs to avoid losing their livelihoods as herders and farmers, fearing not so much hunger and possible starvation, but destitution. To be poor is one thing: to be destitute is quite another.

Table 6 Coping strategies

Category	Examples from Southern Africa, 2001–03
1. Drawing down on savings kept specifically for bad times.	• (Most savings in the form of livestock, housing, etc. – see point 7 below)
2. Making claims against insurance policies taken out against particular risks.	• (Few examples, since formal insurance not well developed and few insure against drought)
3. Receiving gifts and help from • family, friends or community, or • charities and government.	• Drawing on social networks • Food-for-work programmes, General food distribution, School feeding, Supplementary feeding, etc.
4. Taking on additional jobs to earn extra income to make up the deficit. Finding work may involve migration. It may mean entering into occupations seen as unpleasant, demeaning, immoral or illegal.	• Increased prostitution, including sex for food • Gathering wild foods • Increased search for casual labour • Gold-panning (in parts of Zimbabwe) • Theft of crops and livestock
5. Reducing consumption when income or subsistence production falls.	• Reducing expenditure on non-food items – including education, with children withdrawn from school • Substitution between foods (cassava for maize); gathering wild foods • Fewer meals a day, smaller portions
6. Taking loans and falling into debt.	• Borrowing from moneylenders
7. Selling off assets, including consumer durables, tools and equipment, livestock and land.	• Livestock sales • Sales of pots, pans, household furniture

Source: synthesised from evidence collated by Forum for Food Security

When significant numbers of people adopt coping strategies, there may be wider effects in the rural and national economy. For example, livestock prices typically fall after droughts as people sell off their stock. In Zimbabwe a cow could be had for less than 300 kg of cereals by December 2002, compared to the best part of a ton of grain in normal times. Similarly with many more people seeking casual work, and with fewer people with the means to hire labourers, daily wage rates can fall. In both cases, shocks such as failures of harvests can drive up food prices, so that the ratios between these and daily wage rates or the value of livestock can rise sharply following the failed harvest. Since at such times the value of food is rising, and it is likely that in comparison that of money is losing value,[21] there can be a switch from monetary transactions to those denominated in food as barter takes over. These price movements undermine some coping options, eroding the value of assets just when they are most needed.

6.2 Vulnerable people

Vulnerability is often seen as *chronic*, in the sense of continuous, or *transient*. There are different sources of vulnerability, which have been conceptualized[22] as:

- those chronically unable to engage in the productive economy; or
- those spasmodically engaged either because of fluctuating opportunity or adverse events (such as recurrent illness); or
- those (more or less) fully engaged.

[21] This is exacerbated if there is general inflation in the economy, a likely condition after a co-variant shock hits significant parts of the economy. Zimbabwe in particular has suffered rates of inflation of almost 600% a year or more during the crisis (599% for year to December 2003).
[22] For more on this, see Farrington et al (2003).

Not all individuals or households within a given demographic or social group become vulnerable. For example, some elderly people who cannot work but receive cash transfers may pass some or all of the transfer to others in the household who then put it to productive use on behalf of the entire family, whilst other elderly people without formal and informal transfers may be extremely vulnerable to food insecurity. Nonetheless, in the countries of Southern Africa, the following demographic and social groups are usually classified as containing a large proportion of individuals who are vulnerable to food insecurity:

- Children under the age of 5: vulnerable especially to under- and malnutrition, infectious diseases)
- Lactating mothers: vulnerable to under-nutrition when nursing babies;
- Elderly persons: vulnerable due to loss of assets, or ability to use their assets productively, or additional burdens of care for the ill and orphans due to HIV/AIDS;
- Widows and divorced women: vulnerable due to loss of rights to land, lack of time to cultivate land, and loss of former partner's contribution to household livelihood;
- Female-headed households: vulnerable for the same reasons as the preceding category;
- People with disabilities: lack of access to production or earning opportunities, may suffer social exclusion as well;
- Families with members with HIV/AIDS or other chronic illnesses: vulnerable due to lack of labour, and disposal of assets to cover medical costs; and,
- Remote rural populations or those in living in areas of low natural potential – often vulnerable due to over-reliance on a single livelihood source, lack of diversification options, high transport costs, poor information.

Vulnerability arises from life cycle effects; from the effects of disease, age and disability that restrict mobility and the ability to work; and from lack of access to assets, such as land, from which to construct livelihoods. FFSSA Theme Paper 3 stresses the vulnerability of those households that have undiversified livelihoods while depending mainly on subsistence farming. In the rural areas of Southern Africa, the better off, who are less vulnerable, rely much less on subsistence farming, and have more cash crops or rural non-farm jobs.

Not all are vulnerable within these categories, and not all the vulnerable belong to one of these groups. As changes take place, new groups become vulnerable – something that presents a policy challenge, as will be seen below.

Transient vulnerability[23] can affect much larger groups of people, usually as co-variant shock hits large groups of people, putting them at risk of hunger and causing them to undertake coping strategies on a much wider and deeper scale than would normally be seen.

[23] Strictly speaking, it is not that people's vulnerability is transient, rather that their risk of food insecurity has temporarily risen. What has happened is that the size of the shocks experienced – in this case the combined effects of drought and bad weather, HIV/AIDS and policy mistakes – has been so strong they reach even those who would not normally be at risk. The inexact use of terms here suggests that for many of the victims of the current crisis, the effects will be transient, that is short-lived – and this is far from clear.

6.3 Rising risk of hunger: increased vulnerability, shocks and adverse trends

A central question from the crisis of 2001–3 in the countries of Southern Africa is that of why the most visible shock – drought and bad weather – that was less damaging than that experienced in 1991–92 should provoke a deeper crisis than before. The answer lies principally in increased vulnerability of many groups, and partly in additional shocks and adverse trends.

- Vulnerability has increased owing to the disappointments and failures of **poor economic performance** in the region over the last decade or longer. Across most economic sectors – mining, agriculture, manufacturing industry – there has been slow growth. Formal jobs have not been created on the scale needed. Real wages have tended to fall. More people have been displaced on to the informal job market with low wages and precarious terms and conditions of employment. The failure of the formal, largely urban economy based on manufacturing, mining and services to grow has undermined development strategies. Local farmers have suffered from less demand for their produces than they otherwise might have expected. Economic stagnation has restricted public revenues and made it increasingly difficult for governments to provide basic infrastructure and services, let alone make the investments in public goods and services to boost the economy. The rural economy has found it difficult to generate growth through commercial farming and allied activities, without public investment.[24] Furthermore, the failures of the urban economies have undercut typical household strategies to diversify by having one or more members of the farming household living and earning in the city from which they could send back remittances. Poverty has remained high or worsened in many cases, with particularly sharp rises in poverty in urban areas.
- **Market liberalisation**, however hesitant in some cases, has tended to produce new hazards in more volatile prices of farm produce and of food. To the extent that public goods and services have been reduced, above all in remote rural areas, livelihood options have been restricted. Indeed, in some remote areas farmers have retreated towards subsistence production. In the peripheries of Zambia, it is reported that farmers who previously produced maize with some sales to the national market, now produce sorghum, millet and tubers for home consumption or sales to local markets.
- The **HIV/AIDS epidemic** represents a new and severe hazard in the region (see Box 7). For the six EMOP countries HIV infection runs at 20% overall. It is reckoned that in 2001 as many as 500,000 persons died from AIDS-related disease. Apart from the tragic loss of life, the economic consequences to survivors in loss of labour, costs of caring, loss of assets sold to meet medical bills and funeral expenses, loss of land rights for widows, and loss of knowledge are strong. Indeed, de Waal (2003) has claimed that HIV/AIDS undermines coping strategies so strongly that it may lead to 'New Variant Famine', in which what might have been a food crisis degenerates into outright starvation.
- **Policy disappointments** constitute another set of shocks. The sale of the strategic grain reserve in Malawi contributed to the huge rise in maize prices in 2001. The problems of the fast-track resettlement programme in Zimbabwe have led to much reduced output from the former commercial farms contributing to negative economic growth, with loss of jobs and incomes throughout the economy.

[24] The exceptions here have been capitalised farms in those areas with particularly good natural conditions and close access to markets and transport routes – for example some of the large-scale commercial farms in Zimbabwe, or line-of-rail in Zambia, or central and Northern Mozambique.

Box 7 HIV/AIDS and food security in Southern Africa

The HIV/AIDS epidemic has profound implications for food security in Southern Africa through a two-way relationship with a series of complex interactions. Increased vulnerability relating to HIV/AIDS means that acute crises may be triggered more easily and be more difficult to recover from. The contribution of HIV/AIDS to food insecurity will be increasingly felt over the next two decades as there is already a wave of increasing mortality and morbidity on its way, whatever is done now to combat the spread of the epidemic in the future.

HIV/AIDS impacts on negatively on livelihoods and livelihood insecurity contributes to the spread of HIV/AIDS. HIV/AIDS impacts differentially on different groups of households, and impacts are gender-specific. In general, it increases households' vulnerability, impacts on the assets of households, affects the policies institutions and processes that influence livelihoods, forces adaptation to livelihood strategies and results in changing livelihoods outcomes. At the macro level it reduces overall levels of economic growth, erodes public services such as health and education, and may potentially impact on governance and security. This is through falls in agricultural production, reductions in income, additional pressures on expenditure, and increasing pressure on social capital and traditional strategies for responding to food insecurity. There are also important rights issues around land ownership and inheritance. HIV/AIDS impacts on food security may increase transmission of HIV/AIDS by forcing people to adapt their livelihood strategies leading to greater susceptibility and risk of infection, although more research is needed on this.

However, it is important to remember that HIV/AIDS is only part of the macro-level picture influencing livelihoods in Southern Africa: the epidemic is taking place in the context of poor economic growth and increasing vulnerability arising from failures in market liberalisation, weaknesses in accountability and governance, and in regional coordination and integration. What is important is to understand how HIV/AIDS interacts with these other factors in affecting food security in the region.

Source: adapted from Harvey (forthcoming)

Changed conditions have led to increased vulnerability, as seen in:

- 'the rural poor tend to exhibit a highly eroded asset status, manifested by land holdings below 0.5 ha., no cattle or goats, low levels of educational attainment of household members, no savings, and decline in some elements of 'social capital' (community level social support; civil security); to these must be added the depleting effects on household labour caused by HIV/AIDS infections;
- 'a tremendous reliance on subsistence amongst customary tenure small farmers in general, and especially amongst poor rural households: subsistence ratios with respect to maize production are commonly in the range of 80 to 95 per cent, and for grain deficit households can be routinely 100 per cent (zero market sales); [and]
- 'the emergence over the past 5–10 years of an increasing category of subsistence farm household that can only at best produce enough maize to cover 6–8 months consumption, this coverage shrinking to 3–5 months in years when there are climatic shocks (too much rain, hailstorms, shortened rains, droughts etc.' (FFSSA Theme Paper 3, 18–19)

In addition there are new groups of food insecure that have appeared. These include, for example, the former workers on the commercial farms of Zimbabwe, or those who have lost jobs in mining.

6.4 The policy challenge: reducing hazards and vulnerability

One line of policy is to reduce the hazards faced by the vulnerable. While many natural calamities such as drought can hardly be avoided, some of those arising in economy and society can be. Two particular sets of hazards could be mitigated, by:

- **Ensuring that the prices of food staples do not increase sharply**. Actions, such as releasing grain reserves, or facilitating rapid import of additional food, can prevent food

prices rising by unreasonable degrees. How difficult can it be to contain the price of staple such as maize within, say, a 25% ceiling above the average level? In Asia, countries such as Bangladesh have been able to do this through a combination of operating strategic public stocks to clear and transparent rules, and liberalising grain markets for both private internal trade and importing. The thin markets and the difficulties of transport and storage in many countries in Southern Africa make this more difficult than in some Asian cases, but the obstacles are not insuperable;

- **Desisting from arbitrary and sudden interventions in markets** and the economy in general that raise uncertainty and depress investment. All too often, faced by unwelcome trends in food markets, governments have intervened to control prices, to limit or ban international trading, or to make dramatic releases or re-stocking of public grain reserves. Not only have such measures usually been crude with immediate unwelcome effects, but also they have signalled to private traders and investors that food marketing is a risky business.[25] Similarly, decentralisation carries the risk that local authorities with little or no share of central finances, will seek revenue by taxing unduly local business.

The other set of policy challenges lie in reducing people's vulnerability, by helping them to cope with shocks. Here there are two principle sets of policies, thus:

1. Allowing people to construct livelihoods based on a diverse mix of activities. Increasingly economies consist of a welter of activities, the mix of which can change at a bewildering pace, as companies and households interact at all levels from African villages to international markets. Given that the policy community has imperfect knowledge of such matters, a precautionary principle should be the first recourse that permits and enhances options, rather than controls or restricts them.

In the case of the countries of Southern Africa, *migration* is a case in point. Throughout great swathes of the countryside, households have for several generations experienced migration. Migrant activities have been woven into local livelihoods. Governments, for their part, have generally either ignored or tried to control such movements.[26] An alternative would be to facilitate such movement – by offering information on opportunities, by making remittances easier to remit, by allowing public entitlements to be transferable, etc.

FFSSA Theme Paper 3 notes how Poverty Reduction Strategies (PRS) tend to be better detailed with respect to tangible and programmable actions, such as investments in roads, education and health. They are much less detailed on the softer and less tangible advances in governance – such as creating an enabling environment for investment. They are also weak on the details of programmes that might support agricultural development. Similarly, decentralisation is being rushed in, partly as way for donors to open a new front on governance. As already noted, the danger here is that of indiscriminate and regressive taxes on local businesses.

2. Assisting those at risk of hunger. This raises the questions of social protection measures that are dealt with in Chapter 7. Here an important issue is that of identifying the vulnerable who may be candidates for assistance. Vulnerability, however, is not directly measurable. For the most part vulnerability, and changes in vulnerability, is inferred by observing coping.

[25] They have also signalled to the unscrupulous that food markets are places to extract rents and make a killing, provided that the government can be convinced to grant a monopoly right here, a special import license there, etc.

[26] The exception here applied formerly when the South African mines formally recruited labour from surrounding countries.

Much progress has been made in assessing vulnerability in the region in the last few years. Most assessments in Southern Africa use the Household Economy Approach (see Boudreau, 1998). In this the country is divided into livelihood zones, based in part on agro-ecological regions and in part on socio-economic characteristics such as remoteness, pattern of economic activities, type of farming system, etc. Within each of these 'Food Economy Zones' households are differentiated by wealth groups. A baseline picture of how they normally access food is constructed. When shocks arise, the impact of these on the ways people access food can be estimated. This allows the different susceptibility of different Zones and groups within them to food insufficiency to be judged.

A companion issue is that of entitlement of those at risk: who and to what degree? In theory it is easy to argue that public assistance to the food insecure should be targeted to those in need. In practice, it is difficult and invidious to target when the shock faced is co-variant, and almost all households have been harmed. The pragmatic solution adopted by many agencies distributing relief food for general distribution, of discussing criteria for entitlement with local communities and their leaders – at ward or village level, and then allowing local people to make allocations according to their criteria, seems to work. In contrast, the Malawi experience of trying to target starter packs only to the neediest households has led not only to some starter packs going to the wrong people, but also has created social divisions and bad feeling.

In addition to the targeting problem, there is also the more general question about entitlement to public assistance. Policy-makers, both national and donor, are moved to grant extraordinary resources for relief programmes following severe and apparently transient shocks. They are apparently much less inclined to assist those who are chronically vulnerable and who need assistance on a regular basis. A paradox of the 2001–3 food crisis in Southern Africa is that alarm is expressed that so many millions will run out of food by December, but the 'normal' situation in which the 50% or more of households who are poor exhaust their stocks by that month, attracts much less concern.[27] Ironically, then, some of those who are chronically food poor might then find they are entitled to public assistance in crisis years that gives them a food entitlement better than in a 'normal' year.

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7 Social Protection Options for Improved Food Security[28]

The previous Chapters in this paper have highlighted how, in the Southern Africa context, the combination of HIV/AIDS, market failures and systemic weaknesses in governance have brought an increase in chronic vulnerability that ultimately results in household level food shortages. This focus on chronic rather than rapid-onset, acute food insecurity creates space for thinking about social protection mechanisms whose impact goes beyond immediate relief/mitigation of the emergency to development responses that support long-term food security.

This Chapter sets out some of the issues behind social protection policy options for food security, whilst Chapter 9 compares and evaluates these options for different settings.

7.1 Key issues in social protection for food security

The change in focus from acute to chronic vulnerability and food insecurity forces a rethink of what constitutes social protection, who social protection interventions should or could be aimed at, and the linkages between social protection mechanisms and pro-poor growth.

7.1.1 What constitutes social protection?

In the past, responses have been focused on mitigating against periodic but serious phases of food shortage, largely brought about by drought or disease. In such a context, and given the presence of large surplus grain reserves in the United States and EU, food aid has been the most frequent tool for helping people to cope with food shortages. The emerging view from the countries of Southern Africa, that the crisis is more the result of market failures, crises in governance and the HIV/AIDS pandemic have given more urgency to debates about the appropriateness and effectiveness of food aid, and the need to think more broadly about the cause of people's need for social protection (For example, a WFP analysis of how concepts of social protection and safety nets fit within their policies, programme categories and activities will take place in 2004). There has been a shift from thinking about safety nets (which support people when they slip below a certain level of income or subsistence) towards a broader view of social protection. An example is the Norton *et al* (2002) definition which sees social protection as a response to the wider sources of vulnerability, risk and deprivation that poor people face.

What are the implications of this broader definition for social protection interventions to support food security? Devereux (2003) notes how, within the food security literature, Sen's (1999) view of entitlements incorporates four sources of food: production, employment, trade and transfers. A narrow view of social protection incorporates only the transfers element – for example food aid. A broader view of social protection includes production (for example targeted inputs), employment (food-for-work) and trade (food price interventions such as consumer subsidies). Similarly, within narrow views of food security, social protection would provide for people's consumption requirements. In a broader view of food security (i.e. one that takes account of both food availability and food access issues) social protection mechanisms would also include income smoothing – for example,

[28] This section draws on findings from FFSSA Theme Paper 4 (http://www.odi.org.uk/Food-Security-Forum/docs/SocProtection_theme4.pdf) and includes other emerging work on social protection.

providing public works employment opportunities during those months when households are most at risk from hunger.

7.1.2 Differing needs for social protection

Developing a broader view of social protection also includes rethinking vulnerability itself. In Chapter 6, various people / groups are described as containing a high proportion of individuals who are vulnerable to food insecurity. These groups are presented according to demographic categories (under-fives, lactating mothers) or social categories (female-headed households, people with disabilities) or geographical categories (remote rural populations). Chapter 6 illustrates how emerging vulnerable groups, such as those living with HIV/AIDS, present additional and new challenges for policy-makers. However, being female, living in a remote areas, or being HIV-positive does not automatically make people or households vulnerable. In highlighting some of the key sources / causes of vulnerability (poor economic performance, market liberalisation, HIV/AIDS and policy disappointments), Chapter 6 also make clear that there are many people who are increasingly vulnerable not because their capacity to engage in the productive economy has been compromised, by factors that are either exogenous or endogenous to those people or their households. Thus, Chapter 6 presented a three-way distinction of sources of vulnerability:

- those chronically unable to engage in the productive economy; or
- those spasmodically engaged either because of fluctuating opportunity or adverse events (such as recurrent illness); or
- those (more or less) fully engaged.

There are linkages within and between these categories: individuals that are chronically unable to engage in the productive economy may be members of households that are under-engaged. However, according to Farrington et al (2003) this view of vulnerability supplements the risk management focus of the World Bank (see Holzmann and Joergensen, 2000) to include non-risk events (for example, old age or long-term disability). Because people who are inactive in terms of the productive economy do not face the risks identified in its framework, the World Bank ignores those who cannot be active at all – a problem given the growing numbers of people who are disappearing from the productive economy in the countries of Southern Africa because of HIV/AIDS.

Finally, people in need of social protection can be either net producers or consumers of food. Interventions to support the rural poor often assume that rural poor are net producers of food. In fact, in Malawi, people are net consumers of maize (Smale and Jayne, 2003) and in many other areas of Southern Africa. There are implications for choices between different social protection options. Should price support benefit mainly consumers or producers? Is it possible to support poor people who would benefit from high prices when they sell food but lower prices later in the season when they become consumers?

7.1.3 Synergies between social protection and economic growth

When social protection and economic growth are seen as alternative policy choices, governments must prioritise between state expenditure for welfare support versus expenditure to drive economic growth. A growing body of work argues that it is difficult to draw clear boundaries between social protection and growth-orientated activities (Devereux, 2003). Farrington et al (2003), explore some of the synergies or linkages between social protection interventions and economic growth by considering the positive

and negative effects of social protection on agricultural growth and vice versa. There are good reasons for exploring the overlaps and synergies between the two:

1. There is no guarantee that people will make use of social protection transfers in ways that policy-makers intended. Often they will do something very different and this can have both positive and negative outcomes for food security. (See Box 8).
2. Identifying synergies between protecting and promoting livelihoods could help better prioritisation between different interventions when resources are scarce.
3. Exploring synergies could help to identify opportunities for elite capture and misuse of social protection interventions or pro-poor growth interventions.
4. Exploring synergies can contribute to understanding how to appropriately sequence protection and promotion interventions to help people achieve long-term food security.
5. Exploring synergies can help to identify how to link protection and promotion to enable people to take manageable risks that give them better incomes.

Box 8 Fungibility and social protection

Social protection transfers are not always used for what they were intended for by policy-makers, i.e. they are fungible. Evidence from South Africa, for example, shows how one form of transfer, social pensions, are shared within households and reduce household vulnerability. They are often used for children's education or for investments in agriculture (IDPM & HelpAge International, 2003). In Malawi, when some households were offered a choice of being given inputs or being given cash to put to other use, 56 % chose the latter (Harnett and Cromwell, 2000). In Lesotho, government inputs subsidies on lime during the Southern African food crisis resulted in richer farmers from South Africa crossing the border to buy up lime from Basotho farmers.

Fungibility can have both positive and negative effects. Interventions should enable households to exercise choice but mechanisms should be developed to discourage or limit bad choices. Households in Malawi and Lesotho that chose to resell government distributed inputs may have used the money for more remunerative activities, or they may have spent it on alcohol. It is important to recognise that fungibility may reflect both wise and unwise choices on the part of beneficiaries. We should view recipients of social protection as neither victims of their own misuse of resources nor as virtuous poor who always make the right choice.

Findings from the Forum for Food Security and other emerging literature on social protection and food security lead to a set of principles about social protection (Box 9). However, developing appropriate social protection options and successfully implementing them depends on the institutional context in which social protection interventions are conceived and implemented.

Box 9 Principles for social protection interventions to support food security

1. Social protection should be conceived in terms of what it does, who it aims to help, how it aims to help, and why it aims to help.
2. Social protection should include a wide range of different, but appropriately targeted, mechanisms. One size does not fit all.
3. Social protection should be mainstreamed rather than projectised
4. Different aims of social protection should be clearly differentiated – for example between risk reduction, risk mitigation and risk coping. (Though individual mechanisms can have different outcomes for different people – for example distributing seeds can be risk reduction for those who plant it and risk coping for those who are hungry and sell/eat it).
5. Social protection to support food security should differentiate between different kinds of food insecurity (i.e. chronic vs. transitory or acute) in order to find the most appropriate solution.
6. Linkages between social protection and pro-poor growth should be prioritised by governments because this is where the most cost-effective solutions are found (in Chapter 5, we saw the much lower cost of maize produced using free inputs in Malawi compared to maize imported as food aid). Nonetheless, it is necessary to think through how to support the chronically vulnerable (see Catch 22 in next section)

7.2 Institutional and other challenges:

The principles outlined above are neither clear-cut nor easy to achieve for various reasons, including institutional financial and implementation barriers in each of the countries. The dilemmas are shown in Box 10, though some warrant further discussion here.

Box 10 Social Protection Policy Dilemmas

- "Catch 22" – those countries most in need of social protection have the least capacity to deliver it.
- (Perceived) policy choice between reducing poverty through transfers and reducing poverty through economic growth.
- Governments are reluctant to commit themselves to recurrent budget lines including some forms of social protection, e.g. social pensions and free schooling.
- Linking relief and development responses – how to negotiate a balance between responding to the immediate crisis and ensuring progression of longer-term development projects. An example might be how to avoid the development of dependency amongst recipients of food aid during a food shortage that mitigates against timely exit strategies.
- Prioritising between investing in scarce public resources in subsistence-oriented agriculture or promoting diversification and productivity-enhancing activities.
- Distinguishing between transitory livelihood crises and underlying livelihood vulnerability.

At the heart of the debate around appropriate social protection for food security is the 'Catch-22 of Social Protection': those countries whose people are most in need of social protection have the fewest resources to provide it (Devereux, 2003). In the absence of commitments on the part of donors to fund recurrent social protection interventions, government provision of social protection is prioritised against other calls on limited government expenditure. Common characteristics of very poor countries (very low average incomes, absence of growth path to reduce poverty in near future, limited resources to fund transfers to the poor and early stages of transition out of subsistence agriculture) are barriers constraining the installation of effective public safety nets (Smith and Subbarao, 2003).

There is a need to reflect critically on the public spending choice between social protection (reducing poverty by social transfers) and economic growth interventions (reducing poverty by investment in growth-based activities):

- exploring synergies between protecting and promoting livelihoods challenges the view that social protection and economic growth are mutually exclusive choices;
- the issue of unaffordability of social protection needs to be placed in historical context. Until the late 1980s, some countries in Southern Africa did have proto-welfare states and safety net transfer systems but these were dismantled under structural adjustment programmes (to reduce public spending) and liberalisation. The most obvious examples of this are education and public health. Now, because of growing vulnerability (especially as a result of the erosion of human capital assets by HIV/AIDS) there is a need to rethink or re-prioritise the principles that govern public spending and focus on expenditure to drive economic growth;
- Leading on from this, humanitarian circles maintain there is a human rights issue at stake and interventions should be carried out whatever the cost. This view tends to be held by international stakeholders, rather than within governments.

Financial dilemmas are not the only factors constraining policy choices for social protection. Effective social protection interventions require sufficient administration capacity within government to design programmes, correctly identify the right beneficiaries

and deliver social protection to them. In many countries in Southern Africa, institutional capacity is lacking.

Experience in the countries of Southern Africa highlights how difficult it can be for governments to identify those who are most in need of support. Few governments have the capacity to carry out complex targeting exercises and many depend on the externally-funded Vulnerability Assessment Committees. Further, there are also questions about the value of targeting given that financial costs of stringent targeting can outweigh the benefits of reaching particular groups of people. For example, experience in Malawi suggests that universal provision of free inputs, which is simpler to administer, may have a greater impact on poverty and food security than targeted provision (Levy, 2003 (M43)).

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8 Policy Processes

8.1 Introduction

The UN appeal for US$611 million in July 2002 for emergency food and medical supplies to avert the crisis facing (the then estimated) 12 million people in 6 countries in Southern Africa highlighted the continued failure of policies intended to achieve poverty reduction and food security in the region. There are a wide range of contributory factors including disparities between donor, governments and NGO objectives; deteriorating governance and accountability of key institutions; failures in agricultural input and output markets post-liberalisation; and the underlying vulnerability of many households, exacerbated by HIV/AIDS. There has been much research on these issues over the last decade: why is so much relevant policy analysis failing to result in practical changes?

The Forum for Food Security in Southern Africa has brought together people from governments, academic institutions, NGOs and international institutions to discuss these issues in greater depth, and has generated some evidence-based policy options. The challenge remains for the countries of Southern Africa is to get better policy both adopted and put into practice.

This Chapter reviews the current understanding about how evidence contributes to policy processes and makes some specific recommendations about how the research and policy divide could be bridged to better promote policies for poverty reduction and food security in Southern Africa now and in the future.

8.2 The role of research-based evidence in policy

Although research-based evidence clearly matters, there remains no *systematic* understanding of what, when, why and how research feeds into development policy. While there is an extensive literature on the research-policy links in OECD countries, from disciplines as varied as economics, political science, sociology, anthropology, international relations and management, there has been much less emphasis on research-policy links in developing countries. The massive diversity of cultural, economic, and political contexts makes it especially difficult to draw valid generalizations and lessons from existing experience and theory. In addition, international actors have an exaggerated impact on research and policy processes in developing contexts.

A number of international development organisations have research programmes in this area. Impact assessments by the International Food Policy Research Institute have focused increasingly over the last few years on measuring the policy impact of its research programmes, and how it can be improved (Garrett and Islam, 1998 and IFPRI, 1999). The link between research and policy has been a key issue for the Global Development Network (GDN) since its inception in 1999. It was the theme of a series of panel discussions at the GDN Annual Conferences in Bonn (1999) and Tokyo (2000), and of a follow-up workshop held at the University of Warwick in June 2001. The International Development Research Centre (IDRC) in Canada is undertaking a strategic evaluation of the influence of IDRC-supported research on public policy (Nielson, 2001).

Sutton (1999) identifies and describes theoretical approaches in political science, sociology, anthropology, international relations and management, and provides a 21-point

checklist of what makes policies happen. Work for the International Institute for Environment and Development identified a six-point programme for improving impact (Garrett and Islam, 1998). The UK Department for International Development (DFID) has recently completed a major review of work as part of its effort to develop a new research policy (Surr et al, 2002).

A wide range of models for policy processes have been developed within different disciplines, including linear, logical models rooted in classical economic theory, and more complex models based in political science and comparative literature. Most are based on research in democratic, developed countries and there are very few from developing countries. Understanding is also constrained since many studies only consider the impact of scientific or academic research on official policy documents, whereas in reality, policy makers are influenced by "evidence" generated by a much wider range of learning processes including, or especially, what they see with their own eyes. Furthermore, changing a policy document means nothing unless it is put into practice, and, in fact, many things change in practice long before they become enshrined in policy documents.

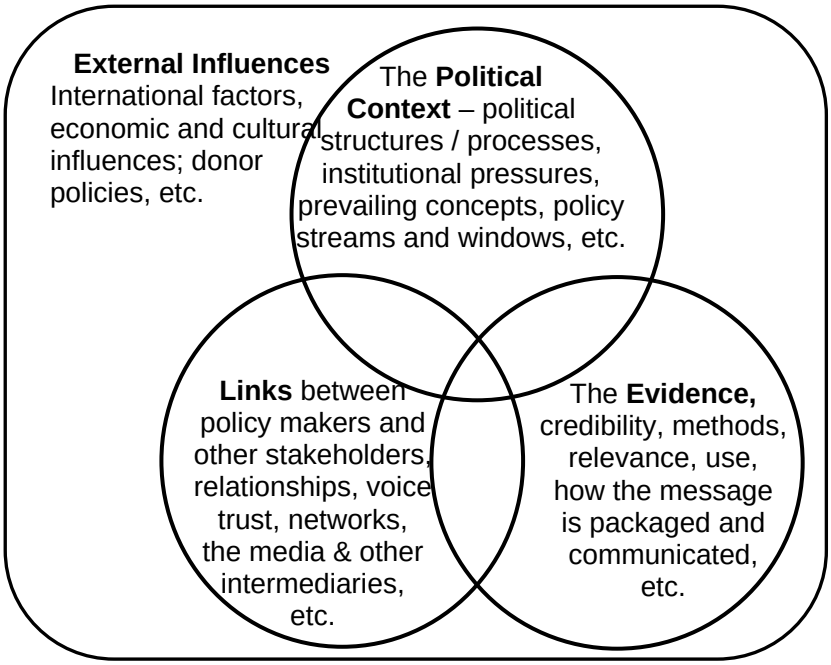
8.3 A new framework

Traditionally, the link between research and policy has been viewed as a linear process, whereby a set of research findings is shifted from the 'research sphere' over to the 'policy sphere', and then has some impact on policy-makers' decisions. At least three of the assumptions underpinning this traditional view are now being questioned. First, the assumption that research influences policy in a one-way process (the linear model); second, the assumption that there is a clear divide between researchers and policy-makers (the two communities model); and third, the assumption that the production of knowledge is confined to a set of specific findings (the positivistic model).

Literature on the research-policy link is now shifting away from these assumptions, towards a more dynamic and complex view that emphasises a two-way process between research and policy, shaped by multiple relations and reservoirs of knowledge.

In a new framework developed by Crewe and Young (2002) research uptake is seen as a function of the interaction of Context (politics and institutions); Evidence (approach and credibility); and Links (between researchers and policymakers) – as shown in Figure 5.

Figure 5 Factors influencing research uptake



8.3.1 The political context

The research/policy link is by shaped the political context. The policy process and the production of research are in themselves political processes, from the initial agenda-setting exercise through to the final negotiation involved in implementation. Political contestation, institutional pressures and vested interests matter greatly. So too the attitudes and incentives among officials, their room for manoeuvre, local history, and power relations greatly influence policy implementation (Kingdon, 1984; and Clay and Schaffer, 1984). In some cases the political strategies and power relations are obvious, and are tied to specific institutional pressures. Ideas circulating may be discarded by the majority of staff in an organisation if those ideas elicit disapproval from the leadership. At its broadest level, it seems that the degree of policy change is a function of political demand and contestation. While it is difficult to change political contexts, you can maximize your chances of influencing policy.

8.3.2 The evidence and communication

Experience suggests that the quality of the research is clearly important for policy uptake. Policy influence is affected by topical relevance and, as important, operational usefulness of an idea; it helps if a new approach has been piloted and the document can clearly demonstrate the value of a new option (Court and Young, 2003). A critical issue affecting uptake is whether research provides a solution to a problem. The other key set of issues here concerns communication. There are many academic fields that provide interesting contributions in this regard, including the literature on interpersonal communication, advocacy and marketing communication, media communication and information technology, and knowledge management and research relevance. These fields have gradually shifted away from various linear theories of communication (sender – message – channel – recipient) towards more interactive models. The sources and conveyors of information, the way new messages are packaged (especially if they are couched in familiar terms) and targeted can all make a big difference in how the policy document is

perceived and utilised. For example, marketing is based on the insight that people's reaction to a new product/idea is often determined by the packaging rather than the content in and of itself (Williamson, 1996). The power of visual images is often a key element in effective communication – frequently, 'seeing is believing' (Philo, 1996). The key message is that communication is a very demanding process and it is best to take an interactive approach (Mattelart and Mattelart, 1998). Continuous interaction leads to greater chances of successful communication than a simple or linear approach.

8.3.3 Links

The framework emphasises the importance of links – communities, networks and intermediaries (e.g. the media and campaigning groups) – in affecting policy change. Some of the current literature focuses explicitly on various types of networks, such as policy communities (Pross, 1986), policy streams (Kingdon, 1984), epistemic communities (Haas, 1991), and advocacy coalitions (Sabatier and Jenkins-Smith, 1999). Issues of trust, legitimacy, openness and formalization of networks have emerged as important issues in GDN work. ODI work reinforces existing theory about the role of translators and communicators (Gladwell, 2000). It seems that there is often an under-appreciation of the extent and ways that intermediary organization and networks impact on how formal policy guidance documents influence officials.

8.4 Lessons for evidence-based policy

Emerging results so far confirm this theory, indicating that research-based evidence is more likely to contribute to policy if:

1. it fits within the political and institutional limits and pressures of policy makers, and resonates with their ideological assumptions, or sufficient pressure is exerted to challenge those limits;
2. the evidence is credible and convincing, provides practical solutions to current policy problems, and is packaged to attract policy-makers interest;
3. researchers and policy makers share common networks, trust each other, honestly and openly represent the interests of all stakeholders and communicate effectively.

But these three conditions are rarely met in practice: although researchers can control the credibility of their evidence and can ensure they interact with and communicate well with policy makers, they often have limited capacity to influence the political context within which they work, especially in less democratic countries. Thus researchers need to work with a wider range of policy activists, including civil society organisations, and use the media if they wish to influence policy.

Some useful lessons about how to promote evidence-based policies are emerging from a review of over 50 cases from developing countries where research-based evidence did, or did not influence policy (Court and Young, 2003). First, it is important to understand the political context, nature of the evidence and the available mechanisms to communicate with policy makers. Second, there are some critical steps in the process. Third, some clear evidence is emerging about the most effective approaches. Some of these are summarised in Table 7.

Table 7 Lessons for promoting evidence-based policies

Understanding	Process	Approaches
Political Context: • Who are the policymakers? • Is there policymaker demand for new ideas? • What are the sources / strengths of resistance? • What is the policy-making process? • What are the opportunities and timing for input into formal processes?	• Get to know the policymakers, their agendas and the constraints they operate under. • Identify potential supporters and opponents. • Keep an eye on the horizon and prepare for opportunities in regular policy processes. • Look out for – and react to – unexpected policy windows.	• Work with the policy makers. • Seek commissions. • Line up research programmes with high-profile policy events. • Reserve resources to be able to move quickly to respond to policy windows. • Allow sufficient time & resources
Evidence: • What is the current theory? • What are the prevailing narratives? • How divergent is the new evidence? • What sort of evidence will convince policymakers?	• Establish credibility over the long term. • Provide practical solutions to problems. • Establish legitimacy. • Build a convincing case and present clear policy options. • Package new ideas in familiar theory or narratives. • Communicate effectively.	• Build up respected programmes of high-quality work. • Action-research and Pilot projects to demonstrate benefits of new approaches. • Use participatory approaches to help with legitimacy & implementation. • Clear strategy and resources for communication from start. • Real communication – “seeing is believing”.
Links: • Who are the key stakeholders in the policy discourse? • What links and networks exist between them? • Who are the intermediaries and what influence do they have? • Whose side are they on?	• Get to know the other stakeholders. • Establish a presence in existing networks. • Build coalitions with like-minded stakeholders. • Build new policy networks.	• Partnerships between researchers, policy makers and communities. • Identify key networkers and salesmen. • Use informal contacts.

8.5 Implications for food security policy in Southern Africa

The FFSSA has identified a wide range of high-level evidence-based policy options relevant to improving food security in the countries of Southern Africa. These relate to market-based economic development; social protection; holistic, livelihood-focused, approaches; and better regional integration. The Forum analysis and e-discussions have also identified a number of historical and political reasons why policy recommendations have not been adopted in the past, including neo-patrimonial governments, donor interference, and weak implementation systems. It has also identified how little analysis there has been in Southern Africa of the links and intermediaries between researchers or research-based evidence and the policy makers; of the distance between the new policy options and conceptual models of policymakers in the region (especially the over-emphasis on food availability compared to access to food); or of current food-security policy processes that research and analysis could feed into.

The FFSSA has brought together a community of researchers, practitioners and policymakers keen to address this issue. Box 11 lists the wide range of stakeholders with a role to play in strengthening food security in Southern Africa.

Box 11 Food Security in Southern Africa: Stakeholders

- **SADC** Food, Agriculture & Natural Resources Directorate; Logistics Advisory Unit; FANRPAN.
- **Parliamentary and governmental bodies** e.g. relevant parliamentary sub-committees; disaster preparedness, economic planning, agriculture and finance ministries.
- **Consortia** e.g. inter-agency food crisis task forces; National AIDS Councils.
- **Civil society** including civil society networks and NGOs.
- **Private sector** e.g. food processors, input suppliers, grain traders.
- **International NGOs** e.g. Oxfam, SCF, Care, Concern.
- **Donors**: e.g. DFID; EU; USAID.
- **UN agencies** e.g. WFP, UNICEF, OCHA, FAO, UNAIDS.
- **Monitoring networks** e.g. early warning systems FEWS-NET, vulnerability assessment committees and FIVMS.
- **Research organisations** and networks e.g. national economic and agricultural policy research institutes; HSRC SARPN; CIMMYT Southern Africa Economic Policy and Working Group.

There are a number of networks in the region with mandates appropriate to these activities. As well as the Forum for Food Security, these include the SADC FANRPAN and the SARPN amongst others. Box 12 lists suitable next steps for getting better policy both adopted and put into practice.

Box 12 Next steps for supporting effective policy action for food security in Southern Africa

- Agree effective policies for strengthening food security in Southern Africa;
- Identify broader range of **stakeholders** who should be involved in food security policy processes, including:

– '**champions**' for the new policy approaches within **national governments** and **operational organisations**;
– media and **other intermediaries** that can help to get the messages across;
– private sector
– 'missing stakeholders' e.g. Ministries of Health and National AIDS Councils

- Identify the **conceptual gap** between current policy-makers thinking, and the principles underlying the new policy options, and develop effective **communications strategies** (particularly in relation to the need to address *access* to food as well as food *supply*);
- Work with researchers, practitioners and policy makers within each country to develop clear evidence-based policy recommendations for **individual countries** and **socio-economic groups**;
- Develop campaigns to feed evidence-based policy recommendations into **key policy makers and policy processes** at country and regional level;
- Work with national policy makers and practitioners to implement **pilot projects** testing new policy options;
- Work with regional and international policy makers to promote better **regional and international policies**.

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9 Conclusions: Policy Options for Achieving Food Security in Southern Africa

9.1 Introduction

Evidence collected by the Forum for Food Security indicates that in many of the countries of Southern Africa, **all three components of food security – availability, access and utilisation - require addressing through more effective policy**. Food availability is by no means secure in the region, but access to food, through more secure livelihoods, is essential. So long as dramatic changes in food availability, resulting from changes in stocks and weaknesses in import impulses, can produce the kind of price hikes seen in 2001-03, then food security remains under threat. Utilisation issues are important and will become increasingly so because of the number of people affected by HIV/AIDS, although there are significant knowledge gaps at present.

Thus – to reiterate the increasingly accepted view - strengthening food security in Southern Africa requires securing livelihoods for the future -- protecting lives now is not enough. Therefore the overarching goal for achieving food security in Southern Africa could be re-specified as:

> "to reach a food norm **and** to develop internal structures that will enable societies to sustain the norm in the face of crises threatening to lower the achieved level of food consumption"
> (adapted from Oshaug, 1985:5–13 (emphasis added))

Given that moving along the continuum from lesser to greater degrees of market engagement is a central feature of economic development, this implies the emphasis must be on attention to market mechanisms, so that food is reliably available to buy at affordable prices for all social groups in Southern Africa. The central question is therefore, what are the most effective options from the policy "toolbox" for achieving food security through market-based economic development in the countries of Southern Africa today?

During 2001-2003, in many countries in Southern Africa national grain stocks had been run down and grain imports were slow to arrive, so that localised harvest shortfalls quickly resulted in three- and four-fold increases in food prices which, for the large number of vulnerable people in the region, spelled crisis. In the end, the donor and government response but equally importantly the response of the commercial sector and people's own "coping" strategies meant that large-scale famine-related deaths were avoided in 2002 and 2003 but unacceptable levels of chronic food insecurity remain.

For many of the countries of Southern Africa, this was the second major food crisis within the space of ten years. After the 1991-92 crisis, there were high hopes that new thinking on food security in the context of structural adjustment and market liberalisation to generate economic growth would make the countries and populations of the region less vulnerable to food crises in the future. So what went wrong? Why did a lesser drought in 2001-2003 threaten a more serious crisis?

From the Forum's review of evidence and analysis, we suggest the answer lies in the fact that, in the early twenty-first century, there is a set of systemic factors keeping many of the countries of Southern Africa on the edge of economic crisis: the failure of market liberalisation as originally conceptualised; chronic human vulnerability; weaknesses in

institutional accountability and governance; and weaknesses in regional integration and coordination, although the impact of these has been felt differently in different countries. Thus many of the countries of Southern Africa remain "on the edge of the table" and there cannot be a return to "business as usual" based on the economic development models that governments and donors have been using in the region over the last two decades. In particular, economic and agricultural growth rates have not been as high as was hoped since 1991/92 and the difficulties of market liberalisation in the region have been underestimated. The conventional promotion of liberalised competitive markets is currently misplaced in some sectors in Southern Africa.

Building on the examination of these systemic factors in the preceding Chapters, this Chapter highlights priority intervention areas, and policy options under each intervention area, for each component of food security, illustrated where relevant by examples of what has worked well in Southern Africa and elsewhere. For comparative purposes, a summary of current policies relating to food security in selected countries in Southern Africa recently prepared by FANRPAN is included at Annex 2. For a number of intervention areas, there are currently knowledge gaps on specific design issues which must be filled first: these are highlighted section by section below. Prioritisation, costing and sequencing are discussed briefly at the end.

How individual countries in the region may wish to work with these policy options is briefly discussed, although naturally this will need to be explored in more detail at country level. The Chapter concludes with some remarks about the implications of the Forum's findings for the content, sequencing and costing of rural development and food security strategies in the region.

This synthesis paper will be revised in the light of comments received from stakeholders; we particularly welcome comments, amplifications or further examples relating to the analysis and evidence presented in the paper. Please send comments to foodsecurity@odi.org.uk or via country consultations in Lesotho, Malawi, Mozambique, Zambia and Zimbabwe during March and April 2004.

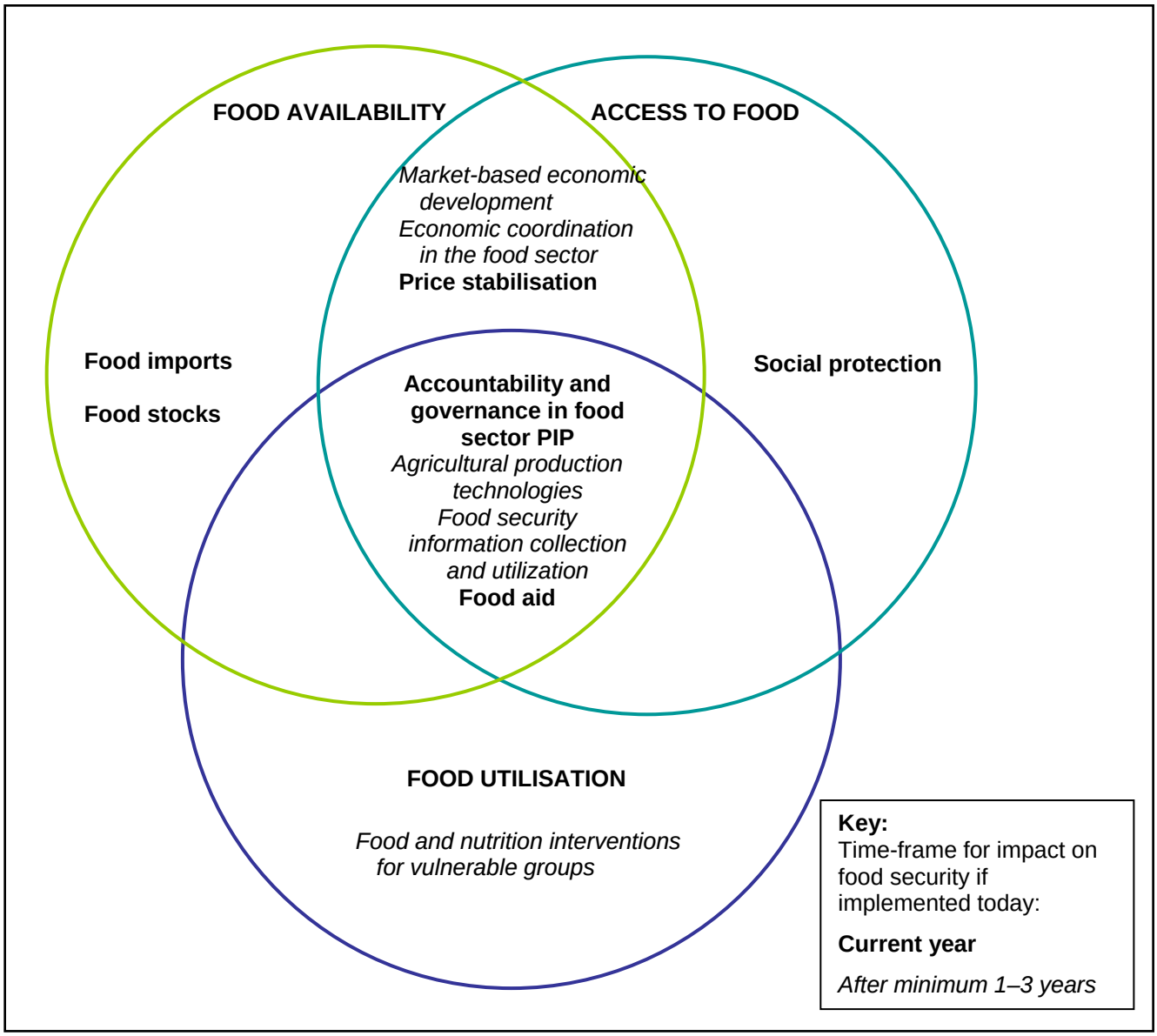
9.2 Policy priorities for building food security in Southern Africa

Figure 6 illustrates priority intervention areas for each component of food security, and indicates potential time-frame for impact of policies within each intervention area. Each specific policy area (summarised in Table 11) is discussed in turn below. The focus is on identifying short to medium term policies that provide non-market mechanisms to promote secure and low-cost food availability and access; and medium-long term economic and social policy that supports food availability and access through market-based economic growth.

We have concentrated on policy areas that fulfil the prioritisation criteria adopted by the DAC Network of Poverty Reduction (2003), namely:

- Relevant within 10 year time frame for context (trends) and policy options;
- Maximise poverty and food security impact;
- Implementable and sustainable;
- Operate at various levels, i.e. including those that might need intervention at international negotiating fora to enable successful intervention at local level (such as intervention within international trade negotiations in order to enable successful domestic agricultural diversification).

Figure 6 Policy priorities for building food security in Southern Africa



Further prioritisation of policy areas, for example according to the relative need for action on the three components of food security, is limited by inadequate data both on the comparative need for action on the three components in individual countries, and on the size of impact of different policy interventions on the three components. Most interventions impact on more than one component of food security and over both the short and longer term (through different transmission mechanisms). It is therefore difficult to pick out a phased list of priority interventions over time. Table 8 provides a very broad-brush perspective.

Table 8 Policy phases for building food security

Policy Goals	Requirements for Short/Medium Term Achievement (Policy purpose)	Requirements for Medium/Long Term Achievement (Policy purpose)
Food security : Secure & affordable access to food	Increased food self-sufficiency (household & national) with food delivery &/or productivity enhancing safety nets & humanitarian response	Increased household & national food market access (low & stable cost, secure, timely) through wider entitlements with (mainly) market based safety nets & humanitarian response
Poverty reduction: Real incomes of the poor increased & more secure, through low food costs, higher returns to labour, & safety nets.	Safety nets to increase/ secure real incomes & develop/ protect assets (see above)	Broad based growth with opportunities & wages for unskilled rural labour, low food prices, and safety net & humanitarian response as above
Rural economic growth: Increased levels of local economic activity, with stable income opportunities supporting poverty reduction & food security	N/A	Macro economic stability & low interest rates; growth in agric. & non agric. sectors tightening labour markets and raising real incomes with stable / affordable food prices.

Source: FFSSA Theme Paper 2

9.2.1 Choosing policy options at country level

It is important to note that the triggers, operational context and impact of the 2001–3 crisis varied significantly between countries (as was illustrated in Box 1). In hindsight, it appears that whilst there was a set of common systemic factors (poor economic growth, the HIV/AIDS pandemic, declining governance) increasing many countries' vulnerability to crisis, the specific crisis triggers and the operational context – and therefore the appropriate responses – were significantly different.

A set of criteria for identifying priorities for interventions at country level has been developed by IFPRI (2001) which is based on distinguishing the context and setting for pro-poor agricultural growth, and in particular six variables:

- national income
- liberalisation in market and trade policies
- agro-ecological potential for agriculture
- infrastructure including service provisions and market development
- labour abundance and wage levels
- empowerment amongst the poor

The urgent next step is to work on a country-by-country basis to identify priority food security policy actions needed for different social groups. Food security issues vary significantly between and within countries, districts, communities and households, so it is vital to identify the most vulnerable groups and to address their specific needs.
How individual countries in the region may wish to work with the various policy options discussed below will of course need to be explored in more detail at country level. Country interventions should as far as possible be integrated within national PRSPs, although

interventions – such as improving accountability in food sector institutions – that lie outside this framework must not be ignored and there are some important implications for changes to the PRSP process and focus itself (see Section 9.3.2 on policy processes and implementation).

9.3 Policy options at macro level

9.3.1 Pro-poor economic growth

Key actors	National governments
Supporting stakeholders	Private sector to respond to policy stimuli Donors to provide and technical assistance for policy design and pilot project
Design issues	Impact of HIV/AIDS on livelihoods Identify policy requirements for supporting agriculture-related RNFA

The Forum has used a model of market-based economic development that distinguishes growth drivers and growth supporters (see Chapter 5). Table 3 summarised our conclusions concerning the pro-poor growth and food security impacts of expansion in different economic sectors.

Sound and stable macro-economic conditions – however difficult to achieve - are a basic pre-requisite for getting out of the low level equilibrium trap that characterises many of the economies in Southern Africa, in order to generate market opportunities, access to resources to invest, reasonable returns from investment, and acceptable risks. These include:

- low and stable interest rates, low inflation, stable and realistic exchange rates (for example, very few business investments can provide a 40% rate of return to match the rate of interest in Malawi in 2003 resulting from the government budget deficit);
- good business environment: infrastructure (mobile phones and participatory rural road construction are examples of promising new and improved technologies and approaches);
- clear and enforceable property rights and contracts. This requires overcoming entrenched political and private interests, in order to end the onerous, petty business regulations and poor services which currently pose a serious and widespread problem across Africa according to Fafchamps et al (2001).

Sector specific policy options include:

Agriculture
If supply constraints can be overcome, then smallholder crop production (cereals, root crops and export crops) in medium and high potential areas, is one of the best drivers of growth. Specific policies to support agricultural growth are discussed in Section 9.4 below.

Rural non-farm activities
Non-farm activities play a critical role as growth supporters, sustaining and spreading the benefits of growth including to poorer households, (particularly if they include a high proportion of low skill jobs). Policy options for stimulating growth in RNFA include:

- investing in rural infrastructure to attract investment in tradeables;
- getting agriculture moving (see Section 9.4) in order to generate demand; and
- addressing problems with capital, information, skills and business networks, which can act as barriers to entry for poorer households, through micro-finance and business development services.

Industry
Even with several years of strong agricultural growth, domestic markets in individual Forum countries are unlikely to provide sufficient demand to stimulate rapid industrial growth. This will depend instead on either international exports (which is difficult in land-locked countries) or regional trade (see Section 9.4.5). Growth can be assisted by policies to overcome problems with low-level equilibrium trap.

Health and education
Worldwide, of all the underlying variables contributing to reduction in child malnutrition, good health environment and women's education have been estimated to account for a nearly 65% share (Runge et al, 2003). Education is often the link that breaks the self-reinforcing cycle of low income and no assets. It is particularly critical for women and girls, giving high payoffs in terms of economic productivity, lower fertility rates, and women's ability to improve the health and nutrition of their children. Thus maintaining investments in education and health is vital for both longer-term access to food and food utilisation (although we would add not sufficient on their own, without changes to improve availability and access to food). Amongst the most cost-effective options for reducing the negative impact of sickness on household income and gross domestic product are preventative health programmes, including school-based health services, immunisations, and access to safe drinking water. In Africa, programmes to combat HIV/AIDS are of course also imperative.

9.3.2 Policy processes and implementation

Key actors	National governments to ensure more open and accountable food sector policy processes and institutions
Supporting stakeholders	Civil society to represent needs of vulnerable groups Private sector to represent needs of commercial operators Donors to provide funding and technical assistance
Design issues	Identify current food security policy processes, including agencies and actors, into which research and analysis could feed Disseminate information within civil society to allow better-informed debate Develop ways to set standards for food security (and nutrition) and to monitor achievement Improve the effectiveness of Poverty Reduction Strategies, ensure that they embrace food security concerns, and form an effective basis for government-donor partnerships

Many of the problems in food security in Southern Africa appear to be political in nature. The adoption and implementation of policies (in general) appear to be strongly influenced by "patrimonial" tendencies at state level, rather than "bureaucratic" assessments of their effectiveness. In the case of food security, the interests of the most vulnerable are not well presented, either through formal political representation or through the national media.

More attention needs to be given to the limits to implementation, and to considering both the operational and political feasibility of alternative policy options, perhaps including political appraisal in the same way that gender and environmental appraisal are already routinely included. This is particularly important given the increased role suggested in Chapter 5 for governments to enable and support market development in the region.

Progress will require changes to ways that policies are made domestically, that donors operate, and in the relations between donors and governments – the aid relationship. An important challenge is to strengthen domestic mechanisms by which governments can be held to account for improving the welfare of its citizens in general, and for improving food security for vulnerable households in particular. How to do this may not be simple and clear, and almost always will need to be adapted to specific circumstances, but it is not impossible either. If this is ignored almost all other policy measures to build food security in Southern Africa are likely to be less effective.

Broad principles should include:

- Paying attention to the politics of policy processes at all levels — from CDFs and PRSPs through decentralisation and down to sector level policies, institutions and processes, and including donor as well as government institutions;
- Supporting reform of the political system as well as food sector institutions in support of greater openness and accountability; and,
- Developing clearer and more consistent narratives about food security and rural development to allow better-informed debate about choices.

Specific action could usefully focus on four main areas:

- Widening the range of actors included in making food policy, to include parliamentarians, civil society organisations and local NGOs, and the media;
- Finding ways in which the implementation of food policy can be monitored publicly and transparently, so that executive agencies may be held to account. This might include setting goals for the delivery of benefits to the disadvantaged and vulnerable, and monitoring to track their delivery;
- Reviewing the donor-government relationship to see how food security issues can be addressed more effectively within it. This could include developing internationally agreed systems of accountability for international agencies for their policy advice and conditionality; and,
- Specific review of PRSP processes to improve effectiveness, including political engagement, in addressing all three dimensions of food security.

9.4 Policy options for supporting food availability

9.4.1 Agricultural production

Key actors	National governments
Supporting stakeholders	National, regional and international ag research & extension Rural families & CSOs to respond to policy stimuli Donors to provide funding & technical assistance for policy design & pilot projects
Design issues	Impact of HIV/AIDS on agricultural production technologies

Lower cost, lower external input and less risky but more productive food crop technologies for agricultural intensification can contribute to making farming families' access to food more secure in short term and to stimulating national food availability and economic growth in long term through enabling smallholder crop production to be a growth driver. Specifics vary between agro-ecological zone, type of farming family, and policy and institutional environment; here we set out some broad principles.

`Sustainable intensification' to permit increased returns at existing producer prices is particularly important in the large areas of Southern Africa where agricultural growth depends on intensification rather than extensification. Examples include facilitiating greater use of organic fertiliser produced on farm, cheaper inorganic fertiliser, and promotion of irrigation (mainly small-scale except in Zambia). There is useful experience from Bangladesh, where farmers have continued to make money despite consumer rice price levels falling to half their levels of twenty years ago, by improving their input-output ratios.

Appropriate agricultural technologies are required for a wider range of crops than at present, in order to reduce production risk for farming families, improve nutrition, and over the medium-longer term act as complementary drivers and supporters of economic growth.

More recently, the identification of appropriate agricultural technologies for ameliorating the debilitating effects of HIV/AIDS on smallholder crop production has become more urgent. These are likely to take the form of labour-saving technologies and crops such as root crops and fruit trees.

9.4.2 Economic coordination in the food sector

Key actors	National governments
Supporting stakeholders	Private sector, farmer organisations to respond to policy stimuli Donors through funding of pilot projects, research on design
Design issues	Identify sustainable institutional models for delivery of coordinated services to farmers to support increased smallholder crop production. Likely to be around farmer organisations, with NGOs. Strengthen Ministries of Agriculture, which are weak in all Forum countries, and redefine role in economic coordination and in context of decentralisation. Likely to be around delivery of core coordination and regulation functions in smallholder agriculture, possibly through other service providers.

Over and above the technology issues discussed above, greater investment in the food sector and associated economic coordination activities by a wider range of stakeholders is needed in order to overcome a range of risks: production risk, price risk, economic coordination risks, and risks of opportunism. Policies need to pay much greater attention to non-market coordination to address market failures: globally there are few if any significant success stories for irrigated and non-irrigated agricultural transformation in the 20th century without some form of government coordination and risk-bearing investment for market development (which is critical for growth in food production in urban and industrial development, in stabilisation of food availability and prices).

Table 9 illustrates the returns in terms of agricultural GDP to government investment in different sectors during the Asian agricultural transformation. However, it should be recognised that many of the success stories have been in inherently more favourable conditions than those in many parts of the Forum countries. Given the serious governance

issues facing many of countries of Southern Africa, one of the major challenges is to develop new models for government intervention to provide an enabling environment for substantial central non-market coordination and risk bearing investment by a range of actors to kick start markets and thus growth in poor rural areas. This includes research and extension, input supply, credit, and output markets.

Table 9 Returns in agricultural GDP (Rps per Rps spending) by investment and period

	1960s	1970s	1980s	1990s
Roads	3.07	3.48	2.92	4.29
Education	1.20	1.49	0.95	1.26
Irrigation Investment	0.51	1.06	1.02	0.07
Irrigation Subsidies	0.69	1.20	-1.18	0.24
Fertiliser Subsidies	4.51	1.26	0.88	-0.65
Power Subsidies	2.26	1.29	0.30	0.07
Credit Subsidies	2.05	0.62	0.08	-0.20
HYV Agric. R&D	3.11	1.89	0.39	n.s.

Source: FFSSA Theme Paper 2

These are likely to be through *new* transparent institutional arrangements involving rural people, farmer organisations, private businesses, NGOs and donors, rather than a return to the parastatals which were a specific `institutional fix' that worked for a time in the 1970s and 1980s. The liberalisation which has succeeded this has also failed to address key low level equilibrium trap and coordination problems in poor rural areas, not just in Southern Africa but also in other areas of the world.

Policies also need to promote stable and robust institutions to reduce investors' vulnerability to opportunities by other actors in the supply chain and by the state and politically powerful rent seekers.

There are important practical difficulties (a number of knowledge gaps impede effective policy design, as identified at the start of this section) but these should not preclude a search for their resolution.

There is no blue-print for what will work: much will be location specific, with suitable approaches varying at different levels and in relation to different actors. Some examples of recent success stories in Southern Africa for reducing economic coordination risks include start up programmes to link rural retail enterprises with appropriate wholesalers, such as the Care Agent programme for agricultural input stockists in Zimbabwe, or the original version of the Malawi Starter Pack programme. Farmer organisations to promote interlocking of markets for greater economic coordination. Credit recovery mechanisms that do not tie production activities into high cost marketing structures. Examples of interventions to reduce risks of opportunism include, at the micro level, adoption of recognised grades and standards in input and output markets; promulgation of good practice in awarding of licences and contracts. At the macro level, publicising official food import plans in advance, creating independent strategic grain reserves.

Scaling up coordination will require broader improvements in governance and accountability and institutional efficiency. There is an important role for direct involvement by farmers' associations at local level and policy pressure at national level.

9.4.3 Price stabilisation

Key actors	National governments, coordinated through SADC, Comesa
Supporting stakeholders	Private sector to respond to policy stimuli Donors to fund research on policy design, pilot projects
Design issues	Cross price elasticities of demand for food compared to health and education (Eldridge 2003:10 (33)) Characteristics and consequences of expenditure switching Eldridge (2003: 33) compared to consumption rationing and other forms of coping strategy such as asset sales, wild food gathering Identify workable systems for coordinating and financing more stable national food supplies and prices.

We commend the policy of influencing the mean level of food prices in Southern Africa over the short to medium term, when fluctuation in food prices due to variations in food availability and failures in markets continues to have such a significant impact on household's access to food, as one of the more effective policy packages for promoting growth and poverty reduction. Over the longer term, improvements in agricultural production and the development of market institutions might be expected to reduce the need for this kind of intervention.

Stabilising food prices is traditionally achieved either through subsidising consumer prices (e.g. through state shops in poor areas), and/or raising producer prices by various means, and depends also on the holding of food stocks (see below). Both these approaches have significant problems of over-inclusion, put strain on government budgets and the fiscal position in general, and require timely and complex technical management decisions. However, whilst the historical record of state intervention in Africa was often bad, it was not universally bad, and one can also question the record and potential of systems where the state does not play a role. More research is needed in this area.

One alternative which is being promoted based on Malawi experience is the use of free input programmes (for more on this, see Levy, 2003). Proponents suggest these have the potential to be:

- sufficient scale to have strong positive impact on food security via maize markets and prices. Scale includes reaching large number of beneficiaries each year throughout the region.
- low-cost and efficient. Free inputs are more so than inputs for work, or subsidies for fertiliser, credit, and/or consumer prices.
- promotes diversification of food and cash crops. Free inputs can do this easily by including appropriate inputs in packs.
- avoids crowding out the private sector. Free inputs are too small to do this
- Poverty targeted or poverty neutral

9.4.4 Food stocks

Key actors	National governments, coordinated through SADC
Supporting stakeholders	Private sector incl SAFEX Donors to fund research on policy design and technical assistance
Design issues	

State holding of stocks addresses very real current problems in Southern Africa related to difficulties of assuring timely private sector importation of food and the impact of this on food availability and food prices. Therefore it is likely to be appropriate for some time, although not necessarily so dependent on the national strategic grain reserves of the past: there are new ways of working that have considerable potential, including the use of futures markets and options, and more open and accountable management of the SGRs that remain.

It is difficult to see how the kind of large-scale inter-year storage needed in Southern Africa over the short-medium term could become attractive for private sector investment in the short term without substantial financial incentives from the state. The states' choices of how far to support inter-year food storage depend on transport, logistics, economic and political considerations. Following concerns regarding the management of Malawi's strategic grain reserve during the 2001-03 food crisis (which auditors ultimately concluded were the result of poor management arising from appointments not based on merit (ERC/Ernst &Young, 2003), Malawi is currently experimenting with increasing openness and accountability in its SGR management through various interventions including the appointment of a management Board representing a wider range of food security stakeholders.

Over the longer term, policies to support market-based economic development, including building market institutions, might be expected to reduce the need for state food stocks.

9.4.5 Food imports

Key actors	National governments, SADC for coordination and integration
Supporting stakeholders	Donors for technical assistance; private sector
Design issues	Identify workable systems for state financing of imports and of coordinated import systems.

Given the high cost of importing grain into inland areas of Southern Africa, the region needs some of its countries to be net food surplus producers on a regular basis in order to ensure food availability at the regional level. In any case, it has been argued that production for within-region trade is the best bet for similar reasons: production for international trade is only feasible for regions at the forefront of technology and infrastructure. There is substantial complementarity in food production and food consumption between most Southern African countries. Maize harvest co-variance is significant between South Africa- Zambia-Zimbabwe; and between Malawi-Mozambique-Tanzania; this implies intra-regional trade to cover for production shortfalls would need to be *between* these two blocks.

There are more opportunities for intra-regional trade to even out fluctuations in harvests between "next-nearest" neighbours; data on the direction of cereals trade flows within Southern Africa show that this is indeed what happens in practice. Zimbabwe, in particular, used to fulfil the role of regional surplus producer, but – if earlier experience with resettlement in Zimbabwe is any guide – it may be 5 -10 years before production in current resettlement areas reaches former levels. Quantities traded by small-scale opportunistic traders are significant locally, for example between Northern Mozambique and Malawi, and were vital in the response to the 2001-03 food crisis. But on a broader scale they are limited by inconsistent policies and cumbersome regulations (and by the private sector's periodic attempts to benefit from price volatility and differentials between countries).

If there were fewer barriers to intra-regional trade and lower transport costs, it may be that most of the harvest deficits experienced in the five Forum focus countries could be covered by imports from South Africa, Tanzania, northern Mozambique, and possibly Kenya. How then can net food deficit countries `pay' net food surplus producers to encourage them to sustain production?

The policy challenges for increased regional trade are:

- reducing policy variability within and between seasons concerning cross-border trade, to improve incentives to traders and producers;
- harmonising food trade policies and regimes between countries, to remove the "small country" constraint;
- specific modalities for food deficit countries to encourage/compensate food surplus countries for sustaining production beyond national food self-sufficiency needs
- institutional arrangements to reduce economic coordination risks and risks of opportunism at regional level, inter alia by:
    - reducing transport costs;
    - simplifying tariff structures and reducing non-tariff barriers to trade (paperwork, payment systems, etc);
    - improving information flow through harmonisation of standards and grade, publication of tariffs, publishing market data;
    - clarifying application trade regimes and regulations in situations of overlapping trade agreements.

Policy changes to encourage free private trade in staple foods will have to be coordinated through SADC and Comesa in order to overcome the coordination challenge (all countries must jump at once). But note that agricultural trade liberalisation has lagged behind liberalisation of trade in other sectors in almost all regional trade agreements around the world (Maasdorp, 1998).

9.4.6 Food aid

Key actors	National governments, international humanitarian agencies
Supporting stakeholders	NGOs and CSOs to provide information, assist distribution Donors to fund assistance at international and national levels; research on market impacts, targeting
Design issues	Impact of food aid on regional, national food markets Impact of HIV/AIDS on humanitarian needs Alternative channels for supporting entitlements

Food aid has some potential to improve short-term availability, access and utilisation of food but it is no substitute for long-term pro-poor economic growth and appropriate social protection. In any case, during the last two major food crises in Southern Africa it has provided on average less than 15% of household food needs (Eldridge, 2003).

Derived from experience during the 1991-92 and 2001-03 food crises in Southern Africa, the Forum has concluded that policy towards food aid in the region could beneficially reduce the use of internationally procured in-kind food aid, which is expensive, can be inappropriate, and runs a high risk of disrupting national food markets, in favour of:

- importing food from within the region and supporting distribution through regular market channels;
- supporting the entitlements of those vulnerable groups otherwise unable to access food through regular market channels (see below on social protection)
- support for non-food needs, particularly given the increasing evidence of expenditure switching as a coping strategy (Eldridge, 2003:33)
- targeting the specific food and non-food needs of HIV/AIDS victims.

SADC Ministers responsible for food security have been advised recently to conduct rigorous market analyses before deciding the extent and nature of food aid that is appropriate in any given season, and cautioned against blanket use of in-kind food aid in the Southern Africa region (SADC REWU, 2003 (51)). A WFP analysis of how concepts of social protection and safety nets fit within their policies, programme categories and activities will take place in 2004.

9.5 Policy options for supporting food access

9.5.1 Building sustainable livelihoods

Key actors	National governments
Supporting stakeholders	National, regional and international ag research & extension Private sector, rural families & CSOs to respond to policy stimuli Donors to provide and technical assistance for policy design and pilot project
Design issues	Impact of HIV/AIDS on agricultural production, other livelihoods components Identify models for effective economic coordination in thin markets Identify policy requirements for supporting agriculture-related RNFA

People's access or "entitlement" to food arise from their own food production, from transfers (see below) but also critically from selling their produce or labour to generate cash to purchase food. Many of the countries of Southern Africa face a "double whammy" of extensive poverty and poorly functioning markets which serve to de-link food availability and access. Increasing food availability nationally or regionally will not increase food security for people and groups without entitlements to that food, hence the importance of building secure livelihoods in order to protect and expand entitlements.

This requires policy action relating to three areas already discussed above: market-based economic development (stimulating expansion of growth drivers and supporters, including both (diversified) agriculture and RNFA); economic coordination in the food sector, to build effective market institutions to reduce risks to households as both sellers and purchasers; and agricultural technologies to reduce production risk. An example of a two-pronged approach being recommended for Malawi is given in Box 13.

Box 13 Food security in Malawi: a two-pronged strategy

A two-pronged approach to making adequate food available to buy at affordable prices has recently been recommended for Malawi based on analysis of four years of rural surveys. Firstly, free inputs programmes because, provided they are on near-universal scale, they increase supply and reduce demand pressure sufficiently to keep prices in check. Secondly, increasing opportunities for developing rural households' livelihoods: such as agricultural piece work; off-farm activities; cash crops that do not displace food crops, e.g. through inter cropping; or livestock.

Source: (Levy, 2003: 9)

9.5.2 Social protection

Key actors	National governments, SADC for coordination
Supporting stakeholders	NGOs and CSOs to provide information for targeting, assistance with distribution Donors to fund research on policy design, pilot projects
Design issues	Impact of HIV/AIDS Characteristics and consequences of expenditure switching compared to consumption rationing and other forms of coping strategy such as asset sales, wild food gathering (Eldridge, 2003: 33) Criteria for selection of targeted transfers: What is robust and at what stage in system does it break down therefore ways round it; coverage; admin cost

If markets are not functioning effectively, as the 2001–3 crisis demonstrated they are not in many areas of Southern Africa, short to medium term policy should aim to compensate for market failure rather than relying on absent markets, by providing alternative, non-market mechanisms to promote secure and low-cost food availability and access. Social protection has an important role to play in this. Over the longer term, it has a role to play in maintaining access for identified vulnerable groups in ways which support rather than undermine markets (there can be considerable synergies between social protection and pro-poor growth). In view of the extent of vulnerability in Southern Africa, and the breakdown of traditional community social protection systems, access to social protection must be broadened and deepened across the region.

A three-step sequential process can overcome some of the social protection policy trade-offs and dilemmas outlined in Chapter 7 that face the countries of Southern Africa:

1. identification of the chronic and transitory food security problems faced by the poor;
2. identification of a range of desirable or ideal social protection interventions; and
3. selection of a set of fiscally affordable and administratively feasible interventions from the toolbox of social protection options available.

What sorts of activities might be in a social protection toolbox for the countries of Southern Africa? Existing and prospective activities can be divided into three main types: measures to reduce risk; measure to mitigate risk; and measures to enable risk coping. The appropriateness and applicability of these are considered in Table 10. Each type of activity will be appropriate for different households or individuals at different times and depends on the capacity of implementing agents.

Table 10 Social protection `toolbox' for Southern Africa

	Activity	Appropriate	Advantages	Disadvantages	Feasible if
Risk Reduction	Fertiliser and seed subsidies and handouts	For households with labour capacity that have been pushed back into subsistence production because of a lack of market access, inputs, etc.	Can be part of exit strategy from other forms of transfer (such as food distribution). Can be appropriate way to encourage certain crops. Does not encourage dependency.	Lack of choice for recipients. Inputs subsidies in the form of loans can be administratively costly to recoup. Inputs can find their way across national borders if subsidies result in significantly different prices.	
	National Food Security Agency	Where functions that are in the public interest will not be carried out by the private sector.			
Risk Mitigation	Weather Insurance against rainfall deficits	Where crop failure insurance acts as a disincentive to sustained effort.	Eliminates moral hazard	Enormous covariant risk (unless insurance risk is carried at international instead of regional level)	Insurance risk is carried by international insurers (risk is not co-variant at international level).
	National Grain Reserves	Offer buffer stock function	Suitable for countries that are land-locked where the costs of importing food are especially high	Reserves are unlikely to succeed if they are always expected to cover their costs.	Can be managed according to principles of accountability, transparency and cost-effectiveness.
	Regional Grain Reserves		Stimulate intra-regional trade(?)	Danger of covariant risk because countries are likely to draw down on the reserve at the same time	
Risk Coping	Food price subsidies				
	Cash transfers, for example social pensions for elderly and orphans		Provide safety net for those unable to engage in productive economy but can also be used for investment in the productive economy. Give recipients the opportunity to exercise choice.	Governments and donors reluctant to fund recurrent budget lines.	Sufficient financial and administrative capacity, especially if recurrent expenditure.
	School feeding and food-for-education				
	Nutritional support to AIDS-affected families				
	Public works programmes	When recipients are able to work	Avoids dependency. Can be self-targeting and enable construction or maintenance of public or community assets and / or enable training or development of skills.	Self-targeting throws up ethical questions about payment of lower than market-rate wages or of less desirable food (e.g. yellow maize). Inappropriate for chronically vulnerable households without labour power.	

9.6 Food security information collection and utilisation

Key actors	SADC for regional coordination; national governments for information collection and analysis
Supporting stakeholders	NGOs and CSOs for information collection and analysis Donors for funding and technical assistance
Design issues	Impact of HIV/AIDS on livelihoods Characteristics and consequences of expenditure switching compared to consumption rationing and other forms of coping strategy e.g. asset sales, wild food gathering (Eldridge, 2003: 33)

Gaps in the collection and utilisation of information on food availability and access in the countries of Southern Africa have been identified as a significant factor contributing to inadequate understanding of the scale, potential impacts and appropriate response to the 2001-03 food crisis.

The national Early Warning Systems that are coordinated at SADC level provide broadly adequate information on the hazards likely to affect food availability. However the systems for the collection of information on livelihoods – and thus the ability to predict the impact of hazards on access to food by different social groups – are still under development under the auspices of the SADC FANR VAC and associated national VACs and are likely to continue to need support for some time to come.

In particular, work needs to completed to incorporate the effect of HIV/AIDS in assessment, targeting and response, and on implementing the adapted version of the food economy approach that is being used in a way which permits comparative assessments between geographical and groups (SADC, 2002).

Over and above this, disaster preparedness, emergency response and long-term planning require overhaul in many countries in the region (Holloway, 2003).

9.7 Implications for current policy agenda

Market intervention and market liberalisation policies have both failed, in different ways, to address fundamental coordination problems in market development at national and regional level in Southern Africa over the last 40 years. These failures can be attributed in part at least to a certain degree of naivety about the weaknesses of government and of markets. Looking forward we now have a better understanding of these weaknesses, and of ways in which they might be addressed. However the task is in other ways more difficult than it was twenty or thirty years ago as there is more pressure on limited natural resources, the global environment is perhaps more difficult, and there are severe challenges from the impacts of HIV/AIDS. These difficulties should not, however, be an excuse for inaction: the 2001-03 food crisis in Southern Africa must be a stimulus to concerted and committed action to learn from the lessons of the past to develop and implement consistent policies that will support development of the fundamentals of a working economy in the region. This will require, inter alia, longer-term investment in institution building and a willingness to radically rethink current market liberalisation policies and consider costly interventions and investments.

In particular, the Forum findings indicate effective implementation of policies must receive greater emphasis in the region: efforts to build food security are currently hampered by serious implementation constraints. These relate to accountability and governance in food

sector policies, institutions and processes. Policy consistency and openness is critical, particularly in relation to macro variables (interest rates, etc), food import plans, and overall standards and grades for food and agricultural produce and imports.

Turning to the appropriate focus for scarce public expenditure, the list is rather long:

- Infrastructure in support of market development at national and regional level: roads, communications, etc – capitalising on opportunities presented by new technologies and also by community contributions to construction, management and maintenance;
- Health and education, given the critical role this plays in supporting nutrition, and the increasing needs within the region arising from the HIV/AIDS pandemic – community contributions have the potential to be significant here too;
- Enabling environment for (not direct involvement in) non-market coordination by NGOs, CSOs, farmer organisations and a range of other actors at national and regional level. This is closely related to the need for policy consistency at macro level that was highlighted above;
- Social protection to support entitlements of the key vulnerable groups in Southern Africa;
- In the short term, food price stabilisation through subsidisation and stock holding, until the benefits of improved economic coordination in food markets begin to be felt. This does not necessarily imply the use of the parastatal models common in the 1970s and 1980s: alternatives include free inputs programmes, use of futures markets, and contracting out the operation of national stocks to professional managers with clear Terms of Reference. There may well be other options: further research is needed on lessons from other regions and on transition arrangements and exit criteria.

The significant funding requirements and emphasis on policy consistency are worrying, given the trends at global level. Funding for rural development has fallen by two thirds in ten years (IFAD, 2001:41); the rural development strategies of major donors such as the EU, FAO, IFAD and World Bank do not present a consistent policy narrative[29]; and PRSPs – currently the major vehicle for development policy at country level in most countries in Southern Africa – are often weak on the specifics of policy for rural development and food security.

The hope must be that over the coming year and beyond, the wide range of stakeholders that have the potential for contributing to the design and implementation of the policies that are needed across the broad range of sectors in order to build food security in Southern Africa, are willing and able to deliver.

9.7.1 Cost effectiveness and exit strategies

The costs of *increased* government and donor investments in support of market-based economic growth and food security should be set against the human, economic and financial costs of continuing poverty (and safety nets) and sporadic relief. In the case of the 2001-03 food crisis, the cost of the response can be estimated to have exceeded US $ 1.5 billion, equivalent to 70% of total ODA to the region in 1998 (World Bank, 2002).

[29] For more on this, see Maxwell (2003).

Looking ahead, it is appropriate to identify exit criteria (for which indicators need to be developed) to establish when particular interventions can be scaled down. The following list is an adaptation of one which first appeared in Levy (2003):

- increase in smallholder purchasing power so that adequate numbers of farmers can buy inputs for producing sufficient food domestically;
- markets for seed and fertiliser developed, providing products small farmers need (small packs, appropriate varieties) at right place and time;
- food crops diversified in maize dependent areas, which are the ones worst affected by food insecurity;
- maize imports by private traders increased, by reducing barriers to cross-border trade so imported maize is from neighbouring countries and thus affordable to rural consumers.

9.8 Implications for analysis and policy design

The Forum for Food Security in Southern Africa has concluded that there are three areas in which further analysis and policy design is critical in order to build food security in Southern Africa:

1. **How to build effective markets** on which to base economic growth and development, both generally and for the agricultural and rural sectors. The scale of fluctuations in food prices in the region cannot be allowed to continue. The problems of economic co-ordination necessary to get markets working better have proved more difficult than expected. They arise at regional level, in deciding how economic integration can proceed. But more importantly they arise at the level of national and local markets, where private entrepreneurs have been reluctant to supply inputs, financial services and to buy up produce.
2. There are also important questions about the policy specifics for **getting the economies of the region moving**. Most commentators argue that it is necessary to get agriculture moving, and, if growth is to reduce poverty, that much of agricultural growth come from smallholdings and related RNFA. Thinking amongst policy-makers and development specialists on how to do this is in flux. For example, can (very) small farms survive in a more competitive world of more centralised supply chains? To what extent can the rural non-farm economy create jobs and incomes, and to what extent can this sector grow independently of the farm economy? What technology should be developed to support agricultural production? And, to what extent can the agricultural economy grow without having a vibrant urban economy built on manufacturing, services and mining to constitute a demand for increased production? Furthermore, the specific policy incentives required for different enterprises raise many questions. The devil may lie in the detail, but this merely serves to accentuate the need for work to be done to explore such details.
3. **Where best to target public expenditure**? Setting the public sector tasks that are feasible matters. In particular, priorities have to be set when there are apparently increasing demands on scarce public funds, including the pressing needs for social protection mechanisms for the poor who suffer badly from food and other crises.

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Table 11 Summary of policy options for strengthening food security in Southern Africa

	PURPOSE	OUTPUTS	ACTIVITIES	ASSUMPTIONS
1	FOOD AVAILABLITY			
1.1	*Information and response:*			
1.1.1	Improve early warning systems	Improve monitoring of negative movements in national food availability and prices	Refine + revitalise national + regional EWS to track imports + stocks as well as season + production	Accurate EWS information on all aspects of food availability is key to identifying crisis
1.1.2	Improve disaster preparedness	Improve response to negative movements in national food availability and prices	Re-operationalise SADC Regional Disaster Management Technical Committee	Regional coordination can play a key role in disaster mitigation (cf. 1991–2)
			Re-vitalise govt + donor disaster preparedness arrangements	Ability to act on EWS information received is key to averting crisis
1.2	*Domestic production:*			
1.2.1	Increase total production (tonnes)		Invest in economic coordination to provide incentives thru' more reliable input and output markets	Unreliable input+output markets are major disincentive to increasing production beyond subsistence level
			Disseminate appropriate ag. technologies e.g. conservation tillage, micro-irrigation	
1.2.2	Reduce fluctuations in production (between seasons)		Disseminate appropriate ag. technologies e.g. conservation tillage, micro-irrigation	
1.2.3	Increase sustainability of production (medium-long term)		Invest in economic coordination to support more reliable input markets	
			Disseminate appropriate ag. technologies e.g. conservation tillage, micro-irrigation	
1.2.4	Diversify production (range of crops)		Invest in economic coordination to support reliable input and output markets for wider range of crops	Diversified crop production increases resilience
			Disseminate information+advice for wider range of crops	
1.3	*Commercial imports:*			
1.3.1	Increase commercial imports esp. from intra-regional trade between 'next-nearest' neighbours + regional blocks	Reduce policy+regulatory disincentives to commercial imports	Reduce non-tariff barriers to intra-regional trade	1. Protects from international price risks, reduces overland transport costs, provides incentives to farmers, saves FX at regional level; 2. Domestic+regional political constraints are not insurmountable
			Invest in intra-regional transport infrastructure	
			Reduce overlap and conflict in reg+intl trade agreements	

	PURPOSE	OUTPUTS	ACTIVITIES	ASSUMPTIONS
1.4	*Stocks:*			
1.4.1	Review contribution of national public SGRs to food security	Agree role+appropriate size of national SGRs	Agree objectives of SGRs within each country wrt national producers and consumers	National public interest is unlikely to met entirely by commercial imports
			Identify appropriate size of national SGRs to meet specified objectives	National public SGRs beyond minimal contingency requirement may be indicated
1.4.2	Reduce leakages in national public SGRs	Strengthen accountability in SGRs	Create autonomous managing agencies for SGRs	
			Agree published operating, reporting standards for SGRs	
1.4.3	Complement national public SGRs with quasi stocks	Identify appropriate contribution of futures+options trades to national food security planning	Put in place financial arrangements for necessary trades on SAFEX	Futures+options trades can reduce requirement for national public grain reserves
1.5	*Food aid:*			
1.5.1	Reduce in-kind international food aid		Increase share of support going to other measures for increasing food availability (as above) & increasing access to food (see below)	In practice, internationally procured in-kind food aid runs a high risk of disrupting national food markets
			Increase share of residual int. hum. assistance going to non-food needs	Non food needs have been inadequately addressed by int. hum assistance to date
			Increase share of residual food aid procured regionally	Internationally procured food aid is higher cost+can be inappropriate e.g. GM maize
			Pay greater attention to the specific needs of PLWA in food aid planning	PLWA have important needs wrt physical access, type of food, and amount of food
2	ACCESS TO FOOD:			
2.1	*Information and response:*			
	Improve vulnerability assessments	Improve tracking of changes in vulnerability amongst different groups	Incorporate ‘vulnerability’ concept more widely into regional and national vulnerability assessment systems	Food security depends on access to food as much as food availability
	Improve disaster preparedness	Improve response to negative movements in vulnerability amongst different groups	As disaster preparedness above	
2.2	*Household production*			
	As domestic production above		As domestic production above	
2.3	*Household purchases*			
	Increase level+reliablity of real incomes for food insecure households	Stimulate pro-poor urban and industrial growth	Stable macro-economic policies to provide incentive to private sector investment	Will require sector-specific policy fine-tuning

	PURPOSE	OUTPUTS	ACTIVITIES	ASSUMPTIONS
			Promote investment in market infrastructure (roads, communications)	
			Review property rights and contract law to ensure clear+enforceable	
		Stimulate pro-poor agricultural and RNFE growth	Review land rights to ensure clear, transferable access to land	Will require sector-specific policy fine-tuning
			Invest in economic coordination involving a wide range of stakeholders to provide more reliable input and output markets	
			Support low-input ag. technologies and appropriate extension	Low labour ag. technologies important in light of HIV/AIDS
		Facilitate livelihood diversification	Consider investments in physical infrastructure such as roads+electricity	Will require sector-specific policy fine-tuning
			Develop policies to facilitate appropriate intra-regional migration including efficient transfer of remittances	
2.4	*Other food receipts*			
2.4.1	Improve effectiveness of formal channels	Increase effectiveness of food aid	See food aid above	
		Broaden access to social protection+make it more effective	Improve targeting+reduce political mediation e.g. through use of cash transfers, vouchers, etc	Wider and longer term social protection needed in Southern Africa.
			Public works programmes which build market-integrating infrastructure	Soc. prot. can meet immediate food needs in ways which support pro-poor economic growth in the long term.
			School feeding schemes which also transfer skills for economic diversification	
2.4.2	Compensate for breakdown in informal channels	Effective alternatives to traditional community social protection systems	Targeted transfers to elderly carers of AIDS orphans	
3	FOOD UTILISATION:			
3.1	*Cooking practices*		?? Awareness campaigns; avail + access	
3.2	*Beliefs and eating habits*		??? Awareness campaigns; avail+ access	
3.3	*Hygiene and sanitation*		Infrastructure at hh, community+nat. levels, awareness campaigns	
3.4	*Health*		???? Inc HIV/AIDS	
			Conclusions on need for micro-nutrients	
4	POLICY ENVIRONMENT:			
4.1	*Policy environment:*			

	PURPOSE	OUTPUTS	ACTIVITIES	ASSUMPTIONS
	Improve policy environment for strengthening food security	Contribution to overall review of generic donor-government aid relationship	Review purpose of donor conditionality+impact on food security	The nature of the generic relationship between governments and aid donors can impede policy implementation, incl. wrt food security
			Review use of PRSPs+CDFs as channels for government+donor funding for food security	The current reliance on PRSPs+CDFs to channel funds may impede aid effectiveness, incl. wrt food security
			See Food aid re: int. hum assistance	
		Review areas in which action is necessary in order to build food security	Amongst others, consider support for increasing accountability at all levels from national food sector institutions to rural political structures	Political accountability is critical for strengthening food security
		Review content of PRSPs wrt food security	Review PRSPs to ensure all aspects of food security (availability, access, utilisation) are addressed	
			Develop campaigns to disseminate accessible information about appropriate conceptual models for addressing food security in Southern Africa	
4.2	*Stakeholders*:			
	Increase contribution of all relevant stakeholders to policy making+implementation	Wide range of stakeholders incl. CSOs+media work together with govt to build food security	Increase knowledge of links and intermediaries in food sector in Southern Africa	Important for national political systems to make food security decisions that reflect the needs of a wide range of stakeholders
			Identify channels for stakeholders to contribute effectively to policy making+implementation	

Annex 1 Data Summary

This Annex contains summarised data relating to the main themes considered by the Forum for Food Security in Southern Africa.

Malnutrition

Table A 1Population ('000s)

Country	1980	1990	2000
Lesotho	1,362	1,682	2,035
Malawi	6,183	8,507	10,311
Mozambique	12,095	14,151	17,691
Zambia	5,738	7,784	10,089
Zimbabwe	7,133	10,241	12,627

Source: World Development Indicators 2002

Table A 2Undernourishment (% of population)

Country	1990–2	1998–2000
Lesotho	27	26
Malawi	49	33
Mozambique	69	55
Zambia	45	50
Zimbabwe	43	38
Low-income average*	35	34

Source: FAO (2002) The State of Food Insecurity in the World 2002. Available at: http://www.fao.org/sof/sofi/index_en.htm

Table A 3Child undernourishment (% of children under 5 years)

Country	Most recent estimate, 1990–2000
Lesotho	16
Malawi	25
Mozambique	26
Zambia	25
Zimbabwe	13
Low-income average*	.

Source: FAO (2002), The State of Food Insecurity in the World 2002. Available at: http://www.fao.org/sof/sofi/index_en.htm

Notes: *Low-income average is the unweighted mean of all low-income countries, as defined by the World Bank in 2002, for which data are available. The precise cut-off point for low-income countries in this year was a GNP per capita of $755 (at market exchange rates).

Data from the World Development Indicators for 1980 indicates the average of 1979-81; data for 1990 indicates the average of 1989-91; data for 2000 indicates the average of 1998-2000. Exceptions are GDP per capita (PPP US$) and population, which refer to the exact years.

Governance and accountability

Table A 4Corruption Perceptions Index (higher values indicate less corruption)

Country	2000	2002
Lesotho	.	.
Malawi	4.1	2.9
Mozambique	2.2	.
Zambia	3.4	2.6
Zimbabwe	3.0	2.7
Low-income average	2.7	2.4

Source: Transparency International

Notes: The TI Corruption Perceptions Index (CPI) ranks 133 countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, drawing on 17 different polls and surveys from 13 independent institutions carried out among business people and country analysts, including surveys of residents, both local and expatriate. In 2002, the CPI included only 102 countries. The large increase in coverage relates to the fact that more valid and reputable sources have been found that can be incorporated

The CPI focuses on corruption in the public sector and defines corruption as the abuse of public office for private gain. The surveys used in compiling the CPI tend to ask questions in line with the misuse of public power for private benefit, with a focus, for example, on bribe-taking by public officials in public procurement. The sources do not distinguish between administrative and political corruption.

Table A 5Political rights (1=highest level of rights, 7=lowest)

Country	1980	1990	2000
Lesotho	5	6	4
Malawi	6	7	3
Mozambique	7	6	3
Zambia	5	6	5
Zimbabwe	4	6	6
Low-income average	5.6	5.8	4.8

Source: Freedom House (www.freedomhouse.org)

Notes: For more information, see http://www.freedomhouse.org/research/freeworld/2002/methodology2.htm

Table A 6Civil liberties (1=highest level of liberties, 7=lowest)

Country	1980	1990	2000
Lesotho	5	5	4
Malawi	7	6	3
Mozambique	7	7	4
Zambia	5	5	4
Zimbabwe	5	4	5
Low-income average	5.4	5.4	4.7

Source: Freedom House (www.freedomhouse.org)

Notes: For more information, see http://www.freedomhouse.org/research/freeworld/2002/methodology2.htm

Table A 7Voice and accountability (z score*)

Country	1998	2001
Lesotho	-0.15	-0.15
Malawi	0.06	-0.14
Mozambique	-0.17	-0.22
Zambia	-0.05	-0.17
Zimbabwe	-0.67	-0.90
Low-income average	-0.57	-0.64

Source: Kaufmann, D., Kraay, A. and Mastruzzi, M. (2003). Governance Matters III: Governance Indicators for 1996-2002. Available at: http://www.worldbank.org/wbi/governance/govdata2002/.

Notes: Voice and Accountability (VA) measures the extent to which citizens of a country are able to participate in the selection of governments

Table A 8Political stability (z score*)

Country	1998	2001
Lesotho	-0.82	.
Malawi	0.04	0.03
Mozambique	-0.53	0.20
Zambia	0.00	-0.42
Zimbabwe	-0.54	-1.25
Low-income average	-0.70	-0.68

Source: Kaufman et al (2003)

Notes: Political stability (PS) measures perceptions of the likelihood that the government in power will be destabilised or overthrown by possibly unconstitutional and/or violent means.

Table A 9Government effectiveness (z score*)

Country	1998	2001
Lesotho	-0.46	.
Malawi	-0.62	-0.77
Mozambique	-0.33	-0.49
Zambia	-0.40	-0.75
Zimbabwe	-1.13	-1.03
Low-income average	-0.60	-0.73

Source: Kaufman et al (2003)

Notes: Government Effectiveness (GE) measures perceptions of the ability of the government to produce and implement good policies;

Table A 10 Regulatory quality (z score*)

Country	1998	2001
Lesotho	-0.06	-0.17
Malawi	0.08	0.28
Mozambique	-0.23	0.16
Zambia	0.25	0.49
Zimbabwe	-0.34	-1.66
Low-income average	-0.48	-0.55

Source: Kaufman et al (2003)
Notes: Regulatory Quality (RQ) measures the incidence of “market-unfriendly” policies;

Table A 11 Rule of law (z score*)

Country	1998	2001
Lesotho	-0.24	-0.19
Malawi	-0.41	-0.36
Mozambique	-1.05	-0.32
Zambia	-0.40	-0.39
Zimbabwe	-0.15	-0.94
Low-income average	-0.71	-0.74

Source: Kaufman et al (2003)

Notes: Rule of Law (RL) measures the extent to which agents have confidence in and abide by the rules of society

Table A 12 Corruption (z score*)

Country	1998	2001
Lesotho	0.19	.
Malawi	-0.19	0.10
Mozambique	-0.53	0.10
Zambia	-0.61	-0.87
Zimbabwe	-0.32	-1.08
Low-income average	-0.59	-0.68

Source: Kaufman et al (2003)

Notes: Control of Corruption (CC) measures perception of corruption, in both the business environment and the political arena.

General notes: The Kaufman et al (2003) indicators are derived from 250 different governance indicators, from 25 different sources constructed by 18 different organisations, and are for this reason, the most comprehensive (in terms of country coverage), and arguably the most accurate set of indicators of 'good governance' or 'institutional quality' currently available.

The dataset is unique in that it also provides information regarding the margins for error in the estimates for each country's governance scores. Nevertheless, they do possess certain limitations. First, there are doubts regarding the cross-country comparability of 'surveys of businesspeople' based indicators of governance, while 'polls of experts' based indicators may be influenced more by subjective opinion than objective fact. Second, the margins for error in countries' scores in each governance dimension are in fact shown to be quite large. Third, they are only available for the years 1996-2002.

*The z-score is the amount by which the level of an indicator in a country is above or below the world average, measured in units of standard deviations. Positive values indicate above average, negative values imply below average. A rough rule of thumb is that countries with z-scores below minus 1 will be among the 15% of countries with the lowest value of the indicator.

Vulnerability

Table A 13 Poverty head count (most recent estimate)

Country	Most recent estimate	Year
Lesotho	1.4	1995
Malawi	4.9	1997
Mozambique	6.5	1996-97
Zambia	3.3	1998
Zimbabwe	4.6	1995
Low-income average	6.3	1992

Source: World Development Indicators 2003

Notes: The poverty headcount is the proportion of the population estimated to be living below the poverty line.

Table A 14 Poverty head count ($1-a-day poverty line)

Country	Most recent estimate	Year
Lesotho	20.3	1993
Malawi	14.8	1996
Mozambique	12.0	1998
Zambia	32.7	1998
Zimbabwe	9.6	1991
Low-income average	15.2	1997

Source: World Development Indicators 2003

Notes: The poverty gap is the mean shortfall from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

Table A 15 Share of the poorest 20% in national income

Country	Most recent estimate	Year
Lesotho	1.4	1995
Malawi	4.9	1997
Mozambique	6.5	1996-97
Zambia	3.3	1998
Zimbabwe	4.6	1995
Low-income average	6.3	1992

Source: Human Development Report 2003

Notes: This measures the share of the poorest 20% of households in the total income or consumption of all households. Higher values indicate lower inequality.

Table A 16 Gini co-efficient

Country	Most recent estimate	Year
Lesotho	0.56	1995
Malawi	0.50	1997
Mozambique	0.40	1996–7
Zambia	0.53	1998
Zimbabwe	0.57	1995
Low-income average	0.42	1992

Source: Human Development Report 2003

Notes: The Gini coefficient varies from 0 (indicating complete equality of household incomes) to 1 (indicating complete inequality of household incomes). Higher values indicate higher inequality.

Table A 17 Prevalence of HIV/AIDS (%)

Country	2001
Lesotho	31.0
Malawi	15.0
Mozambique	13.0
Zambia	21.5
Zimbabwe	33.7
Low-income average	8.4

Source: UNAIDS (2002) Report on the global HIV/AIDS epidemic. Available at: http://www.unaids.org/en/resources/epidemiology.asp

Table A 18 Excess deaths due to AIDS, 1980-2000 (% of total)

Country	1980–2000
Lesotho	11.0
Malawi	16.1
Mozambique	5.6
Zambia	31.7
Zimbabwe	67.3
Low-income average	9.4

Source: UNAIDS (2002).

Macro-economic situation

Table A 19 Aid flows (% of GNP)

Country	1980	1990	2000
Lesotho	13.3	13.8	4.0
Malawi	12.9	26.6	25.9
Mozambique	4.4	42.8	24.8
Zambia	8.0	18.6	20.4
Zimbabwe	1.8	4.0	4.0
Low-income average	11.0	17.4	12.8

Source: World Development Indicators 2002

Table A 20 Aid to agriculture (%)

Country	1980	1990	2000
Lesotho			
Malawi			
Mozambique			
Zambia			
Zimbabwe			
Low-income average			

Source: OECD DAC

Table A 21 Share GDP in manufacturing (%)

Country	1980	1990	2000
Lesotho	8.2	14.3	16.6
Malawi	14.6	18.6	13.9
Mozambique	.	9.7	12.2
Zambia	19.4	35.7	12.6
Zimbabwe	21.3	25.2	16.3
Low-income average	10.1	11.3	10.5

Source: for share of GDP in agriculture, see **Error! Reference source not found.**

Table A 22 Economic growth (% per year)

Country	1980–90	1990–2000
Lesotho	1.99	1.98
Malawi	-0.72	1.47
Mozambique	-1.44	3.29
Zambia	-2.10	-2.29
Zimbabwe	0.70	0.06
Low-income average	-0.08	0.28

Source: World Development Indicators 2002

Notes: Economic growth is the average annual percentage increase in GDP per capita, measured in constant local currency (i.e. adjusted for inflation).

Table A 23 GDP per capita (PPP US$)

Country	1980	1990	2000
Lesotho	623	1,087	2,031
Malawi	362	445	615
Mozambique	388	521	854
Zambia	699	837	780
Zimbabwe	1,473	2,336	2,635
Low-income average	798	1,107	1,394

Source: World Development Indicators 2002

Notes: GDP per capita in US$ PPP is gross domestic product converted to international dollars using purchasing power parity exchange rates. An international dollar has the same purchasing power in each country as a US dollar has in the US.

Table A 24 Inflation (% per year)

Country	1980	1990	2000
Lesotho	11.9	11.8	9.3
Malawi	11.9	14.6	30.7
Mozambique	4.1	42.5	6.4
Zambia	13.6	93.3	19.4
Zimbabwe	12.2	21.1	48.4
Low-income average	14.7	128.8	17.6

Source: World Development Indicators 2002

Table A 25 Government budget balance (% of GDP)

Country	1980	1990	2000
Lesotho	-6.3	-3.0	-3.6
Malawi	-12.4	-2.1	-5.5
Mozambique	.	.	-2.4
Zambia	-13.5	-11.2	-9.5
Zimbabwe	-7.3	-6.3	-5.0
Low-income average	-6.0	-5.4	-3.1

Source: World Development Indicators 2002

General note: Data from the World Development Indicators for 1980 indicates the average of 1979-81; data for 1990 indicates the average of 1989-91; data for 2000 indicates the average of 1998-2000. Exceptions are GDP per capita (PPP US$) and population, which refer to the exact years.

Agricultural Performance

Table A 26 Share of agriculture in GDP (%)

Country	1980	1990	2000
Lesotho	27.6	21.4	17.3
Malawi	46.3	45.5	38.5
Mozambique	36.1	39.4	29.1
Zambia	16.3	19.8	24.2
Zimbabwe	15.7	15.6	19.9
Low-income average	37.0	35.9	34.6

Source: World Development Indicators 2002

Table A 27 Share of agriculture in employment (%)

Country	1980	1990	2000
Lesotho	40.2	40.0	.
Malawi	.	54.0	.
Mozambique	84.3	82.7	.
Zambia	76.1	74.7	.
Zimbabwe	32.4	24.4	.
Low-income average	67.8	65.4	.

Source: World Development Indicators 2002

Table A 28 Area harvested

Cereals total area harv (Ha)	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01	2000	2001	2002	2003
Low-income countries	204,694,137	224,578,978	259,082,846	9.7%	15.4%	26.6%				
Lesotho	203,409	198,801	207,386	-2.3%	4.3%	2.0%	270,109	176,240	264,540	264,540
Malawi	1,155,320	1,414,640	1,555,829	22.4%	10.0%	34.7%	1,570,308	1,587,166	1,635,836	1,704,029
Mozambique	1,077,348	1,560,919	1,795,253	44.9%	15.0%	66.6%	1,578,640	2,044,726	2,064,423	2,064,423
South Africa	6,759,617	6,174,967	4,649,784	-8.6%	-24.7%	-31.2%	4,952,560	4,426,510	4,501,310	4,462,400
Zambia	594,785	929,208	661,167	56.2%	-28.8%	11.2%	718,116	507,512	527,500	849,900
Zimbabwe	1,633,343	1,605,625	1,722,904	-1.7%	7.3%	5.5%	1,797,433	1,538,949	1,697,522	1,587,570

Source: FAO stat March 04

Maize area harv (Ha)	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01	2000	2001	2002	2003
Low-income countries	24,023,646	31,943,440	36,783,021	33.0%	15.2%	53.1%				
Lesotho	115,811	125,811	149,906	8.6%	19.2%	29.4%	187,057	130,300	180,000	180,000
Malawi	1,076,867	1,335,495	1,416,877	24.0%	6.1%	31.6%	1,435,220	1,446,260	1,488,449	1,550,000
Mozambique	673,498	1,006,704	1,170,508	49.5%	16.3%	73.8%	1,084,153	1,275,216	1,300,000	1,300,000
South Africa	4,539,000	4,124,333	3,534,814	-9.1%	-14.3%	-22.1%	3,813,840	3,223,220	3,349,660	3,350,000
Zambia	523,064	807,747	532,008	54.4%	-34.1%	1.7%	586,907	411,662	430,000	750,000
Zimbabwe	1,096,870	1,142,992	1,361,923	4.2%	19.2%	24.2%	1,416,700	1,223,070	1,395,371	1,300,000

Source: FAO stat March 04

Table A 29 Crop yields

Cereals, all, yield ton/ha	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01
Low-income countries	1.45	1.84	2.15	27.2%	16.9%	48.7%
Lesotho	0.98	0.85	0.95	-12.6%	10.9%	-3.1%
Malawi	1.16	1.10	1.50	-5.0%	36.1%	29.3%
Mozambique	0.60	0.40	0.92	-33.1%	129.4%	53.5%
South Africa	2.10	2.06	2.52	-1.8%	22.4%	20.3%
Zambia	1.67	1.58	1.41	-5.2%	-10.7%	-15.3%
Zimbabwe	1.39	1.49	1.24	7.0%	-16.5%	-10.6%

Cereals,total yield (Hg/Ha)	2000	2001	2002	2003
Lesotho	9,435	9,053	9,358	9,358
Malawi	16,755	10,976	10,457	12,588
Mozambique	9,329	8,250	8,564	8,612
South Africa	29,273	24,124	28,547	26,309
Zambia	14,616	14,677	14,127	15,639
Zimbabwe	14,117	12,322	7,437	6,399

Source: FAO stat March 04

Maize yield, ton/ha	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01
Low-income countries	1.27	1.47	1.68	16.0%	14.3%	32.5%
Lesotho	0.97	0.95	0.86	-2.0%	-9.6%	-11.4%
Malawi	1.18	1.11	1.55	-6.3%	39.4%	30.6%
Mozambique	0.57	0.37	0.97	-35.4%	164.1%	70.5%
South Africa	2.53	2.45	2.56	-3.1%	4.5%	1.3%
Zambia	1.80	1.66	1.44	-7.5%	-13.2%	-19.7%
Zimbabwe	1.67	1.63	1.25	-2.5%	-23.3%	-25.2%

Maize yield (Hg/Ha)	2000	2001	2002	2003
Lesotho	8,457	7,882	8,333	8,333
Malawi	17,428	10,990	10,460	12,794
Mozambique	9,399	8,965	9,508	9,600
South Africa	29,973	24,038	30,000	28,998
Zambia	15,020	14,614	14,000	15,480
Zimbabwe	14,880	11,992	7,167	6,177

Source: FAO stat March 04

General note: Data from the World Development Indicators for 1980 indicates the average of 1979-81; data for 1990 indicates the average of 1989-91; data for 2000 indicates the average of 1998-2000. Where data for these years were not available, I have used data from surrounding years.

Food Security

Table A 30 Food production index (1989-91=100)

Country	1980	1990	2000
Lesotho	89	100	99
Malawi	93	100	153
Mozambique	101	100	131
Zambia	73	100	101
Zimbabwe	83	100	105
Low-income average	81	100	126

Source: World Development Indicators 2002

Notes: The food production index covers food crops that are considered edible and that contain nutrients. Coffee and tea are excluded because, although edible, they have no nutritive value. It refers to aggregate quantities, not production per capita.

Table A 31 Crop production (tonnes)

Cereals, total production (Mt)	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	% change 79/81 to 99/01		2000	2001	2002	2003
Low-income countries	296,342,691	413,562,583	557,888,909	39.6%	34.9%	88.3%					
Lesotho	198,377	169,524	196,083	-14.5%	15.7%	-1.2%		254,848	159,550	247,550	247,550
Malawi	1,341,229	1,560,321	2,336,201	16.3%	49.7%	74.2%		2,631,034	1,742,051	1,710,577	2,145,027
Mozambique	649,313	629,216	1,660,449	-3.1%	163.9%	155.7%		1,472,736	1,686,995	1,767,945	1,777,945
South Africa	14,188,790	12,733,633	11,736,960	-10.3%	-7.8%	-17.3%		14,497,761	10,678,607	12,849,956	11,740,222
Zambia	990,374	1,467,171	932,523	48.1%	-36.4%	-5.8%		1,049,611	744,866	745,200	1,329,200
Zimbabwe	2,273,300	2,391,104	2,143,100	5.2%	-10.4%	-5.7%		2,537,429	1,896,241	1,262,498	1,015,950

Source: FAO stat March 04

Maize production (Mt)	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	% change 79/81 to 99/01		2000	2001	2002	2003
Low-income countries	30,408,557	46,885,162	61,684,497	54.2%	31.6%	102.9%					
Lesotho	112,049	119,241	128,479	6.4%	7.7%	14.7%		158,189	102,700	150,000	150,000
Malawi	1,274,667	1,480,566	2,190,052	16.2%	47.9%	71.8%		2,501,311	1,589,440	1,556,975	1,983,000
Mozambique	383,333	370,000	1,136,125	-3.5%	207.1%	196.4%		1,019,033	1,143,263	1,236,000	1,248,000
South Africa	11,462,333	10,091,667	9,041,769	-12.0%	-10.4%	-21.1%		11,431,183	7,748,124	10,049,134	9,714,254
Zambia	940,768	1,344,519	768,406	42.9%	-42.8%	-18.3%		881,555	601,606	602,000	1,161,000
Zimbabwe	1,828,683	1,858,613	1,698,140	1.6%	-8.6%	-7.1%		2,108,110	1,466,750	1,000,000	803,000

Source: FAO stat March 04

Table A 32 Food balance (exports minus imports as a % of GDP)

Country	1980	1990	2000
Lesotho	.	.	.
Malawi	19.8	16.0	.
Mozambique	1.6	.	-0.6
Zambia	-2.1	.	.
Zimbabwe	10.2	8.0	11.5
Low-income average	3.4	2.4	0.6

Source: World Development Indicators 2002

Table A 33 Trade in cereals and preparations, Southern Africa, 1991-2001 (tonnes)

Exports	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Average 1991-2001	1998/99 Cereals Supply, Mt
Botswana	12,989	8,938	10,932	12,153	15,939	8,210	4,099	11,851	11,792	18,233	16,774	**11,992**	
Lesotho	7,800	5,175	2,020	1,800	800	600	753	3,600	3,600	3,600	3,600	**3,032**	
Malawi	2,917	3,202	11,297	8,955	9,360	4,888	4,719	6,373	6,575	11,034	234	**6,323**	
Mozambique												**0**	
Namibia										4,126	5,741	**4,934**	
South Africa	538,735	673,352	366,869	3,971,042	1,825,444	2,354,941	2,090,363	1,247,376	831,192	889,860	1,133,118	**1,447,481**	
Swaziland	450	450	450	450	450	450	4,826	8,754	4,865	10,174	7,505	**3,529**	
Tanzania	7,000	4,141	9,637	0	0	0	24,089	35,120	37,610	104,347	125,130	**31,552**	
Zambia	1,048	4,784	3,505	2,288	1,838	1,340	774	842	14,187	22,338	22,359	**6,846**	
Zimbabwe	546,600	36,283	237,739	1,360,042	450,672	335,331	491,229	573,222	213,900	180,565	24,667	**404,568**	
Total Exports	*1,117,539*	*736,325*	*642,449*	*5,356,730*	*2,304,503*	*2,705,760*	*2,620,852*	*1,887,138*	*1,123,721*	*1,244,277*	*1,339,128*	**1,916,220**	
Imports													
Botswana	115,047	158,677	151,377	204,133	233,452	171,518	181,792	185,532	144,619	223,633	197,535	**178,847**	186,908
Lesotho	215,333	346,030	357,030	372,530	289,601	394,399	249,183	297,814	279,295	229,478	229,478	**296,379**	420,858
Malawi	208,154	437,563	559,478	504,576	299,254	163,851	151,526	395,606	104,386	66,063	144,645	**275,918**	1,632,607
Mozambique	594,120	1,052,220	653,540	534,230	537,120	403,930	377,800	540,740	388,416	415,622	502,023	**545,433**	1,674,561
Namibia	233,594	401,293	488,692	362,913	469,902	413,242	353,745	363,223	475,035	146,773	179,956	**353,488**	284,224
South Africa	1,527,279	4,971,444	2,548,278	1,344,202	2,364,523	2,301,977	1,523,664	1,451,214	1,686,455	1,821,708	1,177,090	**2,065,258**	7,602,352
Swaziland	93,913	96,673	88,100	100,300	72,300	61,800	76,075	68,473	111,284	110,676	152,214	**93,801**	121,860
Tanzania	128,941	190,530	197,240	336,800	210,577	235,584	382,376	754,973	252,264	570,007	610,887	**351,834**	3,599,065
Zambia	57,273	723,527	353,069	66,076	152,045	146,942	110,157	524,387	97,095	79,130	120,632	**220,939**	1,474,387
Zimbabwe	41,548	1,479,145	602,378	91,322	120,886	451,516	215,792	345,122	319,633	118,966	48,799	**348,646**	1,863,678
Total Imports	*3,100,155*	*9,698,425*	*5,847,805*	*3,712,949*	*4,516,208*	*4,573,241*	*3,440,318*	*4,741,552*	*3,713,863*	*3,558,423*	*3,165,724*	**4,551,697**	18,860,499
Exports - Imports													
Botswana	-102,058	-149,739	-140,445	-191,980	-217,513	-163,308	-177,693	-173,681	-132,827	-205,400	-180,761	**-166,855**	186,908
Lesotho	-207,533	-340,855	-355,010	-370,730	-288,801	-393,799	-248,430	-294,214	-275,695	-225,878	-225,878	**-293,348**	420,858
Malawi	-205,237	-434,361	-548,181	-495,621	-289,894	-158,963	-146,807	-389,233	-97,811	-55,029	-144,411	**-269,595**	1,632,607
Mozambique	-594,120	-,052,220	-653,540	-534,230	-537,120	-403,930	-377,800	-540,740	-388,416	-415,622	-502,023	**-545,433**	1,674,561
Namibia	-233,594	-401,293	-488,692	-362,913	-469,902	-413,242	-353,745	-363,223	-475,035	-142,647	-174,215	**-352,591**	284,224
South Africa	-988,544	-	-	2,626,840	-539,079	52,964	566,699	-203,838	-855,263	-931,848	-43,972	**-617,777**	7,602,352

		4,298,092	2,181,409										
Swaziland	-93,463	-96,223	-87,650	-99,850	-71,850	-61,350	-71,249	-59,719	-106,419	-100,502	-144,709	**-90,271**	121,860
Tanzania	-121,941	-186,389	-187,603	-336,800	-210,577	-235,584	-358,287	-719,853	-214,654	-465,660	-485,757	**-320,282**	3,599,065
Zambia	-56,225	-718,743	-349,564	-63,788	-150,207	-145,602	-109,383	-523,545	-82,908	-56,792	-98,273	**-214,094**	1,474,387
Zimbabwe	-505,052	-1,442,862	-364,639	1,268,720	329,786	-116,185	275,437	228,100	-105,733	61,599	-24,132	**55,922**	1,863,678
Total	*-1,982,616*	*-8,962,100*	*-5,205,356*	*1,643,781*	*-2,211,705*	*-1,867,481*	*-819,466*	*-2,854,414*	*-2,590,142*	*-2,314,146*	*-1,826,596*	**-2,635,476**	18,860,499
Share of deficit made up by wheat & wheat flour	62%	12%	32%		60%	101%	115%	45%	33%	52%	36%	**46%**	

Source: FAO data (at http://www.fao.org/waicent/portal/statistics_en.asp)
Cereals and preparations include grains, flours, pasta and dough for all cereals. It excludes manufactured foods such as biscuits.
The cereals supply is an estimate of annual consumption for the countries concerned, including both domestic production and the balance of trade.

Table A 34 Agricultural exports and imports (index)

Agricult. products, total export quantity (index)	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01
Lesotho	165	100	59	-39.4%	-41.0%	-64.2%
Malawi	111	100	117	-10.2%	16.7%	4.8%
Mozambique	330	100	133	-69.6%	32.2%	-59.8%
South Africa	130	100	91	-23.3%	-8.7%	-29.9%
Zimbabwe	72	100	95	38.9%	-5.3%	31.5%

Agricult. products, total import quantity (index)						
Lesotho	80	100	122	24.9%	21.9%	52.3%
Malawi	27	100	71	270.4%	-29.3%	161.7%
Mozambique	57	100	106	75.4%	6.3%	86.5%
South Africa	48	100	134	109.8%	33.7%	180.4%
Zimbabwe	86	100	242	15.8%	141.7%	179.9%

Table A 35 Cereals stocks (tonnes)

[to be completed]

Table A 36 Food aid

Food aid: cereals total total donors	1979–81	1989–91	1999–01	% change 79/81 to 89/91	% change 89/91 to 99/01	%change 79/81 to 99/01
Low-income countries	4,732,429	5,435,327	6,149,781	14.9%	13.1%	29.9%
Lesotho	35,612	22,330	3,095	-37.3%	-86.1%	-91.3%
Malawi	7,787	178,818	29,903	2196.4%	-83.3%	284.0%
Mozambique	151,376	483,459	145,457	219.4%	-69.9%	-3.9%
South Africa	0	2,430	0		-100.0%	
Zambia	116,975	118,199	25,726	1.0%	-78.2%	-78.0%
Zimbabwe	5,905	29,274	24,379	395.8%	-16.7%	312.9%

Table A 37 Food price inflation (% per year)

Country	1980	1990	2000
Lesotho	17.4	13.7	10.7
Malawi	11.0	13.8	30.2
Mozambique	.	.	.
Zambia	15.0	110.8	24.3
Zimbabwe	24.0	19.4	52.1
Low-income average	17.9	23.0	24.7

Source: World Development Indicators 2002

Table A 38 Terms of trade (% of GDP)

Country	1980	1990	2000
Lesotho	0.5	-0.2	-0.8
Malawi	15.7	14.3	4.1
Mozambique	11.2	2.3	-6.0
Zambia	11.2	3.5	-12.3
Zimbabwe	-1.3	0.0	-1.0
Low-income average	9.6	-1.2	-10.0

Source: World Development Indicators 2002

Notes: A decline in this variable indicates a decline in the terms of trade: i.e. a fall in the price of exports relative to imports (vice versa for an increase in the variable).

More specifically, it is the current price value of exports of goods and services, deflated by the import price index, minus exports of goods and services in constant prices, divided by GDP.

Table A 39 Regional maize producer prices (US$ equivalent)

Maize prices, US$	1990	1991	1992	1993	1994	1995
Lesotho	166	184	209	192	177	174
Malawi	95	96	82	98	54	47
Mozambique	134	87	50	32	21	14
South Africa	117	129	158	128	104	164
Zambia	104	86	51	20	14	11
Zimbabwe	92	75	108	139	110	115
International (annual average)	-	-	-	102.1	107.6	123.5

Source: Producer prices:
International prices: World Bank International Commodity Prices

General note: Data from the World Development Indicators for 1980 indicates the average of 1979-81; data for 1990 indicates the average of 1989-91; data for 2000 indicates the average of 1998-2000. Where data for these years were not available, I have used data from surrounding years.

Annex 2 FANRPAN Policy Matrixes

Source: Mano, R., Isaacson, B. and Dardel, P. (2003) 'Identifying Policy Determinants of Food Security Response and Recovery in the SADC Region: The Case of the 2002 Food Emergency', *FANRPAN Policy Paper*, Keynote paper prepared for the FANRPAN Regional Dialogue on Agricultural Recovery, Food Security and Trade Policies in Southern Africa, Gaborone, Botswana, 26–7 March 2003