

Country Food Security Options Paper No. 5



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Consultation Draft

**Food security options in Zimbabwe: multiple threats,
multiple opportunities?**

November 2004

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Acronyms

AFC	Agricultural Finance Corporation (AFC).
ART	Anti-Retroviral Therapy
BMI	Body Mass Index
CA(s)	Communal Area(s)
DFID	UK Department for International Development
DHS	Demographic and Health Surveys
ESAP	Economic Structural Adjustment Programme
FAO	Food and Agriculture Organisation of the United Nations
FEWSNET	Famine Early Warning Systems Network
FFSSA	Forum for Food Security in Southern Africa FFW
GAM	Global Acute Malnutrition
GDP	Gross Domestic Product
GMB	Grain Marketing Board
IMF	International Monetary Fund
LSCF	Large-scale commercial farmers
MDC	Movement for Democratic Change
ODI	Overseas Development Institute
PAAP	Poverty Alleviation Action Plan
PRSP	Poverty Reduction Strategy Paper
SDA	Social Development of Adjustment Programme
UN	United Nations
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNICEF	The United Nations Children's Fund
USAID	US Agency for International Development
VAC	Vulnerability Assessment Committee
WHO	World Health Organisation
Zanu-PF	Zimbabwe African National Union — Patriotic Front
ZIMVAC	Zimbabwe Vulnerability Assessment Committee

Preface and acknowledgements

This paper discusses the food security situation in Zimbabwe over the last twenty years and potential policy options for strengthening food security in the lights of the findings to date of the Forum for Food Security in Southern Africa across the region as a whole. Please send comments to foodsecurity@odi.org.uk

The Forum aims to contribute to analytical and strategic thinking on longer term food security options in Southern Africa following the 2001–03 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, visit:

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This paper and other information produced by the Forum 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.

We particularly wish to acknowledge our grateful thanks for the contributions made to the work of the Forum for Food Security by Reneth Mano, Godfrey Mudimu and colleagues at FANRPAN, and prior to that the contributions to the Zimbabwe country issues paper <http://www.odi.org.uk/Food-Security-Forum/docs/ZimbabweCIPfinal.pdf> by Godfrey Mudimu and colleagues. Bill Kinsey made wide-ranging and insightful comments on a draft version of this paper.

In addition, each Country Food Security Options Paper has benefited from consultations with a wide range of stakeholders in each country and across the region during 2004. In Zimbabwe, this included a food security workshop for civil society organisations by FFSA and FANRPAN in March 2004.

That said, the interpretations expressed in this paper are those of the Overseas Development Institute, and do not necessarily reflect those of our colleagues in Zimbabwe or elsewhere.

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1. Introduction

In the first half of 2002 it became clear that Southern Africa was at risk of a food and humanitarian crisis. Between February and April 2002 the governments of Lesotho, Malawi, and Zimbabwe declared emergencies, while in Mozambique an emergency plan to combat the effects of drought was begun. Subsequently in July 2002 the UN issued a consolidated appeal for US\$611 million to address the crisis in the six countries most affected: Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe.

At the height of the crisis, in late 2002 and early 2003, nearly 15 million people, fully 25% of the population of the six countries, were considered food insecure. In response large amounts of additional food were shipped into the region, including food aid provided by donors.

These events prompt three sets of questions, namely:

- What exactly took place during the crisis?
- What were its causes? What combination of lack of food, inability to access food, or utilisation problems have arisen? Why are there such divergent narratives concerning the causes of food insecurity in the region and appropriate policies to strengthen long-term food security? And,
- What policy lessons are there to be learned to prevent or mitigate similar occurrences in future? Why has there been a pre-occupation with food production at the expense of other components of food security? Why has the policy process, and the political will and institutions that drive it, not received the attention it deserves?

Addressing these questions is the purpose of the Forum for Food Security in Southern Africa (FFSSA). The Forum has tried to take a broad approach, looking beyond the immediate concerns of emergency relief to embrace longer-run issues, and beyond a narrow focus on food supplies to wider considerations of food security and vulnerability. In particular, the Forum has sought the views of a wide range of stakeholders in each country and across the region, with a particular focus on soliciting the views of civil society.

Annex 1 sets out and discusses various terms and concepts relating to food security and vulnerability used in the publications produced by the Forum.

1.1 Food security in Southern Africa 2001–03

What happened from 2001 onwards in the region to provoke the unfolding crisis? The immediate facts are not in doubt. Food supplies faltered owing to harvest failures in some countries in 2001 and in most countries in 2002. Stocks were run down, so food prices soared. The poor would not be able to afford food, and so would go hungry or even starve; they might also fall into destitution — both lives, it was thought, and livelihoods were at risk. Hence the declarations of national emergencies and the organisation of large-scale international relief effort.

In the event, the worst consequences were averted. Deaths were limited, mercifully extremely so. On the face of it, the relief effort succeeded. But did it?

Despite disruptions to the food aid pipeline that eventually meant that no more than three-quarters¹ of the food considered to be necessary was delivered in time, rates of malnutrition did not increase to emergency levels — for example, a 10% or higher level of severe wasting amongst young children, except in what proved to be isolated instances and locations. People, it seemed, coped better than expected with the crisis. Or perhaps the degree of need was exaggerated. Or a combination of the two.

Two points however are reasonably clear, one well understood amongst the policy community of governments, donors and NGOs in the region; the other less widely appreciated.

First, the crisis was a shock to all concerned: the immediate triggers, the climatic variability in the cropping seasons of 2000–01 and 2001–02 and the subsequent harvest losses were serious, but not that poor. In 1991–92 the region had suffered a much harder blow. Yet the current crisis has been more severe than before. It seems that the population of the region has become more food insecure in the decade since 1991–92, probably as a result of a widespread increase in vulnerability to bad weather and economic and social trends. If this is the case, development efforts over the last decade have clearly failed on a considerable and worrying scale.

Second, a look at child nutrition statistics — and it has to be said that the collection and analysis of nutritional data has lagged behind assessments of needs and programming of relief efforts — reveals another dimension to food security in the region. As Table 1 shows, child nutrition is poor in the region, with several countries having rates of stunting similar to that seen in Ethiopia.

¹ No more than 77% of estimated food aid needs had reached beneficiaries by end of March 2003, and probably and perhaps substantially less (MSU 2004).

Table 1. Nutritional status of children under five years of age, by percentages

Country	Survey date	Stunting	Wasting	Underweight
Lesotho	2000	46	5	18
Malawi	2000	49.0	5.5	25.4
Mozambique	1997	36		26
Swaziland	2000	30	1	10
Zambia	2001–02	46.8	5.0	28.2
Zimbabwe	1999	26.5	6.4	13.0
<i>Ethiopia</i>	<i>2000</i>	<i>51.2</i>	<i>10.7</i>	<i>47.1</i>

Source: Demographic and Health Surveys, most recent years <http://www.measuredhs.com/>

Notes: Stunting compares height against age; wasting, weight against height; and underweight, weight against age. The percentages record those who had indices more than two standard deviations below the median for the population.

Surveys of the nutrition of adults, however, do not show the same kinds or rates of malnutrition. For example, the fractions of adult females with body-mass indices below the threshold of 18.5 that indicates being underweight were 6.5% in Malawi in 2000, 11% in Mozambique in 1997, 13% in Zambia in 2001–02 and 4.5% in Zimbabwe in 1999 (Source: DHS surveys).² Indeed, in Southern Africa there appear to be more adults overweight than underweight.

It might be thought that nutrition is deteriorating.³ But this does not correspond with historical nutrition data: the adults of today were not better nourished when they were five years or younger, rates of underweight children were higher in the 1970s.

Could it be, then, that while adults are reasonably well fed, children are not? This is hard to believe: parents, and mothers in particular, take great pains to feed their children. To be sure, there are problems with the energy density of weaning foods, but are they so large?

A more likely explanation for the divergence lies in health and sanitation conditions. Young children are much more susceptible to gastro-intestinal complaints brought on by poor sanitation and contaminated water, to the debilitating effects of worm infestation, and to diseases such as malaria and measles. Not only do such complaints lead to poor health of young children, and to high rates of mortality amongst under-five's; but they also depress appetite and prevent the body making use of any ingested nutrients for growth. Hence poor health can lead to poor nutrition, no matter what food the infants may be offered.

If this is correct, then there is a continuing, chronic problem — perhaps a crisis — of child health in the region

² For comparison, surveys in the 1990s in India and Bangladesh of adult females show rates of 40% or more as underweight.

³ Yes, child nutrition statistics in Southern Africa have worsened of late – but since 1998 or so. For much of the 1990s there was improvement in these statistics, albeit slow improvement. **UNICEF Nutrition Fact Sheet June 2004** at: <http://www.reliefweb.int/w/rwb.nsf/0/d85614da7e2f75fbc1256ee4004bb76f?OpenDocument>

One of the major implications of the evidence accumulated by the Forum for Food Security, as we shall explain in more detail later, has been that the 2001–03 crisis in Southern Africa was a manifestation of an *expansion in food insecurity*, not temporary hunger of the kind traditionally addressed by international humanitarian response. Around 8 million individuals across the countries of Southern Africa are food insecure year in year out (CARE SWARMU, 2003). For many other households, however, food insecurity can occur when they are unable to cope with a particular hazard or combination of hazards. It is this latter group that appeared to be expanding significantly during 2001–03, as a result of localised climatic events *in combination with* longer-term economic trends and the HIV/AIDS epidemic. This resulted in doubling the number of food insecure people to approaching 16 million persons in Southern Africa as a whole by late 2002.

Current thinking suggests that the root causes of food insecurity lie in poverty (lack of social capital as well as physical assets) and negative physical, economic and social trends, rather than in unpredictable shocks. Failure to access food, for lack of income, social welfare, or deficits in home production; and to utilize it effectively, are major problems over and above harvest shortfalls. The negative influence of vulnerability on households' livelihood decisions is increasingly recognised: persistent vulnerability can produce extreme risk aversion (seen, for example, in high levels of livelihood diversification amongst poor people) and sale of assets. These may allow households to cope over the short term, as they did in Southern Africa in 2001–03, but jeopardise investment by the household for the longer term. These problems occur at the level of individuals and households and persist regardless of the availability of food at national level.

Better policies and stronger and better governed institutions have a major role to play in strengthening access to food. Strengthening food security is likely to be achieved not merely by responding to temporary hunger, which can conflict with effectively addressing high levels of food insecurity over the longer term; but through a combination of production, market, and consumption-based interventions designed to address critical underlying factors. These include a long-term commitment to social protection for those who are unable to feed themselves, more productive agriculture for food crops, and more efficiently functioning food markets. Food insecurity — and the fear this induces — can be a major determinant of coping strategies, producing a downward spiral for affected households. Public policy needs to address the underlying factors contributing to the risk of food insecurity.

1.2 Food security policy arena

All this implies that strengthening food security in Southern Africa requires action across a broad front. Figure 1 shows how the Forum has conceptualized the policy arena for strengthening food security.⁴ A number of points are worth emphasising:

- it promotes attention to all three components of food security;
- it shows the importance of longer-term policy options as well as short-term responses to food crises, as may apply widely across Southern Africa;

⁴ A full discussion of this concept is included in the Forum *Synthesis Paper* (FFSSA, 2004).

- it shows the wide range of policies that can have a significant impact on components of food security, many of which may have primary objectives unrelated to food security.

We have used this scheme as the basis for highlighting potential policy options for strengthening food security within selected countries in Southern Africa and across the region as a whole. Appropriate policy objectives and activities will, of course, vary significantly among countries according to underlying causes: analyses for Lesotho, Malawi, Mozambique, Zambia and Zimbabwe are presented in these Country Food Security Options Papers.

Figure 1. Policies affecting food security



Source: FFSSA (2004).

1.3 FFSSA Country Food Security Options Papers

The purpose of these Country Food Security Options Papers is to discuss food security in particular countries of Southern Africa over the last twenty years or so; and, based on this, to identify public policy options for strengthening food security in the light of emerging findings across Southern Africa as a whole.

The Papers are *not* intended to be prescriptive. Rather, they are intended to make observations for consideration by policy-makers, drawing on the best of the considerable good practice in the Southern Africa region and internationally, and the views of civil society. The Papers have benefited from contributions from a wide range of stakeholders in each country and across the region during 2004. A number of countries in the region have put in place mechanisms for conducting thorough reviews and overhaul of policies for supporting food security, and a number will be re-examining policy in connection with mid-term PRSP reviews in the immediate future. Both these provide ideal opportunities for standing back and re-assessing what we know about food security and how better food security can be strengthened by effective public policy in the future.

The papers follow a common format. Following this Introduction, Chapter 2 provides a historical perspective on the food security situation within the country, presenting information on food availability, access and utilisation going back two decades where data permit, to put in context the events of and response to the 2001–03 crisis. In particular, we have attempted to identify key factors which appear to affect food availability, access, and utilisation in each country. These vary significantly between countries and thus critically influence appropriate policy response.

Chapters 3 and 4 set out the main components of the policy response to food insecurity over the last twenty years and in response to the 2001–03 crisis and the events that have contributed to the outcomes seen. These Chapters also discuss aspects of how policy affecting food security has been made, because issues to do with political will and implementation capacity are critical determinants of policy response.

The final Chapter 5 concludes with observations on the policy response to date, commenting on fit of response to the identified key factors affecting food security in each country, and on policy implementation issues, including discussion of the similarities and contrasts between the specific case and other countries in the region. Chapter 5 draws on the findings to date of the Forum for Food Security to make observations about potential policy options in each country for strengthening long-term food security.

2. Food security in Zimbabwe

In April 2002 the government of Zimbabwe declared a “national drought disaster”, as it became clear that the harvest due in April-May 2002 was to be poor. The previous harvest in 2001 had also been low, at 74% of the previous five-year average: the 2002 harvest was to be lower still, at just over half of that mean. In the hungry season of the ensuing crop marketing year, 2002–03, around 6M persons were assessed as needing emergency food relief, with 705,000 tonnes of food aid in cereals planned for distribution by donors.

This was hardly the end of the crisis: the 2003 harvest proved to be even lower than the previous two, at just 41% of the average for 1996–2000. The World Food Programme, as well as other donors, continued emergency feeding in Zimbabwe in the 2003–04 marketing season, planning to feed 3.5M people with 330,000 tonnes of cereals.

Estimates of the harvest of April-May 2004 are disputed: the government claims a more than adequate yield of well over 2M tonnes of cereals; FAO and other sources doubt that more than 0.8M tonnes were harvested — less than half the 1996–2000 average.

The run of poor harvests is exceptional. While some of the problems can be blamed on poor weather in the cropping season, the manner of implementation of the fast-track resettlement programme, other food policies, and the context of a failing economy clearly play a substantial role in the crisis.

The current problems bring issues of food insecurity into sharp relief, but well before these events, a large fraction of Zimbabwe’s citizens were food insecure. In 1999–2000, FAO estimated that food in Zimbabwe was, on average, available to the value of 2,100 Kcal a person a day — just about the minimum required to meet average energy needs.⁵ But that does not mean that all Zimbabweans were adequately fed. As Table 2 shows, some 39% of Zimbabweans were not sufficiently well nourished. This figure is above the average for Sub-Saharan Africa as a whole, and more than twice the developing world average. Given that Zimbabwe had been, until the recent economic downturn, a country with income above the average for the continent, the extent of under-nutrition is as surprising as it is alarming.

Although some progress was made in the 1990s towards reducing the share of the population under-nourished, absolute numbers rose to reach 4.9M by the end of the decade. Since then, as will be explained, most of the factors affecting food security have moved adversely, so it is likely that by 2004 the numbers of the ill-fed will have risen still further.

⁵ SPHERE Guidelines.

Table 2. Numbers of persons under-nourished in Zimbabwe

	1990–1992	1995–1997	1999–2001
Total population, millions	10.5	11.7	12.6
Number of people undernourished, millions	4.5	5.1	4.9
Proportion of undernourished in total population, %	43	44	39

Source: FAO, State of Food Insecurity 2003

Child **malnutrition** statistics, see Table 3, show that just over one quarter of young children are stunted indicating long-term malnutrition; and one sixth are underweight showing short-term under-nutrition as well as longer term deficits. Trends during the 1990s are not clear, but there is little evidence of any progress being made in reducing child malnutrition. It is apparently not known to what extent the malnourished children owe their status to low food intake, and how much to the effects of disease. That said, there are indications that HIV/AIDS may be playing a role in worsening nutrition indicators.

**Table 3a: Nutrition of children under five, Zimbabwe
Per cent with moderate (more than 2 SDs below median) or severe levels**

	1988	1994	1999	2003
Stunting	30	23	27	26.5
Underweight	13	17	13	17
Wasting	1	6	6	n/a

Source: UNICEF

Less data exists on adult malnutrition, but the statistics that [do] exist (as reported in FAO 2001) show a surprising pattern: they do not coincide with the child malnutrition data. For example, the DHS of 1995 estimates that just 5% of adult females aged 15 to 49 years had body mass indices below the threshold of 18.5 that reflects medium term under-nourishment. Even in the worst region of Matabeleland North, the percentage was still only 11%.

In contrast, the percentage of adult women who were considered overweight, with indices above 25, was over 21% nationally, and as high as 35% and 43% for the cities of Bulawayo and Harare respectively.⁶ The large fraction of adults overweight is likely to mean problems of diabetes and cardio-vascular disease.

The disparity between adult and child nutrition even exists within households (SEE Table 3b). Data from surveys of 357 households in (old) resettlement zones for 1997 shows that in only 47% of households were the nutrition status of adults and children similar. In another 48% of households, adults were adequately nourished while their children were not.

⁶ When adult males have been measured, lower body mass indices are usually recorded, so that smaller proportions, less than half the percentage of females, of men are regarded as overweight. It is not clear why adult females should be more prone to being overweight than males.

Table 3b: Distribution of households in resettlement zones by nutritional category, 1997

	Children's z-scores, height for age		
	Malnourished	Adequately nourished	Totals
Adult BMI	(percent (n))		
Malnourished	16.0 (57)	4.1 (15)	20.2 (72)
Adequately nourished	48.5 (173)	31.4 (112)	79.8 (285)
Totals	64.4 (230)	35.6 (127)	100.0 (357)

$\chi^2 = 7.76$ (df = 2; p = 0.005; min ef. = 25.61)

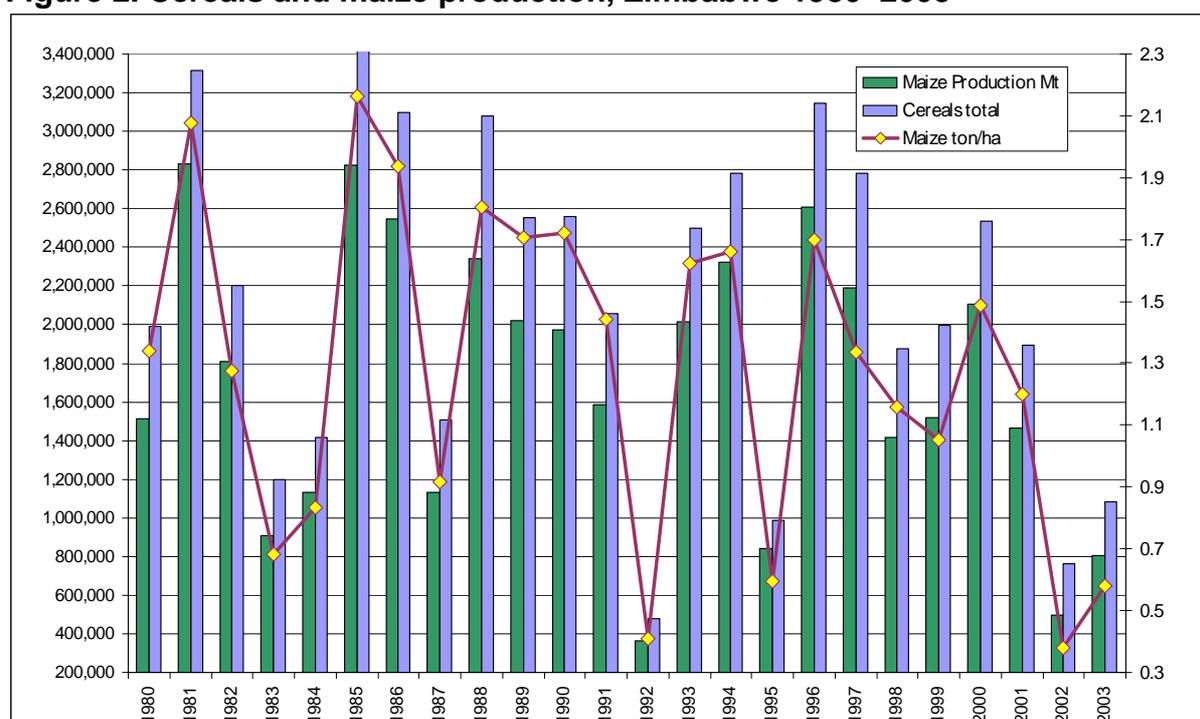
Source: Kinsey 2002

The remainder of this chapter reviews some of the evidence on the three main components of food security: availability, access, and utilisation.

2.1 Food availability

2.1.1 Domestic agricultural production

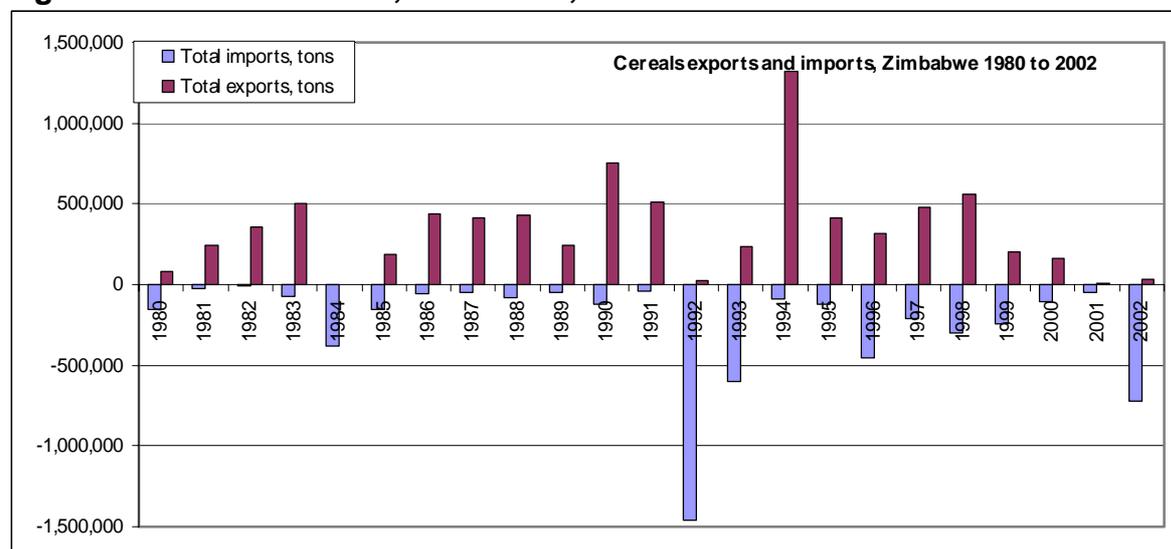
In most years food availability can be met through domestic production; with cereals, and above all maize, providing the bulk of staple food. As Figure 2. shows, total cereals production since Independence in 1980 does not show a clear trend for the most part, although there are signs of downward movement since the late 1990s. Instead, the harvest varies considerably, largely in tune with the weather. Since Zimbabwe's population has risen from just over 7 million persons in 1980 to more than 13 million persons by 2003, overall cereal production person has tended to decline.

Figure 2. Cereals and maize production, Zimbabwe 1980–2003

Source: FAO, FAOSTAT

In recent years Zimbabwe has consumed around 1.8M tonnes of cereals as food, and another 0.4M tonnes as animal feed, making total domestic consumption some 2.2M tonnes. As Figure 3 shows, in slightly more than half the years of the 1980s and 1990s this amount was produced domestically.

Figure 3. Trade in cereals, Zimbabwe, 1980–2002



Source: FAO, FAOSTAT

2.1.2 Trade in food

Trade in cereals, see Figure 3 is very much a residual of production. In most years until the late 1990s, a net surplus on trade in cereals has been typical, the great majority of the exports by weight being unmilled maize. Between 1990 and 2002, Zimbabwe exported over 5M tonnes of cereals. Of this quantity, some 55% went to the neighbouring states of Malawi, Mozambique, South Africa, and Zambia — in that order of magnitude; and a further 17% went to other states within Southern and East Africa.⁷ Zimbabwe has, until its recent run of harvest failures, thus played a significant role in supplying the import needs of its neighbours.

Cereals imports have in most years, again until recently, run at low levels, mainly being wheat to make bread and pasta, and grains for specialist purposes such as brewing. In years of low domestic production, however, imports have been substantial — as seen in the years 1984, 1992 & 1993, 1996, and 2002–04.

2.1.3 Food aid

Food aid shipments to Zimbabwe have been limited in large part to responses to the main harvest failures. Since 1980, some 1.6M tonnes of cereals food aid in total has been received, but more than 80% of these shipments arrived in just four marketing years: 1984–85, 1992–93, 1998–99, and 2002–03. The bulk of cereals aid has come from the USA.

⁷ As defined by states within the SADC and the EAC, plus Madagascar and Reunion. The main export destinations were Tanzania, Kenya, the DR Congo and Angola.

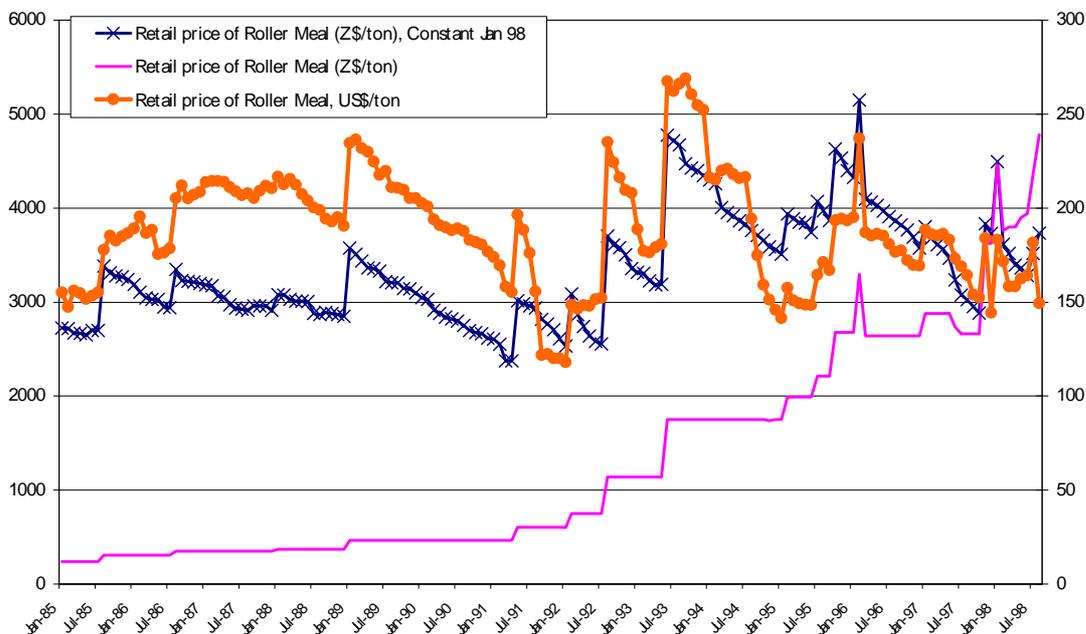
2.1.4 Food prices

Retail prices of roller milled maize meal in Zimbabwe were controlled and subsidised from Independence to 1993. As part of the economic reforms (ESAP), the subsidies were eliminated and prices set by the market.

Figure 4 shows the evolution of retail prices from 1985 to 1998. Throughout the 1980s, the price was revised infrequently, so that given inflation the real cost of milled maize was often falling. Prices were maintained for most of the time within a range of US\$150 to US\$200 a tonne. During the 1990s, with accelerating inflation, price increases became more frequent, and real prices rose, rarely being less than the equivalent of US\$150 a tonne, and sometimes rising well above US\$200 a tonne. The major harvest failure of 1992 resulted in retail prices increasing from less than US\$100 a tonne before to over US\$250 a tonne by the middle of 1993. Another price spike occurred after the poor harvest of 1995.

Figure 4. Retail price of roller meal, 1985 to 1998

US\$ prices on the right axis, Zimbabwe dollar prices on the left



Source: Central Statistics Organisation, via Michigan State University

The rise in roller meal prices in the 1990s was less important for poor consumers than is apparent, since liberalisation allowed the entry into the market of hammer mill operators producing whole maize meal at a significantly lower price.

During the recent crisis, retail maize prices have been officially controlled by the GMB, but often supplies are unavailable, and so the parallel market price is closer to the effective price. Table 4 shows examples of the prices registered for grain — note that these prices are not for meal and so cannot be directly compared to those in the previous figure.

Table 4. Prices of maize as grain, 2000–2004

Date		Z\$/kg	Z\$/tonne, constant price 1995	US\$/tonne	Source
Aug-02	GMB Official	12.54	6.3	22	ZimVAC Dec 02
Aug-02	Parallel	49	24.6	87	ZimVAC Dec 02
Dec-02	GMB Official	12.44	3.6	9	ZimVAC Dec 02
Dec-02	Parallel	130	37.3	94	ZimVAC Dec 02
Mar-03	GMB Official	12.68	2.8	9	ZIMVAC Apr 03
Mar-03	Parallel	217	47.7	157	ZIMVAC Apr 03
Nov-03	GMB Official	190	8.7	35	Fosenet
Nov-03	Parallel	1,500	68.4	279	Fosenet
Feb-04	Parallel	1,500	51.1	355	Field Obs.
Apr-04	Parallel	444	13.6	99	FEWSNET
Apr-04	Parallel	833	25.5	186	FEWSNET
Oct-04	Parallel, grain surplus areas	694	13.7	128	FEWSNET
Oct-04	Parallel, grain deficit areas	1,111	21.9	205	FEWSNET
Oct-04	GMB	720	14.2	133	FEWSNET

Note: Z\$ converted to US\$ at the parallel exchange rate. Constant prices derived from the Consumer Price Index, 1995=100.

As the crisis set in, the GMB pegged the price of maize grain at around Z\$12.5 a kg: given the depreciation in the value of the Zimbabwe dollar, this price at one point was as low as US\$9 a tonne, at the parallel rate.⁸ Subsequently, the GMB have allowed their prices to rise – to the equivalent of US\$35 a tonne by late 2003, and to US\$133 a tonne by October 2004.

Parallel market prices rose enormously, from Z\$49 a kg in August 2002, to Z\$217 by March 2003, and to Z\$1,500 a kg by November 2003. But these rises in part reflect the very high rate of inflation in the economy. In US dollar terms, parallel market prices moved from US\$87 to US\$157 to US\$257 a tonne for the same months — in effect rising from a domestic production cost to an import parity price for maize from the world market. Parallel prices peaked in early 2004 and have subsequently fallen, in both US and Zimbabwe dollar terms. By October 2004 they stood at the equivalent of US\$205 in grain-deficit areas.

2.2 Access to food

Food access depends largely on either own-production for farming households, or purchasing power and the price of staples for other households. Far from all the households who farm can meet their staple food needs from their own production, even in years of good harvests. For example, in the drylands of Chivi, Scoones et al. (1996) reported that 40% of crop farmers did not sell any crops in a typical year. Farm households who do not produce enough staples to feed themselves, typically find themselves buying in food during the latter part of the marketing year, that is in the 'hungry season' months leading up to the new harvest in April-May.

⁸ There was thus a huge incentive either to divert GMB supplies on to the parallel market, or even to smuggle grain acquired from the GMB out of the country. A tonne of such grain would have cost in March 2003 Z\$12,680. Sold in Zambia or Malawi at the time, it would have been worth at least US\$200 a tonne. At the parallel rate, US\$200 would have yielded Z\$277,800.

2.2.1 Poverty and vulnerability

Poverty is a key determinant of access to food. Surveys in the mid-1990s found that just over 60% of the population could be considered poor, and 36% or 46% — depending on the survey — were classed as very poor.⁹ There were significant differences by location. As Tables 5 and 6 show, rural households, and especially those in the communal lands, were more likely to be poor than urban households; and poverty rates were higher in the marginal lands. For example, a 1998 survey in three of the more marginal Districts — Matopo, Chivi and Gutu — found that more than two-thirds of households were very poor, and less than one fifth were not poor (Bird & Shepherd 2003).

Table 5. Poverty by Area of Residence in 1995

Sectional Classification	Very Poor (%)	Poor (%)	Non-Poor (%)
Communal Lands	71	13	17
Large Scale Commercial farms	35	22	43
Small Scale commercial Farms	57	13	30
Urban Areas	21	18	60

Source: 1995 PASS main Report, reported in Poulton et al. 2002

Table 6. Poverty by Natural Region in Rural Areas

Natural Region	Prevalence (%) of	
	Poverty	Extreme Poverty
I	62.4	36.2
II	71.6	41.2
III	77.3	51.4
IV	81.6	57.2
V	79.5	55.7

Source: (Central Statistical Office 1998), citing ICES 1995; reported in Poulton et al. 2002

Since the mid-1990s, urban poverty may well have increased significantly: the urban vulnerability assessment carried out in October 2003 estimated that 51% of urban dwellers were very poor, and further 21% were poor. Fully 64% of the urban population were estimated to have access to less food than the adult equivalent of 2,100 Kcal of energy intake a day, rising to 71% of the population of Bulawayo. The urban population, it seems, has been hit hard by inflation, school fees and loss of jobs, all of which have affected their ability to obtain food.

⁹ The 'very poor' were defined as those whose incomes could not command enough food, even if they spent all their income on food alone: the poor were defined as those who could not afford a minimum consumption basket of food and other essentials. In both cases, the poverty line was defined in local terms. At official exchange rates, even the category 'poor' was defined by an income of less than one US dollar a person a day, that of the very poor was an income less than half a dollar a day: at purchasing power equivalent, the very poor level was worth slightly more than US\$1 a day. These poverty lines have been criticised for ignoring the differences in living expenses typical for urban and rural areas. The World Bank in 1995 adjusted living costs, making those in towns about 50% higher than in the rural areas. To complicate matters still further, the surveys do not capture fully the value of gathered produce in rural consumption.

See Poulton et al. 2002 for more details on these points.

Poverty is closely associated with lack of access to **land** in rural areas, and with low levels of **education**. Typically those with little land or education lack other assets, such as livestock. (Poulton et al. 2002) Living in **remote areas** tends to make matters worse: there are fewer options for livelihoods and coping. Those who are unable to work, owing to age, disability, and sickness — including those living with HIV/AIDS — are also often poor.

2.2.2 Coping strategies

The poor cope partly by being prepared to restrict consumption of food — reducing meal frequencies and portion sizes, switching to the cheapest possible foods — and consumption of other goods and services, including taking their children out of school. Similarly, they often earn income by taking on arduous work that is low paid — including brewing, construction, gathering wood, etc. But such measures offer survival, rather than the means to escape poverty (Bird & Shepherd, 2003).

2.3 Food utilisation

The mixed picture of many young children being underweight and stunted, while few adults show such problems, suggests that food availability and access may not be the main cause of child malnutrition. It suggests, instead, that care practices and the disease and sanitation challenges faced by young children may be more important.

Support for this proposition comes from the results of surveys in three resettlement zones in 1997. There is surprisingly little correspondence between levels of income and the incidence of adult and child malnutrition. Indeed, levels of malnutrition are higher in natural region II than in IV. The explanation may lie in three points. First, in the drier lands of NR IV there is more gathering of wild foods and the diet is more diverse. Second, although households in NR II have higher incomes, much of this comes from cash crops of tobacco and cotton, and these cash earnings may not be spent on a good diet. Third, the disease challenge to young children is greater in the wetter areas of NR II, 'not only malaria, respiratory and gastro-intestinal diseases but also like parasites and soil-borne worms.' (Bill Kinsey, personal comm.)

Health problems have been made worse by the changing fortunes of health services.¹⁰ These were expanded rapidly after Independence to reach out into the communal lands. But those gains have been undermined subsequently. Budget cuts and the introduction of user fees in the early 1990s were the first setbacks; followed by the mounting impact of the HIV/AIDS epidemic; and, most recently, by loss of trained medical staff who have left the country in the face of economic problems, so that by 2003 fully 55% of doctor posts and 40% of nurses positions in the public health system were unfilled. Staff shortages and lack of funds to buy vaccines may now be affecting child immunisation programmes.

¹⁰ Much of this information comes from an unpublished consultancy report carried out for DFID in late 2003, and from the joint Ministry of Health and Who Humanitarian Assistance and Recovery Programme (Harp), Rapid Needs Assessment for the Health Sector in Zimbabwe of October 2002.

Some health statistics, after substantial improvement since Independence, are now in decline: for example, maternal mortality rates rose from 283 to 697 per 100,000 between 1994 and 1997. The crude death rate has jumped from 9.4Y in 1992 to 30.3Y in 2003. Deaths, that previously peaked amongst the very young and the elderly, now also show a marked peak amongst adults in their thirties — a clear indication of the impact of HIV/AIDS (see Table 7). Deaths to this epidemic were estimated to run at over 3,000 persons a week in 2003, with more than half of hospital beds being taken up those afflicted by HIV/AIDS.

Table 7. Prevalence of HIV/AIDS in Southern Africa(%)

Country	Estimated rate of infection of adults aged 15 to 49 years, end 2003
Botswana	37.3
Lesotho	28.9
Malawi	14.2
Mozambique	12.2
South Africa	21.5
Swaziland	38.8
Zambia	16.5
Zimbabwe	24.6

Source: UNAIDS, July 2004 — at <http://www.unaids.org/Unaid/EN/Resources/epidemiology.asp>

HIV/AIDS interacts with nutrition in both directions: poor nutrition makes people more susceptible to infection and more prone to show symptoms, while those seropositive need about 15% more calories each day to prevent wasting, and children with AIDS need even more to maintain normal growth (WHO 2003).

The economic crisis has also affected water supplies, above all in urban areas, where treatment chemicals are from time to time unavailable.

2.4 Conclusions

In summary, food availability at national level, although declining per person since the 1980s, has until the last few years not been a problem, other than in years of harvest failures. Indeed, in many years of the 1980s and 1990s, Zimbabwe was a net exporter of cereals.

Access to food, however, is a different matter. Thanks to the considerable inequalities in the country, poverty is more widespread than average income data would suggest; so that almost 40% of the population do not get enough to eat, and more than one quarter of young children are stunted. Poverty has in the past been concentrated in rural areas, above all in the semi-arid lands. But rates of poverty have risen, and particularly in urban areas, in the last ten years or so.

While child malnutrition is a serious problem, for adults obesity may be the more important problem. This suggests that the problem of child malnutrition may be as much a matter of care, health and sanitation as it is of access to food. Health services are in decline as budget cuts and economic problems take their toll, at the same time as HIV/AIDS advances.

Figure 5 summarises the main issues in food security.

Figure 5. Factors affecting food security in Zimbabwe



3. Existing policies for food security in Zimbabwe

Three main sets of policies have affected food security since Independence, as follows:

- the drive to boost domestic food production, both to make food available and to support farmer incomes;
- overall economic and social development policies designed to promote economic growth and improve social welfare that affect people's access to the food available; and,
- the relief efforts mounted after the major climate shocks — the droughts seen in the early 1980s, 1986/87, 1991/92, 1994/95, 1997/98, 2001/02 and the cyclone of 1999/2000.

These are reviewed in turn.

3.1 Agricultural policy¹¹

With the majority of Zimbabweans living in the communal areas (CAs) on smallholder farms at Independence in 1980, boosting farm output and incomes in these areas was a key objective of the new government.

State-owned agencies established the conditions for expanding maize production in the CAs, in effect extending the support previously given to the large-scale commercial farms into the smallholder areas. The state-owned Grain Marketing Board (GMB) increased its coverage of collection depots into the CAs, from just three in 1980 to 37 in 1991, as well as setting up additional seasonal collection centres. The GMB announced buy-in prices in advance of the harvest: these were fixed across the countryside irrespective of transport costs, and thus represented a considerable increase for farmers living in more remote locations who in the past saw their prices discounted by the costs of transport from farm to depot. The Ministry of Agriculture, through the extension service, promoted a maize production package based on high-yielding hybrid varieties, with fertiliser application to capture the yield potential. Credit to buy fertiliser and seed was provided by the Agricultural Finance Corporation (AFC).

Farmer response was exceptional. The area under maize in the CAs doubled from 1979/80 to 1985/86 to reach 1.3M ha; maize production in the CAs correspondingly rose from 0.8M tonnes in 1980 to 1.8M tonnes in 1986. From producing very little of the maize marketed, by the end of the 1980s smallholder production came to represent the larger part, 65%, of the total marketed.

National policy was to produce as much of the country's cereal requirements domestically as possible. The GMB was expected to keep a large reserve of grains. Thanks to the increased amounts bought in from smallholders, this goal was more than achieved. By 1986 around 2M tonnes of maize were in store, enough for a whole nine months of normal use.

But from this high point in the latter half of the 1980s, the model began to unravel. The state-owned marketing boards, of which the GMB was one of the largest,¹² were

¹¹ Key references: Mudimu 2003, Poulton et al. 2002, Eicher 1995, Howard et al. 2000

running up deficits equivalent to 5.8% of all public spending by the mid-1980s. Pressure mounted to cut these costs.

In response to growing public sector deficits, running at 10% or more, the government brought in the Economic Structural Adjustment Programme (ESAP) in 1991. This package liberalised international trade, many domestic prices, foreign exchange dealing and financial transactions. It was also intended to trim government spending and to reform taxes.

No sooner had the ESAP begun, than the country was hit by the worst drought of the twentieth century in the growing season of 1991–1992. The harvest of 1992 was pitiful: maize production fell to just one fifth of the average for the previous five years. To make matters worse, the GMB had, on the advice of the World Bank and IMF, just sold off most of its grain stocks.

The drought was to have serious consequences. The immediate fear, that sheer lack of food would cause starvation, was not realised, thanks in large part to coping by affected households supported by a concerted and largely effective relief effort by government assisted by donors. The relief effort was founded upon lessons learned from the 3-year drought of the early 1980s that had also been applied in 1987. (Bill Kinsey, personal comm.) Box 1 describes the measures taken.

The cost of relief to the government, however, dashed any immediate plans to bring public spending into balance.

From then on, major cleavages opened up in Zimbabwe's agricultural development between sectors and social groups. Liberalisation of international trade and domestic markets allowed some farmers to realise their full potential. Large-scale commercial farmers (LSCF) gained more from their tobacco exports, and developed export horticulture. Some smallholders were also able to profit from growing cash crops, such as tobacco, paprika, and above all, cotton.

Box 1. Responding to the drought of 1991–1992

Those working on early warning in Southern Africa were aware of the likely problems from mid-1991 onwards. Food stocks throughout the region had been run down to low levels. By October–November, just before the cropping season, climatologists were convinced that the signals from ENSO¹³ were indicating a serious drought; and warnings were issued. Right from the start of the cropping season in November 1991 the rains failed, and weather specialists reiterated that a recovery was not likely. They were right: dry conditions prevailed through much of the critical months of January and February.

Government response was delayed by a few months as policy-makers hoped that the early warnings of poor rains were exaggerated. Indeed, the GMB continued to export maize in the 1991–92 rainy season. But once the relief effort began, the

¹² Similar boards operated for beef cattle, dairying and cotton, amongst others.

¹³ El Niño–Southern Oscillation: changes in temperatures in the Pacific Ocean can trigger a reversal of the normal westwards movement of equatorial currents, bringing heavy rains to the eastern seaboard of the Pacific, and drought conditions in the west — extending into the Indian Ocean and affecting the eastern side of Africa. Increasingly it is possible to link drought in Southern Africa with ENSO events.

Box 1. Responding to the drought of 1991–1992 (continued)

measures taken were impressive. Large orders for additional commercial imports of maize were placed. For the marketing year 1992–1993, the GMB was to import 1.85M tonnes¹⁴ of cereals at a total cost of about US\$440M.

The government registered the population affected by drought for relief food distribution that gave free food to the elderly and disabled, and enrolled the able-bodied in food-for-work (FFW) programmes. In January 1992, 873,000 persons were helped out of 2.1M registered. By November 1992 registrations had climbed to 5.6M persons, or 75% of the rural population. With so many to feed, the government cut official rations from 15kg maize a person a month to 10kg and eventually 5kg.

Green (1993) comments that while the government response was delayed and initially 'chaotic', it rapidly became a smooth and impressive operation:

'(Zimbabwe) has allocated substantial resources to programmes intended to benefit the welfare and the livelihoods of poor Zimbabweans. By 1983-84 it had built up a highly effective problem reporting, food delivery and work for food network backed by large national resource allocation as well as internationally mobilized funds. It backed this with a very (perhaps too) large inter-year food reserve. But by 1990 the reporting and delivery mechanisms had ossified. In 1991-92 the national reserves were run down in a way hard to characterize other than as reckless. The 1992–93 supply procurement, logistical, and especially distribution systems revival were lagged and initially chaotic.

On the other hand, as of late 1992, 25 000 to 30 000 tonnes a month were reaching about 5 000 000 recipients, probably virtually double the attained level of any other Southern African state.

Once seriously begun the logistical exercise from procurement through delivery to Zimbabwe was both a top priority and a model of efficiency, and from December 1991 substantial import orders were placed out of Zimbabwean foreign exchange earnings without waiting for external assistance.' (263)

That said, there are doubts as to how well the distribution was overseen, and the extent of leakages to those contracted to provide and transport grain.

Government also rolled out a scheme for blanket supplementary feeding of children aged six months to five years that was to reach 1M such infants.

Income support was also offered to the needy to help with school fees, together with distribution of seed and fertiliser packs for the next planting season.

International relief efforts were impressive as one of the largest-ever food relief operations was mounted.

Despite the great efforts made to help those directly affected by drought, much of the response was a matter of households coping. People coped despite drought undermining some of the usual ways to adapt to loss of crops: there was less casual farm work to be had as the crops failed, less wild food was available and more households were looking for what little there was, and gifts of food from the more prosperous farmers to the less fortunate were reduced.

Eldridge (2002), analysing household survey results for Malawi, Zambia and Zimbabwe estimates that drought relief and FFW met just 15–25% of staple food

¹⁴ It is not clear if this includes food aid, although given the size of this figure it is likely that this includes the 471kt of food aid that was planned for Zimbabwe.

Box 1. Responding to the drought of 1991–1992 (continued)

requirements. Scoones et al. (1996) confirm this for Chivi District where although almost 80% of households received food relief or FFW, these supplies made up only a small part of consumption needs. But, they report, FFW demands on time were not onerous – ‘a few hours a day’.

Households, it seems, survived the food crisis in two main ways. First, they economised on food. Kinsey et al. (1998) report that, in the (old) resettlement schemes of rural Zimbabwe, meal frequencies were cut – with 30% of households reporting one meal a day, and 50% only two meals. The majority, 70%, also served less food at mealtimes. One third of households consumed some wild foods, with the rest not eating these only since they were not available.

Second, they bought in maize meal and grain. Eldridge (2002) estimates that typically households bought in two to three times as much meal and grain as they received from relief schemes. Maize prices, however, more than doubled in the aftermath of the poor harvest of 1992.

To allow such purchases, households switched expenditure from non-food items, such as clothing, health and education. They sought additional sources of income from selling vegetables, trading items such as second-hand clothes, brewing beer, sewing and crocheting, and gold-panning – a restricted or illegal activity. And they sold off assets, above all smallstock – although cattle were much less likely to be sold.¹⁵ As livestock were sold, their prices fell: in terms of maize, the price of which was rising, the value of livestock fell to one fifth of the previous non-drought level. Productive assets were sold last of all, if at all: in the resettlement zones, for example, no household surveyed by Kinsey et al. (1998) sold off farm equipment.

Sources: Eldridge 2002, Glantz et al. 1997, Green 1993, Holloway 2000, Kinsey et al. 1998, Mugwara 1994, Scoones et al. 1996

But food crop farming stagnated. The large farms shifted away from maize as a commercial crop, since the producer prices were controlled: the GMB was slow to relinquish control over the crop, so farmers switched to more profitable options. The smallholders of the CAs were faced by dramatically altered circumstances. The GMB, in an effort to cut its losses, closed depots and collection points in the more remote areas: farmers had to bring their crops to the depot gate to sell them. The AFC, saddled with much bad debt, moved to purely commercial terms and conditions for credit. Consequently the large majority of smallholders were effectively denied access to formal credit. Deprived of credit and inputs, and facing more difficulty in selling crops, many smallholders ceased to grow maize for sale. The green revolution of the 1980s was stopped in its tracks.

Domestic food supplies, however, were still sufficient to cover the country’s needs in most basic foods other than wheat. Other than in the drought years, Zimbabwe was able to export a small surplus of maize.

Only in the last years of the 1990s did food production begin to falter and fall below domestic requirements: and to understand that story, we need to look at wider developments after the ESAP was started.

¹⁵ Less than 8% of households in Chivi reported such sales. This may be lower than in other areas owing to the relative poverty of households in Chivi. More than 60% of the households in the resettlement areas, where there were more cattle, reported livestock sales — but how many of these involved cattle is not recorded.

3.2 The wider economy¹⁶

As was seen, despite income levels — GDP has fluctuated between an average of US\$600 [US\$ constant 1995] and US\$650 a head since 1980 — that are above average for the continent and the region, given the inequality of access to resources, above all land, a high fraction of people living in the CAs are poor by any standards. After Independence an important aim was to reduce the inequalities and bring them out of poverty.

As described, one measure was the vigorous drive for a smallholder green revolution. That succeeded, but the impact of the farm programmes was uneven. Production increases were indeed impressive; but it is now clear that the bulk of the additional supplies were coming from a small proportion of farmers — perhaps one quarter, and that most of these were also geographically in the more favoured CAs of Mashonaland. Their increased activity and incomes almost certainly benefited some of their less fortunate neighbours, as they hired labour on their fields and spent some of their increased earnings on local shops and businesses. But it was not enough to reduce poverty on any substantial scale.

The government also funded a major expansion of education and health facilities into the CAs. Levels of spending were impressive: the health budget reached 3.1% of GDP in 1990, the education allocation was worth 6.3% of GDP by the mid-1980s. Infant mortality fell, life expectancy increased, and literacy rose. Improving education allowed more of the African population to obtain formal jobs, often in the towns and cities, with corresponding income rises. Remittances from sons and daughters in urban areas became an important element in the rural economy.

But the ESAP, with its programme of market and trade liberalisation and trimming the scope and extent of government activity, and the near-simultaneous drought, brought profound changes. Those in agriculture have already been outlined. The urban economy, based around services and manufacturing industry, faltered. Trade liberalisation meant increased competition for those industries that had previously enjoyed protection. Liberalisation should have allowed more investment, but less was seen than expected or hoped for — in part since government was unable to control the budget deficit, and the resulting public debt drove up interest rates.

On the formal labour markets, few new jobs were offered to the tens of thousands of new entrants every year — the result of the high population growth rate of Zimbabwe and the successes in formal education. The civil service, a major employer, actually saw job losses. Formal sector wages fell in real terms, as inflation eroded the value of nominal wages¹⁷; and an increasing share of the urban workforce turned to poorly-rewarded informal jobs. Remittances to rural areas suffered.

At the same time, the government tried to reduce its spending. The health and education budgets were cut by one third or more in real terms. User fees were introduced for services.

¹⁶ Main sources: Addison & Laakso 2003, Chisvo 2000, Jenkins 1997, Marquette 1997

¹⁷ Addison & Laakso (2003) report that in the first half of the 1990s the real value of public sector wages fell by 39%, and those in the private sector by 25%.

Government tried to offer some relief through the Social Development of Adjustment Programme (SDA). This provided training for laid-off workers, and direct assistance to low-income households to buy food, and pay health and school fees. The SDA was part of wider strategy, the Poverty Alleviation Action Plan (PAAP) of 1994, that put the stress on community development efforts. But these initiatives lacked the funds and scale to address the problems. Moreover they were battling against the tide of insufficient economic growth to deliver jobs and incomes to meet the needs of the majority.

3.3 The political consequences of economic problems

The economic problems of the 1990s were to have severe political implications. By 1998 the frustrations over lack of land in the CAs, where a growing farming population were hemmed in by the commercial farms that occupied the lion's share of the best lands, boiled over in two land invasions by smallholders into neighbouring large-scale commercial farms. Initially the country's leadership condemned such actions, worried that the one part of the economy that was thriving — commercial farming — would be disrupted. But it was soon appreciated that if the ruling party did not take radical action, it would lose support in the rural areas where it has previously strong support. Hence in 2000, and prompted by defeat in a referendum on constitutional change, the government pushed through legislation to enable 'fast-track resettlement' with compulsory seizure of large farms. (see Sithole et al. 2003)

Land reform might have made a significant difference to rural poverty in the 1980s. The programmes for land redistribution adopted immediately after Independence were, however, modest; so much so that in almost twenty years, only a small part of the former 'European' areas had been acquired and redistributed, benefiting no more than 73,000 households.

The 'fast-track' programme, in contrast, was rapidly and chaotically implemented: marked by widespread invasions of large farms, confusion and dispute over subsequent rights to land, and too little attention to measures to support those resettled. The result, at least until 2003, and in all probability 2004, has been that large sections of the country's best farmlands have either not been worked, or have been farmed at low intensity for lack of inputs. Agricultural production has been hit hard. National maize harvests have, since 2000–01, fallen well below what might have been expected from spells of poor weather.

3.4 Policy-making and the international donors¹⁸

The government that came in with Independence in 1980 had to pursue its avowedly socialist goals, and an agenda of correcting the injustices of the past, within narrow confines. It was restrained by fears of the settler economy collapsing, as had been seen in Mozambique only five years earlier; it had to build national unity; and the economy was heavily tied to that of South Africa where the apartheid government was

¹⁸ Main sources include Addison & Laakso 2003, and Jenkins 1997.

unsympathetic to the new regime in Zimbabwe. Policies for redistribution, above all of land, were held in check.

Donor assistance flowed to a country where the government was admired for its restraint, and praised for the smallholder green revolution and the advances in education and health. A blind eye was turned by most external observers to the excesses of repression in Matabeleland in the early 1980s, the emergence of a one-party state as Zanu absorbed Zapu in 1995, and an increasingly centralised and presidential administration that would allow for authoritarian rule.

The early 1990s, however, saw a major revision to policy, with the introduction of ESAP: apparently largely on the advice of technical advisers within the government, under little pressure from donors. As ESAP was implemented, however, there was increasing donor involvement in the measures. Mounting external debt,¹⁹ up from less than US\$1 billion in 1980 to more than US\$5 billion in 1995, meant greater leverage for the IMF and the World Bank.

But donors were largely in favour of the direction taken by government: the drive was for economic growth in a liberalised market economy. The rhetoric of socialism and redistribution was ever less voiced. Social concerns could, it was hoped, be met by a judicious combination of public safety nets, such as food-for-work, and encouragement for non-governmental organisations and their programmes of participatory development in the villages.

Room for manoeuvre, however, was closing in the 1990s. As economic growth faltered, and the public sector deficit obstinately refused to narrow, and thereby creating pressure for cuts to the budget, government increasingly found itself responding to immediate problems both economic and climatic, rather than taking the initiative. The donors became more influential: they had the funds that government lacked and so they could try and call the shots.

But a combination of economic disappointment, mounting formal unemployment, and stagnating or declining incomes for the majority; while a few people with access to capital prospered — in an already highly unequal society — was to prove politically unsustainable. In the urban areas discontent coalesced around a new party, the MDC, capable of mounting a serious challenge to the ruling party at the polls. Spontaneous land invasions in the rural areas in 1998 reminded Zanu-PF that it could not take the rural vote for granted. In an effort to shore up rural support, the ruling party gambled on a more radical stance with fast-track resettlement as the centrepiece.

Economic policy began to diverge from the international orthodoxy, as the government moved to control prices of essentials, fix the rate of exchange and control foreign currency. Lacking the foreign exchange to tackle shortages of imported essential items, and with the domestic economy failing to produce enough locally-produced goods, government hoped it could contain inflation by administrative control. This created rationing problems that in practice have often been resolved by long queues, but government has preferred these to price rises. It has given rise to a parallel economy where essentials are available at prices many times the official rates, as seen earlier in the prices of maize.

¹⁹ Some is commercial credit, but much is loans from multilateral and bilateral aid donors.

At the same time, government began to clamp down on formal opposition with harassment of the MDC, alleged intimidation of rural voters, and increasing control over the independent press. Donors, alarmed by an increasingly authoritarian government and mounting reports of human rights abuses, began to distance themselves from government. As the economic situation deteriorated, and donor advice on the economy was disregarded, the main donors froze their support to Zimbabwe — the IMF and the World Bank suspended operations, while the UK's DFID, USAID and the European Union stopped all aid other than that for humanitarian purposes.²⁰ Most other donors have also turned a cold shoulder to the government.

Relations between the government and its principal donors may be at an all-time low, but this is not necessarily of great consequence for decision-making in Zimbabwe. Policies for Zimbabwe are overwhelmingly the result of internal political processes. It is easy to overstate the role of the donors (Addison & Laakso, 2003).

Difficult as it is to disentangle the various threads to the argument, it would however seem that there are two main influences on policy in Zimbabwe in recent years. One is that already seen: the determination of the ruling party, historically identified with the war of liberation, to maintain its place at the helm. If preserving power means adopting authoritarian government, if it means making dramatic changes to its economic policy, it has been prepared to do so — no matter what the outside world may think or say.

The other influence is less well documented: the efforts by parts of the political and military elite to cash in on their power. Cases in point include allegations of military involvement in dubious mining ventures while engaged in the DR Congo; and the way in which fast-track resettlement has seen large tracts of seized farms being allocated not to land-hungry peasants, but to government supporters among the urban elites, some of them apparently in no hurry to farm their new properties.

An economy with controls creates opportunities for rich pickings by those few able to flout the controls. The centralised and authoritarian style of rule allows powerful individuals to make rapid decisions that favour their interests, with little or no challenge. And controls on the press make it less likely that corruption and sharp practice will be revealed publicly.

Unwelcome as this latter development is, the point should not be overplayed: government has been keen to be seen to stamp down on some abuses, and there have been some high-profile revelations over corruption in the last few years. Moreover, in what remains of the independent press, there is still some scope for enquiry and discussion of these issues.

²⁰ Ironically, given the scale of the current crisis, funds from these three sources to Zimbabwe have been generous since 2001 and 2002: probably more than would have flowed had relations been cordial and no crisis had occurred.

3.5 Responses to the crisis of 2001 onwards

From 2001, Zimbabwe has faced a combination of challenges to food security that are unprecedented. As seen, domestic food supply has been severely disrupted by a combination of poor weather and chaotically implemented policy, so that food is only available thanks to expensive imports and food aid from donors. At the same time, the economy has slid into frank recession, and has actually contracted since 2000. Jobs are scarce, essential goods in short supply, and rampant inflation is cutting real incomes.

If this were not bad enough, the HIV/AIDS epidemic, that has been advancing for a decade or longer, has reached a point where 25% or more of the population are reckoned to be HIV positive. Deaths are running at an estimated 3,800 a week. The social tragedy is appalling, the economic costs in care and loss of adults in their prime are high.

Government has responded to the threat to food security in part by trying to control food supplies. In 2001, the GMB was once again granted a monopoly in trading in maize and wheat, whether in the form of grains, meal or flour. Prices for maize at all stages from the farm-gate, into mills, and for retail sale have been subject to official controls. Had the GMB been able to buy in, or import, sufficient maize, this might have worked. But it has not. Over the three years since mid-2001 repeated reports indicate that frequently no maize grain or meal can be had at the controlled price. The intermittent official supplies, furthermore, have allegedly often been distributed to supporters of the ruling party.

A parallel market in maize has emerged, but prices here have skyrocketed — for example from August 2002 to January 2003, prices rose by 167%. Against this, wages for casual work have fallen behind. In August 2002, the median rural wage was worth 5.2kg of grain equivalent: by December 2002 it was worth just 2.5kg. (Reports from the VAC)

The government has in place a public works programme that has reached more than 40% of the population – but inflation has made the payments derisory. Typical payments per worker under the programme have in total reached the equivalent of just 10kg of grain on the parallel market.

Child feeding has been re-introduced in the current crisis, but it is not clear on what scale the government has been able to provide this.

With the government unable to provide much more relief, donors have mounted a large-scale programme of relief in Zimbabwe that has seen hundreds of thousands of tonnes of maize distributed to targeted households in the CAs. By March 2003, at the height of the pre-harvest hungry season, more than 5 million persons, around 40% of the population, were receiving monthly food packets. Donors have also funded supplementary feeding to children under five, school meals, and food assistance to people living with HIV/AIDS.

With relations between government and most of the official donors strained, relief feeding has been allowed only in the CAs — very little assistance has been given to

the urban population, or to those living in the former large-scale commercial farming zones.

4. Looking ahead: strengthening food security in Zimbabwe

4.1 The context of overall crisis

In the early years of the twenty-first century, Zimbabwe finds itself beset by interlinked economic, political and epidemiological crises, in which food insecurity is a key consequence.

Politically, we await a resolution of the impasse in relations between the ruling party and the opposition. This has been marked by frequent reports of human rights violations, and questions over the freedom and fairness of recent elections. Policy-making has become erratic, and at times dramatic — as seen in the land resettlement policy. Policy is hard to predict. Considerations of political advantage appear paramount to an unusual degree, and debates are highly politicised. Public debate on policy, moreover, has been muted by restrictions on the press and the limited dialogue in Parliament. The scope for using evidence for informing policy is thus small.

The economy has contracted in every year from 1998 to 2003, sending real incomes plummeting to levels no better than they were at Independence. With investors wary of committing funds given the political uncertainties, it is difficult to see how the economy can recover without a resolution of the political impasse. The response to economic problems since 2000 or so has been mainly to impose controls on trading and prices; measures that have had little success in stemming inflation or maintaining the living standards of the poor and vulnerable, while introducing distortions into the markets, and creating inflexible conditions that have undermined business operations and confidence. To a large extent, economic policy has been fire-fighting, without a clear and convincing strategy for economic recovery. At the same time, government's ability to conduct sound analyses of the policy options available has been weakened by an exodus of many economists from the civil service. (Bill Kinsey, personal comm.)

HIV/AIDS meanwhile is exacting an increasing toll socially and economically. Efforts to tackle the epidemic have not yet been on the scale and intensity needed. To some extent, the funding and new initiatives from donors and NGOs do promise some progress on this front. Even if those efforts are successful, the disease and its effects will remain at serious levels for years to come.

Improving food security will depend in large part on progress on resolving these difficult and pressing matters.

4.2 Seven challenges for food security

Improving food security requires progress on four longstanding concerns, as well as on three relatively new and demanding issues; that can be further divided by matters of food availability and those of access to food – see Table 8.

Table 8. Food security challenges for Zimbabwe

	<i>Longstanding concerns</i>	<i>New and demanding issues</i>
Food production & availability	<ul style="list-style-type: none"> • Increasing production and productivity amongst the majority of CA smallholders – including devising sustainable farming and livelihood systems for the drylands • Responding to periodic harvest failures 	<ul style="list-style-type: none"> • Getting food production and marketing systems to work better — realising the domestic potential for food production matters since it is cheaper to produce food locally than to import. In particular this implies resolving issues of: <ul style="list-style-type: none"> ○ Food production: technology, role of sorghum and millet, cassava; farming in the drylands, reactivating supplies of inputs, technical assistance, credit ○ Cereals markets: degree of state control over domestic and international trade
Food access	<ul style="list-style-type: none"> • Providing (temporary) safety nets in years of poor harvests for those who depend in large part on the farm economy • Social protection for the unfortunate — elderly, disabled, chronically sick 	<ul style="list-style-type: none"> • Ensuring access to food for poor households within the non-farming population — urban, peri-urban, mining, etc. • Responding to the HIV/AIDS epidemic

The main concerns expressed by participants at the March 2004 FFSSA/FANRPAN workshop on food security were about production and food availability. Most of this is a matter of re-activating production on the former large-scale commercial farms, by establishing input supply and credit, and extension, to the new farmers. The role of the GMB in controlling grain prices is lamented: what is the incentive to grow maize commercially?

There were also debates over appropriate crops and techniques for the semi-arid margins — if not maize, then is it millet and sorghum, or else cassava and sweet potato?

Some of the NGO community are exercised by issues of access. In particular, questions arise over how better to target food relief within the communal areas; and about what to do in urban areas and mining camps, and for the former LSCF farm workers and persons living with HIV/AIDS.

Nutrition and utilisation debates tend to be held in other fora. Issues raised include the need for nutritional surveillance and how to do this effectively. Does it make sense to offer blanket supplementation to the under-fives when wasting rates rise above 5%, rather than the international norm of 10%, and if so, should wet, or dry (take-home) rations be offered? School meals are also in debate: are they as effective as some claim, given their cost?

The rest of this section reviews the policy issues and options in more detail.

4.2.1 Food availability

In the mid-1990s, farm management studies showed that the cost of producing maize on large-scale commercial farms in Natural Region (NR) II of Mashonaland was just US\$69 a tonne, while for smallholders in CAs in the same region, the cost was US\$79 a tonne. (Sukume et al. 2000) Adding another US\$15 a tonne for transport to the main urban markets, gives a delivered cost of US\$84–94 a tonne. Given that international supplies were costing US\$220 a tonne or more delivered to Harare in 2003, domestic production is far and away the cheapest source of staple food in Zimbabwe.

For most years of the 1980s and 1990s, Zimbabwe harvested enough maize to meet domestic needs, except for the years of bad weather. Those years aside, Zimbabwe thus had sufficient food available at modest cost. This left two key issues to solve.

One was ***raising the productivity of the majority of smallholders in the communal areas***. The green revolution of the first half of the 1980s raised aggregate production from the CAs, but it did so largely from a small proportion of farms favoured by location and resources of land, labour and capital. The majority of smallholdings saw much lesser gains, owing to lack of resources, or to their location in the semi-arid lands of Natural Regions III, IV and V — where the majority of the CA population live.

Spreading the green revolution into such areas would have two welcome outcomes: it would boost food production — increases will be necessary for many years to come since the population is growing, and it will be some time before urbanisation is sufficient to see a net reduction in rural population; and it would provide direct food supplies to some of the poorest people in the country — some 75% or more of the population in NR III–V are poor, and more than half are extremely poor.

Policy options are both technical and economic/organisational. Which crops are most appropriate for such areas? It is commonplace to hear that maize has been planted too far into the semi-arid margins where millet and sorghum should be the grains of choice, being more resistant to drought. Some argue that even millet and sorghum are too vulnerable to rainfall failures, and that cassava needs wider promotion as a famine crop. Changing the output mix depends on there being appropriate varieties of alternatives to maize, on having production techniques that are effective for the drylands, and, perhaps more than anything else, on the possibilities for marketing any surpluses of alternative crops.²¹

The debate on these issues is similar to that taking place in neighbouring countries. The issues are not simple to resolve, since there are multiple considerations in the argument, that different contributors weight differently. At one extreme are those who recommend hybrid maize varieties with applications of manufactured fertiliser as the mainstay of the farming system. In a good year, the yields per hectare from such systems are far in excess of most other food crops. But others argue that this is to ignore the reality that farmers cannot afford enough fertiliser to realise the potential yields — indeed they may not be able to buy the seeds, let alone anything else. They

²¹ It may also, depending upon crop — for example, cassava — and area, depend upon consumer awareness programmes focusing on storage and preparation techniques. (Bill Kinsey, personal comm.)

worry that it would leave people highly vulnerable to rainfall failure; and that it undermines local biodiversity. Instead they advocate low external-input farming of crops that demand less rain or can resist drought.

Much of the argument thus turns on the ability to create effective input supply systems, with provision of credit. It also hinges on the provision of some form of insurance against the years of poor rainfall. Possibilities here include anything from formal insurance contracts, to keeping savings including livestock, to the possibilities of migration, to diversified income portfolios. In the long term, these two sets of conditions will surely be in place: but what do we do in the short term, when they are most definitely not? Do we direct efforts to creating the conditions, or go for a cropping system that fits within the existing limitations?

What techniques are needed in the drylands? Reports of soil erosion, soil degradation, as well as loss of pasture and woodlands are frequent. The challenge is to find techniques that not only boost production and resist drought, but also that conserve resources — and that are economically viable as well. Conservation farming,²² originally pioneered in Zimbabwe and now being applied in Zambia with some success, appears a promising option (see Haggblade & Tembo 2003). Learning new skills, increased time spent weeding, and additional care in land preparation present challenges for adoption; but they appear manageable and the results seen to date make any increased efforts look well worthwhile. The system can be used with hand tools, or with draught oxen.

But improved and appropriate crops and techniques are unlikely to be adopted unless there are the economic and organisational supports for them. From where can people get credit to obtain inputs? How can they afford to take the risk of investing in their fields when an ill-timed drought cuts the harvest? In the case of Zimbabwe, in contrast to its neighbours, the presence of a local fertiliser industry using in part local raw materials — and which currently has excess capacity — could supply fertiliser at lower cost than imports.²³ How can a simple and robust supply chain be mounted that ensures that farmers can get basic inputs — seed, fertiliser, some agro-chemicals, etc. — from local stores at the right moment? And, last but not least, how can marketing chains be extended into the drylands without the costs being so high that farm-gate prices offered become derisory?

There are pilot schemes for micro-finance, developing the capacity of local stores in input provision, seed fairs, contracting the production of sorghum, and marketing of pigeon peas. It remains to be seen how successful these pilots are, and whether they can be expanded with equal success.

The other longstanding issue is that of **responding to harvest failures in national cereal markets**. Left to the market, a harvest deficit is likely to be covered by imports. But these are only available at costs well above those of domestic production. Even if maize can be bought in sufficient quantity in South Africa, for example, it will cost at least US\$160 a tonne when delivered to Harare, and US\$ 220 a tonne if procured

²² This aims to make better use of nutrients and available moisture, through minimum tillage, only breaking pans in the soil to allow increased infiltration of rain water, and precision use of fertiliser in crop rotation systems.

²³ In the mid 1990s, fertiliser costs were under US\$200 a tonne for ammonium nitrate. In comparison, UK costs at that time were not much lower — at around US\$160 a tonne.

internationally. Food prices would thus tend to rise to import parity levels, at 50% or more than the usual domestic cost. The impact on the budgets of the poor, many of whom are net buyers of foods, could be heavy.

The main **policy response** to date has been for the GMB to store domestic production and to release this at controlled prices, similar to those of a normal harvest year, to millers in drought years. But domestic storage is expensive, so much so that total costs of such stored grains are almost certainly higher than those for imported maize.²⁴ It is no wonder that the GMB has for many years operated at a loss.

An alternative to storage would be to use imports, but to subsidise them: costly, but probably cheaper than storage, and probably less costly than the social costs of the price spikes if import parity prices are allowed to rule.

The danger with interventions to prevent maize prices from soaring when harvests fail is that Zimbabwe prices may then be cheaper than those of neighbouring countries also affected by poor harvests; so that informal exports take place putting upward pressure on prices in Zimbabwe. Such considerations strengthen the argument for co-ordinating farming and food policies between countries with long and porous boundaries.

A variant that has been piloted from 2003 in Bulawayo is that of subsidising the price of sorghum, using sorghum donated by USAID. Since milled sorghum is regarded by most consumers as inferior to maize meal, the scheme should be self-targeted to the poor. It also has the potential of developing a market for sorghum, a grain that is more suited than maize for cultivation in the drought-prone semi-arid lands. As at early 2004, the experience had been popular with consumers and there were plans to extend it to other urban centres.

To these older concerns, can be added those that have arisen in the last four years: how to **re-activate commercial farming** in the more favoured areas, and particularly in the new resettlement zones. The newly-resettled farmers, and especially the A1 smallholders, lack inputs, labour and traction, and access to credit to fund such purchases. Zimbabwe has companies experienced in supplying inputs to commercial farms, but in recent years they face limits in working capital costs and access to foreign exchange.

Cereals marketing is another issue. The GMB monopoly has pushed down prices in real terms,²⁵ and there are complaints over delays in paying farmers. Unless farmers can be assured that they will be paid promptly at prices that keep pace with Zimbabwe's rampant inflation, then they are unlikely to plant maize other than for home consumption.

Policy options here are intricately linked to progress in stabilising the economy, on the one hand, and to changes in marketing. The latter issue is, however, highly

²⁴ A point appreciated by government.

²⁵ In August 2004 the GMB price for maize was Z\$750,000 a tonne: with the US dollar worth Z\$5,300 on the parallel exchange markets, this makes the producer price for maize US\$142 a tonne. This is less than import parity, but should generate a margin for the efficient grower. The problem is that the margin will be much less than that applying to tobacco, soy beans or cotton (FEWSNET 31 Aug 2004).

politically sensitive, since control over cereals has come to be seen to be central to national security.

Government policy has announced programmes to supply inputs to the resettled households, to offer credit, and to provide tillage services; but there are doubts, given inflation, on whether the budget allocations will prove sufficient to meet the needs. It also not clear as to how such programmes can be sustained, and what measures might be taken to put input supply in the former large-scale farmlands on a commercial basis.

4.2.2 Food access

Harvest failures lead directly to **transitory poverty** for those smallholders for whom the cereals harvest is a substantial part of their incomes — and that poverty leads to food insecurity, even if it is possible to contain food price rises.

Policy options to alleviate such temporary hardship include:

- Distribution of food to those seen to be particularly poor and vulnerable. In the current crisis this is the overwhelming focus of the donor relief effort. Such programmes are expensive – if for no other reason than the logistical costs of moving large quantities across the countryside. Targeting can be costly to get right, otherwise the errors of exclusion or false inclusion mount. Government disagrees with most free food distribution, arguing that the able-bodied should work, hence the next measure;
- Public works programmes that date from the 1980s and were successful in helping people to cope with the harvest failure of 1992. For those able to work, these have the advantages of being self-targeting, since those not poor are unlikely to apply for work; as well as potentially creating useful outputs, such as road maintenance;
- Grain loans have been tried in the past, although there are few reports on their effectiveness;
- Both in the current crisis, as previously in 1992 and 1995, programmes to provide supplementary feeding to all children aged six months to five years in smallholder areas have been implemented. But there are questions over the actual coverage and the effectiveness of these schemes in the past (Munro 2002). Moreover, they are costly and their cost-effectiveness has not been tested;
- School feeding is another option being used in the current crisis. This has the additional potential benefit of encouraging school attendance and perhaps better attention in class. But it is not clear that it is school-age children that are most at risk in food crises, as opposed to the under-five's; and, as with supplementary feeding, the cost-effectiveness of school feeding is not clear.

Although there have been reviews of these programmes, there are few formal evaluations and even fewer comparisons of the different options, their effectiveness and relative costs. Given the scale of resources put into some of these programmes, above all the donor relief efforts, and given the potential for using relatively simple and cheap monitoring and evaluation techniques, the lack of formal evaluation surprises.

There may be other ways to help assist households to cope with the failures of their crops. For example, support for the prices of livestock that have to be sold; or perhaps

even assistance for temporary migrants. But there is little discussion of these in either national or donor circles. To be fair, such possibilities are not often considered in other parts of Southern Africa, or anywhere else for that matter. Presumably such measures are not considered since their links to food security are far less clear than measures such as direct provision of food.

Social protection for those who are chronically poor and unable to work – including (some of) the elderly, disabled and sick — is another continuing issue. But it is not one that gets much attention in mainstream policy.

For the most part the fate of these people rests with the support that they can get from family and local community, supplemented by help from charities. In the current crisis information on these groups is scarce, and awareness is low. The exception to this is the issue of HIV/AIDS, see below.

The current crisis has seen an increasing awareness of ***poverty and distress in urban and peri-urban areas, and in mining communities***. Until the last few years, it has usually been thought, with good reason on the basis of the evidence from surveys, that poverty is overwhelmingly rural. With the recent and growing problems of the urban economy, that is no longer true.

The main ***policy options*** for the urban poor include keeping the price of basic food low and stable — the agenda already discussed above; and creating decently-paid jobs, the agenda of economic recovery.

Stabilising prices of basic foodstuffs — maize meal above all — can be done, but the costs effectively tax the country's citizens. Ideally such costs should be explicit and transparent within the national budget, rather than appearing as part of the operating deficits of entities such as GMB, making it difficult to see how much the parastatal losses are the result of legitimate social concern, and how much arises from inefficiencies. With political stability and discipline, this can be done. In the current environment, it is more problematic.

Some form of public works programmes might be a way to provide jobs for the unemployed. The alternative would be simply to provide unemployment benefit, but the register would be open to abuse by the many who work informally. The former is clearly a more feasible action, but the public costs of any programme that reached the many currently unemployed are likely to be high.

Otherwise for the desperately poor, food packages or income support are possible, but costly to provide, and would require targeting. The costs of these are likely to be high for each household reached, probably higher than those of public employment: on the other hand the numbers in extreme need may not be so large as the unemployed.

In the current straitened circumstances of public finances in Zimbabwe, offering additional social assistance on any scale is probably a non-starter. What funds are available for public investment are probably better used in getting the economy re-activated.

HIV/AIDS poses another new challenge. Unusually, this is one area of social protection where funds may not be as constraining as for other programmes, thanks to international aid earmarked to combat the epidemic.

Several NGOs are providing food packages to the households of persons living with the disease, in recognition of the extra need for calories and good diet for the HIV positive. There may also be a useful return to measures as simple as providing multi-vitamin pills to those sero-positive. There are also counselling and other support programmes offered by NGOs.

In the last year or so anti-retroviral therapy (ART) has started to be offered by the Ministry of Health, as part of the WHO '3 by 5' initiative by which three million persons living with HIV/AIDS will be offered ART by 2005.

There is awareness and concern of the need to offer those affected by the disease ways to earn livelihoods — for example, by disseminating ideas on low-labour farming. Given, however, that local farming systems have long tried to save labour where possible, it is not clear that there are new technical answers to such needs.

4.2.3 Food utilisation and other nutritional issues

Issues of food utilisation are not discussed in full here, largely for lack of data and published analysis of these issues.

That said, the evidence on the gap between malnutrition rates for infants and adults suggests a high pay-off to efforts to improve the health environment of infants, and perhaps also care practices. Child nutrition would very probably be enhanced by better health and sanitation conditions, including: ensuring complete coverage of infants in immunisation programmes, provision of clean water supplies and safe sanitation, primary health services to monitor the growth of infants and provide timely treatment for the more common problems, etc. It would be useful to have more information and analysis to be able to prioritise within this menu, as well as to be able to direct services to particular social groups or districts. Doing so, however, will be difficult when public health services, and public works and utilities, are suffering declining budgets in real terms and struggling to retain their staff.

Similarly, it is probable that programmes to remedy micro-nutrient deficiencies — above all deficiencies of Vitamin A and iron — would be valuable. There are promising ways to combat these: Zimbabwe already has experience of Vitamin A supplements targeted to cases of measles, chronic diarrhoea and incipient xerophthalmia; as well as to communities hit hard by the 1992 drought. Food fortification was introduced in 1997 when bread was fortified with Vitamins A, B and iron. (FAO 2001)

5. Conclusions

Two major issues underlie policy options for strengthening food security in Zimbabwe.

1. The country has the resources to produce more than enough staple food to feed the population from its own land, at low cost in most years. But when there is poor weather, that occurs roughly twice a decade in recent times, and harvests fail, then food has either to be imported or taken out of store. But imports cost at least half as much again as domestic supplies, and the costs of storage are high, such that the real cost of stored grains is usually even higher than those of imports.

What, then, should be done when harvests fail? Leave matters to the market and accept that food prices may double in such years? Or subsidise, at public expense, either the cost of imports or stored grains, so that prices do not rise?

In practice, there is usually a third option: rely on the charity of donors and non-governmental organisations. This cannot be seen as a long-term solution. Quite apart from other considerations of, for example, independence, repeated and regular shipments of food aid may potentially either reduce incentives to local producers, or restrict the development of marketing chains that link farms to city maize mills, or both. Food aid should be reserved strictly for unforeseeable and rare emergencies — such as the intense drought and harvest failure of 1991–92; and not for the lesser harvest failures routinely seen a couple of times a decade.

2. The other issue concerns economic inequality and access to food. The distribution of land and other assets, education levels, and incomes remains highly inequitable in Zimbabwe, more than two decades after Independence. Indeed, inequality may be rising. Hence although the country has the wealth to assure all of its citizens at least their basic needs, in practice more than half of the population lives below the poverty line, and almost 40% have insufficient access to food.

Zimbabwe has tried to create new jobs and opportunities to bring those with low incomes up towards the level of the rest, but this has had limited success. The alternative is to redistribute assets, a radical example being the fast-track land settlement. It is far from clear that the latter will be any more successful than the former: land is an important asset, but unless those getting more land have complementary assets of tools, draught power, crop inputs, and know-how the potential to raise their incomes will not be realised.

Zimbabwe has also invested heavily in education to remedy differences in opportunity, but this alone has not proved effective. Too many young people have found themselves without jobs despite their education and qualifications at secondary and tertiary levels.

One way or another Zimbabwe has to improve considerably the welfare of the majority of its people and to reduce the yawning gaps between the haves and the have-nots.

Added to these underlying issues are the current concerns that set severe challenges to improving food security: namely the triple threat from political impasse, economic decline, and the spread of HIV/AIDS.²⁶ Without progress on these three fronts, it is likely that the current scene of insufficient domestic food production even in years of reasonable farming weather, leading to costly imports and continuing food aid; of widespread poverty with many depending on public distribution for food supplies; and of child malnutrition prompted or exacerbated by disease and poor sanitation that could be remedied by straightforward and well-known measures but which require trained staff and funds that are in short supply — will continue. In this context, food security policy will remain largely a matter of fire-fighting.

Moreover, without progress, matters may deteriorate. Food riots have broken out in the past, thankfully briefly. The threat of a worsening should be a spur to reform.

Zimbabwe's problems have knock-on effects on other countries in the region. Geographically, the country sits across the main land routes connecting Zambia and Malawi to South Africa. The problems of the Zimbabwe railways in providing a reliable service, and episodes of fuel shortages for road transport, push up the cost of moving goods through the country.

For two decades after 1980, neighbouring countries could expect that in most years Zimbabwe would be able to sell small, but significant amounts of maize to them, at a cost lower than imports from the world market. That has ended, and now the pressures and opportunities run in the opposite direction. Zimbabwe has begun to draw in food from its neighbours. On the positive side, this has created a market for the surpluses arising from recent good harvests of maize in Zambia. But it threatens to push up the price of maize in Malawi and Zambia.

Not all, however, is gloom. Zimbabwe possesses some very good agricultural land, and has the infrastructure and supply chains to make good use of this. The economy has been dynamic in the past, based on some rich natural resources of land and minerals, accumulated infrastructure and capital stocks, and, not least, know-how and economic organisation. Given the right conditions that dynamic can surely be re-kindled. If the political impasse can be overcome, and the economy re-activated, then there will be opportunities to make progress on food security.

²⁶ It is disconcerting that, thanks to these threats, devising and implementing a feasible strategy to reduce poverty in Zimbabwe has never been more difficult. Confidence in the possibilities of policy is at low ebb.

Annex 1 : Food security and vulnerability – key definitions

Defining food security

'Food security' exists when:

'all people at all times have physical, social and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.'²⁷

Some propose that, in addition, the definition includes that people do not fear loss of food security (Maxwell 1996). In this sense, reliability becomes as important as overall level of food intake: dramatic fluctuations in any component of food security, either because of an unexpected shock or during particular periods of the year, can have significant impacts on overall food security status.

Food security may be seen to have three basic components:²⁸

- **Food availability:** the sum of domestic production, imports (both commercial and food aid) and exports, and changes in national food stocks;
- **Food access:** people's entitlement²⁹ to food, namely the amount they can produce, purchase or obtain through transfers from kin, community or state;
- **Food utilisation:** effective preparation and consumption of food, and the biological capacity of individuals to absorb and utilise nutrients in the food that they eat, that in turn depends in large part on their health.

Institutions are important for food security because they influence people's ability to source food, for example through markets, government channels, and community networks.

The concept of food security can be applied at various levels: for individuals, households, nations and ultimately at global level. Food security is sometimes confused with concepts of food self-sufficiency, particularly at national level. To clarify, it is not necessary that a country produce all its own food to be food secure – think for example, of Finland, Kuwait or Singapore; countries where food insecurity barely exists, but which import much of their food. In similar vein, food availability at national level does not imply food security at individual level.

A1.1 Types of food insecurity

For those living in or close to poverty, food insecurity can often be seasonal. Typically in the period leading up to the harvest, some smallholder households run out of their basic food supplies and enter the food market, pushing up food prices and thus making access to sufficient food difficult for those living below the poverty line. Not for nothing, this period is often called the 'hungry season'.

²⁷ www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/fs_en.htm

²⁸ www.ifad.org/gender/thematic/rural/rural_2.htm

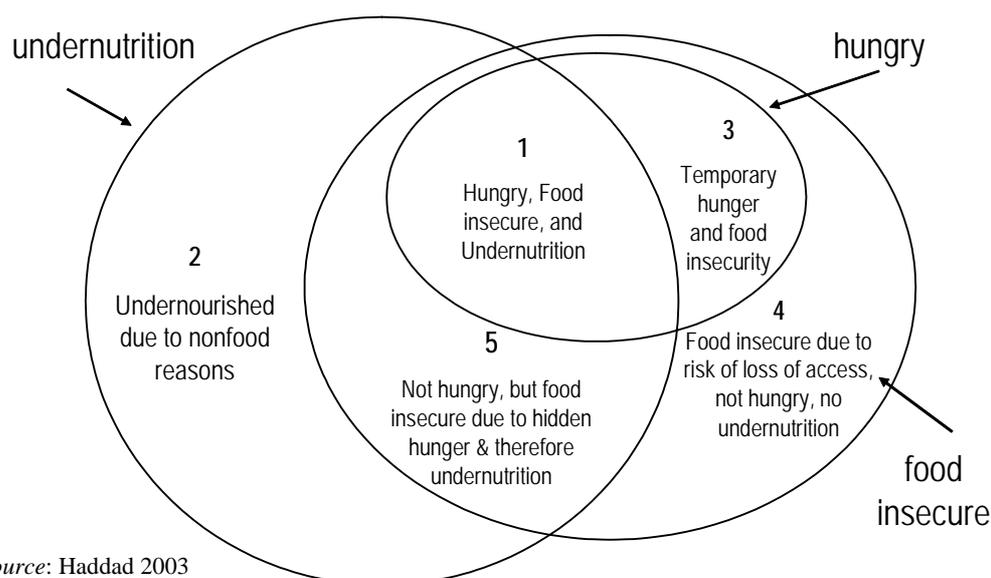
²⁹ Entitlements are the basis of access to food: 'The mere presence of food in the economy, or in the market, does not entitle a person to consume it' (Dreze and Sen, 1989: 9).

Food insecurity can be a chronic, on-going condition, usually closely associated with the poverty of those affected – usually a minority of the population. But there can be more short-lived episodes of food insecurity in which much larger numbers of people become temporarily food insecure, in reaction to a shock to the food system. In the case of Southern Africa, the combination of harvest failures in 2001 and 2002 and the consequences of policies on storage, food trading and land redistribution, were shocks that plunged large numbers of people into food insecurity.

Large-scale temporary food insecurity is clearly of great concern in its own right; but what may be even more worrying is that people may have become more vulnerable to shocks than in the past, and thus at greater risk of falling into such temporary food insecurity. If so, it may take only small shocks in future to condemn many to hunger. When severe problems are experienced by large numbers of people, and especially if they have suffered an abrupt decline in food intake, only then may the situation may be described as 'famine'.

Concepts of hunger, food insecurity and undernutrition overlap, see Figure A1.1.

Figure A1.1. The overlapping concepts of hunger, food insecurity and undernutrition



Source: Haddad 2003

The five possible states identified are as follows (after Gillespie & Haddad 2004):

1. Hungry, food insecure and undernourished owing to inability to access the food or to use it well, usually owing to problems of health and sanitation;
2. Food intake sufficient, but undernourished due to a lack of non-food inputs such as clean water and sanitation;
3. Not undernourished, but food insecure and hungry;
4. Neither hungry nor undernourished, but food insecure since they run a significant risk of losing access to food; and,
5. Not hungry, but food insecure and undernourished — they get enough calories to stave off hunger, but not enough variety in their diet and so are likely to have micronutrient deficiencies 'hidden hunger.'

A1.2 Measuring food insecurity

Unfortunately, indicators for measuring food insecurity are not well developed. Food balance sheets based on crop estimates, plus data on exports, imports and stores, have historically formed the basis of assessing food security in many countries, but these are indicative only of likely food availability, not the other important components of access to food and effective utilisation of food.

There is a well developed international protocol for assessing malnutrition through anthropometric measurements, described below, and this is the conventional route for identifying “emergencies” warranting international humanitarian response.

However, many food emergencies are ‘slow-onset’ and critical months have been lost by the time food insecurity is manifest in actual malnutrition. The essential difficulty is in identifying meaningful indicators of the *risk* component of food insecurity that can be used to measure the probabilities of food insecurity for different population groups. We return to this issue below, after setting out the various measures of malnutrition which still form the basis for much international debate on food insecurity.

There are two commonly used ways of assessing undernourishment.

- One is by inferring access to food by individuals, and then comparing this against a benchmark of typical minimum requirements for energy – defined by FAO as *on average* 2,100 kcal per person per day. To do this, FAO take a balance sheet of food available in a country, and then make judgments about the distribution of income so as to infer the average amount of food likely to be accessed by different fractions of the population.³⁰ This is then compared to the benchmark, and the numbers estimated not to have enough food are expressed as a percentage of the population.
- The other is by directly observing nutrition status by measuring people (‘anthropometry’). Most frequently surveys are made of children aged under five years, since they are most sensitive to malnutrition. Children are weighed, their height measured, and their age recorded.³¹ From these three sets of information, three statistics are usually computed:
 - Weight for height (‘wasting’) is indicative of *acute* malnutrition;
 - Height for age (‘stunting’) is indicative of *chronic* malnutrition;
 - Weight for age is a combination of the two.

All are measured against norms for the reference population as a whole: more than 2 Standard Deviations under the median is regarded as “moderate” malnutrition, and more than 3 Standard Deviations is classed as “severe”. Demographic Health Surveys are generally considered to be the most accurate source of nationally comparable under-5’s data³².

The standard indicator used to identify emergencies – Global Acute Malnutrition (GAM) – measures weight for height (wasting). Levels of 10% of under-5’s more than 2 Standard Deviations below the median weight for height within the reference

³⁰ The method depends heavily on the quality of the data on food supplies, and on the assumptions about the distribution of food. Although FAO take great pains to make their estimates, the results have been criticised as unreliable.

³¹ When time is pressing, as in emergencies, a short cut is to measure the upper-arm circumference (MUAC) of children.

³² <http://www.measuredhs.com/>

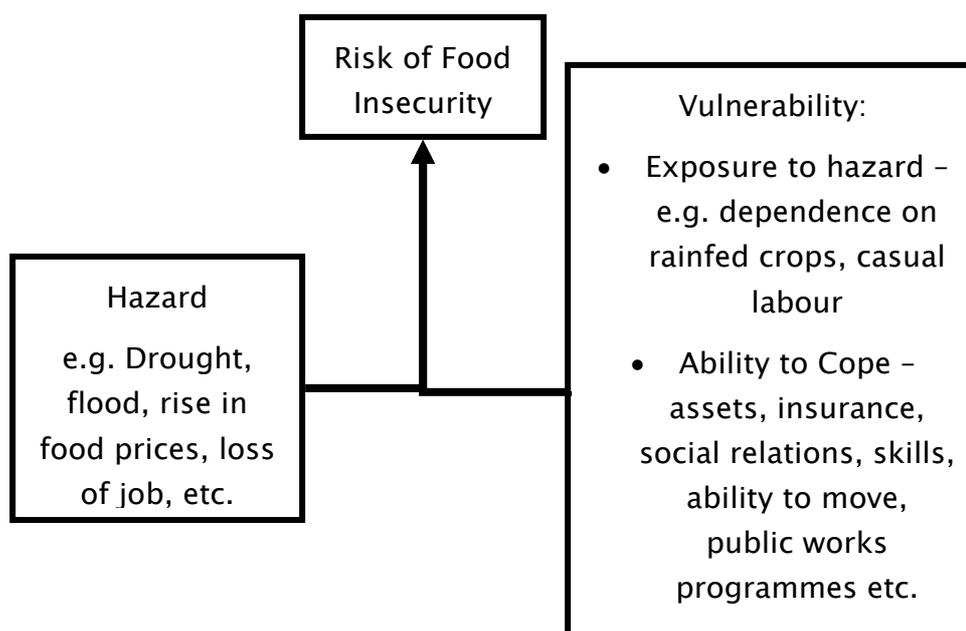
population are generally considered to indicate levels of malnutrition in the population at large warranting universal supplementary feeding of children under five. Levels between 5% and 10% are considered to be of concern and warranting close monitoring of the population.³³

To sum up, the quality of data used to measure malnutrition is often contested, but in any case malnutrition indicators are not necessarily accurate guides to levels of food insecurity within population groups. This distinction is highly important because, as we shall see in the next section, the risk of food insecurity – and the fear this induces – can be a major determinant of coping strategies, producing a downward spiral for affected households. The necessary public policy response is to attempt to address the underlying factors contributing to the risk of food insecurity.

A1.3 Vulnerability and food insecurity

Vulnerability may be seen as a combination of the degree to which a person or household is exposed to a hazard, and the extent to which they can cope with the effects of the hazard. The combination of vulnerability and hazard produces the risk of a particular outcome, such as food insecurity. These relations can be captured in a diagram, as seen in Figure A1.2.

Figure A1.2. Risk of food insecurity, hazards and vulnerability



Hazards may be natural, political, economic or social/human in nature; they may be unpredictable shocks, or longer-term trends. The latter, including, for example, weak economic growth and failures in democratic consolidation, can be as damaging for food security as sudden natural disasters or conflict. Hazards that affect individuals, such as old age, illness or being orphaned, are additional threats to food security for affected individuals, over and above economy-wide hazards.

³³ This is not to ignore those children who are malnourished.: when levels of GAM in the population are under the 10% trigger level, children identified as wasted are, ideally, referred for individual therapeutic feeding.

Box A1.1. Common food security hazards

	Natural	Political	Economic	Social
Trend	Land shortage Soil degradation	Weak governance	Market failure Inflation	Old age Childhood
Shock	Drought Flood Earthquake	Civil conflict	Devaluation Border controls	Motherhood Accidents Ill-health

NB HIV/AIDS and other pandemic diseases – as distinct from ill-health – are both trends and shocks, and there are political aspects, social aspects, economics aspects etc in terms of impact (see Slater, 2004)

For the chronically poor, the land, labour and capital they have at their disposal may be so inadequate that they are food insecure even in the absence of a significant hazard. This appears to be the case for around 8 million individuals across the countries of Southern Africa year-in year-out (CARE SWARMU, 2003). For many other households, however, food insecurity can occur when they are unable to cope with a particular hazard or combination of hazards. It is this latter group that appeared to be expanding significantly during 2001-03, as a result of localised climatic events *in combination with* longer-term economic trends and the HIV/AIDS epidemic: in Southern Africa as a whole, by late 2002 doubling the number of food insecure people to 16 million.

The concern in Southern Africa is that more people are at risk of food insecurity than in the past. As Figure A1.2 suggest, this can arise in three ways, thus:

- Increased exposure to hazards, since some households find their range of livelihood options curtailed and are forced to depend on risky activities, such as rainfed cropping;
- Reduced ability to cope. A key element is possession of assets, such as savings or livestock. But if these have been already been liquidated to cope with a previous hazard, future coping will be undermined. Inability to move and find additional work in times of stress may similarly reduce coping capacity: those living with HIV/AIDS are often in this situation. Coping is also affected by social relations: some fear that HIV/AIDS may weaken community mechanisms to help the weak cope. This is particularly important for food security because, as we explained above, the ability to generate income or to source food through community transfers is very important, not just the ability to grow it. Coping is also a function of formal provision of social protection by government, such as public works schemes or cash transfers.
- Increased frequency or severity of hazards. Climate change may be a threat in this respect, but equally so might be increasingly unstable food markets in which the price of maize fluctuates violently.

A feedback loop could operate as well: households that have seen either their ability to cope reduced, or the hazards they face increased, may then try to limit their exposure by undertaking less risky activities – but at the expense of forgoing income opportunities that would allow them to rebuild their assets and thus cope better. For example, farmers in drylands might plant millet rather than take the risk, arising from drought, of growing cotton or maize for which there is the chance to earn cash from surpluses. In relation to food security, livelihood strategies, in combination with livelihood outcomes themselves (i.e. in terms of poverty reduction and food security),

can set up **virtuous or vicious circles** of asset accumulation and social integration, which have a critical impact on households' ability to reduce, mitigate or cope with hazards threatening food security over the longer term.

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