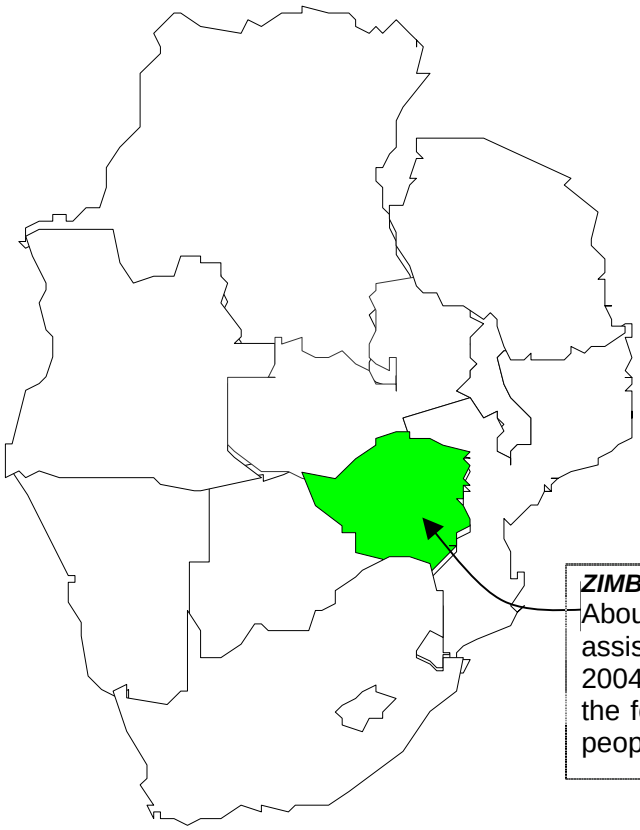
ZIMBABWE
Vulnerability
Assessment Committee

ZIMBABWE
FOOD SECURITY AND VULNERABILITY ASSESSMENTS - APRIL 2004
REPORT

SADC FANR
Vulnerability
Assessment Committee



ZIMBABWE
About **177 681 MT** of cereal food assistance will be required from April 2004 through to March 2005 to meet the food gap of about 2.3 million rural people.

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Harare

Prepared in collaboration with SIRDC – Food and Nutrition Programme, Ministry of Agriculture- National Early Warning Unit, Ministries of Public Service Labour and Social Welfare, Education, Sports & Culture and Health Child Welfare, Civil Protection Unit, CSO, WFP, FEWS NET, and SC (UK)

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Preface

This is the fifth food security assessment conducted by the Zimbabwe Vulnerability Assessment Committee (ZimVAC) initiated in August 2002 with technical support from the SADC Vulnerability Assessment Committee (VAC). Since then, three rural and one urban food security and vulnerability assessments have been carried out in Zimbabwe. These assessments have affirmed that although the national food security situation has gradually been improving with each successive year, household food insecurity has continued in different parts of the country.

ZimVAC is composed of a consortium of government, NGO and UN Agencies and is a subcommittee of the Social Services Cabinet Action Committee (SSCAC).

Acknowledgements

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ZimVAC warmly acknowledges this invaluable support from these multiple organizations.

Highlights for Household Food Security 2004-05

- The household food security situation for the 2004-05 season has significantly improved compared to last year. At the peak of the hunger period (November 2004 – March 2005), an estimated 2.3 million rural people (29%) will not be able to meet their food requirements compared to 4.4 million people (56%) in the rural area last year.

- A total of 177,681 Mt of food assistance will be required to meet the cereal deficit for this population compared to a deficit of 388,000Mt required last year.

- This cereal deficit is broken down according to the following periods as follows: 8,598 Mt during April to July 2004: 51,525 Mt during Aug to Nov 2004, and 117,558 Mt during Dec to Mar 2005.

- The food gap per person increases over subsequent periods and during August to November the range of deficit is 20 to 25 Kgs per person.

- The depth of the deficit is much higher in December to March, ranging from 43 to 62 kgs per person for that period.

- The greatest number of people predicted to be food insecure will be in Manicaland (420,929) and Midlands (340,097) provinces.

- The level of need varies widely across districts with Nyanga, Mutasa, Mberengwa, Insiza, Bulilima, Umzingwane, Kariba, Tsholotsho, Binga and Hwange having at least 30% of the population food insecure during the period April to July 2004.

- Resettlement areas contributed between 69 –84% of their requirements from own production compared to Communal areas which contributed about 33%.

- Food Aid was the single largest source of food in Communal areas providing on average 47% of needs.

Chapter 1

Summary

1.0 Zimbabwe Country Context

Zimbabwe has a population of 11.6 million people (CSO August 2002) with the bulk of the population living in the rural areas of the country.

The country's economy has faced a lot of challenges in the last five years with GDP falling by 28.7% between 1999 and 2003 and expected to decline further by 6.5 percent in 2004[1]. Annual inflation rose consistently from 228% in April 2003 to 622.8% in January 2004, but with a fall to 500% by April 2004. Between March and December 2003 the Zimbabwe dollar lost over 360%[2] of its value against the United States dollar, but rates stabilised during the early months of 2004 alongside the decline in inflation and the introduction of new economic policies. The National Food Poverty line for a household of 5 persons increased by 639.5% between April 2003 and March 2004 with minimum wages not keeping pace with the increasing cost of living in the country (Labour and Economic development research Institute of Zimbabwe, 2004). The structural unemployment estimated to be above 60% of the employable population of Zimbabwe (Human development Report 2003).

Most recent estimates in Zimbabwe indicate that 1.8 million people are living with HIV/AIDS, with an adult prevalence rate of 24.6%[3] The impact on food security of the pandemic has been through loss of coping mechanisms at the community level and the generally poor long-term nutrition status of the population.

1.1 Purpose of the Assessment

The April 2004 Zimbabwe Vulnerability Assessment aimed to appraise the food security and livelihood situation throughout the country, in order to identify areas in need and rural populations likely to be food insecure in the 2004-2005 marketing year and to determine their short and medium to long term livelihoods needs. This should inform decision-making, both on programme interventions and possible policy options.

The specific objectives of the assessment were:

- To identify areas and socio-economic groups likely to be food insecure and to predict the extent and intensity of food insecurity at national and sub-national levelsTo identify major constraints and opportunities to support sustainable rural livelihoods.
- To establish changes in livelihoods and coping strategies of rural households over time
- To understand the gender and age dimensions of sustainable rural livelihoods.
- To examine the linkages between rural livelihoods and HIV/AIDS, education, child protection, health, nutrition and water and sanitation.

1.2.0 Overview of Methodology of Assessment

1.3.0 1.2. 1 Technique

A "Livelihoods Based Vulnerability Analysis| (LBVA) framework based on household surveys and focus group discussions was used for the ZimVAC April 2004 assessment. The approach used is adapted from the LBVA adopted by the SADC Regional VAC in March 2003. The LBVA covers a wide range of issues, including availability of, and access to, food, water, shelter, health, education and child protection.

[1]Ministry of Finance and Economic Development, Selected Economic Indicators 2004.
[2]Pararrel Market rate
[3]Zimbabwe National HIV and AIDS Estimates (2003), MOHCW, CDC,UNAIDS

1.2.2 Data Collection

The sampling frame for the April 2004 survey was based on the list of all sites covered in the April 2003 survey, updated for completion and coverage of provincial, land use and Food Economy Zone sectors. A random sample of sites was selected from this list, and, within each site, a village was identified for conducting the household interviews and community focus group discussions. Wherever possible the selected village was one that had also been visited in the 2003 exercise.

A total of 93 sites were selected across the country and within each selected village 25 household and one community interview were conducted. A total of 2,243 household interviews were conducted in 92 sites and the resultant analysis sample consisted of 2,170 household and 90 community interviews.

1.2.3 Survey Logistics

The survey was conducted from April 20th to May 4th 2004. A total of 13 teams of 66 field researchers representing NGOs, UN and Government carried out the exercise. To facilitate data capture, researchers used Personal Digital Assistants supplied by the World Food Programme.

1.2.4 Data Analysis

Data analysis was undertaken using SPSS software. To determine food security conditions for the 2003-04 and 2004-05 consumption years, data was analysed by province, farming sector and Livelihood Zone. Linkages were made between food security and indicators of household welfare, including proxies for HIV/AIDS were explored. Extrapolation of the results to district level was done by linking Livelihood Zone data with CSO August 2002 ward level census data. The community interviews were analysed separately, and then linked to household data to provide a complete picture

1.3.0 Summary of Key Findings

1.3.1 Demographics

- **Sample -** The sample covered every district in the country and more than 75% of all sampled households were in the Communal areas whilst approximately 8% were in Old resettlement and small scale farming areas, 13% in newly resettled A1 areas, and the remainder (2%) in operational Large scale commercial farming areas.

- **Household Activities -** Most households interviewed were engaged in farming activities (70%). A number of households were also engaged in other livelihood activities with market gardening being the most common (13%) followed by mining (6%).

- **Household Composition -** The largest households were found in Matabeleland North and South and smallest in Mashonaland East. Over 30% of the households had elderly persons (60+ years) as members.

- **Head of Household Profile -** A number of head of household characteristics are summarised below.
    - Female-headed households were most common in Matabeleland North and Midlands (35%) and least common in Mashonaland West (20%).
    - Overall 27% of households had a head aged 60+, most commonly in Mashonaland East.
    - One fifth of all households recorded the head as being widowed, most commonly in Midlands

1.3.2 Review of the Situation in 2003-04 Marketing Year

- **National Food Security Situation 2003-04 -** The cereal requirements for last year were estimated at approximately 2.4 million MT. Of this total, maize constituted about 1.9 million MT. With the 2003 harvest production reported at 1.1 million MT of cereals including carry over stocks, the cereal gap was estimated at 1.3 million MT.

- **Food Insecure Rural Population in 2003-04 -** 56% of the rural population was estimated to fall short of their minimum cereal requirements during 2003-04 compared to 76% in the 2002-03 marketing year.

- **Coping Strategies and Consumption Patterns -** Improved food security in the rural areas has resulted in most households reducing their consumption coping strategies during December to March, compared to the same period 2002-03. In particular, there were significant reductions in the proportion of households skipping entire days without meals, eating unusual foods, or eating only vegetables.

- **Agriculture[1] -** Area planted to cereals for the 2003 season ranged from 0.13 to 50 acres increasing by 9% from the 2002-03 season, predominantly in the A1 resettled areas.

- **Household Health -** Malaria was overwhelmingly accorded the highest ranks followed by HIV/AIDS and diarrhoea.

- **Child Protection Issues**- Overally, 21% of households reported having one or more children aged 15 or less labouring full time on the farm whilst 37% had children engaged in part timework. The number of children labouring full time or part time drops consistently as the household's food security status improves and households with orphans have a higher average number of children labouring full time than those without orphans.

- **Migration –** Overally, 15% of communities reported higher than normal out-migration and 23% reported higher than normal in-migration. Major reasons for out-migration were seeking jobs and food whilst reasons for in-migration were seeking jobs and food and also ill health.

1.4 Projections for Household Food Security 2004-05

Food security for the marketing year April 2004 to March 2005 was determined from household data collected on crop production and livestock holdings and predictions of income expenditure on cereals and other sources of cereals, and was extrapolated from the findings of the previous year.

- **Predictions of Food Security 2004-05 -** A total amount of 177,681 Mt of cereal will be required to meet the needs of a population of about 2.3 million people in the rural areas who at the peak of the hunger period (Dec – Mar) will not be able to meet their food requirements during the 2004-05 season. This is equivalent to 29% of the total rural population and represents a significant decrease of the predicted situation a year ago (56%). The highest numbers of the population predicted to be food insecure will be in Manicaland and Midlands provinces. The extent of the cereal deficit varies across the three periods with the largest deficit being expected in the period December to March.

- **Population with Food Deficit -** For the period April to July the proportion of the food insecure population will range from 4% in Mudzi to 41% in Hwange with more than half of all districts having less than 20% of the population facing a deficit. The level of need varies across districts with Nyanga, Mutasa, Mberengwa, Insiza, Bulilima, Umzingwane, Kariba, Tsholotsho, Binga and Hwange having at least 30% of the population food insecure during the period up to July 2004.

[1] This section excludes those reporting no land (91 households) predominantly in the large-scale commercial farming sector and ex-farm workers in A1 areas. All averages are taken over non-zero areas.

1.4.1. Possible intervention Strategies

Short Term Strategies Household Food Deficits

In order to meet the food requirements of the 2.3 million people expected to be food insecure in the coming year, a number of measures could be introduced:

- **Targeted cash transfers** - safety nets would be most appropriate in areas where there is food surplus but isolated pockets of vulnerable households. In other areas, cash transfer programmes should be continued and active efforts to ensure that food would be made available on the market for purchase.

- **Community Food Granaries** – Zunde raMambo

- **Targeted food aid** – beneficiaries should be the most vulnerable households

- **Subsidizing of cereals for vulnerable households** - Though is an expensive option, it is recognized that prices of cereals could substantially alter the number of food insecure households but even at minimum prices there will still be just under 10% of the rural population who are so chronically poor that their incomes would be inadequate to purchase sufficient cereal requirements.

- **Internal redistribution of cereals** - internal movement of food must be facilitated to ensure that food reaches all areas where there are needs.

1.4.1.3. Long Term Food Security and Livelihoods recovery strategies

To address long term food and livelihood insecurity at both national and sub national levels, efforts by government and partner organizations should be directed at poverty reduction and these could include:

- Strengthening measures to control inflation to ensure that food and other basic goods and services are affordable to the population.
- Continued support for towards agricultural recovery.
- Continued support for livestock recovery programmes.
- Continued investments in the social services, in particular health and education,
- Continued and intensified efforts to tackle HIV/AIDS pandemic, in terms of prevention, mitigation and treatment and support for those infected and affected by HIV/AIDS.
- Continued efforts to address the plight of orphaned children

1.4.1.4 Monitoring and Further Research

Projecting food security requires making a variety of assumptions, particularly about prices and, in turn, households ability to access food commodities. It is very important, therefore, that monitoring of food security and livelihoods is carried out to review the validity of assumptions and to account for any unpredicted changes that may occur. The key variables to monitor will include:

- Maize prices and availability (both from the GMB and inter households markets)
- Livestock prices and terms of trade
- Cash crop prices and returns
- Provision of external assistance (e.g. food aid, other transfers)
- Responsiveness of different income sources to changes in the cost of living
- Utilisation ie nutritional status indices

Chapter 2

Introduction

2.0 Background

Since August 2002, three rural and one urban food security and vulnerability assessments have been carried in Zimbabwe. These assessments have affirmed that the national food security situation in the country has continued to improve over these years. However, while the food deficit gap at national level has significantly improved in the last season, the availability of maize and its accessibility at household level were the main determining factors of food insecurity from 2002. During the last marketing year, there was more grain available on the market but the price of maize made it difficult for large numbers of the population both rural and urban to access this staple food. The Urban assessment carried out in September 2003 estimated that about 65% of Urban households were food insecure. Respondents cited inflation as the major shock affecting them through high prices for most food commodities. The macro economic situation has not been conducive as the country has continued to experience a decline in the Gross Domestic Product, rising unemployment, depreciation of the Zimbabwe dollar against major currencies, poor export performance and the resultant poor balance of payment position. The impact of these factors on the livelihoods of the general population is worsened by the heavy burden imposed by the HIV and AIDS pandemic on the society as a whole. Consequently, household self-reliance and economic productivity have been severely eroded.

While information is available for planning for the Urban areas, the last assessment for rural areas was conducted in April 2003. In this respect, the Zimbabwe Vulnerability Assessment Committee (ZimVAC) undertook an assessment of food security and livelihoods in the rural areas of Zimbabwe in April 2004. This survey will not merely update the last April assessment but will seek for a deeper understanding of the broader emerging context and key issues redefining rural livelihoods and vulnerability in Zimbabwe.

2.1 Purpose of the assessment

The assessment aims to appraise the food security and livelihood situation throughout the country, in order to identify areas in need and rural populations likely to be food insecure in the 2004/2005 marketing year and to determine their short and medium to long-term livelihoods needs. This is expected to inform decision-making, both on programme interventions and possible policy options.

2.2 Specific Objectives of the assessment

- To identify areas and socio-economic groups likely to be food insecure and to predict the extent and intensity of food insecurity at national and sub-national levelsTo identify major constraints and opportunities to support sustainable rural livelihoods.
- To establish changes in livelihoods and coping strategies of rural households over time
- To understand the gender and age dimensions of sustainable rural livelihoods.
- To examine the linkages between rural livelihoods and HIV/AIDS, education, child protection, health, nutrition and water and sanitation.

CHAPTER 3

METHODOLOGY

3.1 Analytical Framework[2]

In March 2003, the SADC Regional VAC adopted a "livelihoods-based vulnerability analysis" (LBVA) framework, based on household surveys and focus group discussions. A livelihood can be defined as "the sum of ways in which people make a living. Vulnerability refers to the level of exposure of a household or community to particular shocks (external vulnerability) and their capacity to cope with that shock (internal vulnerability)". A comprehensive analysis of livelihoods must cover a wide range of issues, including food, water, shelter, health (including HIV/AIDS), education, protection etc. The main characteristics of the approach are:

- Analysis disaggregated by livelihood zone (LZ) and by socio-economic or wealth group. Livelihood zones are the geographical units of analysis, while the use of wealth groups acknowledges that different people have differing levels of access to assets and income and that these do not necessarily balance each other out within any given area. For Zimbabwe, the livelihood zones used were those identified in a re-zoning exercise conducted in March 2003 by the ZimVAC, and described further in section 4 . Further disaggregation is carried out where applicable by other social and demographic characteristics.
- The focus is on how households access food and earn income and their expenditure patterns. The approach acknowledges that access to food is not exclusively related to food production or availability. By assessing access to income in addition to food, the approach also enables us to understand access to services such as healthcare and education.
- Quantitative analysis. This is necessary to cross-check information and ensure that the results that emerge from the data are internally consistent. It also enables us to assess the relative contributions of various sources to the total amount of food and income, and therefore to estimate the overall effects of various shocks.
- Analysis of baseline access as a means of assessing vulnerability. A benchmark is needed with which to compare the likely changes in access to food and income as a result of actual or predicted problems. Often, LBVA uses a "normal year" analysis. In each of the Zimbabwe studies to date, it was decided to use the last marketing year (in this case April 2003 – March 2004) as the baseline, whilst also making comparisons to information collected for the previous marketing year. Subsequently, changes in each source of food and income for the next 12 months are estimated. Further details of how these estimates were derived for each source of food and income are presented in Annex C.

3.2 The Survey Sample[2]

The sampling frame for the April 2004 survey was based on the achieved sample of the ZimVac April 2003 rural survey, an approach taken so as to ensure comparability with the previous year's results. The sample for the 2003 survey consisted of 150 sites distributed across the country and representing the 24 Food Economy Zones (FEZ) as described in section 4.

A total of 93 sites in all districts, which represent coverage of all FEZ, provinces and Farming sectors, were selected for inclusion in the 2004 sample. Wherever possible a site that had previously been included in the April 2003 sample was again selected for the 2004 sample, in order to move towards establishing trends over time. Where no site in a particular zone in a particular district had been covered in the 2003 exercise, a random selection process was used for selection – this involved 20 of the 93 selected zones.

Within each selected site, one village was identified for inclusion in the sample. If the site was one of those from 2003 a random selection of one village visited in 2003 was made. If the site had not been covered in 2003, a random selection of one village from all in that site was made with the assistance of District officials.

[2] This section draws heavily on "A Comparison of Emergency and Baseline Vulnerability Assessments", Mark Lawrence, 2003.

[2] A full description of the sampling process is provided in Annex A

Within each selected village 25 households were randomly selected using a transect method, for household interviews. Community leaders in each village were asked to assist in the identification of key informants and knowledgeable members of the community, for participation in the community interview and discussion. The total planned sample size was thus 2,325 households and 93 communities. Unfortunately one site was never reached due to logistical problems, and community interviews were not carried out at another two sites, again for logistical reasons. A total of 2,243 household and 90 community, interviews were completed. Extensive data cleaning necessitated the removal of some household interviews from the sample due to high rates of non-response and other logistically derived reasons, and the final size of the household sample used for analysis was 2,170. A full description of the sampling process is contained in CCAnnex A whilst a map of sampled areas is shown below (figure 3.1).

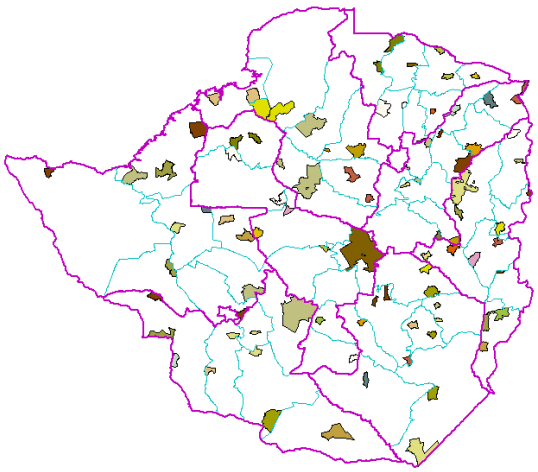


Figure 3.1 : Distribution of Wards Sampled for April 2004 Rural VAC Survey

3.3 Survey Instruments and Logistics

The assessment's instruments[3] consisted of (i) a household questionnaire covering household demographics, asset and livestock ownership, food availability, access to food and income for 2003-04 and 2004-05, agricultural inputs, consumption patterns, coping strategies, health and education, and household mortality; and (ii) a community questionnaire looking at food availability, market prices, coping strategies, health and water issues, seasonal activities, perceptions on the past agricultural season and future needs.

The questionnaires were administered by 13 teams, each consisting of 4-7 researchers who represented Government, NGOs and the UN[4] agencies. Each team used Personal Digital Assistants (PDAs) to record data from household interviews. Team leaders were identified and handed responsibility for coordinating the team's schedule, reporting and data quality checks.

3.4 Data Analysis[5]

Data analysis was undertaken using SPSS software. To determine food security conditions for 2003-04 and 2004-05 consumption years, data was analysed by province, agricultural sector and livelihood zone. Linkages between food security and health, education, HIV/AIDS and other household characteristics were also explored. Extrapolation of the results to district and national
level was then done by linking Livelihood Zone data with CSO August 2002 ward-level census data. The community interviews were analysed separately, and then linked to household data to provide a complete picture.

[3] Copies of the survey instruments are contained in Annexes B and C
[4] See Annex D for a full list of participants
[5] See Annex E for the details of how the data analysis was carried out.

3.5 Data Quality

One of the major problems faced by the data analysts was that of non-or incomplete or inaccurate responses as recorded (or not) on the interview forms/PDA. Some of these problems were clarified through the debriefing with each team upon their return from the field. In the majority of cases during analysis, it was possible to rectify obvious problems through extensive data cleaning process and through crosschecking of responses within and between interviews. Some key crosschecks included:

- Knowing that households could not have survived on significantly less than their minimum food requirements
- Comparing reported purchases of food with possible purchases given household income levels
- Comparing overall food security status with coping strategies and consumption behavior.

Analysts worked together to make informed judgements to deal with these problems. In the worst cases where data was severely lacking or inconsistent, those records were excluded from analysis. In the case of the expenditure section, the quality of the data and differing ways of asking the questions by enumerators led to that section being excluded from all analysis.

Double entry was performed on 10 percent of the demographics section to check on the quality of the data entry process. A few discrepancies were detected and corrected.

Overall, while there were some shortcomings with the data, the ZimVAC believes that the results presented here are a reasonable reflection of the prevailing situation.

CHAPTER 4

LIVELIHOOD ZONES AND POPULATION PROFILE

4.1. Livelihood Zone Descriptions

Zimbabwe's Livelihood Zones were first delineated and described by Save the Children as part of the "Risk Map" project in 1996. The 1995/96 report divided the country into 26 livelihood zones. The delineation of the zones was updated in March 2003 by the ZimVAC to take into account socio-economic changes, in particular the land reform programme undertaken by the Government from 2000 to 2002. In the delineation, livelihood zones, which were formerly grouped together as large-scale commercial farming areas, now comprise of smaller farming units of varying sizes.

The zones are based on farming sector (communal or subsistence farming, old commercial farming, newly resettled farms, i.e. Model A1 (communal resettlement) or A2 (small-scale commercial farms), old small-scale commercial farming, irrigated estates or old resettlement area). In commercial farming areas, livelihoods are based on wage-based farm employment. In communal and resettlement areas, livelihoods are more varied and based on different combinations of food and cash crop production, and livestock holdings. Agro-ecological zones are also factored in when determining the livelihood zones. Zimbabwe's agro-ecological zones are numbered from I to V, with zones I and II being prime arable land, zones IV and V having low rainfall and being more suited to extensive farming and livestock, and zone III being an intermediate area. Livestock holdings, however, are also related to wealth and therefore are not strongly correlated with agro-ecological conditions (Figure 1).

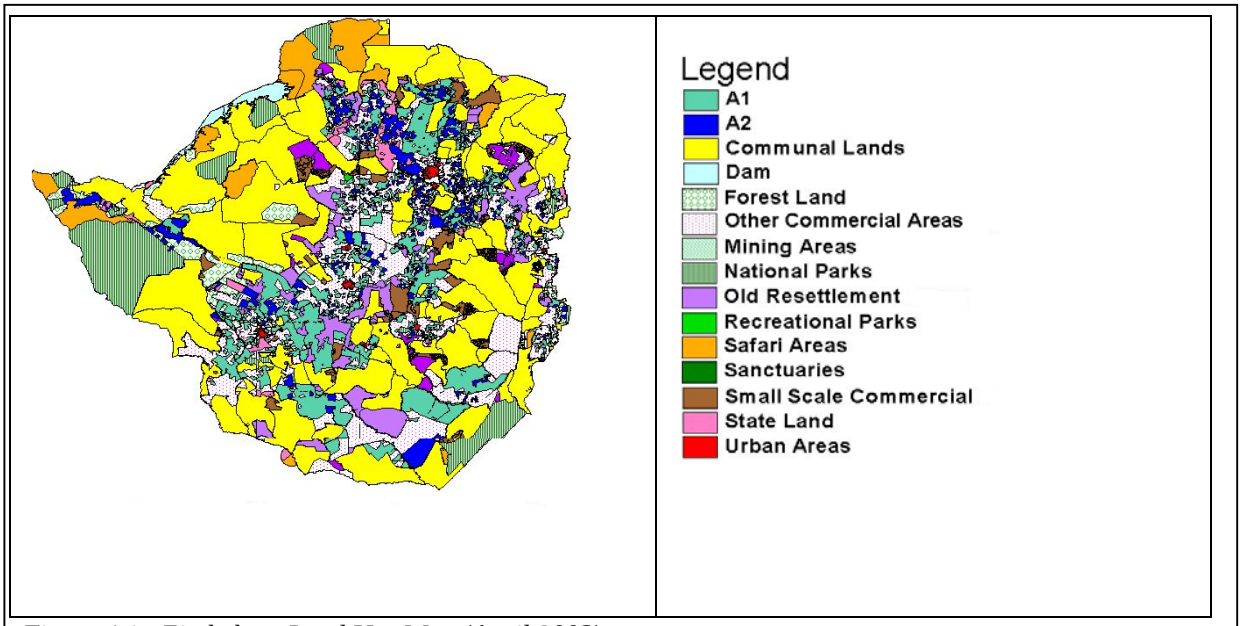


Figure 4.1 : Zimbabwe Land Use Map (April 2003)

Combining these factors and considering livestock, cereal crops and cash crops sales, sources of income and others, ZimVAC *(April 2003)* redefined and re-delineated the livelihood zones into 24 zones from the previous 26. (Figure 4.2).

The poorest zones are found in peripheral parts of the country in the north-east (Greater Mudzi), extreme north and west (Zambezi/ Kariba Valley), and south of the country. Elsewhere, agricultural production and income are normally highest in the highveld parts of the Mashonaland Provinces, and parts of northern Manicaland. These areas have the highest concentration of commercial farms and resettlement communities. In the Matabeleland Provinces and in southern parts of Midlands and Masvingo provinces, levels of crop production decline, and livestock become more important.

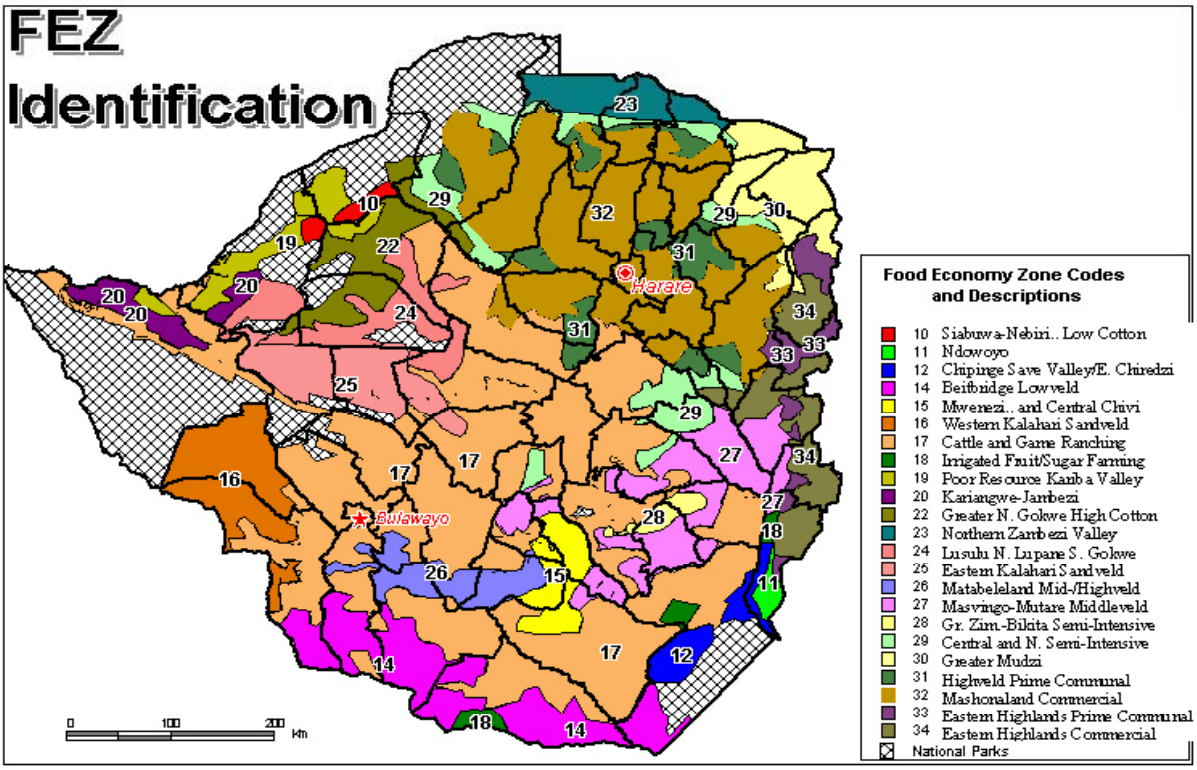


Figure 4.2 : Zimbabwe Livelihood/Food Economy Zone (FEZ) Map (April 2003)

For the current survey it was decided that as sample sizes for certain low-population zones were too small for detailed analysis, a number of relatively similar zones were combined for analysis purposes[3]. These were as follows:

- Poor Resource Kariba Valley, Kariangwe-Jambezi and Siabuwa-Nebiri Low Cotton-Producing Communal were merged into one zone labelled “Western Zambezi Valley”
- Northern Zambezi Valley was merged with Greater Mudzi
- Ndowoyo Communal, Chipinge, Save & Eastern Chiredzi, and Mwenezi, Southern Mberengwa, Southern Zvishavane and Central Chivi were merged into “Southern Masvingo, Southern Midlands and Chipinge”
- Great Zimbabwe and Bikita Semi-Intensive was combined with Central and Northern Semi-Intensive Middleveld

4.2 Demographic Profile of the Sample

This section aims to provide an overview of the demographic aspects of the cleaned sample of 2,170 households and their accompanying 90 communities.

4.2.1 Geographical Distribution of the Sample

The sample covered every district in the country and more than 75% of all sampled households were in the Communal areas whilst approximately 8% were in Old resettlement and small scale farming areas, 13% in newly resettled A1 areas, and the remainder (2%) in operational Large scale commercial farming areas.

[3] Note that this was only for the pragmatic purpose of this assessment; it does not constitute re-zoning. The zones remain sufficiently different that future analyses should attempt to deal with them individually.

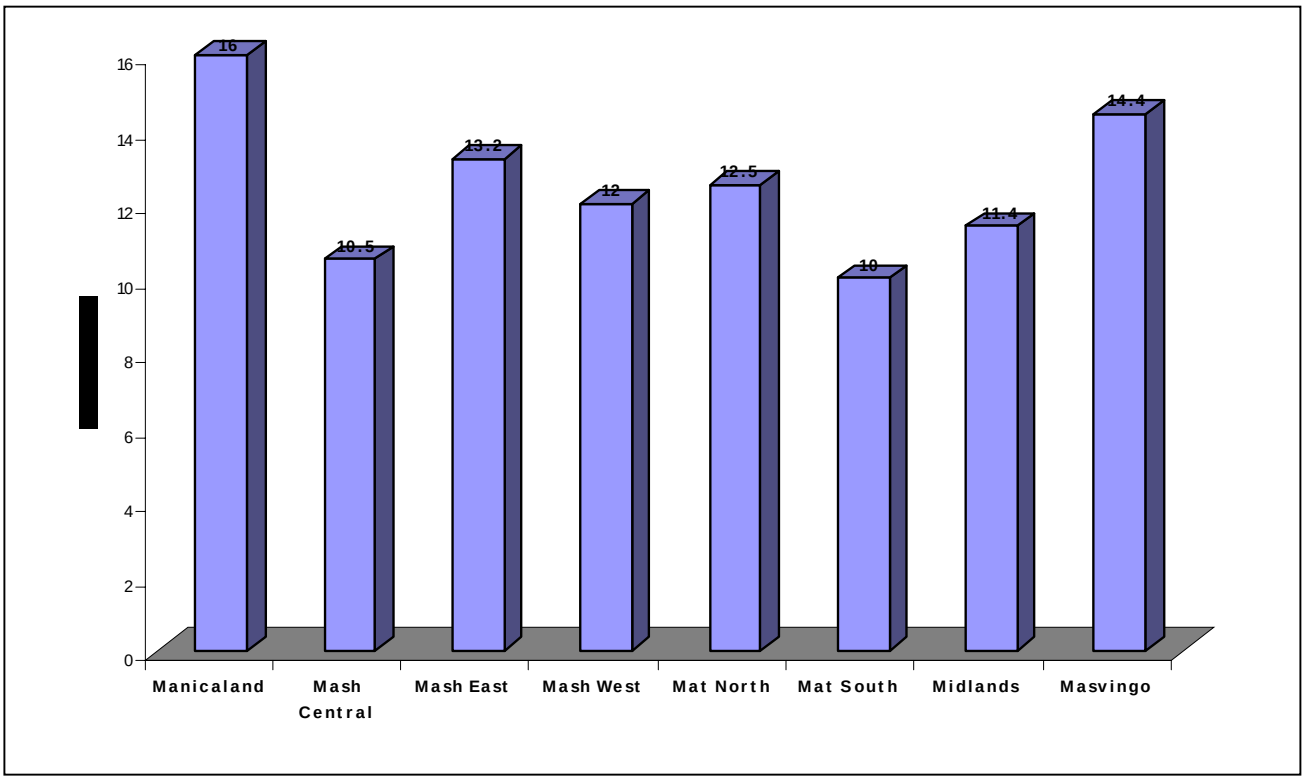


Figure 4.3 shows the distribution of the sample over provinces, and it should be noted that provincial representation is not reflective of 2002 census population figures. Since the sample was designed to adequately represent all FEZ in all provinces, it was necessary to increase the sample size for some areas e.g. Matabeleland North. Similarly the sample is not proportionally representative of FEZ and here again it was necessary to increase the sample size in smaller zones to ensure that disaggregating would be possible at the analysis stage. Further, some zones were grouped for analysis purposes, as explained above. Annex A gives details of the FEZ representation in the sample.

4.2.2 Household Livelihood Activities

Table 4.1 reflects percent responses on household livelihood activities rather than percent of households. Most of the responses (73.4%) indicated that farming is the main household livelihood activity, while 13.6% of the responses indicated market gardening as the main activity. All mining activities accounted for 5% of the total responses. Market gardening was most common in Manicaland and Midlands provinces, in Communal areas and in the Mutare-Masvingo Middleveld zone. Gold panning was most common in Mashonaland West and Midlands's provinces, in the Old Resettlement areas, and in the Lusulu, Lupane and Southern Gokwe zone.

Table 4.1: Household Livelihood Activities (Multiple Responses)

Livelihood activities	% Responses
Farming	73.4
All mining	5.7
Excommercial farm worker	1.2
Fishing	1.0
Market gardening	13.6
Commercial farm worker	1.9
Trading, selling	1.5
Skills offered	0.7
Casual Labour	0.5
Other	1.8
Total responses	2855 responses

The data shows that more than 75% of households named only one activity, possibly only mentioning their *main* livelihood activity, but comparisons with the income sector show that only 10% of households claimed no income sources at all during the marketing season ending in April 2004. A further 29% of households registered one income source during this period, 32% two sources and the remainder noted 3 or more sources[4]. Provinces where greatest proportions of households registered no income sources include Mashonaland Central, Matabeleland North and Masvingo (13-15%), whilst Midlands showed the least proportion (6%). Those in Communal areas were more likely to have registered no income sources (11%) compared to those in the resettlement areas (4-5%).

More than 20% of households registered that children were engaged in farm labour activities. 11% of these households have claimed that 80% or more of their children were engaged in full time farm labour activities. Regarding adults engaged in farm labour activities, 70% of households claimed that more than three quarters of adult members were also engaged in farm labour activities. Less than half of all households registered adults as engaging in full time non-farm income activities with nearly one fifth claiming that all members were so engaged.

4.2.3 Household Composition

Household size ranged from 1 to 19 with an average of 6 persons. The largest households were found in Matabeleland North and South, in Old resettlement areas and in the Eastern Kalahari Sandveld zone. Smallest household sizes were found in Mashonaland East province, in the large-scale unsettled commercial farms, and in the Irrigated Fruit and Sugar Estates and the Eastern Highlands Communal zones.

Households were asked to provide information on residence of members. Nearly 90% of households claimed that at least three quarters of their members were in full time residence. Large proportions of members in full time residence were most common in Mashonaland Central province and Western Zambezi valley zone, and least common in Masvingo province and in Beitbridge and South West lowveld and Eastern Kalahari Sandveld zones, with minor differences between land sectors.

60% of households claimed to have no elderly members (aged 60+), whilst 4% claimed that the elderly made up at least 40% of all members. 43% of households claimed to have no children under 5 whilst in 4% of households children under 5 constituted half or more of all members.

The number of orphans in households ranged from 0 to 8, with 32% of all households registering at least one orphan with one parent deceased and 12% having at least one orphan with both parents deceased. Households in Midlands province reported the greatest presence of orphans (40%) whilst Masvingo and Matabeleland South reported the smallest presence (28%). With regard to farming sector, communal areas reported the greatest and commercial farms that have not been resettled the smallest presence of orphans in the household.

Dependency ratios were calculated in two ways. Firstly the raw ratio arose by comparing the number of adults (aged 16-59 years) to the number of dependents (young and elderly). Secondly, the effective dependency ratio by taking into account the reported health of adult members (16-59 years) – those reporting to be in poor health or disabled were included amongst the household dependents. Ratios ranged from 0 (no able adults in the household) to 100 (no dependents in the household). Using the raw ratio 9% of households had in excess of 4 dependents per able adult (or no able adults at all) with this figure rising to 12%, using the effective ratio. Households in Midlands's province reported the more serious effective ratios with 15% having in excess of 4 dependents per adult. Mashonaland West showed the least serious ratios with 9% of households having in excess of 4 dependents per adult. Communal areas showed more serious rates than either the Old or new A1 resettlement areas.

The number of widowed persons in households ranged from 0 to 4 with 28% of all households recording the presence of at least 1 widow/er. The presence of widow/ers was most common in Matabeleland North and Midlands (35% of households) and in Communal areas (30%) and least common in Mashonaland West and Matabeleland South (24%) and in unsettled commercial farming areas (11%).

[4] See section 4.4 for comments on seasonality of income sources.

4.2.4 Profile of Head of Household

Female-headed households were most common in Matabeleland North and Midlands (35%) and in Communal areas (30%) and least common in Mashonaland West (20%) and unsettled commercial farming areas (15%).

The age of the head of household ranged from 15 (1 household) to more than 90, with overall 27% of households having elderly heads (60+ years). These elderly headed households were most common in Mashonaland East (38%) and in Old resettlement areas (38%) and least common in Manicaland (17%) and in A1 resettled areas (18%), with none being recorded in unresettled commercial farming areas.

One fifth of all households recorded the head of household as being widowed. This was most commonly found in Midlands (29%) and in communal areas (23%) and least common in Mashonaland West (15%) and in unresettled commercial farming areas (9%).

Only one quarter of households recorded the head as having more than primary school education, with 19% recording no formal education. Household heads with no education were most commonly found in Mashonaland Central and West (23%) and in communal areas (20%) and least commonly found in Masvingo (13%) and in unresettled commercial farming areas (9%).

Close to 10% of all households recorded the health of the head as poor/disabled (with "poor" defined as sick for more than 3 months continuously) and 11% of households recorded the head as having been sick for 3 or more weeks in the past month. Heads in poor health were most common in Mashonaland East and Central (13%) and in Communal and old resettlement areas (11%) and least common in Mashonaland West (5%) and in A1 resettlement and unsettled commercial farming areas (5%). Heads of households sick for 3+ weeks in the past month predominated in Matabeleland South and Midlands (14%) and in communal areas (11%) and were least common in Masvingo (7%) and unsettled commercial farming areas (2%).

4.2.5 Characteristics of Female Headed Households

Table 4.2 summarizes frequently cited characteristics of households in relation to gender issues. It is clear that female heads of households are less educated, more likely to be widowed and/or to have 1+ widows resident in the household, have more serious effective dependency ratios, and are much more likely to have one or more orphans in the household. On the other hand, female heads are less likely to be in charge of large households.

Table 4.2 : Household Characteristics by Gender of Head

Characteristic	% Female Headed	% Male Headed
3+ weeks sick	10	13
Poor health	12	8
4+ dependents/adult	19	9
Household size 4+	28	36
Age 60+	28	27
No education	30	14
1+ orphan in HH	60	27
Widowed	67	3
One+ widows in HH	69	13

4.3 Community Wealth Ranking

The community-level questionnaire in the current survey asked questions about the typical characteristics of households considered to be poor, middle and better off in that community. The main factors affecting wealth include the land area owned, assets and livestock owned and the types of income-earning strategies that they pursue.

The table in Annex G summarizes the key issues of land and livestock holdings for the wealth groups in each food economy zone, and indicates the percentage of the population estimated by the community to fall into each category. As can be seen, the differences between households considered "poor" vary only relatively little across the country. Poor households typically own 0.5-2 hectares of land, and less than 2 cattle. There are some exceptions to this, for example in the Eastern Highlands Resettlement area, land and livestock ownership is significantly higher.

Greater differences arise for the middle and better off wealth groups, particularly in relation to land. In some zones, e.g. Eastern Highlands Communal and Matabeleland Middle and Highveld the middle income groups still only own on average 1.5 ha, while in Greater Northern Gokwe the average is said to be 6-7 ha.

It is important to bear in mind that these are the characteristics for "typical" households in each category. However, as the analysis of vulnerability based on the household survey shows in chapter 9, there are a wide range of factors affecting food security. This can mean that the households that are actually food insecure display quite varied characteristics. Factors such as the age, gender, health status and education level of the household head have a significant bearing on, for example, the ability to access and utilize land.

4.4 Seasonality of Consumption and Activities

The inclusion of seasonal analysis in this year's survey has added another important layer to our understanding of rural food security and livelihoods. Each community indicated the months during which various activities take place. A simple scoring system was put in place for each activity and each month, with blank meaning the activity was not occurring, 2 meaning peak season, and 1 meaning the activity was occurring but only to a limited extent.

The calendar in table 4.3 below indicates the seasons for various activities for key crops and livestock in two different zones of the country, the Highveld Prime Communal (covering much of the Mashonaland provinces) and the Beitbridge and Southwestern Lowveld Zone. As can be seen, the cropping season starts earlier in the north, with maize planting taking place mainly from October to December, compared to December to February in the south, although the pattern for millet in the south resembles the pattern for maize in the north. There is a notable difference in the season for peak livestock sales between the two areas. In the south, because of greater reliance on livestock, sales occur year-round and peak from June to August. This earlier peak was also reported in other southern zones such as the Western Kalahari Sandveld, Matabeleland Middle and Highveld, and Cattle and Game Ranching/ Resettlement, while in the Highveld and much of the middle and north of the country, sales peak between November and January.

Table 4.3: Seasonal Activities in two FEZ

Beitbridge & SW Lowveld	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Maize - Plant									2	2	2	
Maize - Weed									1	2	2	2
Eat Green Maize	2	1									2	2
Maize - Harvest	2	2	1									
Millet - Plant							1	2	2	1		
Millet - Weed								1	2	2	2	1
Millet - Harvest	2	1										2
Cotton - Plant							2	2				
Cotton - Weed									2	2	2	2
Cotton - Harvest	2	2	2	2	2							
Cotton - Market	2	2	2	2	2	1						
Livestock Sales	1	1	2	2	2	1	1	1	1	1	1	1
Highveld Prime Communal												
Maize - Plant							2	2	2	1		
Maize - Weed								1	2	2	1	
Eat Green Maize	2	1								1	2	2
Maize - Harvest	2	2	2									
Cotton - Plant							2	2	2			
Cotton - Weed								2	2	2	2	1
Cotton - Harvest	2	2	2	2	1							
Cotton - Market	2	2	2	2	1							
Groundnuts - Plant							2	2	2	1		
Groundnuts - Weed								2	2	1	1	1
Groundnuts - Harvest	2	1	1								1	2
Groundnuts - Market			1	2	2	1						
Livestock Sales								2	2	2		

2	**Peak**
1	**Limited activity**
	No activity

While there are some income-earning activities – such as formal employment – which are non-seasonal, some key activities are very much linked to the time of year. Figure 4.4 below shows the seasonal peaks for 4 key activities amongst all communal activities. While there are some differences between zones regarding the precise start and end of activities, the overall pattern is very consistent

Clearly there are two distinct seasons. In the post-harvest/winter months of May to August, vegetable gardening/selling and off-farm casual labour (which includes such activities as hut and granary construction, brick-making and fencing) are at their peak, and then drop to minimal levels by October. By October, however, livestock sales and on-farm casual labouring begin to pick up, and peak by December/January. On-farm labour is dominated by weeding at that time, but continues into grain harvesting in April, and extends into May and June in those zones where cotton-picking occurs.

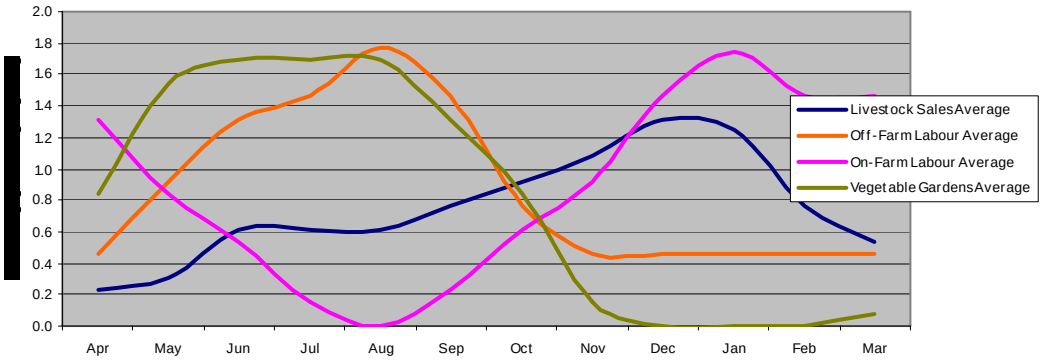


Figure 4.4 : Seasonal Peaks for Income Earning Activities

4.5 Hungry Periods

Taking all these activities into account, the calendar in figure 4.5 below provides an average picture of what communities considered to be the “hungry period” for different wealth groups. No single year was specified, but it is likely that this was the picture for 2003-04. There are two main patterns to be seen. First, moving from the poor to the middle to the better off, it can be seen that each group begins to experience hunger at different times. Some communities reported problems for the poor beginning in April, while there were no problems for the middle until at least June, and for the better off until at least August. Second, the extent of hunger clearly does not simply rise constantly until the end of the marketing year in March as has sometimes been assumed. For the poor, hunger plateaus from September until December, then peaks in January and starts falling sharply from February. For the middle, the plateau is from October to January, before beginning to fall in February. For the better off, there is a peak in January, but at much lower levels than for other groups, and then levels begins to fall in February.

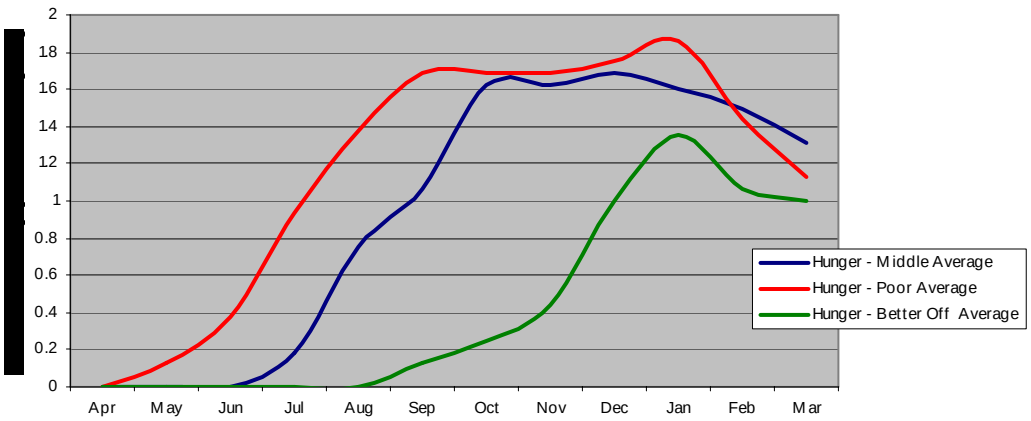


Figure 4.5: Seasonal Patterns of Hunger by Wealth Group (based on 2003-04)

These observations can be explained by the pattern of access to food and income that exists for each group. From April, households predominantly rely on their harvests, and these last for differing numbers of months according to the wealth group and to the geographical areas. As the harvests run out, households begin to compensate with other activities, such as vegetable sales and off-farm labour during the winter months for the poor and middle. Livestock sales also increase around this period, peaking in December/January, and the better off in particular benefit from this activity. Between November and February, on-farm casual labour peaks for the poor and sometimes the middle, but this is also the time when maize prices and unavailability peaks, so many households struggle to meet their needs. By February, green maize and some other crops in the field begin to become available, and hence hunger begins to ease, but only falls back to very low levels once the harvest proper comes in from April.

In respect of number of income sources reported by households we find that the proportion of households with two or more income sources peaks during the period August to November, with fewer households having no income source at all during this period. On the other hand, the number of different income sources is at its lowest in the period December to March.

CHAPTER 5

NATIONAL LIVELIHOODS SECURITY REVIEW

5.1 FOOD BALANCE SHEET MARKETING YEAR 2003/04

Last years cereal requirements were estimated at approximately 2.4 million MT taking into account the August 2002 census population figure of about 11.77 with a per capita cereal consumption of about 163 Kg per annum. Maize requirements (feed, seed and human consumption) were estimated at about 1.9 million MT. calculated from a per capita consumption of 120 Kg per annum and other uses. With production of cereal and carry over stocks of about 1.1 million MT the cereal gap was estimated at 1.3 million MT of cereals of which 980,000 MT was made up of maize.

GMB was expected to import most of the required cereal (around 60%) while WFP and humanitarian agencies were to cover approximately 40% of the requirements.

While it is difficult to have a reliable estimate of the total cereal imported, reading from the internal WFP monthly distribution figures and food balance sheets it appears that most of the estimated maize gap was realized towards the end of the marketing season ending March 04. This matches evidences from CHS (C-SAFE and WFP monitoring systems) suggesting that food availability started to improve from the end of December 2003. This period coincides with the increase in humanitarian food aid deliveries and GMB distributions.

Figure 5.1 indicates the estimated proportions of contributions at the end of March 2004 from different sectors. Available information seem to indicate that GMB contributed about 45% of the total maize import, while WFP[6] imported 28%, C-SAFE 10% (C-safe report), and balance accounting for private imports and unfilled gap.

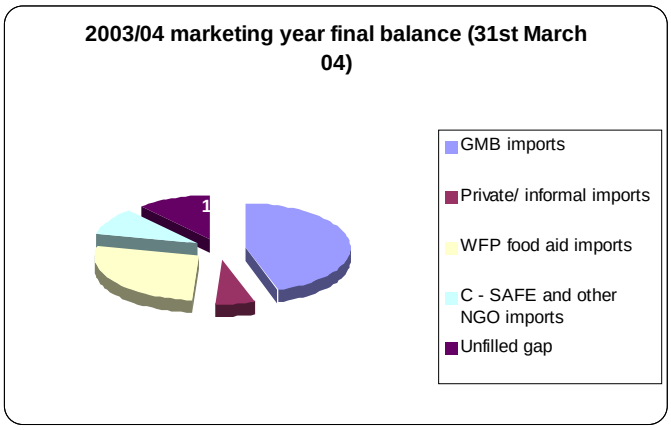


Figure 5.1 Final Cereal Balance 2003-04 Marketing Year (31/03/04)

By the end of March GMB should have imported more than 400,000 MT of which around 100,000 will be carried over to the next marketing season. With an additional 200,000 in the pipeline, the GMB opening balance for the current year would remain at around 300,000 MT. WFP and C-SAFE will have imported around 380,000 MT of which 50,000 MT are carried over to the 2004-05 marketing season. This will probably leave a total opening balance of about 350,000 MT of maize at the start of the current season, a better situation as compared to last year's opening balance.

5.2 Major Economic Trends in 2003/04

Declining Economy

The Zimbabwean economy has been facing major challenges since 1999. By the end of 2003 real Gross Domestic Product (GDP) had fallen by about 26 percent and is projected to decline further by about 6.5 percent in 2004[5]. Per capita real GDP fell from Z$2,162 in 1998 to Z$1,573 (at 1990 prices) in 2003 and is projected to decline further to Z$1,174 (at 1990 prices) by the end of 2004 (Figure 5.2). The decline in the economy has been associated with increased unemployment, and with greater stress being placed on limited government finances and public spending.

[5] Ministry of Finance and Economic Development; Selected Economic Indicators 2004
[6] WFP Report

High Inflation

Inflation has continued to be one of the major economic challenges for the country. It derived much of its impetus from imported costs of production as the local currency fell under pressure from a shortage of foreign currency, a high government budget deficit financed by domestic borrowing to finance recurrent expenditure, and negative real interest rates that fuelled speculative borrowing, which in turn encouraged credit expansion (Budget Statement 2004, Monetary Policy).

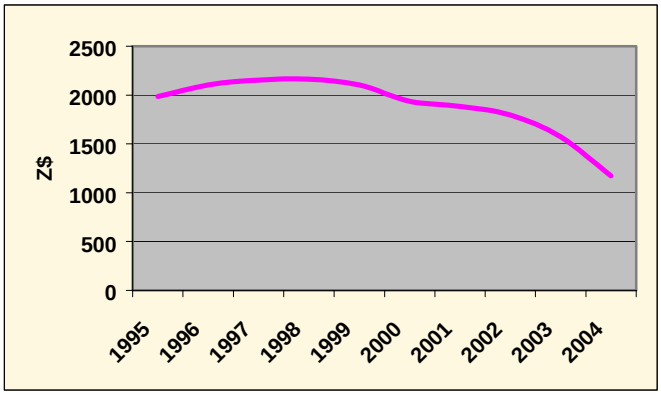


Figure 5.2 : Real Per Capita GDP (1990 prices)
Source: *Ministry of Finance &Economic Development*

Annual inflation rose consistently from 269.2 percent in April 2003 to an unprecedented high of 619.5 percent in November 2003. After a marginal drop to 598.7 percent in December, it again increased to 622.8 percent in January 2004 (Figure 5.3). The last two months of the period under review have seen inflation rate falling to 602.5 percent in February and 583.7 percent in March and continuing to decline to 505 percent in April. The monthly inflation for May 2004 was 448.8 percent, a 56.2 point drop from the April rate of 505 percent. The monthly inflation rate has followed the same trend depicted by annual inflation rates (CSO).

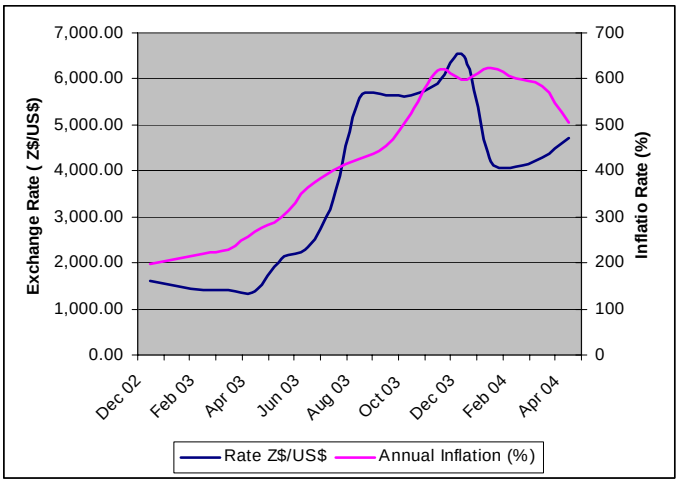


Figure 5.3 : Annual Inflation and Z$ Exchange Rates ***Source:*** *CSO and FEWSNET*

Depreciation of the Zimbabwe Dollar

Given that close to 30 percent of the input cost of Zimbabwean industrial production is imported, a devaluation of the Zimbabwean dollar against major currencies wreaks havoc throughout the economy. Between March and December 2003 the Zimbabwe dollar lost over 360 percent of its value against the United States dollar on the parallel market (Figure 5.3). The introduction of the controlled foreign currency auction system, abolition of foreign currency *bureau de changes*, and the clampdown on illegal foreign currency dealing halted further devaluation of the local currency. The appreciation and stability of the Zimbabwe dollar in the last first three months of 2004 have been given credit for the decline in inflation since January 2004.

Declining Coping Capacities and Purchasing Power of Poor Households

Economic challenges and their effects on households' purchasing power have worsened the quality of life for most Zimbabweans and stretched the capacity to cope of a significant proportion of the population. As a result of inflation the national food poverty line (FPL) for a household of 5 persons increased by 639.5 percent between April 2003 and March 2004 to

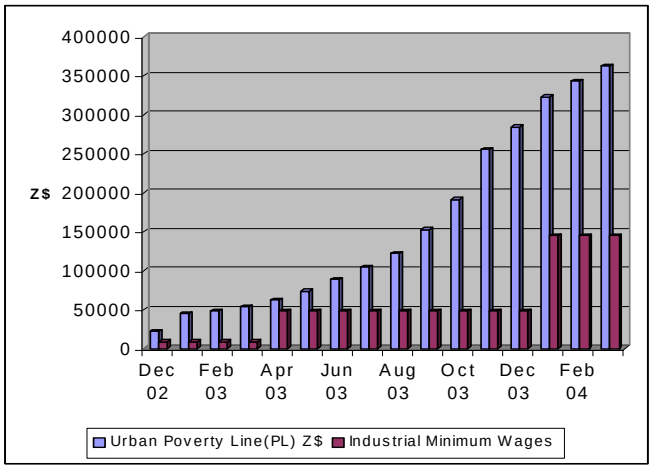


Figure 5.4: Urban Poverty Line and Monthly Minimum Wage Rate (Industrial)
Source: Ledriz/ZCTU

about Z$193,000 per month[6]. In the same period the urban poverty line gained 577 percentage points to reach Z$362,580 in March 2004. (Figure 5.4) Minimum wages have not kept pace with the increasing cost of living in both rural and urban areas and income generating opportunities are decreasing (Figure 5.4). Structural unemployment is estimated at extremely high levels of above 60 percent of the employable population of Zimbabwe.

5.3 Market Price Performance

5.3.1 Food Availability

The majority of communities reported that cereals, pulses and sweet potatoes were not readily available during the period January to April 2004. However commodities such as sugar, salt and cooking oils were reported to be readily available from local shops and district markets. Figure 5.5 shows a breakdown of cereal unavailability by province. The basket of cereals considered in the analysis include, maize, sorghum, millet, and wheat. The results show that the highest percentage response indicating cereal unavailability was in Midlands (80%), Mashonaland West (more than70%) and Masvingo (more than 60%) with Matabeleland North and South being above 50%.

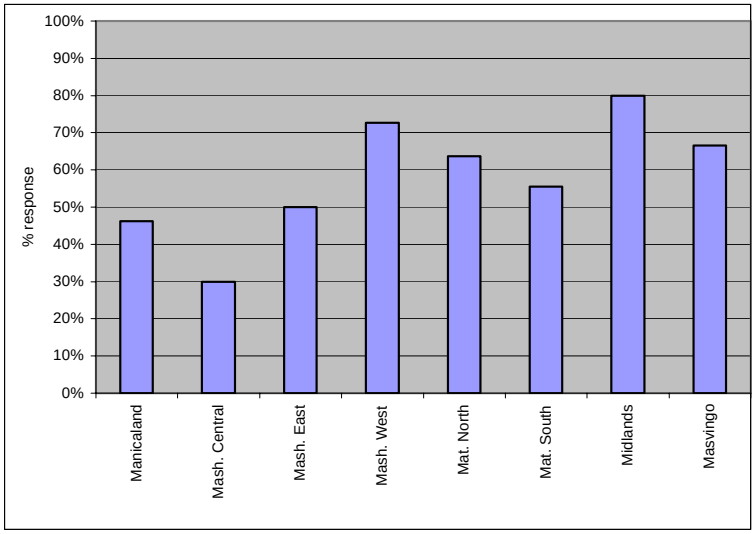


Figure 5.5 : % Communities Reporting Cereal Unavailability January – April 2004[1]

The above findings are consistent with data from the Community and Households Surveillance (CHS) collected through WFP and C-SAFE. Here, starting from January 2004 the proportion of respondents indicating food unavailability showed a downward trend, an indication of improvement in food availability through the local market since then (Figure 5.6).

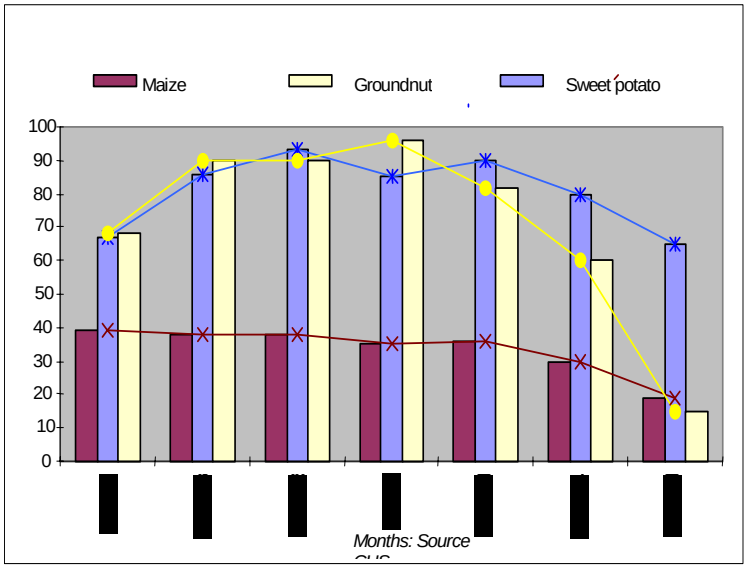


Figure 5.6 : % Communities Reporting Cereal Unavailability 2003-04[1]

5.3.2 Food Access[7]

The relatively poor harvests in 2003 further increased the reliance of much of the rural population on purchases of cereals, increased the divergence between the controlled price of grain - sold by or through the GMB - and the prices on the open market. Maize was not readily available on the markets a condition that contributed to the price escalation throughout 2003 as shown in figure 5.7 – an average of 240% increase from April 03 to April 04. However prices did start to decrease from January 2004 to April 2004 when maize was reported to be available in most markets.

Usually during a food crisis, the value of livestock relative to grains falls significantly. This is what happened in 2002 and early 2003 (figure 5.7). However it is very positive to see a large recovery in livestock values over

[6] Labour and Economic Development Research Institute for Zimbabwe
[7] Full details of maize prices and livestock terms of trade are found in Annex H

the last year. This reflects fewer people selling livestock and/or more maize being available (i.e. people were less desperate to sell animals to get food). The terms of trade for cattle increased by 306% from April 03 to April 04 on average, and the increase was much higher in some areas.

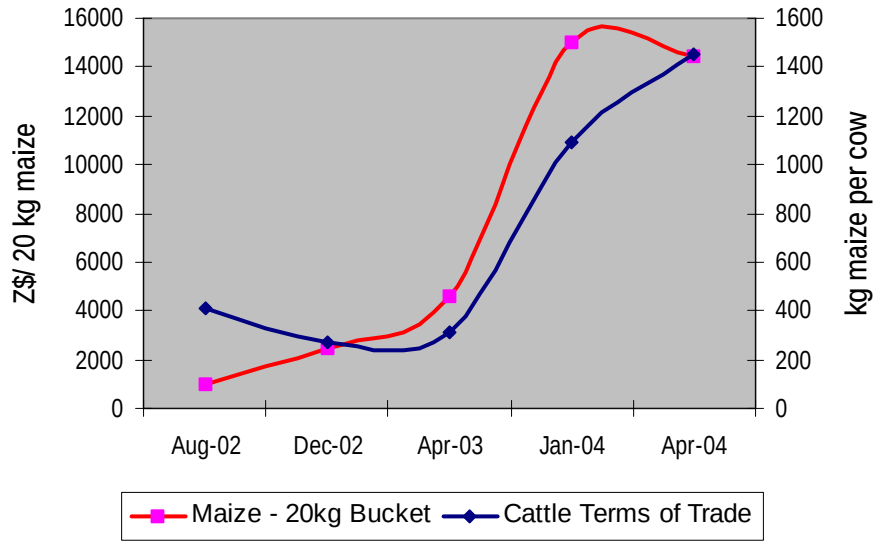
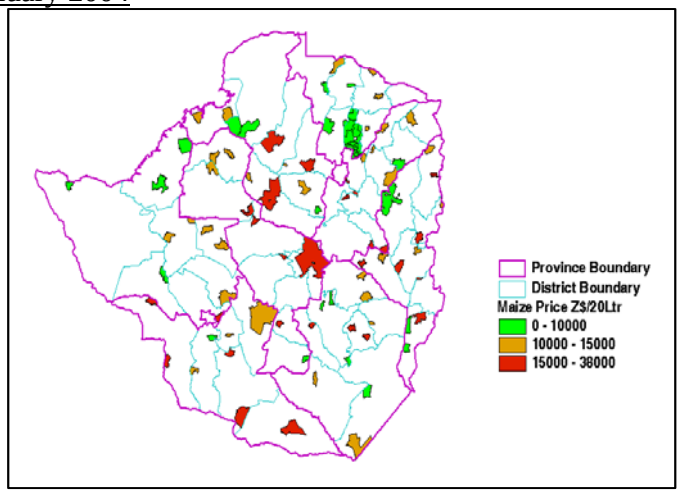


Figure 5.7 : Maize Prices and Livestock Terms of Trade August 2002- April 2004[1]

Figure 5.8 shows the geographical distribution of maize prices per 20 kgs of maize grain on the parallel market for January and April 2004. While the price has decreased during this period, it is observed that a significant number of places still remained with relatively high prices, ranging from Zim $10, 000 to Zim $20,000 per 20 kg of maize. A few places registered the highest price levels and indicated no improvement from January to April 2004.

January 2004



April 2004

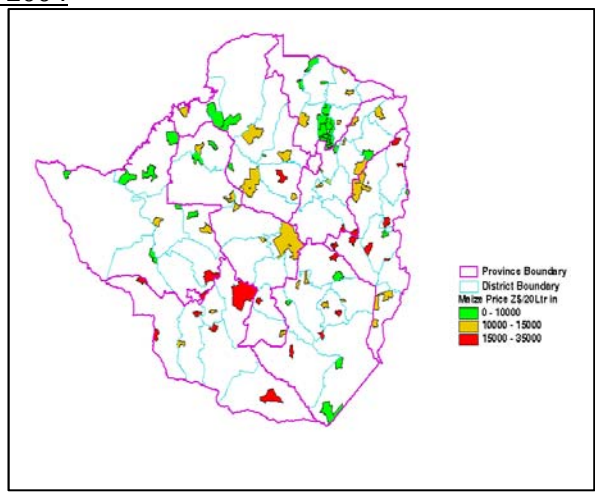


Figure 5.8 : Maize Prices (20 kgs) on Parallel Market[1]

The HIV/AIDS epidemic in Zimbabwe is a serious concern for families, communities and the country at large. As the HIV/AIDS epidemic continues to cause stress in the economic, agricultural, health and social sectors, one of its worst effects on the population has been the

[8] Information in this section is based on "Zimbabwe National HIV and AIDS estimates 2003" MOHCW, CDC, UNADIS, SAFAIDS updates and the National Nutrition Survey (MOHCW) 2003.

multiplication of orphans. It is estimated that 2,600 adults and 690 children die every week (2003) whilst the number of HIV/AIDS orphans, estimated as 761,000 in 2003 is expected to rise to 910,000 by 2005. With hundreds of thousands of people currently living with HIV/AIDS in the country, more and more orphans will result. The prolonged illness period associated with HIV/AIDS has and will continue to threaten the capacity of many households to provide care and support to those infected. More and more household income will be diverted towards health and funeral costs and, as most households already live in or close to poverty, very little income will remain to provide for the basic needs of remaining family members.

In most cases the HIV/AIDS patient will die after all important assets have been sold in order to raise money for health care costs. In addition to poverty and hunger, children with chronically ill parents assume the care-giving responsibility traditionally confined to older people. This might force them to drop out of school to look after their sick parents and other younger siblings, or to earn more income for the household. Although difficult to quantify, one of the most serious effect of HIV/AIDS on children is the discrimination and stigmatisation experienced both during and after the death of parents (Save the Children (UK) 2002).

The impact of HIV/AIDS on food security has been through loss in productivity, loss of coping mechanisms at the community level and the generally poor long-term nutrition status of the population. In 2003 under 5 underweight was estimated at 17% and stunting at 27%, both of which emphasize the long term nature of the problem. At the household level, when traditional income/livelihood earners become ill, children take over the role of ensuring food security. An important facet to this is that family members not affected by AIDS may lose productive labour time due to the need to provide care to sick members, or orphans, and the need to attend to social demands such as attending funerals.

While AIDS can affect households' food security status, their food security status can also affect the progression of the disease and its transmission. Poor nutritional status can increase the risk of opportunistic infections occurring, and can speed up the progression from HIV to full-blown AIDS. Research has also shown that malnutrition increases the risk of HIV transmission from mothers to children. Food insecurity can also lead people to engage in high-risk activities such as commercial sex work or emigrational labour, or can make them more vulnerable to sexual exploitation.

The gender dimension in the HIV/AIDS debate is quite crucial. It is estimated that more than half of all HIV/AIDS cases (56.5% of infected adult population) are found in the female population, who are arguably the most productive in rural areas and are also charged with providing primary care for the young. The gender dimension is clearest among teenage girls and young women. UNAIDS (2003) have indicated that the prevalence of HIV among 15-19 year old females is almost 4 times the prevalence for males of the same age; while the prevalence for 20-24 year old females is more than 2½ times higher than that for males. This reflects the particular vulnerability of young women to infection as a result of exploitation and/ or a lack of power in sexual relations.

Home based care (HBC) programmes and those for orphans and vulnerable children (OVC) are increasing and expanding in the rural areas of Zimbabwe, aiming to mitigate some of the effects of HIV/AIDS, and more national health policy initiatives are needed to contribute to the on-going efforts to control HIV/AIDS and to ease the plight of those affected.

Chapter 6

Household Food Security: Review of 2003-04 Marketing Year

6.1 Overall Access to Food

An estimated 56% of the rural population fell short of their minimum cereal requirements in 2003-04, compared to 76.2% in 2002-03, indicating a major improvement in the population's food security status over

the last 12 months. For much of that population their deficits were also relatively small. Table 6.1 indicates the percentage of different groups, disaggregated by a variety of demographic, health and education characteristics, who were food secure and food insecure last year.

Table 6.1 : Household Characteristics and Food Security 2003-04

		Secure	Insecure	*n* =
Gender of HH Head	*Male*	66.1%	33.9%	*1,464*
	Female	65.7%	34.3%	*565*
Age of HH Head	*15-19*	72.2%	27.8%	*18*
	20-59	66.6%	33.4%	*1,448*
	60+	64.7%	35.3%	*539*
Orphans in HH	*Yes*	62.6%	37.4%	*653*
	No	65.4%	34.6%	*1,154*
	No Children	78.6%	21.4%	*229*
Health of HH Head	*Good*	68.7%	31.3%	*1,382*
	Fair	60.5%	39.5%	*448*
	Poor/ Disabled	59.4%	40.6%	*192*
Education of HH Head	*None*	62.8%	37.2%	*374*
	Primary	65.0%	35.0%	*1,055*
	Lower Secondary	70.0%	30.0%	*540*
	Higher	67.3%	32.7%	*55*
Dependency Ratio	*No Able Adults*	75.0%	25.0%	*76*
	4-8 dep/ adult	56.2%	43.8%	*112*
	2-3 dep/ adult	59.4%	40.6%	*379*
	1 dep/ adult	67.0%	33.0%	*1,353*
	No Dependents	79.3%	20.7%	*116*
Effective Dependency Ratio	*No Able Adults*	72.9%	27.1%	*96*
	4-8 dep/ adult	53.1%	46.9%	*147*
	2-3 dep/ adult	61.1%	38.9%	*424*
	1 dep/ adult	67.4%	32.6%	*1,265*
	No Dependents	80.8%	19.2%	*104*
HH Size	*1-3*	80.9%	19.1%	*346*
	4-6	71.3%	28.7%	*983*
	7-9	54.5%	45.5%	*538*
	10+	41.4%	58.6%	*169*
Total Sample		66.1%	33.9%	*2,240*

This table shows that for a number of groups considered "vulnerable" – in particular female-headed and elderly-headed households, and households with orphans - the percentages who were food insecure were not very different from households without those characteristics. As is discussed further below, this is in part due to the effects of targeted food aid, though it also reflects the fact that by no means all households in such categories are automatically vulnerable[9]. However, the variables relating to household size, dependency[10], health and (to a lesser extent) education show substantial differences. For example, using the effective

[9] See section 9.3 for further discussion of this in relation to projected food insecurity in 2004-05.

[10] The ordinary dependency ratio used here classifies dependents as those aged under 15 and over 60. The effective dependency ratio differs by treating adults who are chronically ill or disabled as dependents rather than as productive adults.

dependency ratio, only 19.2% of households with no dependent members were food insecure, compared to 46.9% of households with 4-8 dependents per able-bodied adult.[11]

6.2 Sources of Food Accessed

When we examine the contribution of different sources of food to overall access, the general improvement in food security in 2003-04 appears to have been the result of a substantial improvement in harvests and an increase in the provision of food aid. Figure 6.1 and Table 6.2 below indicate the average percentage of minimum requirements provided by different sources of food by province. Note that for cross-checking purposes, the food purchases reported by households were directly recorded, but were also compared with the quantity of food that could have been purchased with their reported income. Any difference in these quantities is recorded as "additional purchasable cereals".

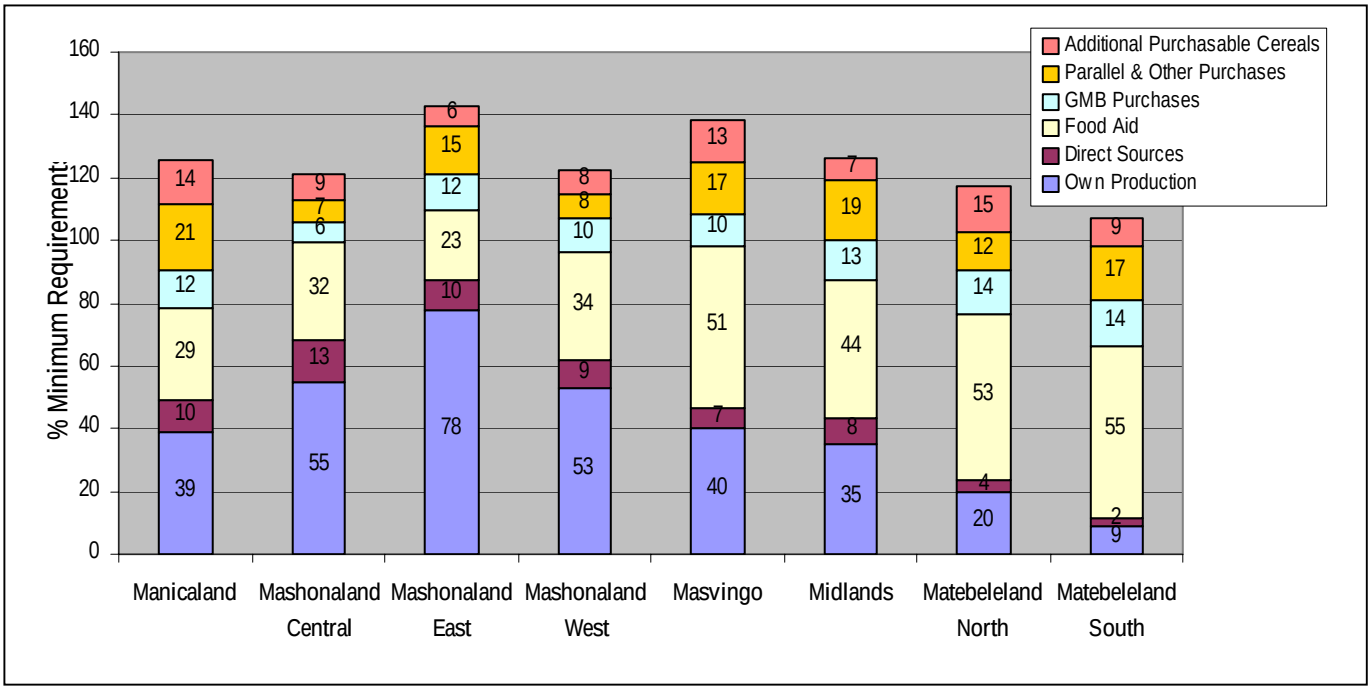


Figure 6.1: Total Food Accessed by Province and Source, 2003-04

Table 6.2 : Total Food Accessed by Province and Source (%)

Province	Own Production	Direct Sources	Food Aid	GMB Purchases	Parallel & Other Purchases	*Additional Purchasable Cereals*	Total Reported % Req. Met	Total Derived % Req. Met	*n* =
Manicaland	39	10	29	12	21	*14*	111	126	*330*
Mashonaland Central	55	13	32	6	7	*9*	113	121	*215*
Mashonaland East	78	10	23	12	15	*6*	136	143	*253*
Mashonaland West	53	9	34	10	8	*8*	115	123	*248*
Masvingo	40	7	51	10	17	*13*	125	138	*293*
Midlands	35	8	44	13	19	*7*	119	126	*238*
Matebeleland North	20	4	53	14	12	*15*	102	117	*257*
Matebeleland South	9	2	55	14	17	*9*	98	107	*206*
Total	*42*	*8*	*40*	*12*	*15*	*10*	*115*	*126*	*2040*

[11] See Annex I for a similar table using combinations of the 4 "vulnerable group" indicators (age, gender and health of household head, and presence of orphans) referred to by WFP and C-SAFE in their Community and Household Surveillance (CHS), and indicating their food security in both 2003-04 and 2004-5.

Because of large differences within communities, there were still many households who were food insecure. While the overall average for the country was to access 115% of minimum requirements, the food insecure sections of the population – just over one third of all households - accessed only an average of 59% (in Manicaland) to 69% (in Midlands) of their needs. At the other end of the spectrum, 17% of households accessed over 200% of their minimum requirements.

Overall, Mashonaland East and Masvingo were the most food secure provinces last year, while Matabeleland South was the least food secure. The most notable changes from the previous year are as follows:

- There was a very large increase in food aid provision. Aid accounted for 13-25% of provincial needs in 2002-03, but rose to 23-55% in 2003-04. Other than in Matabeleland North and South, the figures suggest that there was an apparent over-supply of aid.
- The contribution from own crop production increased in all areas except Matabeleland South, e.g. from 10% to 20% in Matabeleland North, and from 28% to 53% in Mashonaland West.
- On average, households purchased substantially less grain from the GMB this year (from 13-25% last year to 6-14% this year), but there was almost no change in purchases from the parallel market.
- There was no significant change in food from direct sources (i.e. working/ bartering in exchange for food, or receiving remittances or gifts of food).

The picture by farming sector in figure 6.2 and table 6.3 below indicates that amongst farming communities' contributions from own production was lowest in communal areas (33% of requirements), but was much higher in resettlement areas (69-84%). Resettlement areas – particularly new A1 settlements - made up the rest of their needs mainly from purchases, while food aid was the single largest source of food in communal areas (providing on average 47% of needs). In commercial farms that have not been resettled, purchases are the largest source of food, reflecting the wage-based economy in that sector.

It should be noted that the sample of former commercial farm workers in new resettlement areas was extremely small, and therefore the picture shown for those areas may not reflect the circumstances of those who do not have access to land. Save the Children's Household Economy Assessment in resettled farms in Zvimba in October 2003 indicates that the landless groups are particularly vulnerable to food insecurity.

Figure 6.2 : Total Food Accessed by Farming Sector and Source, 2003-04 (%)

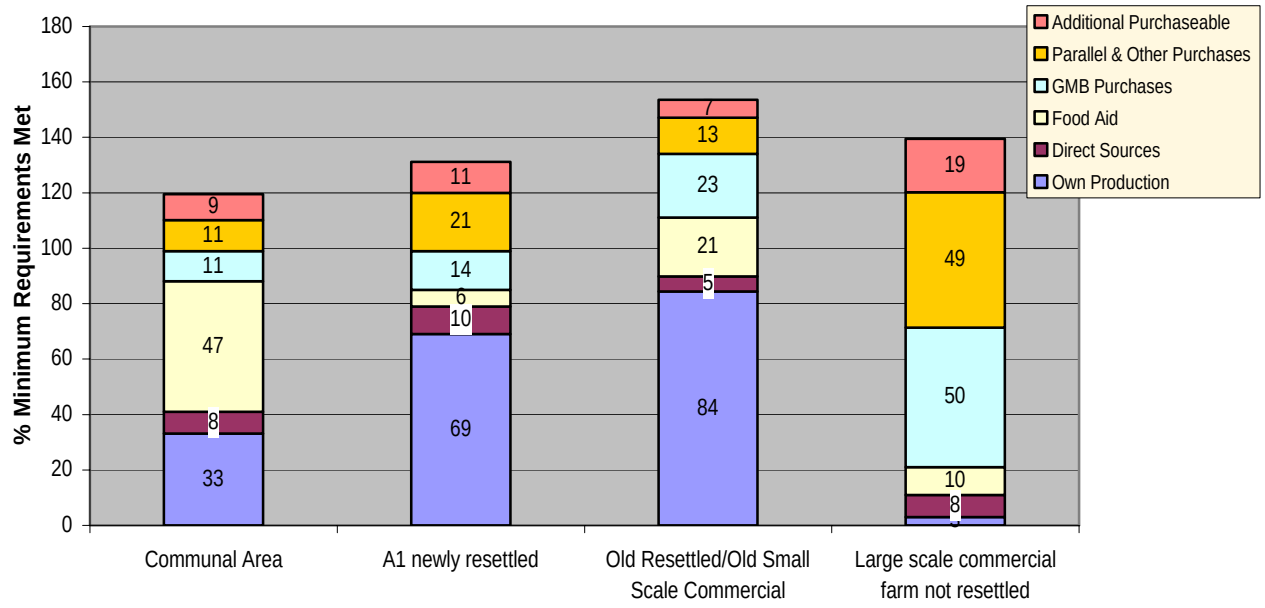


Table 6.3 : Total Food Accessed by Farming Sector and Source (%)

Land Sector	Own Production	Direct Sources	Food Aid	GMB Purchases	Parallel & Other Purchases	Additional Purchaseable	Total Reported Access	Total Derived Access	*n* =
Communal Area	33	8	47	11	11	9	110	120	*1,600*
A1 newly resettled	69	10	6	14	21	11	136	147	*262*
Old Resettled/Old Small Scale Commercial	84	5	21	23	13	7	147	154	*143*
Large scale commercial farm not resettled	3	8	10	50	49	19	124	144	*35*
Total	*42*	*8*	*40*	*13*	*13*	*10*	*115*	*126*	*2,040*

6.2.1 Food Sources by Gender and Age of Household Head

Table 6.4 below shows the percentage of minimum energy requirements provided by each source of food, broken down by the gender and age of the household head[12]. The 18% of households in the survey who accessed more than double their minimum requirements last year (the "super secure") are excluded from this analysis to avoid skewing averages.

This table shows that while there was a difference in the contribution of the harvest to households headed by males and females (31% for male-headed; 24% for female-headed), there was no significant difference by age. Age was more significant for direct sources of food – mainly food paid in exchange for casual labour - where elderly-headed households are likely to be less able to labour. There was little difference by age or gender in the contribution of purchased food.

[12] Note that the sample size is too small to allow further disaggregation of the households headed by 15-19 year olds.

Table 6.4 : Food Access by Source 2003-04, by Gender and Age of Household Head (%)

Gender of HH Head	Age of HH Head	Own Production	Direct Sources	Food Aid	Purchases	*Total*	*n =*
Male	*20-59 years*	31	8	35	25	*100*	*1,046*
	60+ years	31	5	42	22	*100*	*385*
	All Male-Headed	31	7	37	25	*100*	*1,442*
Female	*20-59 years*	24	7	46	23	*100*	*396*
	60+ years	24	8	49	24	*104*	*153*
	All Female-Headed	24	8	47	23	*101*	*556*
Both Gender	*15-19 years*	20	9	43	35	*108*	*18*
	20-59 years	29	8	38	25	*100*	*1,442*
	60+ years	29	6	44	23	*101*	*538*
	Total	29	7	40	24	*100*	*1,998*

However, the biggest difference was in terms of the amount of food aid provided, where being female-headed and elderly-headed added to the average amount received. Households headed by 20-59 year men received 35% of their requirements from food aid, while those headed by elderly females received 49% of their requirements. In communal areas[13], this greater amount of food aid appears to have slightly over-compensated for disadvantages some of those groups faced elsewhere, resulting in those groups accessing on average more than male or 20-59 year old headed households. In resettlement areas, however, where minimal food aid was provided, female and elderly-headed households had significantly lower total food access. Hence, while elderly female-headed households were the most food secure group in communal areas (accessing on average 107% of their needs), they were the most food insecure group in A1 resettlement areas (accessing only 77% of their needs).

Annex J provides a complete picture of the contribution of the different sources of food to the population disaggregated according to their level of food access last year in each Food Economy Zone for reference. Annex K provides the same analysis disaggregated by land sector, gender and age of household head. The following sections provide some highlights and further analysis on each of the sources of food.

6.2.2 Market Purchases

Cereal purchases from all sources contributed between 13% and 33% of cereal requirements in each province last year. Table 6.5 shows the proportion of those purchases coming from the GMB and the parallel market over three 4-month periods in each province last year, whilst table 6.6 shows the annual distribution of purchases from the two sources for each land sector.

The total share of purchases from the parallel market increased from 32% 2002-03 to 41% in 2003-04. Over the course of the year, the relative contribution from the parallel market increased marginally, from 42% in April to July 2003, to 48% in December 2003 to March 2004. Households purchased an average of 218 kgs of cereals over the year.

[13] See Annex K for further disaggregation by land sector.

Table 6.5 : Seasonal Cereal Purchases by Source and Province, 2003-04 (%)

Provinc	GMB Jul 03	Parallel Apr-Jul	GMB Nov	Parallel Aug-Nov 03	GMB Mar	Parallel Dec-	% Purchase from	% Purchase from Paralle	*Average Total kgs Purchase*	n =
Manicalan	66	34	65	35	60	40	65	35	*293*	*330*
Mashonaland	63	37	53	47	38	62	54	46	*100*	*215*
Mashonaland	61	39	62	38	50	50	60	40	*182*	*253*
Mashonaland	47	53	47	53	38	62	51	49	*167*	*248*
Matebeleland	42	58	42	58	52	48	50	50	*228*	*257*
Matebeleland	57	43	57	43	58	42	60	40	*260*	*206*
Midland	61	39	58	42	59	41	62	38	*258*	*238*
Masving	59	41	64	36	46	54	65	35	*222*	*293*
Total	*58*	*42*	*57*	*43*	*52*	*48*	*59*	*41*	*218*	*2,040*

Notice that Manicaland and Masvingo provinces recorded lowest proportions of annual purchases from the parallel market, whilst Matabeleland North and Mashonaland West recorded the highest, but seasonal differences are apparent.

Table 6.6 : Annual Cereals Purchases by Source and Land Sector, 2003-04

Land Sector	% Annual Purchases from GMB	% Annual Purchases from Parallel	*Average Total kgs Purchased*	*n =*
A1 newly resettled	54	46	281	*262*
Communal Area	59	41	178	*1,600*
Large Commercial, Not Resettled	50	50	818	*818*
Old Resettled/ Old Small Commercial	74	26	297	*297*
Total	59	41	218	*2,040*

Except for a much higher contribution of GMB maize to purchases in old resettlement areas, the relative contribution of the GMB and parallel market in other sectors was little different to the national average. The average total kgs of cereals purchased was lowest in communal areas, but was higher in resettlement areas and especially high in commercial farms that were not resettled.

6.2.3 Food Aid

The role of food aid in preventing serious food insecurity last year is apparent from the very high proportions of total food requirements provided by this source, as indicated earlier. 47% of the requirements in communal areas were provided by food aid, comprising approximately 42% from General Food Distributions (GFD) and 5% from various types of supplementary feeding and school feeding. Table 6.7 below indicates the average kgs received and contribution to minimum food needs for different sectors, subdivided by their food security status.

Clearly food aid played a vital role in ensuring that many who otherwise would have been food insecure accessed their minimum needs, However, the concerning findings from this analysis, taken in conjunction with the figures for total food access presented at the start of this chapter, are that more food aid than was required was provided last year overall, and that some people who were not in need received food aid. Ideally the quantity of food aid provided should be just enough to ensure food security, whereas in practice it appears to have been provided in substantial quantities even to those who were already accessing well in excess of their minimum requirements independently. The analysis of vulnerability in Chapter 8 points to the likelihood that a focus on simple criteria such as gender or age of household heads will result in the inclusion of large numbers of households with those characteristics who are not in need, which may be what happened last year. Furthermore, general food distributions were focused almost exclusively in communal areas, with needs in resettlement areas being largely ignored.

Table 6.7 : Provision of Food Aid 2003-04, by Land Sector and Type of Aid

Sector/ Food Security Status	Supplementary Feeding as % Req 04	Supplementary Food Aid kgs	GFD Food Aid as % Req 04	General Food Aid kgs	*n* =
A1 newly resettled					
Food Insecure (<100% needs)	4	35	3	25	*64*
Food Secure (100-150% needs)	4	32	4	32	*75*
Very Secure (150-200% needs)	3	26	7	31	*32*
Super Secure (>200% needs)	2	23	0	1	*90*
Total	*3*	*29*	*3*	*20*	*261*
Communal Area					
Food Insecure (<100% needs)	3	34	27	259	*598*
Food Secure (100-150% needs)	5	45	48	389	*537*
Very Secure (150-200% needs)	5	38	59	397	*242*
Super Secure (>200% needs)	8	50	58	308	*221*
Total	*5*	*40*	*42*	*330*	*1,598*
Large scale commercial farm not resettled					
Total	*8*	*49*	*1*	*8*	*35*
Small Holding/Old Resettled/Old Small Scale Commercial					
Total	*3*	*32*	*21*	*178*	*142*
All Sectors					
Food Insecure (<100% needs)	3	34	25	234	*696*
Food Secure (100-150% needs)	5	43	41	333	*666*
Very Secure (150-200% needs)	5	35	49	328	*308*
Super Secure (>200% needs)	6	42	37	200	*370*
Total	*5*	*38*	*36*	*274*	*2,036*

The scaling up of distributions largely followed the recommended sequencing, except that peak distributions continued into April 2003 and again into April 2004, by which time the food security situation was much improved as people were able to consume from their harvests. The improved analysis of seasonality in this current assessment should better assist programmers in identifying the periods across which households experience deficits, rather than suggesting – as was previously the case – that deficits are concentrated towards the end of the marketing year.

It is not possible to examine in detail the implications of the apparent over-supply of food aid last year, but potentially there may have been impacts on the incentives for households to engage in income-earning activities. In addition, there may have been positive depressive effects on maize prices prior to the harvest when supply was poor, but subsequently those depressive effects may have had a negative impact on prices for producers as food aid continued to be provided in April after the improved harvest this year.

6.3 Income

Income levels are a key determinant of food security and of wider livelihood security, determining not only how much food a household can purchase, but whether they can afford essential non-food goods and services, ranging from soap, fuel and agricultural inputs, to education and healthcare costs. An examination of the sources of income for different types of households illustrates their livelihood patterns and the problems that they are likely to be vulnerable to. Hyperinflation in Zimbabwe makes direct comparison of nominal income over different times of the year impossible. Therefore all nominal income figures were converted into a purchasing power estimate using the parallel market price prevailing in each area at the time the income was earned. This is the "maize equivalent income" (MEI), i.e. the kgs of maize purchaseable with the income earned at that time. Table 6.8 shows the sources of income for groups disaggregated by their food security status in 2003-04 and their land sector[14].

Table 6.8 : Percent Total Income 2003-04 by Source, Land Sector and Sub-Group

Land Sector/ Sub-Group	Formal Emp & Remittances	Trade & Self-Employment	Crop & Veg. Sales	Livestock Sales	Casual Labour	Gold-Panning	Other	Total kgs Maize Equivalent Income 2003-04	*n* =
A1 newly resettled									
Food Insecure (<100% needs)	16%	14%	14%	0%	40%	7%	8%	212	*64*
Food Secure (100-150% needs)	21%	6%	52%	5%	7%	7%	1%	2,182	*75*
Very Secure (150-200% needs)	38%	7%	28%	2%	18%	5%	2%	1,618	*32*
Super Secure (>200% needs)	40%	10%	39%	5%	3%	3%	2%	3,093	*90*
Average for Sector	*33%*	*8%*	*41%*	*4%*	*7%*	*5%*	*1%*	*1,993*	*261*
Communal Area									
Food Insecure (<100% needs)	22%	17%	22%	11%	11%	7%	11%	143	*598*
Food Secure (100-150% needs)	28%	21%	20%	12%	8%	7%	4%	691	*537*
Very Secure (150-200% needs)	27%	16%	32%	8%	9%	2%	6%	905	*242*
Super Secure (>200% needs)	38%	18%	17%	11%	10%	5%	1%	1,969	*221*
Average for Sector	*31%*	*19%*	*21%*	*11%*	*9%*	*5%*	*4%*	*695*	*1,598*
Large scale commercial farm not resettled									
Average for Sector	*83%*	*7%*	*1%*	*2%*	*7%*	*0%*	*0%*	*1,587*	*35*
Small Holding/Old Resettled/Old Small Scale Commercial									
Average for Sector	*13%*	*16%*	*47%*	*13%*	*3%*	*4%*	*3%*	*2,271*	*142*
Total - All Zimbabwe									
Food Insecure (<100% needs)	22%	17%	20%	9%	14%	6%	11%	156	*696*
Food Secure (100-150% needs)	26%	17%	28%	11%	7%	7%	4%	919	*666*
Very Secure (150-200% needs)	26%	16%	35%	7%	9%	3%	4%	1,139	*308*
Super Secure (>200% needs)	36%	13%	30%	9%	7%	4%	1%	2,520	*370*
Average for Zimbabwe	*31%*	*15%*	*30%*	*9%*	*7%*	*5%*	*3%*	*984*	*2,036*

Looking at the total income, it is clear that the more income households had, the more food secure they were. The incomes of the food insecure in all areas were very low, i.e. able to purchase on average only 156 kgs of maize. At the average parallel maize price in April 2004 of Z$740/kg, this is equivalent to an annual income of only Z$115,440. On average, households in the communal sector had much lower incomes than households in all other sectors – 695 kgs compared to 1,993 kgs in the A1 resettlement sector, or 1,587 kgs in the large-scale commercial farming sector.

The summary of the sources of income show some interesting patterns also. Formal employment income accounted for a much greater proportion of the income of the most food secure group compared to others. Crop and vegetable sales were the largest source of income in old and new resettlement areas for all groups except the food insecure. Meanwhile the food insecure group in A1 areas were heavily reliant on casual labour. In large-scale commercial farms, the farm workers obtain over 80% of their income from formal employment, and supplement it with some casual labour and petty trade.

In communal areas, the food insecure have very diverse income sources and the pattern changes only marginally as food security increases, though the absolute value of income rises for almost all sources in more food secure groups. This overall sectoral picture for communal areas masks some significant differences in income patterns between different food economy zones.. For example

[14] Note that the sample sizes for Large-Scale Commercial Farms and Old Resettled were too small to allow for further disaggregation by food security status.

- Remittances are high in Beitbridge, in Western and Eastern Kalahari Sandveld, and Eastern Highlands Communal zones (15%, 22%, 12% and 22% of average household income respectively, compared to a national average of 7% of income). While the latter figures include local remittances, 7% of households also reported having relatives abroad who remit money, with the greatest proportions being in the provinces bordering South Africa and Botswana – Matabeleland North (12% of households) and South (15%), and Masvingo (10%). 79% of those receiving remittances from abroad received from within Africa, while 18% received from Europe, 7% received from America and 2% from Australia[15].
- Livestock sales are high in Beitbridge, Western Kalahari Sandveld and Lusulu, Lupane and Southern Gokwe Zones (accounting for 31%, 33% and 25% of income respectively, compared to a national average of 9%).
- Gold-panning is high in the Greater Mudzi & Northern Zambezi Valley zone (29% of average income, compared to 5% nationally).

Overall, the most cash-poor communal zones were the Western Kalahari Sandveld (274kgs), Lusulu, Lupane and Southern Gokwe (437kgs) Greater Mudzi and Northern Zambezi Valley (451kgs). The most cash-rich communal zones were Southern Midlands/Southern Masvingo and Chipinge (1,142kgs) and Central and Northern and Great Zimbabwe/Bikita Semi-Intensive (950kgs). However, even in the latter zones, income is very unevenly distributed and there were large numbers of people with very low incomes. Annex L provides complete tables of income by source for each food economy zone.

6.4 Food Security and Children

This section reviews a variety of aspects of how food security affects children, specifically in relation to their education, their involvement in labouring and the status of orphans.

6.4.1 School Attendance and Food Security

Table 6.9 below relates current school attendance to household food security status over the previous year by with land sector. The table shows that nationally, 22% of households had 1 or more school-aged children out of school at the time of the survey[16]. There were higher rates of attendance in old resettlement, small-scale and large-scale commercial farms (84-93%).

[15] Some households received remittances from more than 1 source.

[16] Note that the analysis in section 7 will examine each child separately, while other sections focus on households. As there can be different children in and out of school within the same household, the percentage of children out of school (11%) is lower than the percentage of households with at least one child out of school (22%).

Table 6.9 : School Attendance by Food Security Status and Land Sector, 2003-04

Sector/ Food Security Status	1+ Children Currently Out of School or Dropped Out	All currently attending School	n =
Communal			
Food Insecure (<100% needs)	27%	73%	*64*
Food Secure (100-150% needs)	20%	80%	*75*
Very Secure (150-200% needs)	17%	83%	*32*
Super Secure (>200% needs)	18%	82%	*90*
Total	*22%*	*78%*	*261*
A1 Resettlement			
Food Insecure (<100% needs)	31%	69%	*598*
Food Secure (100-150% needs)	22%	78%	*537*
Very Secure (150-200% needs)	7%	93%	*242*
Super Secure (>200% needs)	23%	77%	*221*
Total	*22%*	*78%*	*1,598*
Old Resettlement/ SSCF			
Total	*16%*	*84%*	*35*
LS Commercial Farm Not Resettled			
Total	*7%*	*93%*	*142*
National Total	22%	78%	*2,036*

Food insecure households were more likely to have children out of school (27% and 31% of food insecure households in communal and A1 sectors respectively). However, for households with no deficits last year, further increases in food security do not appear to be related to increased school attendance – the differences between the "food secure" and "super secure" are insignificant. (Although the highest level of attendance is recorded in the "very secure" group in A1 areas – 93%).

6.4.2 Food Aid and Education

48% of households in the sample had at least 1 child in a school-feeding programme. The provision of primary school feeding was found to only make a marginal difference to overall school attendance, with 21% of households with a child receiving primary school feeding having at least one child out of school compared to 23% of households who had no children receiving school feeding. This analysis is limited as it takes no account of the length of the feeding programme, the number of children receiving, or the attendance of the specific children receiving feeding. Nonetheless, the rest of the analysis in this section suggests that there are many factors influencing attendance levels, and school feeding cannot hope to counteract all of these.

6.4.3 Children, Labour and Food Security

Section 7 will provide full details on children labouring on farms, showing that nearly one quarter of all households reported having at least one child under the age of 16 engaged in full time labour. Two key factors are apparently clearly connected to the extent of child labour viz food security status and the presence of orphans in the household.

The first noticeable trend is how the number of children labouring either full time or part time drops consistently as food security status improves. However, the second key trend is that households with orphans have a higher average number of children labouring than those without orphans, irrespective of their food security status.

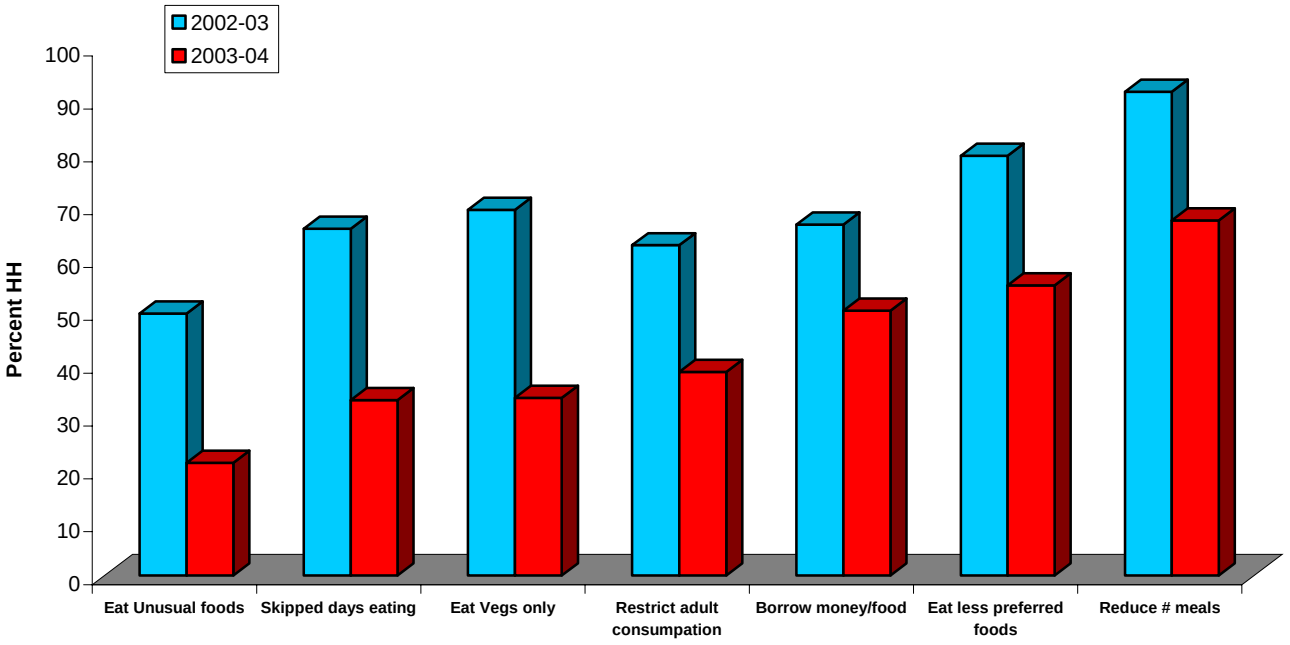
6.4.4 Conclusions

Education is crucial to the future potential both of children themselves and of the country as a whole. The analysis above provides some indications about how children's rights to food, education and not to have to work can be protected. While improved food security and incomes by themselves will help improve attendance at school, additional measures will be required to help ensure children fulfil their potential[17]

6.5 Coping Strategies

Improvement in agricultural production and food security in most communal and resettlement areas has resulted in most households reducing during December 2003 to March 2004, the consumption coping strategies used to acquire food, as compared to 2003-03. As figure 6.3 indicates there have been significant reductions in the percentage of households that skipped entire days without eating, ate vegetables only as a complete meal and ate unusual types of wild foods not normally eaten, over the two-year period. The second greatest decrease in the proportion of households is among those eating less preferred foods, cutting on the number of meals and buying food on credit or borrowing food. The decrease in the number of households utilising these coping strategies could be attributed to the widespread food aid distribution and easy access to grain in the market for most households, as reported in previous sections. Further details of use of consumption strategies is provided in table 6.10.

Figure 6.3 : Household Consumption Coping Strategies, 2002-03 and 2003-04



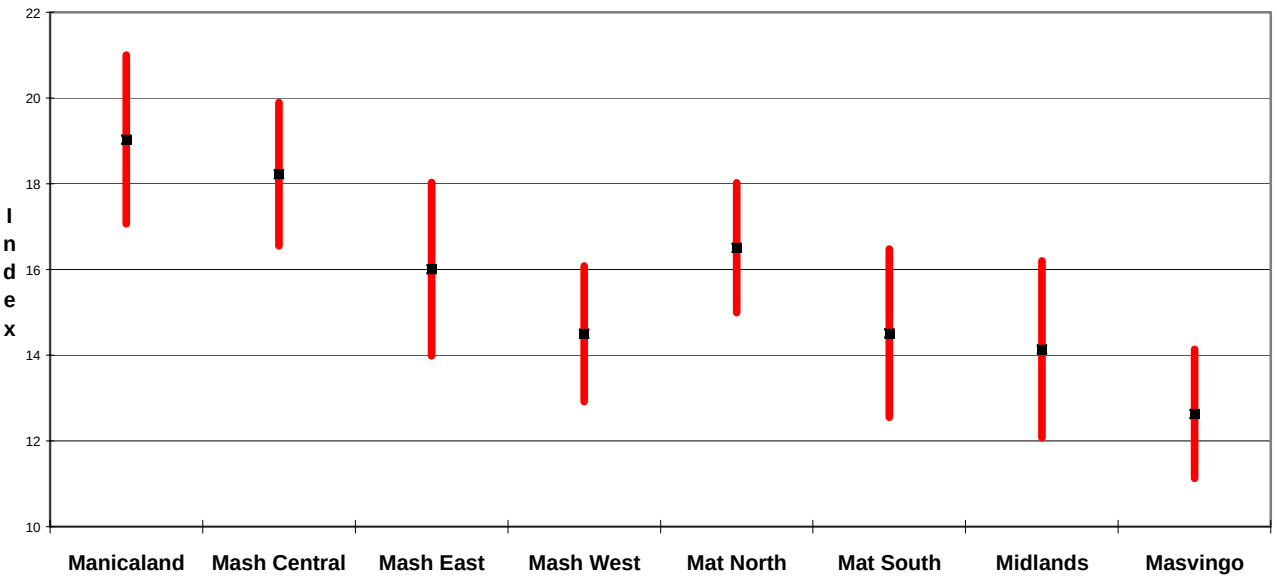
[17] See Section 7 for more details

Table 6.11: Household Consumption Coping Strategies, 2003-04 vs 2002-03

Household Coping Strategies	% HH Using Strategy	
	2003-04	2002-03
Has the household borrowed food or money to buy food, or bought food on credit?	**50**	**66**
Has the household relied on less preferred foods as substitutes for maize?	**55**	**79**
Have the household members reduced the number or quantity of meals eaten per day?	**67**	**92**
Have HH members skipped entire days without eating due to lack of money or food?	**33**	**66**
Have HH members eaten meals of vegetables only?	**34**	**69**
Eaten unusual types of wild food that are not normally eaten?	**21**	**50**
Has the HH restricted consumption of adults so that children can eat normally?	**37**	**63**
Slaughtered more animals than normal for food?	**7**	**14**
Eaten **all** maize green/ fresh from the field? (i.e. nothing left to harvest)	**10**	**8**

Using the first six strategies in the table above, an index was derived to reflect both the seriousness of the consumption strategy used and the frequency of its use[18]. Figure 6.4 shows the variation of values of this index from a provincial point of view. Clearly Manicaland and Mashonaland Central show the most serious coping behaviour, with Masvingo the least serious.

Figure 6.4 : 95% Confidence Intervals for Consumption Index by Province, 2003-04



The number of coping strategies used bears a close relationship to the above index and we find that one quarter of households used three or more of the six strategies on a fairly frequent basis i.e. at least once or twice per week.

Table 6.13 shows that use of expenditure, income and migration strategies in 2003-04 has remained more or less similar to that in 2002-03, possibly attributable to the general harsh economic environment, which has continued in 2003-04.

[18] The index was derived using the weights and methods of the CHS studies. See Annex M for further details.

Table 6.12: Household Other Coping Strategies, 2003-04 vs 2002-03

Household Coping Strategies	% HH Using Strategy	
	2003-04	2002-03
Expenditure Strategies		
Have you avoided spending on healthcare because you had to buy food?	**38**	**42**
Has the HH reduced expenditure on education to buy food?	**38**	**43**
Has the HH reduced expenditure on agricultural and livestock inputs?	**42**	**56**
Income Strategies		
Has the HH sold more than the usual number of livestock to get food?	**10**	**15**
Has the HH sold breeding and draft cattle to get food?	**3**	**7**
Has the HH sold other HH assets to get food?	**12**	**18**
Has the household had crops or livestock stolen?	**19**	**22**
Migration Strategies		
Send children away to friends or relatives?	**9**	**10**
Been forced to temporarily or permanently migrate to find food or work?	**7**	**9**

When considering the number of coping strategies used, we find that

- 39% of households used two or three of the expenditure strategies
- 10% of households used two or more of the income coping strategies.
- 14% of households used one or more of the migration strategies

6.5.1. Coping Strategies by Land Sector

Generally the communal areas had greater proportions of households engaged in various coping strategies compared to other sectors. The Old resettlement areas had the least proportion of households using various coping mechanisms, followed by the A1 resettlement areas and Large scale commercial farms.

Two thirds of communal households used at least one consumption coping strategy, compared to one third of those in Old Resettlement areas and half of those elsewhere. The average consumption index, reflecting frequency of use and seriousness of type of strategy, was far higher in communal areas (17) than in Old Resettlement areas (9), with those for other areas lying between. The most common consumption strategy in Communal areas was that of reducing the number of meals (71%), whilst more than half of all households were engaged in borrowing food or money for food and relying on less preferred foods as maize substitutes.

As noted before fewer households used the expenditure, income and migration strategies, but in the Communal areas more than 40% of households reported using each of the three expenditure strategies. Only in respect of one strategy viz thefts of crops or livestock, did A1 households report greater incidence than those in other sectors.

6.5.2 Coping Strategy by Head of Household Characteristics

The coping strategies employed were generally independent of the gender of the household head, with few differences apparent in percent of households using each strategy.

The level of education of the household head seems to be closely related to the coping mechanisms, although both the educated and the uneducated or less educated do use the various coping mechanisms. The percentage of households using the coping mechanisms across the board decreased with the increase in the level of education of the household head.

As the health status of the head of household deteriorates, there were higher chances of the household using one or all of the coping mechanisms.

6.5.3 Overall Coping Strategies

Looking at the sum total of all of the coping strategies, we find that nearly one fifth of households used no strategies at all, whilst 7% used 9 or more of the 18 possible strategies. Nearly half of all households used between 1 and 4 strategies.

Table 6.13 : Percent Households using any Coping Strategy by Province 2003-04

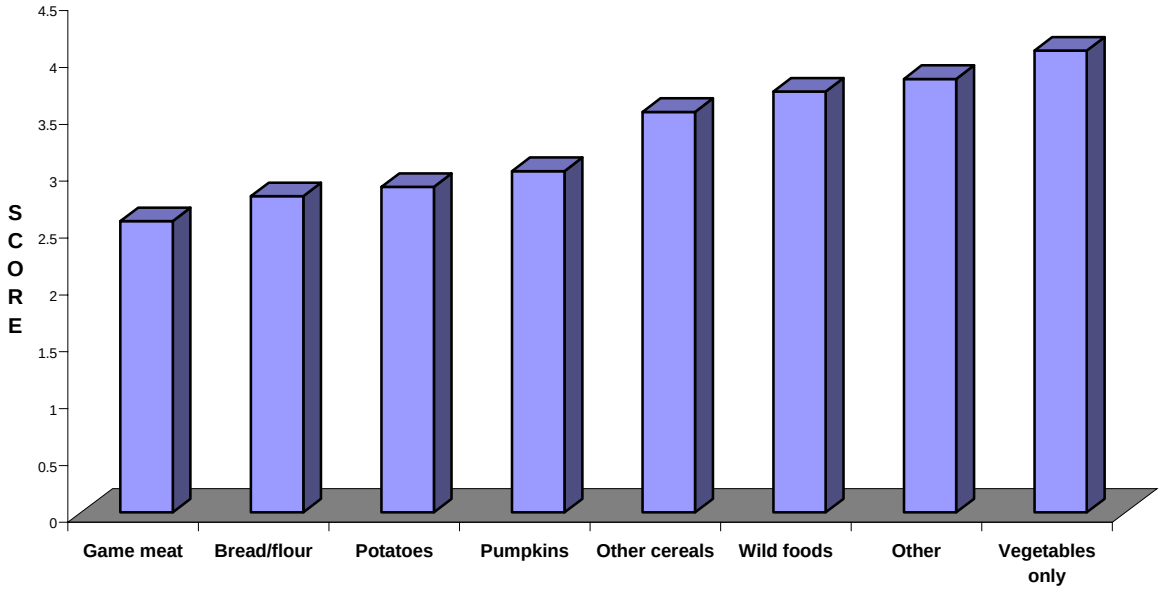
Province	No strategies	1-4 strategies	5-8 Strategies	9 or more Strategies	n =
Manicaland	14	39	37	9	344
Mashonaland Central	13	43	33	11	224
Mashonaland East	20	46	24	10	286
Mashonaland West	13	57	27	3	258
Matebeleland North	17	54	24	4	271
Matebeleland South	18	58	21	3	215
Midlands	34	35	22	10	247
Masvingo	22	56	19	3	311
Total	19	48	26	7	2156

The Provincial picture as shown in table 6.14 indicates that Midlands province shows the greatest proportion of households using no strategies at all. However, Midlands also has a relatively large proportion of households using large numbers of strategies, as do Mashonaland Central and West and Manicaland. In addition, Manicaland, Mashonaland Central and West have the smallest proportion of households using no strategies at all which indicates that households in these three provinces are the most likely to have to resort to greater numbers of coping strategies in the pre-harvest period of December to March.

6.5.4 Community Coping Strategies

Most communities indicated that they rely heavily on vegetables only if they do not have access to their regular maize. In the absence of maize, less than 20% of the communities said they relied on other cereals compared to 35% that have vegetables as a first or second means of survival. Figure 6.5 overleaf presents scores of alternatives to cereals as perceived by communities. Note that the other category consisted mainly of fruits, tea, and beans. The main substitutes in order of preference from this chart are thus vegetables only, other foods, wild foods and other cereals.

Figure 6.5 : Community Alternatives to Cereals, Ranking Score, 2003-04



Communities were also asked to rank the coping activities of people in the community, in terms of wealth groups. Such activities included income earning, expenditure and migration strategies. A scoring system was used to categorize these strategies, for each of the community identified wealth groups, whereby a higher score indicates more communities assigning a higher rank to that strategy. Top scoring strategies for each group are shown in table 6.15, in order of decreasing score. The differences between the three groups are subtle, indicating for the less poor, the resources that may be available before more drastic strategies have to be adopted.

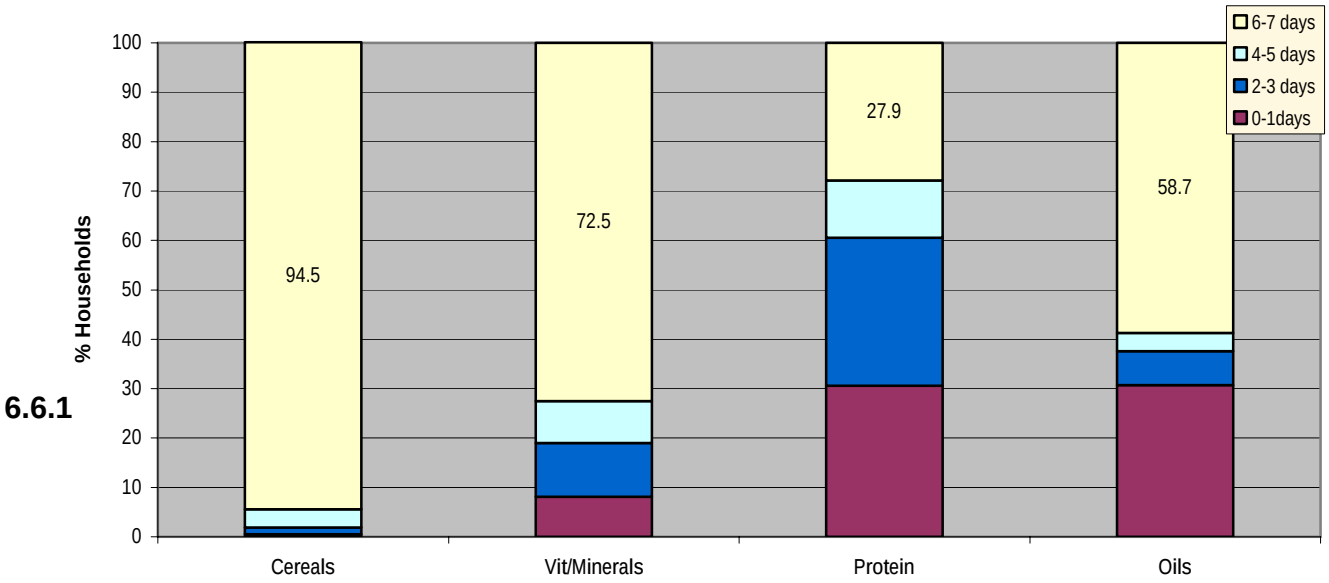
Table 6.14 :Community Perceptions of Coping Strategies, by Wealth Group, 2003-04

Poorer HH Strategies	**Middle HH Strategies**	**Better Off HH Strategies**
Cut down on consumption	Sell productive assets	Sell productive assets
Borrow food or money	Cut down on consumption	Cut down on consumption
Sell productive assets	Borrow food or money	Borrow food or money
Theft	Reduce Education Expenditure	Reduce Education Expenditure
Cut and sell firewood	Cut and sell firewood	Gold panning
Reduce Education Expenditure	Theft	Theft

6.6 Consumption Patterns in 2003-04

Households were asked about the consumption of various food products during the past 7 days. The analysis indicates that most households consume maize and vegetables almost on a daily basis. At least 95% of households ate cereals, mostly maize, followed by 73% eating vegetables and/or fruits, at least 6 or 7 times a week. Cooking oil and fats, sugar and sugar products were also widely consumed by many households with 59% and 44% of the households consuming the products 6 to 7 times per week respectively. However, nearly 33% of households consumed oils at most once per week. As expected the frequency of consumption of protein foods such as meat, fish, edible insects, eggs, milk and/or legumes was very low and nearly one third of all households consumed them at most once per week. Figure 6.6 illustrates consumption patterns for the major food groups. Household consumption of Irish potatoes was not common with 50% of all household consuming them at most once per week and similarly with indigenous foods where 75% consumed them at most once in the past week. Note that it is likely that the presence of food aid distributions, which usually include legumes and cooking oil, during the survey period will have influenced the results of consumption patterns.

Figure 6.6 : Households Consumption Patterns, Last 7 days



6.6.1

Consumption Patterns by Province

At provincial level maize consumption frequency was lower than the national average at 73% in Matebeleland South and North. The low consumption of maize is compensated by Sorghum and millets, which are highest in these provinces standing at 20% and 25% in Matebeleland North and South respectively.

The Mashonaland provinces reported a higher rate of consumption of potatoes/sweet potatoes/pumpkins than others, with 38% in Mashonaland East, 28% in Mashonaland Central and 24% in Mashonaland West of the households reporting consumption 6 to 7 times in the past week. This consumption was lower in Matebeleland North (8%) and South (6%) and Manicaland (9%) provinces.

Matebeleland South (67%) Mashonaland East (50%), Masvingo (49%) and Matabeleland North (46%) reported a higher consumption of sugar products compared to other provinces (35%).

Only Masvingo and Matabeleland South recorded more than 20% of household consuming nuts and pulses on at least 6 of the past 7 days. Egg consumption was extremely low in all provinces, whilst frequent fish consumption was only recorded in Mashonaland East and West and Manicaland (3%). Consumption of milk on 6 of the past 7 days was most likely in Midlands (22%) and least likely in Manicaland, Mashonaland Central and West (8%). Insect consumption was extremely low in all provinces, as was meat with only Mashonaland East having more than a 5% frequent use in the past 7 days. Overall protein consumption was lowest in Manicaland and Mashonaland Central, with 40% of households having had protein foods at most once in the past week, and highest in Masvingo, Midlands and Matabeleland South where more than one third of households recorded consumption on at least 6 of the past 7 days.

Leaf vegetable consumption was highest in Manicaland (85%) and Masvingo (83%), and lowest in Matebeleland South (44%) and Matebeleland North 58%. Consumption of fruits on at least 6 of the past 7 days was reported by 16% of households in Manicaland and 10% in Midlands and Mashonaland East. Overall consumption of vegetables and/or fruits was lowest in Matabeleland North and South and highest in Manicaland and Masvingo.

Frequent consumption of oils or fats was highest in Matabeleland South, Midlands and Masvingo, and lowest in Mashonaland West and Central. Frequent wild food consumption was recorded in more than 10% of households only in Manicaland, Mashonaland East and West and Matabeleland North.

Table 6.16 attempts to summarize the above findings in respect of consumption within the major food groups on at least 6 of the past 7 days.

Table 6.15 : Households Frequent Consumption Patterns by Province[19]

Province	Protein	Vitamins Minerals	Oils/Fats
Manicaland	Low	High	Medium
Mashonaland Central	Low	Medium	Low
Mashonaland East	Medium	Medium	High
Mashonaland West	Medium	Medium	Low
Matabeleland North	Medium	Low	Low
Matabeleland South	High	Low	High
Masvingo	High	Medium	High
Midlands	High	High	High
Average %	28	73	59

6.6.2 Consumption Patterns by Land Sector

Consumption frequency for maize, sorghum and millets, meat, leafs vegetables is almost similar across land sectors, with sorghum consumption higher in communal and Old resettlement areas. Bread consumption is highest in the large scale commercial not resettled and the Old resettlement areas. There is a higher rate of sweet potatoes/pumpkin consumption with over 30% of households reported consuming the product 6 to7 times a week in the A1 newly resettled areas and the Old resettlement areas, compared to other sectors. Fish consumption of at least 3 times a week is high (67%) in the A1 newly resettled areas. Frequent sugar consumption is higher in the large-scale commercial areas (76%), followed by the Old resettlement areas (64%) and lowest in the communal areas (39%). Consumption of nuts and pulses is much higher in the Old resettlement sector (34%) with other sectors similar (10%). A similar pattern applies to milk consumption.
Table 6.17 summarises frequent consumption patterns during the past 7 days for the four land sectors.

Table 6.16 : Households Frequent Consumption Patterns by Province[20]

Land Sector	Protein	Vitamins Minerals	Oils/Fats
Communal	Medium	Medium	Medium
A1 Resettled	Medium	Medium	Medium
Old Resettlement/Small holding	High	Low	High
Large scale commercial unsettled	Low	High	High
Average %	28	73	59

6.6.3 Consumption pattern by Household Characteristics

This section deals with only those household characteristics which appear to influence consumption patterns of major food groups. A summary follows.

- Female, compared to male, headed households show a slightly smaller frequency of protein intake;
- As household size increases so too does frequency of protein intake;
- As education of head of household increases so too does frequency of protein intake;
- Households with head in the 'other' marital status (i.e. not married and not widowed) show smallest frequency of vitamins/minerals intake;
- As health of head of household deteriorates, so too does frequency of vitamins/minerals intake;
- As household size increases frequency of vitamins/minerals intake decreases;
- Female headed households show slightly more frequent consumption of oils/fats;
- Elderly headed households show more frequent consumption of oils/fats;
- As education of head of household increases so too does consumption frequency of oils/fats;
- Households with head of household in fair health show least frequent consumption of oils/fats.

[19] Note that classification of consumption on at least 6 of the past 7 days as high, medium, low is relative to the overall national average % of households as shown in the final row of the table.
[20] Note that classification of consumption on at least 6 of the past 7 days as high, medium, low is relative to the overall national average % of households as shown in the final row of the table.

6.7 Agriculture

6.7.1 Land Area Owned and Planted

The analysis in this section excludes 91 households who reported owning no land, but includes those who claimed to own land but did not cultivate one or more crops in one or more of the agricultural years 2002-03, 2003-04. Households not recording any land owned were predominantly those on large scale commercial farming areas, ex commercial farm workers in A1 areas and those in all areas who declined to provide responses.
Land holding on average is higher in the Old Resettlement/small holder areas[21] (59 acres) compared to Communal areas (5 acres) and A1 resettlement areas (11acres).

The area planted to cereals in 2003-04 ranged from 0.13 to 50 acres with an average[22] of 3.3 acres showing an increase of 9% from 2002-03. Area planted increased most in the A1 newly resettled areas, in Mashonaland West, Matabeleland North and Matabeleland South. A decrease in area was recorded in Mashonaland Central and East and Masvingo.

Less than one third of respondents reported planting cash crops in the 2003-04 season. Area planted in 2003-04 ranged from 0.2 to 48 acres with an average[14] of 2.8 acres, the average increase from 2002-03 being 22%. Area planted increased most in the A1 and Old Resettlement areas and in Matabeleland South[23].

Table 6.18 below shows that largest areas are owned in Mashonaland East and Masvingo with largest areas cultivated to maize or cash crop in Mashonaland East. Within these provinces it is the Old resettlement area households that own and cultivate the larger areas.

Table 6.17 : Household Land (acres) Owned and Cultivated by Province

Province	Acres[14]					n=[24]
	Owned	Cereal 02	Cereal 03	Cash 02	Cash 03	
Manicaland	4.2	2.5	2.6	2.8	2.8	47-309
Mashonaland Central	5.1	2.4	2.1	1.8	1.8	63-212
Mashonaland East	19.3	4.5	4.3	4.8	5.0	109-274
Mashonaland West	8.3	3.5	3.9	2.6	2.6	73-249
Masvingo	21.7	3.3	3.2	1.9	2.0	105-282
Midlands	7.8	3.4	3.5	2.3	2.4	95-238
Matebeleland North	5.7	3.4	3.8	2.2	2.0	18-267
Matebeleland South	5.1	3.3	3.5	1.8	4.2	9-203
Overall	10.0	3.3	3.3	2.8	0.9	2079

Table 6.19 provides average areas for land owned and cultivated for various head of household characteristics. Differences between groups are not large and the figures are provided solely for topical interest. Households with head of household male and/or married own and cultivate more land. In respect of age of head of households, it appears that elderly households own and cultivate more land, whilst in respect of education level those heads of households with higher than lower secondary education own, on average, more that three times as much land as others - yet they do not appear to cultivate to cereals or cash crops to similarly large areas[25]. No explainable differences were observed in respect of health of head of household.

Groups showing greatest increases in area planted to cereals, 2003-04 compared to 2002-03, include

[21] Note throughout that outliers increase this average – 95% CI is (36, 83)
[22] All averages are taken over non zero areas
[23] Sample size small (n=9 in 2002-03)
[24] Sample size varies from one variable to another
[25] Sample size for most educated heads of households is small (n=84)

- male headed households
- primary educated heads of households
- heads aged 20-59 years
- heads of households in good health whilst those showing greatest increases in area planted to cash crops include
- male headed households
- most educated heads
- heads in good health.

Table 6.18 : Land Owned/Cultivated by Head of Household Characteristics

Head of Household	Acres[26]					n=[27]
	Owned	Cereal 02	Cereal 03	Cash 02	Cash 03	
Marital Status						
Married	10.6	3.5	3.5	2.9	2.9	513-1493
Widowed	8.9	2.7	2.8	2.1	2.2	89-446
Other	7.5	2.8	3.0	2.8	2.7	17-131
Gender						
Male	10.5	3.5	3.6	2.9	3.0	408-1491
Female	8.6	2.8	2.8	2.1	2.0	109-582
Level of Education						
None	7.3	3.0	3.0	2.4	2.8	75-383
Primary	10.5	3.4	3.6	2.8	2.7	263-1077
Lower Secondary	7.4	3.1	3.1	2.6	2.8	162-538
Higher	39.9	4.6	4.3	5.2	4.5	18-84
Age						
20-59 Years	8.0	3.1	3.2	2.7	2.8	367-1454
60+ Years	15.5	3.7	3.8	2.9	2.8	145-573
Health Status						
Good	9.4	3.5	3.6	2.9	3.0	408-1409
Fair	10.1	2.8	2.8	2.1	2.0	109-471
Poor/disabled	14.3	3.3	3.4	2.8	2.8	517-2079

Where applicable, households were further asked why they had left land uncultivated during the 2003-04 season. 30% of the multiple responses noted lack of seed and a further 30% noted lack of draught power. 10% noted lack of labour, 12% insufficient rainfall and 17% lack of fertiliser. A1 resettlement areas particularly emphasised lack of draught power, whilst provincial responses differing from the overall include

- Mashonaland Central, East and West emphasised lack of fertiliser
- Matabeleland North and South emphasised lack of draught power
- Matabeleland South emphasised lack of labour
- Midlands emphasised lack of seed
- Manicaland, Mashonaland Central, Matabeleland South and Masvingo emphasised lack of rainfall

[26] All averages are taken over non zero areas
[27] Sample size varies from one variable to another

6.7.2 Agricultural Inputs - Sufficiency

The majority of farmers in all provinces did not have sufficient inputs for cereal and cash crops in the 2003-04 cropping season. Table 6.20 shows that an average of 24% of all households had enough cereal seeds, although over 40% of those in Matebeleland North and South reported they did have enough seeds, possibly explained by the fact that many of these farmers grow retained millet and sorghum seed. Mashonaland West and Manicaland Provinces had the greatest proportion of households with insufficient cereal seed. For cash crops, nearly three quarters of all households did not report any cash crops for the season. Of those who planted cash crops 31% indicated they had enough seed. More than three quarters of households indicated they did not have enough fertiliser for the main cereal crop and almost 14% of the households indicated they did not have a garden. Of those with a garden close to 60% had access to enough water for gardening.

Table 6.19 : Access to Inputs 2003-04 Cropping Season by Province

Province	Enough seeds for cereal crop	Enough seeds for cash crop	Sufficient chemical fertilizer for cereal crop	Enough water for gardening
Manicaland	14	33	9	58
Mashonaland Central	23	24	6	53
Mashonaland East	22	46	13	49
Mashonaland West	13	22	3	51
Matebeleland North	44	41	10	35
Matebeleland South	41	22	4	75
Midlands	18	28	6	70
Masvingo	23	29	7	82
Total	24	31	7	59

In regards to land sector, households in Old Resettlement/small holding areas were least affected by input shortages, as shown in table 6.21. Of interest here is the proportions of households not reporting any cash crop harvested in 2004 – ranging from 47% of A1 households to 74% of those in communal areas.

Table 6.20 : Access to Inputs 2003-04 Cropping Season by Land Sector

Sector	Enough seeds for cereal crop	Enough seeds for cash crop	Sufficient chemical fertilizer for cereal crop	Enough water for gardening
Communal	24	27	7	59
Old Resettlement	29	44	11	64
A1 Resettled	23	35	9	54

Reasons provided for insufficient inputs were predominantly a shortage of funds,

- 74% of households could not afford sufficient cereal seed
- 89% of households could not afford sufficient cash crop seed
- 76% of households could not afford fertilizer,

although a small proportion claimed non availability (7-8%). Unaffordability of cereal and cash crop seeds was most critical in Mashonaland Central, whilst Matabeleland North gave high importance to unavailability in both cases. A greater proportion of communal households could not afford seeds, whilst those in A1 and Old resettlement areas put slightly more emphasis on unavailability. Up to 20% of households maintained they did not wish to use fertilizer and/or preferred to use organic manure.

Generally, among male-headed households a higher percentage had sufficient seed for cash crops (33% compared to 23%) but access to other inputs showed little difference based on gender of head of household. Most educated heads of households appear to access inputs more easily than those less educated whilst widowed heads of households appear to have least access to sufficient inputs.

Table 6.21 : Access to Agricultural Inputs by Head of Household Characteristics

Head of Household	% households sufficient				N=[28]
	Cereal seed	Cash crop Seed	Fertilizer	Garden Water	
Marital status					
Married	24	32	9	59	651-1494
Widowed	22	22	8	61	143-438
Other	34	30	7	55	44-132
Gender					
Male	25	33	8	59	636-1550
Female	22	23	6	60	202-597
Level of education					
None	22	29	5	57	325-385
Primary	24	27	8	59	964-1073
Lower Secondary	22	36	6	63	504-540
Higher	47	39	19	52	58-64
Age					
20-59 Years	23	33	7	58	603-1528
60+ Years	27	24	8	61	225-576
Health status					
Good	24	32	8	61	604-1407
Fair	23	27	5	54	163-461
Poor/disabled	22	27	5	60	70-192

6.7.3 AGRICULTURAL INPUTS - SOURCES

The main source of seed for 33% of the households was retained seed, Mashonaland Central showing the highest proportion (44%) followed by Manicaland (39%), Mashonaland East (34%) and Masvingo (33%) as shown in Table 6.23.

NGO seed was the main source of cereal seed most commonly in Matabeleland South and North and, to a lesser extent, in Midlands, Masvingo and Mashonaland East. Only in Mashonaland West was there a sizeable proportion of households whose main source was from Government/GMB. Purchases were most common in Mashonaland East and, to a lesser extent, in Midlands.

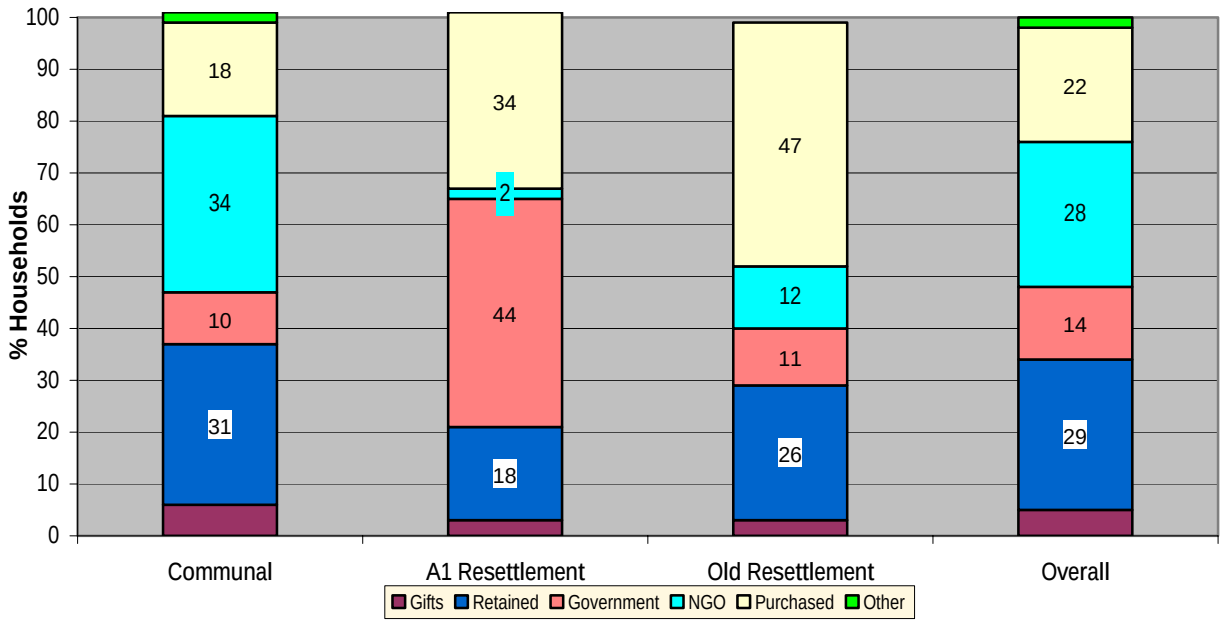
[28] Sample size varies from one variable to another

Table 6.22 : Cereal Main Seed Source 2003-04 % Households by Province

	Gifts/remittances	Retained seed	Other	Government	NGO	Purchased	n=
Manicaland	4	39	2	13	19	23	317
Mashonaland Central	3	44	3	19	8	22	203
Mashonaland East	5	34	0.4	13	12	35	277
Mashonaland West	3	18	2	32	28	16	245
Matebeleland North	11	16	0.4	15	44	13	263
Matebeleland South	5	14	0.5	10	52	18	205
Midlands	3	30	1	6	32	28	241
Masvingo	5	33	3	5	32	21	283
Total	5	29	2	14	28	22	2034

Figure 6.7 shows equivalent information by land sector. From this it is clear that main sources of seed for those in Communal areas were NGO handouts and seed retained from past harvest. On the other hand, many of those in A1 resettlement areas received from GMB/Government whilst purchasing was also common. Households in Old resettlement/small holder areas were most prone to purchase seed with a fair number using that retained from the past harvest.

Figure 6.7: Main Source of Cereal Seed 2003-04 % Households by Province



Main source of cereal seed was investigated in respect of head of household characteristics. It was found that accessing seed via gifts/remittances or that from GMB/Government, were not dependent on household demographics. On the other hand

- Female heads, widowed heads, and heads with no education were most likely to have received seed from NGOs
- Male heads, married heads, heads aged 20-59 years, those with highest education and those in good health, were most likely to have purchased seed.
- Elderly heads and those with no education were most likely to have retained seed

6.7.4 LIVESTOCK OWNERSHIP

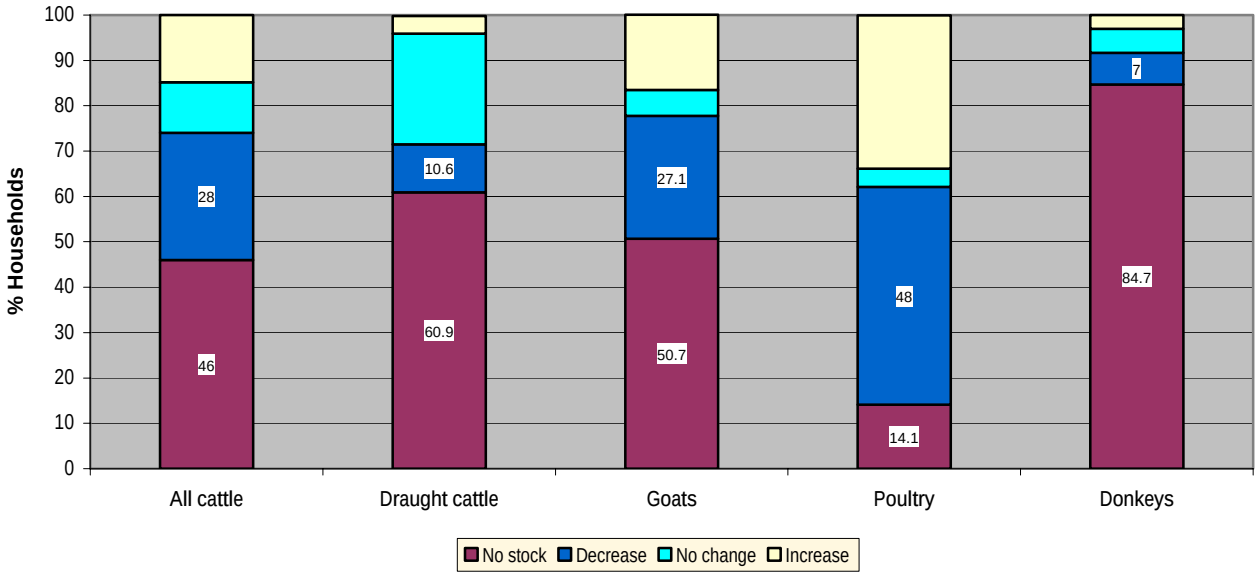
Households were asked to provide numbers of each type of livestock, not only current numbers but also the numbers they had owned at the same time last year. Table 6.24 shows average numbers of livestock currently held in all areas.

Table 6.23 : Average Livestock Holdings 2003-04

Livestock Type	% HH not owning	Average[29] #	Maximum #	n=
All Cattle	51	5.5	109	2160
Draught cattle	64	2.8	16	2159
Goats	54	4.5	40	2158
Poultry	18	8.2	107	2162
Donkeys	87	3.0	9	2157
Sheep	97	4.2	26	2156
Pigs	97	3.4	20	2148

Figure 6.8 illustrates the general picture of different kinds of livestock ownership for the period 2002-03 to 2003-04. Slightly more households now own cattle compared to last year but still half of all households own no cattle, very few (15%) increased their cattle holding during the period and more than a quarter decreased their stock. Ownership of draught cattle shows an even worse scenario with nearly two thirds of households not owning any stock and a further 11% who have decreased their stock during the period. Half of all households own goats, although more than a quarter register a decrease and 17% an increase during the past year. Donkeys are owned by only 16% of households with little recent changes in stock sizes, whilst almost all households own some poultry. Nearly half of all households registered a decrease in poultry stock during the period, but one third registered an increase.

Figure 6.8 : Livestock Holdings April 2004 compared to April 2003[30]



Of particular interest may be those households who owned livestock in 2002-03 and now own none. For the major livestock this represents

- 7% of households who previously owned cattle
- 7% of households who previously owned draught cattle
- 8% of households who previously owned goats
- 5% of households who previously owned poultry

[29] Average taken over those owning 1+ animal
[30] No stock indicate no stock at both periods April 2003 and April 2004

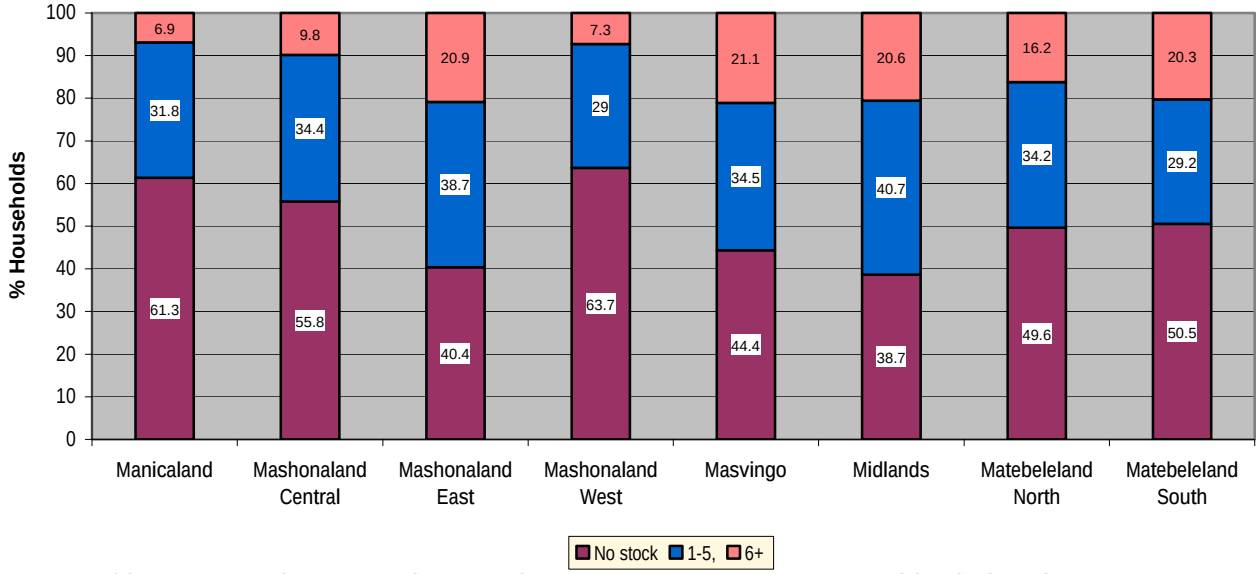
Households were asked to provide reasons for changes in stock sizes during the period under discussion. Table 6.25 summarizes the main findings for the major types of animals. Births account for the majority of cattle and goat holding increases whereas more purchases were made in respect of draught animals and poultry. Clearly the main reason for decrease in draught/cattle herds was due to deaths with sales being cited a lot less frequently. Goatherds also suffered deaths but here slaughtering and sales also took their toll. Decreases in poultry numbers were mainly from slaughtering although deaths also featured. It is worth noting that all stocks were prone to thefts.

Table 6.24 : Reasons for Changes in Stock Holdings, April 2003 to April 2004

Reason for Change	All Cattle	Draught Cattle	Goats	Poultry
Increase in Stock				
% HH increasing	15	10	17	34
Births	76	43	63	58
Purchases	20	33	33	37
Other	5	23	1	5
Decrease in Stock				
% HH Decreasing	28	11	27	48
Sales	24	22	26	16
Deaths	64	63	48	31
Slaughtered	5	4	20	48
Thefts	4	0	4	4
Other	2	3	2	2

Livestock ownership varies quite considerably across the provinces and land sectors. In general more households in Mashonaland East, Midlands and Masvingo Provinces own cattle and draught animals compared to other provinces. Households in Matabeleland South tend to own goats and/or donkeys moreso than households in other provinces, whilst poultry ownership is common across all areas. Figure 6.9 illustrates the situation in respect of cattle.

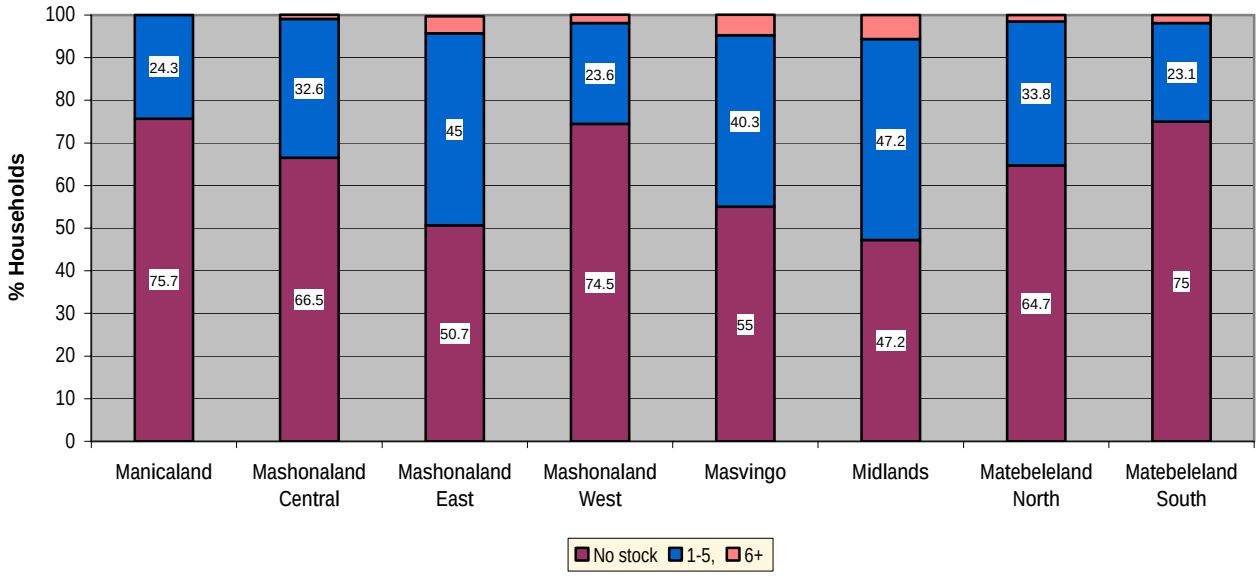
Figure 6.9 : Cattle Ownership April 2004 by Province



Looking at changes in cattle ownership during the past year we find that 20% of households in Masvingo registered an increase in herd size, compared to only 9% in Mashonaland West. Conversely, 42% of households in Matabeleland South registered a decrease, compared to 20% in Manicaland and Mashonaland West. Notice from figure 6.9 that Mashonaland West has the highest proportion of households (64%) with no cattle at all.

The issue of draught power is of particular concern in Manicaland, Mashonaland West and Matabeleland South provinces where more than three quarters of households do not own any draught animals. Figure 6.10 illustrates the provincial situation.

Figure 6.10 : Draught Cattle Ownership April 2004 by Province



Changes in ownership of draught cattle were most severe in Mashonaland East where 16% of households registered a decrease in numbers since April 2003. Increases in numbers of draught animals were similar across all provinces, except Masvingo showing a slightly higher increase at 7%.

In general, greater proportions of households in the Old resettlement/small holder areas tend to own cattle, while only in respect of poultry do A1 resettlement households come close to matching other sectors. Only just over half of Communal households own cattle, although most of them own poultry and half of them own goats. Table 6.26 provides an overview of livestock ownership in the different land sectors.

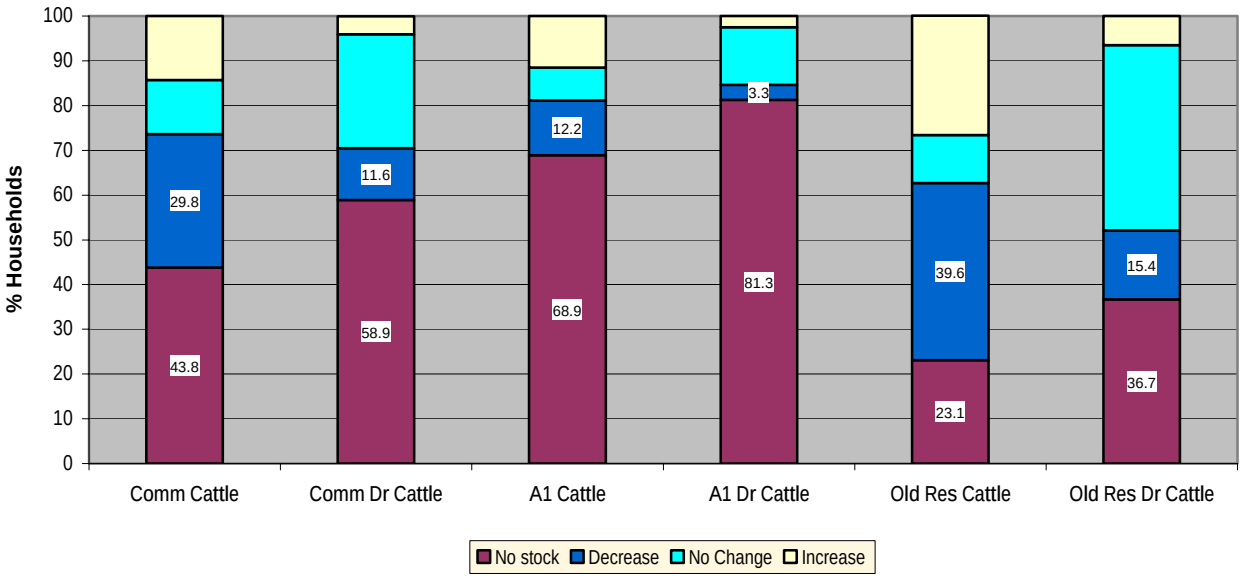
Table 6.25 : Household Livestock Ownership April 2004 by Land Sector[31]

Livestock	Communal		Old Resettlement		A1 Resettlement	
	% Own	Average #	% Own	Average #	% Own	Average #
Cattle	52	4.8	75	10.2	22	5.7
Draught Cattle	38	2.7	61	3.5	18	2.7
Goats	51	4.5	52	4.4	20	4.9
Poultry	84	7.4	83	11.9	78	10.7
Donkeys	14	3.0	15	3.2	10	2.8

Changes in livestock ownership between April 2003 and April 2004 varied quite considerably across the different land sectors. As figure 6.11 below shows nearly one third of households in Communal areas registered a decrease in cattle numbers with a much smaller proportion showing an increase, whilst changes in draught cattle were few. In the A1 resettlement areas a greater proportion of households registered an increase in cattle numbers, whilst draught cattle remained relatively stable. In Old Resettlement/small holder areas nearly 40% of households registered a decrease in cattle numbers with only one quarter showing an increase. Similarly larger proportions of households showed decreases in numbers of draught cattle in the Old resettlement areas.

[31] Average number of livestock is taken over those owning 1+ animals

Figure 6.11 : Cattle and Draught Cattle Holdings April 2004 Compared to April 2003, by Land Sector



Cattle ownership is considered in terms of head of household characteristics, as shown in table 6.27. The following summary applies

- Other marital status (including single) were least likely to own stock whilst married heads were most likely to increase stock
- Male headed households were more likely to increase holdings
- Highest educated heads were most likely to increase holdings[32]
- Elderly heads were more likely to own stock but also more likely to decrease holdings
- Health of head had no bearing on cattle holdings

Table 6.26 : Cattle Holdings April 2003 Compared to April 2004, by Head of Household Characteristics

Head of household	No stock both years	Stock Decrease	No Change	Stock Increase	n=
Marital Status					
Married	45	28	10	17	1522
Widowed	47	30	15	9	445
Other	61	19	10	10	135
Gender					
Male	45	28	10	17	1522
Female	48	28	14	10	583
Level of education					
None	50	29	11	10	391
Primary	41	29	13	17	1088
Lower Secondary	55	25	9	12	555
Higher	36	30	6	27	66
Age					
20-59 Years	51	24	10	14	1494
60+ Years	33	36	14	17	571
Health status					
Good	46	27	11	15	1429
Fair	45	28	12	14	471
Poor/disabled	47	31	10	13	198

[32] Note that sample size is small

6.7.5 LIVESTOCK DISEASES

As part of the community interviews questions were asked about the prevalence and seriousness of livestock diseases during the 2003-04 season. Major concerns from the communities included Black leg, Tick-borne diseases, Anthrax, Foot and Mouth and Lumpy skin. Newcastle, Internal Parasites and Fowl pox were mentioned in connection with poultry. Rabies and to a lesser extent Cocciodosis were also mentioned.

Chapter 7

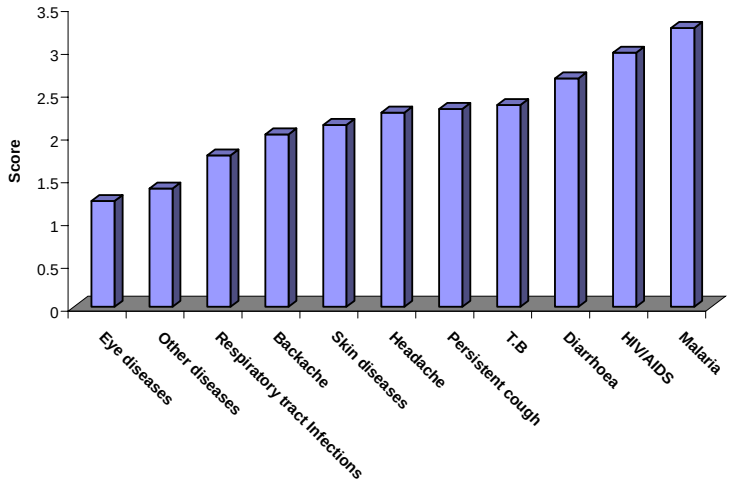
Household Health, Water, Education, Child Protection and Migration

This section considers various aspects of household health, education, access to safe water, migration, and deaths and seeks to establish linkages within sectors for input into programme planning and as a basis for examining food security in the coming year. Please note that all results derived from community level data arise from a small sample and should therefore be taken as indicative only.

7.1 Household Health

Communities were asked to discuss **major diseases** in the area, to rank their severity and indicate the most vulnerable groups who suffered from each disease. Figure 7.1 below shows the results of scoring the communities' multiple classification of diseases as 'severe', where a higher score indicates greater proportions assigning higher ranks.

Figure 7.1 : Scoring of Communities Perceptions of Health Problems in the Past Year



Clearly malaria is a persistent problem in most communities followed by HIV/AIDS and thereafter by diarrhoea, tuberculosis, coughs, headaches, and skin diseases. Considering the community level response we see the same pattern with more than three quarters of all communities classifying malaria as above normal or severe and similarly two thirds classifying HIV/AIDS as above normal or severe. Close to half of all communities classified diarrhoea, headaches and tuberculosis as above normal or severe, whilst close to one third rated coughs, backaches and skin diseases as above normal or severe. Eye diseases and respiratory tract infections were rated above normal or severe by less that one fifth of all communities.

The results of communities' identification of which groups suffer from each disease are shown in table 7.1 overleaf. Children were said to be most affected by coughs, diarrhoea, respiratory infections and skin diseases, whilst women are most affected by backaches and eye problems and, to a lesser extent tuberculosis and HIV/AIDS. Men too suffer from backaches, tuberculosis, HIV/AIDS and eye diseases.

Additional questions to the communities investigated **access** to various health care facilities for HIV/AIDS infected people in the village. Two thirds of communities noted that they had access to Home Based Care programmes (HBC), whilst three quarters noted access to general health facilities, but only one quarter mentioned access to voluntary counseling and testing. HBC programmes and voluntary counseling (17%) were practically non existent in newly resettled A1 areas and general health services were also very limited compared to other areas (42%). Provincially, HBC programmes were least common in Mashonaland West as were general health services, whilst voluntary counseling and testing was least accessible in Manicaland.

Table 7.1 : Groups Suffering from Diseases

HEALTH PROBLEM	Group Affected : % of All Responses					# Responses
	Children	Youths	Men	Women	All	
Persistent cough	21	9	3	7	60	68
Diarrhoea	19	1	0	0	80	73
Headache	0	2	14	16	69	64
Backache	0	0	37	48	16	82
Malaria	1	0	1	1	96	79
Respiratory tract Infections	20	6	13	11	50	54
Skin diseases	29	10	5	3	52	58
Tuberculosis	0	5	37	29	28	82
HIV/AIDS	0	10	32	30	28	115
Eye diseases	7	0	29	21	43	14
Other Diseases	15	15	15	20	35	20

At the household level a number of questions investigated the health status of individual household members. Two thirds of all households recorded that one or more persons had been **sick in the past month**. Such sickness was least commonly reported in Old resettlement areas (55%) and in Matabeleland South (50%) and most commonly reported in Manicaland (81%). Differences between other demographic groups were not obvious. Using a multiple response approach, we find that three quarters of households with illness in the past month had sought treatment at a health facility, least commonly in Matabeleland North (65%) and most commonly in Old resettlement areas (89%). Overall 9% of households reporting illness had not sought any treatment at all. Reasons for not seeking formal health care treatment included lack of funds (55%), illness was minor/ did not require medical attention (10%), lack of transport (8%) and a large number (19%) of other unspecified reasons.

The health status of each individual in the household was classified into one of four categories viz good, fair, poor and disabled. Grouping together the poor health who had been sick for more than 3 months continuously and the (very small) disabled categories and calling it chronically ill, we find that just under one tenth of all households have one or more members aged 16-59 years who are **chronically ill**. This is least common in Mashonaland West (7%) and most common in Mashonaland Central (16%) and in households with widowed heads (11%). In respect of household member of all ages being chronically ill, we find that one fifth of all households reported one or more household members to be currently chronically ill.

Considering all household members, the proportion of members who are chronically ill ranges from 0 to 100% with an average of 5%. Highest averages are found in Mashonaland Central (7%), Communal areas and female headed households (7%) and lowest in Mashonaland West (3%) and in Commercial farming areas that have not been resettled. Overall, one fifth of all households reported one or more household members to be currently chronically ill.

7.2 Deaths in the Household

Households were requested to provide details of all deaths of households members that had occurred in the past 12 months. Overall one fifth of households recorded one or more deaths, with 3% recording 2 or more. There were no significant differences across land sectors in the recording of deaths but the occurrence in Matabeleland North was significantly higher (27%) whilst those in Manicaland and Matabeleland South were significantly lower (14%). Note however that, since this issue is extremely sensitive, we cannot draw firm conclusions from these results due possibly to households not wishing to respond quite truthfully and/or under reporting. Overall 56% of reported deaths were male.

The occurrence of deaths in female headed households appears to be higher than that in male headed households, and similarly in elderly headed households, in households where the head is widowed, in households with more serious dependency ratios and in households wherein there are orphans. Further, the larger households appear to be more likely to have had one or more recent deaths.
Using the multiple response approach in examining the relationship of the deceased to the current head of household, figure 7.2 illustrates the findings showing percent of all reported deaths, showing that just over

40% of deaths were sons or daughters of the head of household, possibly implying that it is likely that these households now have responsibility for one or more orphaned children.

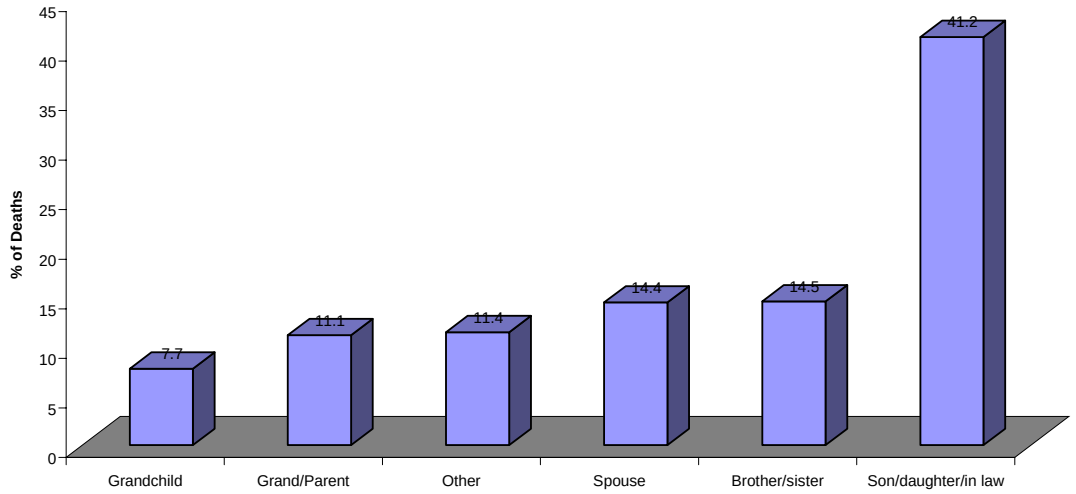
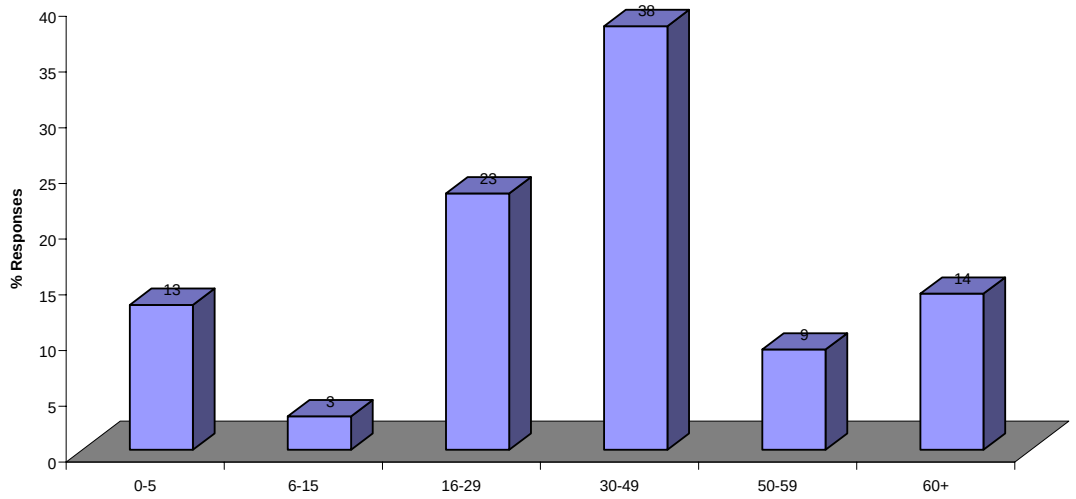


Figure 7.2 : Household Deaths by Relation to Head of Household

Households were requested to provide information on age at death and cause of death. As expected from the figure above, age at time of death ranged from under 1 year to more than 90 years. Figure 7.3 below shows that the majority of reported deaths occurred in the 30-49 years age group (38%) confirming the finding above, although a good number were reported for those aged 16-29 years (23%) and children aged 5 years or less (13%).

Figure 7.3 : Age Distribution of Household Deaths During Past 12 Months



In respect of cause of death we again use the multiple response approach and find that the following frequencies were recorded

- 36% unknown/not stated
- 19% from tuberculosis
- 14% from HIV/AIDS
- 8% after a short illness
- 6% from pneumonia
- 6% from malaria
- 6% from diarrhoea
- 3% from old age
- 2% from accidental causes

The shockingly high proportions of deaths in the 16-49 age ranges highlights the fact that AIDS is likely to be responsible for more than just the 14% of deaths directly attributed to it above.

7.3 Access to Safe Water

The community interview sought to obtain information on village access to safe water and distance to main water source. Less than half of all communities indicated that they were accessing a "safe" water source i.e. protected well, borehole or tap. One fifth claimed to be using a river or stream and an additional fifth to use a shallow well. Access to safe water was highest in Communal areas (51%) and lowest in Old resettlement areas(17%). Provincially communities in Mashonaland West recorded the least access to safe water (27%) and those in Masvingo recorded the highest (55%).

The distance to the water source was recorded by two questions, viz the time taken to walk there and the estimated distance. Unfortunately the responses were not consistent and here we report only on estimated distance. More than half of all communities reported that the main water source was more than 1 km distant from the village, whilst less than one fifth noted that it was within 500m. Those in newly resettled A1 areas noted the greatest distances with more than two thirds being 1 km+ away from the main source. Nearly three quarters of the Matabeleland North communities reported similarly.

7.4 Education

This section will refer only to those households with children aged 6-15 living in the household at the time of the survey. Information was collected about the education status of each child in the household viz whether the child was currently in school (1st term 2004), whether the child had dropped out of school in the past 12 months and reasons for not being in school and/or dropping out of school.

One quarter of households recorded that one or more children were not currently in school, with 8% noting that more than half the household children were not in school. Of all those children not in school, one quarter were aged 6 whilst 43% were aged 13-15 years, and 47% were female.

Less than one fifth of households noted dropouts in the previous 12 months, with 9% having had more than half the children dropout of school. Of all the children who had dropped out of school, two thirds were aged 12-15 years, and 44% were female.

Table 7.2 below summarises the percentage of children aged 7 to 15 years who were out of school or dropped out in the last 12 months, and the reasons given for non-attendance[33]. Overall, 16% of children were either out of school or had dropped out in the last 12 months. The rates were substantially higher for children over the age of 12 compared to children under 12 (24% compared to 12%), which probably reflects the greater direct and opportunity costs involved in sending older children to school. There was no significant gender differences. Overall 4% of children were reported to have dropped out during the past 12 months, but were currently back attending school.

[33] Due to confusion between the coding for responses for "early marriage" and "not applicable" in the survey, it was not possible to distinguish between those responses, and hence those responses have unfortunately had to be excluded. This is likely to somewhat underestimate the dropout rates for girls, particularly older girls.

Table 7.2 Percent Children Aged 7-15 years Not in, or Dropped out of, School in Past 12 Months:

Gender	Age	% not in/drop out of school	Completed	Can't Afford	Too far	Work outside home	Care for sick	Work in home	Too ill	Too young	Other	n
Male	7-12	13	1	55	4	0	1	0	11	6	21	99
	13-15	23	4	66	0	3	0	1	6	2	18	110
	All	16	2	61	2	1	1	1	9	4	20	209
Female	7-12	11	3	56	6	3	0	0	10	2	21	63
	13-15	25	4	61	0	0	1	1	4	7	23	105
	All	15	4	59	2	1	1	1	6	5	22	168
All	7-12	12	9	56	5	1	1	0	10	4	21	162
	13-15	24	4	64	0	1	1	1	5	4	20	215
	All	16	3	60	2	1	1	1	7	4	20	377

In all cases, the most common reported reason for drop-outs was "can't afford costs". This was particularly the case at secondary school level, where fees, books, uniforms, transport and possibly boarding greatly increase the costs of education to households. For younger children, distance was an important reason for non-attendance. Illness was another common reason for non-attendance, particularly for younger children. The need to work inside or outside the home or to care for the sick was cited quite rarely, accounting for only 1-3% of dropouts. Nonetheless, as is indicated further below in the "Child Protection" section, non-attendance at school is associated with a higher number of children in the household contributing to farm labour, even if this is not the primary reason for non-attendance. Large numbers of children, particularly those under 12 recorded "other" reasons for drop-outs, but the survey did not capture what these other reasons were.

7.5 Child Protection Issues

School Attendance, Status of Household Head and Orphans

Table 7.3 : % Households' Schooling Status by Age of Head of Household

Age & Gender of HH Head	1+ Out of School	All in School	*n* =
Male			
15-19 years	13%	88%	*11*
20-59 years	19%	81%	*1,048*
60+ years	25%	75%	*386*
Total Male	*21%*	*80%*	*1,445*
Female			
15-19 years	33%	67%	*7*
20-59 years	23%	77%	*396*
60+ years	28%	72%	*154*
Total Female	*25%*	*76%*	*557*

The age and gender of the head of household also has a significant bearing on school attendance of children. As table 7.3 shows, households headed by older people and by women are more likely to have children out of school, although households headed by females aged 15-19[34] have the highest levels of non-attendance of all groups.

Looking at the attendance levels among households with and without orphans, a concerning picture emerges of very much higher levels of non-attendance among households with orphans (Table 7.4). In Communal areas, 30% of households with orphans have at least one child not attending school compared to 18% of households without orphans, while the gap is even bigger in A1 resettlement areas – 33% compared to 18%. When we look only at households with double orphans (i.e. both parents died), the difference is marginally smaller, though still large: 31% compared to 20% nationally.

[34] Sample size extremely small

Table 7.4 : % Households' Schooling Status by Orphan Status and Land Sector

Land Sector	1+ Out of School	All in School	*n* =
Communal			
With Orphans	30%	70%	*541*
No Orphans	18%	82%	*885*
Total	*22%*	*78%*	*1,426*
A1 Resettlement			
With Orphans	33%	67%	*66*
No Orphans	18%	82%	*164*
Total	*22%*	*78%*	
Old Resettlement/ SSCF			
With Orphans	20%	81%	*41*
No Orphans	14%	86%	*85*
Total	*16%*	*84%*	*126*
LS Commercial Farm Not Resettled			
With Orphans	29%	71%	*7*
No Orphans		100%	*22*
Total	*7%*	*93%*	
National			
With Orphans	30%	70%	*655*
No Orphans	17%	83%	*1,156*
Total	*22%*	*78%*	*1,811*

Non-attendance at school is strongly related to children labouring full-time on the household's farm. The average number of children in the household labouring full time is more than twice as high in households with children out of school than in those with all in school (0.82 compared to 0.39). The difference for children labouring part-time is not significant, however, probably reflecting that children in school may work part time on weekends and holidays.

No relationship was found between attendance and the health of the household head, i.e. the same percentage (22%) of households with the head in good health status and in poor health or disabled had one or more children out of school.

Potential inter-generational education issues are highlighted by the fact that the percentage of households with children out of school drops significantly as the level of education of the household head increases. 30% of households whose head has no education had children out of school; this falls to 21% when the head is educated to primary level, and to 16-17% when the head is educated to upper or lower secondary level.

Children and Labour

Table 7.5 : Child Labour and Food Security Status

HH Status	# Children (<16) in Farm Labour		
	Full-Time	Part-Time	*n* =
Food Insecure (<100% needs)			
With Orphans	0.58	1.09	*244*
No Orphans	0.53	0.85	*399*
Food Secure (100-150% needs)			
With Orphans	0.62	0.94	*225*
No Orphans	0.44	0.63	*385*
Very Secure (150-200% needs)			
With Orphans	0.51	0.91	*85*
No Orphans	0.38	0.66	*174*
Super Secure (>200% needs)			
With Orphans	0.39	0.90	*99*
No Orphans	0.36	0.52	*196*
All Sample			
With Orphans	0.55	0.99	*653*
No Orphans	0.45	0.69	*1,154*

Nationally, 21.9% of households reported having at least 1 child under the age of 15 engaged full-time in work on the farm, while 37.3% had at least 1 child engaged part-time in such work. The average number of children per household working full time was 0.4, with an average of 0.7 working part-time. Table 7.5 shows two key factors apparently affecting the extent of child labour viz food security status (2003-04) and the presence of orphans.
The first noticeable trend in this table is how the number of children labouring either full time or part time drops consistently as food security status improves. However, the second key trend is that households with orphans have a higher average number of children labouring than those without orphans, irrespective of their food security status.

Further disaggregation of households was attempted according to whether the orphans were maternal, paternal or had lost both parents. The survey revealed 7 categories of households with orphans, according to whether the children in those households were all orphans (maternal, paternal or both parents dead), or whether there was a mix of orphaned and unorphaned children (maternal, paternal, both parents dead, or a mixture of these, i.e. orphans taken in from more than 1 household). Table 7.6 provides a summary.

Table 7.6 : Child Labour and Household Orphan Status

HH Orphan Status	# Children in Farm Labour		% of HHs with 1+ Children Out of School	*n* =
	Full Time	Part Time		
Some mother, some none	0.60	0.97	31%	*75*
Some both, some none	0.56	1.07	36%	*99*
Some father, some none	0.60	0.99	31%	*161*
Mixture	0.80	1.38	31%	*105*
All children both parents dead	0.36	0.92	23%	*88*
All children father dead	0.41	0.73	23%	*209*
No orphans	0.45	0.68	17%	*1,076*
No children	*n/a*	*n/a*	*n/a*	*227*
Total	0.43	0.71	22%	*2,040*

There is a noticeable difference between households which only have orphaned children and those which have a combination of orphaned children and non-orphaned children (irrespective of which parent of the orphans was lost). Where there is a mix of orphans and non-orphans, more children are involved in farm labour and non-attendance in school is much higher. This suggests that orphans are especially marginalized when they are living in families with other children.

Conclusions

Education is crucial to the future potential both of children themselves and of the country as a whole. The analysis above provides some indications about how children's rights to food, education and not to have to work can be protected. While improved food security and incomes by themselves will help improve attendance at school, three specific additional measures will be required to help ensure children fulfill their potential:

- Provided targeted assistance to poor households to assist them to meet the costs of education.
- Carry out sensitization aimed at carers of orphans stressing their equal right to education, and examine additional possibilities to encourage orphan's attendance at school without increasing stigma.
- Carry out sensitization regarding the benefits of education aimed at parents who themselves have not received any formal education

7.6 Migration

Communities were asked to comment on changes in migration patterns during the past year, and to identify reasons for any observed changes. Overall 15% of communities recorded higher than normal out-migration, whilst 23% reported higher than normal in-migration. In both cases, approximately two thirds noted there had been no change during the past year. Using the multiple response approach, reasons given for in or out migration are illustrated in figure 7.4. Clearly major reasons for out-migration were job and/or food seeking, whilst those for in-migration were similar but included ill health. Other reasons stated for in-migration included gold panning, retrenchment, ex-farm worker movements and trading opportunities.

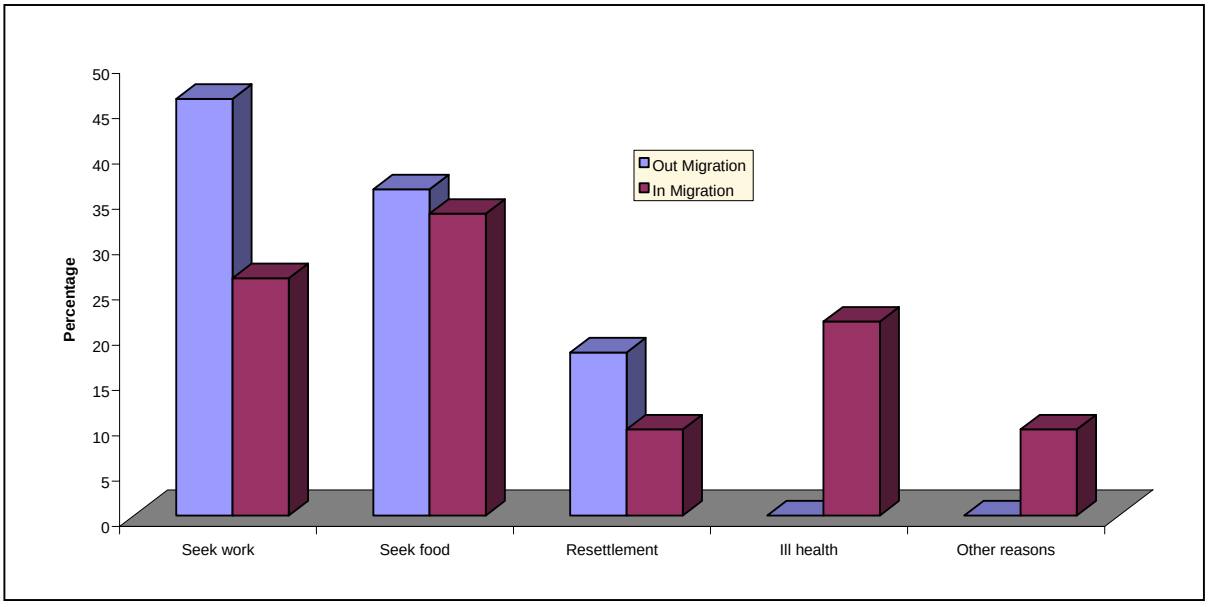


Figure 7.4 : Reasons for Migration

When considering provincial differences, we find that Manicaland registered the greatest proportions of communities reporting increased out-migration whilst Masvingo communities reported the greatest increase in in-migration. Communities in the three Mashonaland Provinces and in Matabeleland North reported very little change in either out or in-migration. Those in Midlands and Matabeleland South reported mixed changes. Close to half of those in communities in A1 resettled areas report increases in in-migration, as did one third of those in Old resettlement areas.

7.7 Community Perceptions of the Most Vulnerable

Communities were asked to identify and rank which groups of people, from a specified list, were most vulnerable to food insecurity. Using the multiple response approach we find that, out of all groups ranked 1, ("most vulnerable"), orphans attracted one quarter of responses, followed closely by child headed households and thereafter by female or widowed headed households and elderly headed households. A score was developed to indicate not only the ranks which communities assigned to the various groups but also to incorporate proportions according those ranks. The results are shown in figure 7.5 and here we see child headed households, orphans and young children themselves reflecting highest scores overall.

Linking this with the analysis from the household survey, there are consistencies, inconsistencies and additional insights. The high rankings given to orphans is consistent with the findings of the household survey on food insecurity, but also with the possible intra-household issues of discrimination raised in earlier sections. The concern for young children may also reflect intra-household issues not captured in the household survey. The high rankings given to widow/ female-headed households and to elderly-headed households suggest that the perceived relative situation of these groups is worse than the household survey indicates. There is a possibility that such "group-based" categorizations of vulnerability are not very helpful if, as the household data suggests, the variety of characteristics of food insecure households requires very localized knowledge for targeting, almost on a household by household basis.

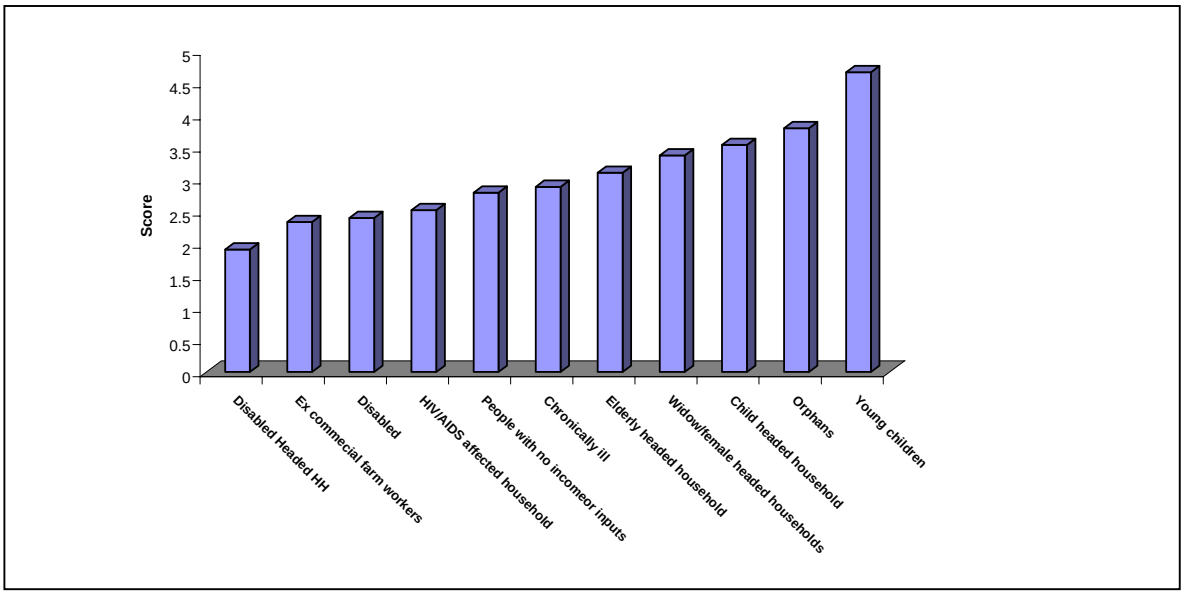


Figure 7.5 : Community Perceptions of the Most Vulnerable

CHAPTER 8

PROJECTIONS FOR HOUSEHOLD FOOD SECURITY IN 2004-05

8.0 Introduction

Food security for 2004-05, as described below, was determined from household data collected on crop production and livestock holdings, predictions for income expenditure on cereals and other sources of cereals, and was extrapolated from the findings of the situation last year. This section will present the overall findings for the country, followed by sub-national and sectoral breakdowns and explanations of the sources of food and income predicted to be available in the coming 12 months.

8.1 Assumptions Used in Predictions

Two key thresholds have been set which attempt to ensure that households are not required to access food and income in a way that overly jeopardizes the natural and human resource base of production and livelihoods:

- Households will keep a minimum of 5 cattle and 3 goats, and will only sell 25% of any holdings above that threshold.
- A maximum of 80% of total household income will be spent on cereals

In addition, there were some variables that could not be forecast with absolute certainty:

(i) the availability of grain from the GMB,
(ii) the future price of maize sold by the GMB and
(iii) any future changes in the income levels earned by households given a change in the GMB maize price. Hence, the current blend price of maize was used with all potential future income expressed in cereal equivalent.

Note also that it is assumed that cereals *will* be available for purchase by those able to afford such purchase.

The conclusions below are derived by using the blend price for each food economy zone and by considering the purchasing power over three periods in the year.

- April to July - a period after the harvest when most households rely on their production
- August to November - the dry season, when people will rely on off farm income and gardening for some areas, and
- December to March - when normally prices reach a peak and households have to balance their resources, including financing of production, and also poor households relying mainly on on-farm labour whilst the majority of households who are not self sufficient from production would have run out of their harvest.

The population was then divided into quarters according to the level of food insecurity.

8.2 OVERALL PREDICTIONS OF FOOD SECURITY, 2004-05

A total of 177,681 MT of cereal food assistance will be required to make up the food gap of about 2.3 million people in the rural areas during the 2004-05 season. This number of food insecure people is equivalent to 29.5% of the total rural population, which is much lower than the 4.4 million people (56%) of the same population considered food insecure last year.

The greatest proportion of population with a deficit will be in Matebeleland North Province with 39% of the population being food insecure, followed by Matebeleland South Province with 34% of the population facing a food deficit. However, Manicaland and Midlands provinces have the highest numbers of food insecure populations. Mashonaland West province will contain the least percentages of food insecure people. The deficit level varies across the three periods with the largest deficit being experienced from December onwards (Table 8.1).

Table 8.1 : Cereal Deficit/Population that cannot meet the deficit, by Province and Period

PROVINCE	RURAL Population Aug-04	Seasonal Population in Need Apr to Jun Pop	Jul to Nov Pop	Dec to Mar Pop	Seasonal Food Deficit Apr to July MT	Aug to Nov MT	Dec to Mar MT	Total MT
Manicaland	1,327,162	281,824	361,541	420,929	1,191	7,946	22,538	31,675
Mash Central	969,102	155,902	299,711	299,711	962	7,568	13,531	22,061
Mash East	1,030,039	133,014	314,906	316,093	939	7,819	14,453	23,211
Mash West	937,907	107,264	193,386	196,317	496	4,553	8,471	13,520
Masvingo	1,242,121	207,486	301,253	306,387	965	5,966	13,761	20,692
Mat North	635,725	176,618	233,438	248,621	1,026	5,781	14,853	21,660
Mat South	626,385	185,263	198,978	212,536	1,728	4,441	13,078	19,247
Midlands	1,155,212	221,356	329,443	340,097	1,291	7,451	16,873	25,615
Total	7,923,654	1,468,725	2,232,656	2,340,691	8,598	51,525	117,558	177,681
		Percent of Total Population			Percent of Total Food			
Manicaland		21.2	27.2	31.7	3.8	25.1	71.2	
Mash Central		16.1	30.9	30.9	4.4	34.3	61.3	
Mash East		12.9	30.6	30.7	4.0	33.7	62.3	
Mash West		11.4	20.6	20.9	3.7	33.7	62.7	
Masvingo		16.7	24.3	24.7	4.7	28.8	66.5	
Mat North		27.8	36.7	39.1	4.7	26.7	68.6	
Mat South		29.6	31.8	33.9	9.0	23.1	67.9	
Midlands		19.2	28.5	29.4	5.0	29.1	65.9	
Total		18.5	28.2	29.5	4.8	29.0	66.2	

8.3.1 Population with Food Deficit

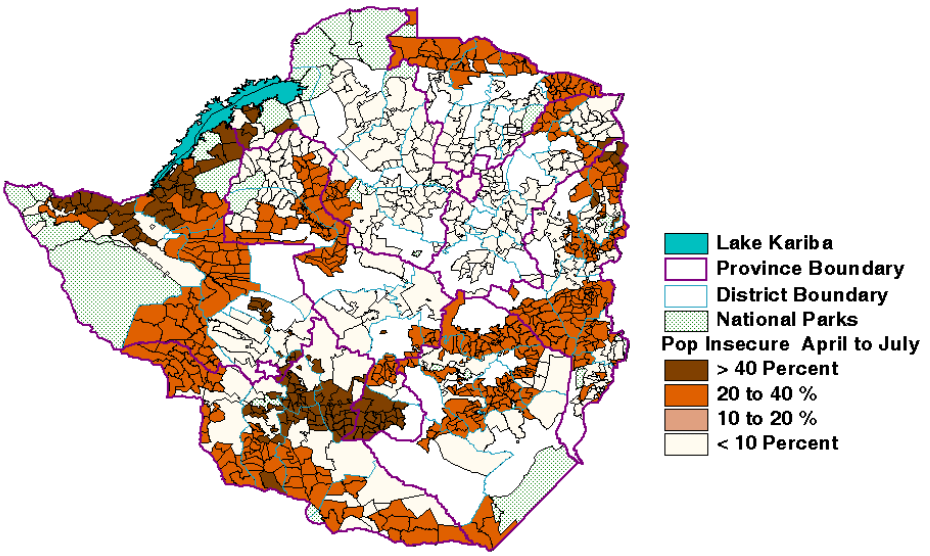


Figure 8.1: % population with Food Deficit by District & Livelihood Zone, April–July 2004

Food security in 2004-05 has improved compared to last year (when during the first and second periods between 20% and 55% of the population in some districts was food insecure). For the current season and in the period April to July 2004 the proportion of population food insecure will range from 4% in Mudzi to 41% in Hwange with more than half of all districts having less than 20% of the population facing a deficit. This is characteristic of a near normal year. Although many people have a good harvest and access to food, there is always a percentage of the population that is chronically food insecure. The level of need varies across districts with Nyanga, Mutasa, Mberengwa, Insiza, Bulilima, Umzingwane, Kariba, Tsholotsho, Binga and Hwange having at least 30% of the population food insecure during the period up to July 2004. (Annex N and Figure 8.1)

Normally poor households in rural areas run out of their harvests from June-July onwards, even in exceptionally good years, and from then on will rely on off-farm labour and other activities to generate income to buy food or to exchange their labour for food. The population facing a food deficit starts increasing at this time and in the period August to November more people within the districts will have a food deficit and more districts will have at least 20% of the population food insecure. Some wards along the Zambezi valley and isolated areas in Midlands, Matebeleland South and North Provinces will have over 40 percent of the population with a food deficit (Figure 8.2 and Annex N). Districts with at least 40% of their population expected to be food insecure include UMP, Insiza, Umzingwane, Centenary, Rushinga, Binga, Kariba, Mudzi and Hwange. It should be noted that the extent of the problem is limited compared to last year when during the same period over 50% of the population for most areas was expected to face a food deficit.

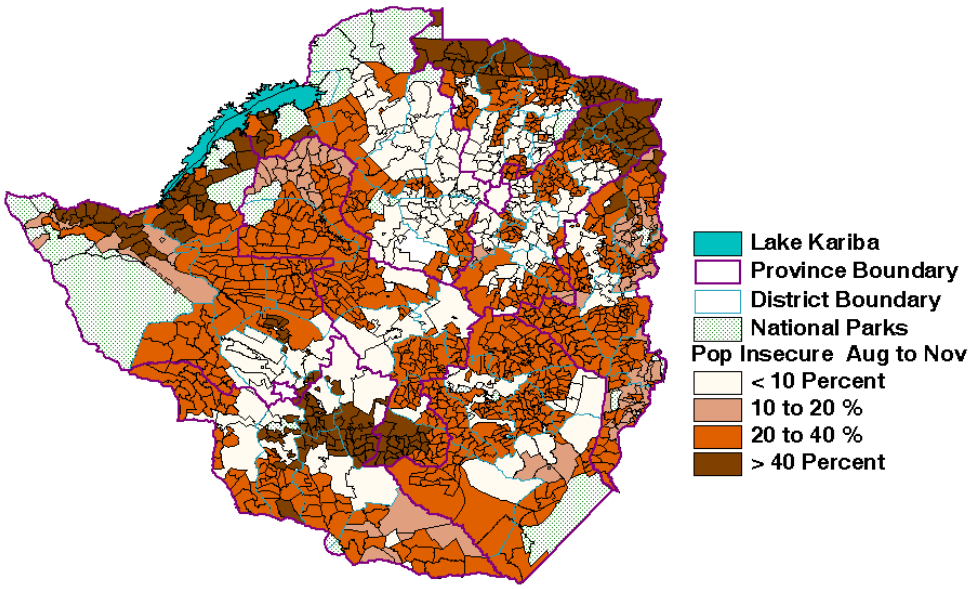


Figure 8.2: % Population with Food Deficit by District & Livelihood Zone, August–November 2004

In general, more households tend to run out of their harvest towards the end of the year. Coincidentally the price of maize starts increasing around the same period (November-December) depending on the harvest level and prospects. It is also during this period that some households depend on provision of on-farm labour for planting and weeding but this period is very critical, as farmers have to buy inputs and also provide labour to prepare their own crops. Food deficit for the December to March period is estimated to increase in most wards and proportions of population affected will range from 13% in Makonde to 53% in Hwange, with Rushinga, Binga, Kariba and Mudzi also expected to have more than half their populations food insecure (Figure 8.3 and Annex N). A number of FEZ sites within Districts are expected to have more than half their populations food insecure, notably the Greater Mudzi areas of Makoni, Rushinga, Mudzi, Mutoko, UMP and Nyanga, the Northern Zambezi valley areas of Centenary, Guruve, and Mount Darwin, the Kariangwe-Jambezi and Poor Resource Kariba Valley areas of Kariba and Hwange, all of Binga except the Lusulu and Eastern Kalahari Sandveld areas and the Siabuwa-Nebiri areas of Kariba.

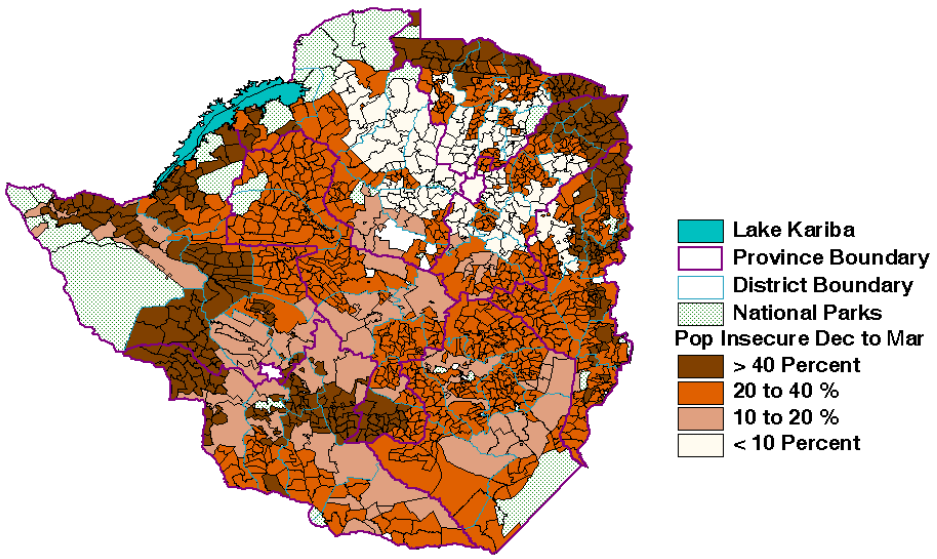


Figure 8.3: % Population with Food Deficit by District & Livelihood Zone, December 2004 – March 2005

8.3.2. Interventions Required

In order to meet the food deficit food aid distributions in the form of food for work, public works programmes and/or cash disbursements can be considered. The depth of food requirement is such that on average about 6 kgs per person for the period April to July will meet the deficit. The food gap per person increases over subsequent periods and during August to November the range of deficit is 20 to 25 Kgs per person. As expected, the depth of the deficit is much higher in December to March, ranging from 43 to 62 kgs per person for that period (table 8.1). The spatial distribution of the deficit is such that some areas require in total more than 4,000 MT of cereals over the period April 2004 to March 2005 (Figure 8.4).

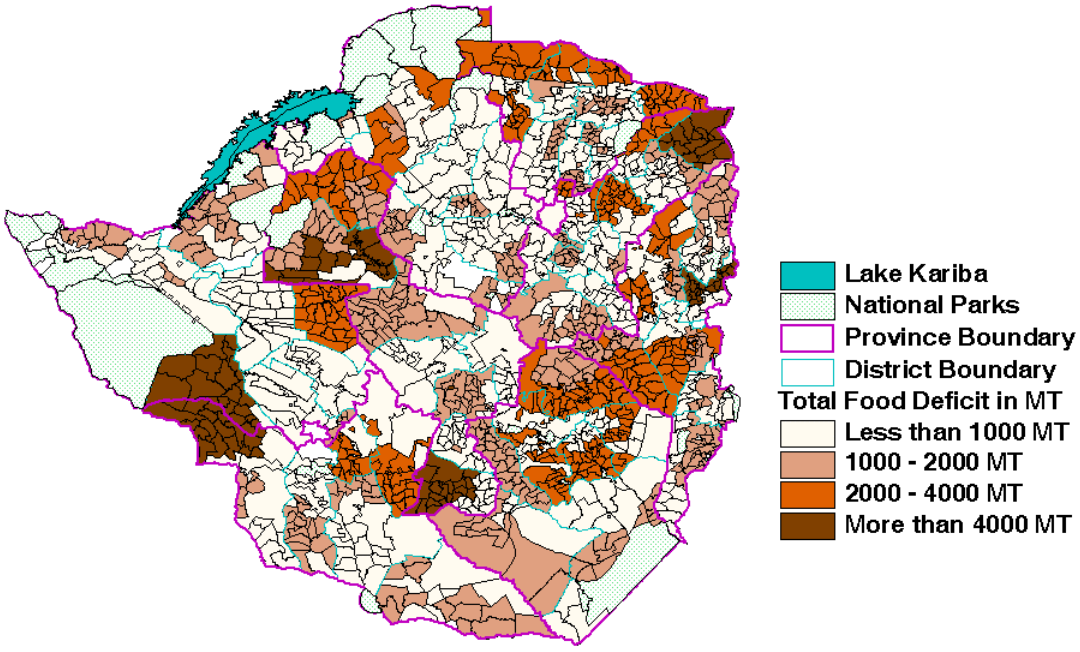


Figure 8.4: Total Food Deficit by Livelihood Zone and District, April 2004 to March 05

If cash entitlements are considered, the amounts must vary with the intensity of the problem as indicated in the food deficit map (figure 8.4) and the population maps of those in need (figures 8.1-8.3). Considering that the cost of maize is between the current price of Z$285/kg and the new GMB price of Z$750/kg, these calculations use the current blend price of Z$477/kg. Based on the population facing the food deficit and the amount of grain that has to be distributed per province, then the average cash entitlement varies across the wards as they vary with the livelihood zones. The average cash entitlements will range from an average of Z$1,000 per person per month in the period April to July to a maximum of Z$8,000 per person per month during the critical period of December to March. The levels of cash entitlements will also vary with the price of maize, if the price of maize say doubles from Z$477/kg, then there is need to equally increase the cash value so that it can purchase an equivalent amount of maize (Table 8.1 and Annex O).

Table 8.1: Food Gap/Cash equivalence for the food insecure

	Average ration per Person										
				Average Cash Disbursement (Z$) /Person				Total Cash Equivalent (Z$ million) Maize at Z$477/kg			
	Kgs Apr to Jun	Kgs Jul to Nov	Kgs Dec to Mar	Apr-Jun	Jul-Nov	Dec-Mar	Total	Apr-Jun	Jul-Nov	Dec-Mar	Total
Manicaland	4.2	22.0	53.5	2,062.75	10,483.80	25,540.42	38,086.98	581.3	3,790.3	10,750.7	15,122.4
Mash Central	6.2	25.3	45.1	2,944.75	12,045.02	21,534.38	36,524.15	459.1	3,610.0	6,454.1	10,523.2
Mash East	7.1	24.8	45.7	3,367.73	11,843.97	21,810.55	37,022.25	448.0	3,729.7	6,894.2	11,071.8
Mash West	4.6	23.5	43.1	2,223.54	11,230.57	20,582.24	34,036.36	238.5	2,171.8	4,040.7	6,451.0
Masvingo	4.7	19.8	44.9	2,219.00	9,445.80	21,423.81	33,088.61	460.4	2,845.6	6,564.0	9,870.0
Mat North	5.8	24.8	59.7	2,769.85	11,812.26	28,497.44	43,079.55	489.2	2,757.4	7,085.1	10,331.7
Mat South	9.3	22.3	61.5	4,448.68	10,646.40	29,351.95	44,447.03	824.2	2,118.4	6,238.3	9,180.9
Midlands	5.8	22.6	49.6	2,781.91	10,788.69	23,664.74	37,235.33	615.8	3,554.3	8,048.3	12,218.4
Total	5.9	23.1	50.2	2,802.75	11,008.23	23,956.73	37,767.70	4,116.5	24,577.6	56,075.3	84,769.3
Average /Month	1.5	5.8	12.6	700.69	2,752.06	5,989.18	9,441.93	1,029.12	6,144.40	14,018.82	21,192.34

8.4 Factors Influencing Vulnerability to Food Insecurity

The factors that combine to determine whether any individual household is vulnerable to food insecurity are many. The "Sustainable Livelihoods" Framework indicates 3 sets of factors that affect livelihood outcomes for households:

1. Household Assets, including
   - Human capital (the number of household members contributing to productive and reproductive activities, their education levels and skills, and their health status)
   - Financial Capital (the stocks and flows of income that contribute to livelihoods)
   - Physical Capital (infrastructure and producer goods that support livelihoods)
   - Natural Capital (stocks of natural resources such as land and water)
   - Social Capital (the social resources, relationships and networks that households can draw upon)
2. The social, cultural, legal and political environment within which people carry out their livelihood activities.
3. The "vulnerability context", i.e. shocks, trends and seasonal factors external to the household that affects livelihoods.

The current survey contains detailed information on many aspects of household assets in particular, and on some of the external factors influencing food security. The following sections attempt to give indications of the characteristics of the households predicted to be food insecure in the coming year by exploring some key determinants of livelihoods.

8.4.1 Natural, Physical and Financial Capital

Land Owned

At the national level, the quantity of land owned is not an efficient indicator of food insecurity. Once the quality of land is taken into account, a pattern begins to emerge. By grouping communal food economy zones according to the Natural Region classifications that they predominantly fall into, it is clear that – all other things being equal – an acre of land is less productive as one moves from NR II to III to IV and V[35], while cultivating more land increases production of both food and cash crops.

However, while land quality and quantity is a good indicator of production, it is not a good indicator of food security due to the diverse nature of rural livelihoods. In food economy zones primarily comprising land in Natural Regions II, IV and V, land size owned is not a useful indicator as there is no simple relationship with food security. Only in Natural Region III is there a useful indicator, where over 80% of households with more than 7 acres of land are food secure. Otherwise there is little difference between the percentages of food secure and insecure households according to land holdings. For example, 57% of the communal households in the survey who own less than 3 acres of land will be food secure this year, compared to 71% of those who own more than 10 acres. There is certainly a difference, but it cannot be translated into a targeting criteria.

Land Cultivation 2004-05

Respondents were asked about their plans for the coming agricultural season in respect of area to be planted to cereals and expected main source of cereal inputs. More than half of all households noted that they planned to increase the area planted to cereals, with proposed greatest increases in Mashonaland East (3.5 acres increase) and smallest in Manicaland (1 acre increase). Those in Old resettlement areas have substantially greater planned increases (5.7 acres increase) and those in Communal areas the smallest (1.3 acres increase).

In regards to cereal seeds for the coming season 27% of households said their main source would be from seed retained in the past harvest, whilst 12% were expecting seed from NGOs, 14% from GMB, and 38% intended to purchase their seeds. Only 11% maintained they would be in a position to purchase sufficient fertilizer for the new crop.

A1 resettlement areas have greatest expectations of seeds from GMB (29%) whilst those in communal areas are more likely to have retained seed (30%) and those in Old resettlement areas are most likely to purchase their seed (60%). Seed donations from NGOs were really only expected in Communal areas (15%).

Livestock Ownership

Due to the massive improvement in the terms of trade between cattle and maize in the last 12 months, cattle ownership this year is a good indicator of food security. At its lowest, in the December 2002 VAC survey, one bull was equivalent in value to 271 kgs of maize purchased on the parallel market. With the improved supply of maize in recent months, the value of a bull has risen rapidly to a national average of 1,455 kgs of maize. Although this figure varies across the country, the maize purchasable from the sale of one bull could cover the minimum cereal requirements of an average family for the full year. Hence, any household with more than 5 cattle[36] this year will be food secure even if the terms of trade fall back to their average level for the last 12 months. This is a useful indicator for screening out food secure households, but must be combined with other

[35] The sample size for Natural Region I (in the Eastern Highlands) was too small to allow further disaggregation.

[36] Note again that our analysis explicitly stops cattle sales at a minimum holding of 5 in order to preserve a minimum level of productive assets. In reality, a household with even 1 bull could sell it, but our analysis recommends that an intervention should take place before a household is forced to take that step.

indicators as 61-84% of the food secure households in various food economy zones own less than 5 cattle. (i.e. all households with more than 5 cattle will be food secure, but not all households with less than 5 cattle will be food insecure.)

The terms of trade for goats have increased in similar proportions. Although one goat is currently worth only 1-2 month's worth of food for an average household, goat ownership is apparently a good indicator of overall food security status, as 95% of households owning more than 5 goats are predicted to be food secure this year.

More refined potential screening criteria by food economy zone are presented in Annex P. Table 8.2 summarizes the issue of livestock holdings in relation to expected food security in the coming year and shows a clear trend of increasing food security as livestock holdings increase.

Table 8.2 : % Households Food Insecure 2004-05 by Livestock Holdings[37]

Livestock Holdings	All Sectors	n=	Communal	n=
No stock	42%	219	53%	136
Small stock only	40%	876	47%	671
1-5 Cattle	35%	736	39%	627
6+ Cattle	0%	329	0%	233

Physical Assets

The survey recorded the numbers of various physical assets owned by households, including items such as ox-ploughs, scotch carts and televisions. Nationally, as the value of households' assets increases so does food security. 56% of those with assets worth less that $200,000 are food secure compared to 84% of those with assets worth more than $3.75m. However this is not useful as a targeting criteria for interventions in part because any threshold set would have high inclusion and exclusion errors, and also because such a valuation is not practically feasible in the field.

8.4.2 Human Capital – Demography, Health and Education

This section examines a number of factors relating to human capital, including the age and gender of the household head, family size, dependency ratio, presence of orphans, and the education and health status of the household head. A number of these factors are also related to the less measurable aspects of livelihoods, namely social capital and structures and processes. For example, a widow may be disadvantaged not especially by a lack of labour, but perhaps because of a loss of access to networks that her husband was a member of or because of social practices preventing her from inheriting her husband's assets.

Sex and Age of Household Head

Our survey shows that a greater proportion of female-headed households will be food insecure next year compared to male-headed households (37% compared to 29%), as is indicated in table 8.3 below. This is particularly so in Old Resettlement areas and on Large-scale commercial farms[38] but the difference is also large in A1 resettlement areas. There is a relatively small difference in communal areas.

Table 8.3: % Households Food Insecure 2004-05 by Sector and Sex of HH Head

Sector	Male %	*Total n=*	Female %	*Total n=*
Communal	35.0%	*1124*	40.3%	*471*
A1 Resettlement	12.8%	*207*	18.2%	*55*
Old Resettlement/ SSCF	5.6%	*107*	24.5%	*34*
LS Commercial	3.4%	*29*	50.0%	*6*
All	29.0%	*1467*	37.3%	*566*

[37] Cattle owners in the table may or may not also own small stock
[38] Sample size extremely small

Table 8.4 : % Households Food Insecure in 2004-05 by Age of Household Head

	% Food Insecure	*n* =
All Sectors		
15-19	28%	*18*
20-59	31%	*1,450*
60+	32%	*541*
Communal		
15-19	31%	*13*
20-59	36%	*1,115*
60+	37%	*444*

The age of the household head on its own is not a good indicator of food security. Young household heads (aged 15 -19)[3] are more likely to be food secure, but there is no significant difference between elderly-headed households as a group and those headed by people aged 20-59 (table 8.4). Note that only 1 child-headed household was in the entire sample.

Combining age and sex of household heads, we see that gender is a more influential factor for food security (table 8.5). For example, amongst elderly-headed households, 36% of those headed by women are projected to be food insecure, compared to 31% of those headed by men.

Table 8.5: % Households Food Insecure 2004-05 by Age and Sex of Household Head[39]

Gender & Age of HH Head	All Sectors	*n* =	Communal	*n* =
Male 15-19	19.2%	*11*	28.6%	*7*
Male 20-59	28.2%	*1,048*	34.4%	*784*
Male 60+	31.1%	*386*	36.3%	*314*
Female 15-19*	43.9%	*7*	33.3%	*6*
Female 20-59	37.4%	*396*	40.5%	*326*
Female 60+	35.7%	*154*	40.2%	*130*

Presence of Orphans in the Household

Table 8.6: % Households Food Insecure in 2004-05
By Presence of Orphans

	% Food Insecure	*n*=
All Sectors		
With Orphans	39%	*1156*
No Orphans	29%	*655*
No Children in HH	27%	*229*
Communal Only		
With Orphans	41%	*885*
No Orphans	34%	*541*
No Children in HH	34%	*174*

Recalling from section 7 that more than half of all households have orphans, table 8.6 shows that households with orphans are more likely to be food insecure than those either without orphans or without any children at all.

Household Size and Dependency Ratio

Larger households are more likely to be food insecure than smaller households (table 8.7). But more significant than the simple household size is the dependency ratio, i.e. the number of dependents (i.e. children and elderly) per adult in the household. For example, as is illustrated

Table 8.7: % Households Food Insecure 2004-05 By Size of Household

HH Size	All Sectors	*n* =	Communal	*n* =
1-3 persons	25%	*346*	31%	*261*
4-6 persons	29%	*987*	33%	*787*
7-9 persons	37%	*538*	43%	*416*
10+ persons	39%	*169*	44%	*136*

[39] Sample size small for households with heads aged 15-19 years

in table 8.8 below, a household with 4-8 dependents per adult is more than twice as likely to be food insecure than one with no dependents at all.

Table 8.8 : % Households Food Insecure by Dependency Ratio

Dependency Ratio	All Sectors	*n =*	Communal	*n =*
No Able Adults	37%	*76*	42%	*66*
4-8 dependents per adult	45%	*112*	50%	*90*
2-3 dependents per adult	37%	*381*	42%	*304*
1 dependent per adult	29%	*1,355*	34%	*1,062*
No dependents	22%	*116*	29%	*78*

The results using an "effective dependency ratio" (which takes account of the health status of adults) are presented in the section below on Health.

Education Level of Household Head

This current VAC survey has for the first time included a question about the highest level of education attained by the household head. As table 8.9 below indicates, education has a clear bearing on the food security status of the household. 9-10% more households whose heads have primary education are food secure than households headed by someone with no formal education. There is little difference between households headed by someone with secondary compared to primary education, but all of the small number of households headed by someone with tertiary education are food secure.

Table 8.9:% Households Food Insecure2004-05 by Education Level of HH Head

Education Level of HH Head	All Sectors	*n =*	Communal	*n =*
None	38%	*374*	43%	*317*
Primary	29%	*1058*	33%	*832*
Secondary (Lower or Upper)	25%	*576*	30%	*429*
Tertiary	0%	*20*	0%	*13*

This points to an important long-term need to ensure universal access to primary education not only as an important need in its own right but also to enhance rural food security and livelihoods. The potential benefits of adult literacy or skills training should be investigated for households headed by those with no formal education, although half (51%) of those household heads are aged over 60.

Marital Status of Household Head

Results show that, whilst 70% of households whose head is married are likely to be food secure, only 61% of those households with widowed heads will be food secure, and 64% of those with other status[40] heads. When taking into account also gender of head of households we find that marital status of female headed households has little influence on projected food security over all sectors, although in communal areas the female widowed heads of households appear to be slightly more food secure than other female headed households (Table 8.10). For male-headed households those who are widowed are more likely to be food insecure in all sectors.

Table 8.10: % Households Food Insecure 2004-05 by Marital Status of Head of Household

Gender & Marital Status Head of HH	All Sectors	n=	Communal	n=
Male Headed HH				
Married	30%	1452	36%	1092
Widowed	40%	52	44%	41
Other	25%	51	34%	32
Female Headed HH				
Married	38%	401	46%	83
Widowed	39%	90	41%	338
Other	42%	598	47%	75

[40] Recall that "other" marital status includes single, divorced and separated

Health, HIV/AIDS and Food Security

Table 8.11 : % Households Food Insecure 2004-05 by Health of Household Head

Health of HH Head	All Sectors	*n =*	Communal	*n =*
Good	28%	*1,384*	33%	*1,057*
Fair	35%	*450*	40%	*368*
Poor	43%	*154*	48%	*130*
Disabled	45%	*38*	50%	*32*

The health of the head of household is found to have a significant influence on the overall food security status of the household. 28% of households whose head is in good health are predicted to be food insecure this year, compared to 43% of those whose head has been sick for more than 3 months ("poor health") and 45% of those whose head is disabled[41] (table 8.11). A similar picture emerges if we consider any household member who is sick.

To attempt to specifically highlight the potential effects of HIV/AIDS and other forms of chronic illness on food security, it is necessary to try to identify appropriate proxy indicators and then to control as far as possible for other influences on food security. Much of the analysis that follows focuses only on households in Communal areas, due to small sample sizes in other areas.

For the proxy of "poor health", the analysis only considers poor health of household heads aged under 60, as the large number of elderly household heads said to have been in poor health are likely to include a much wider variety of illnesses and ailments. Table 8.12 below shows the predicted percentage of minimum cereal requirements from each source of food for the coming year, disaggregated according to the health status of the household head, and according to whether the household is predicted to be food secure or not.

Table 8.12: Predicted % Minimum Cereal Requirements 2004-05 by Health of Household Head

	Health of HH Head	Own Production	Direct Sources	Purchases	Total Food Access	*n =*
All Sectors						
Food Insecure HHs	Good	20%	7%	23%	50%	*325*
	Fair	20%	7%	17%	45%	*104*
	Poor	18%	6%	19%	43%	*35*
	Total	*20%*	*7%*	*21%*	*49%*	*464*
Food Secure HHs	Good	106%	22%	429%	558%	*535*
	Fair	84%	24%	337%	445%	*123*
	Poor	80%	15%	228%	323%	*37*
	Total	*101%*	*22%*	*406%*	*529%*	*695*
Communal						
Food Insecure HHs	Good	20%	7%	23%	49%	*297*
	Fair	21%	7%	17%	45%	*99*
	Poor	18%	7%	19%	44%	*34*
	Total	*20%*	*7%*	*21%*	*48%*	*430*
Food Secure HHs	Good	71%	20%	383%	475%	*400*
	Fair	58%	18%	317%	394%	*92*
	Poor	72%	18%	168%	259%	*29*
	Total	*69%*	*20%*	*358%*	*447%*	*521*

The table shows that in all categories, households whose head is chronically ill are expected to have lower total food access than households whose head is in good health. The difference is smallest among food insecure households in communal areas, where those in good health on average will access only 5% more of their requirements than those in poor health. The difference is actually much greater among the food secure households, where those in good health in communal areas can potentially access 475% of their food needs compared to only 259% for those in poor health. Looking at the sources of food, we see that such gaps arise mainly in relation to potential purchases of food, and therefore to income levels. The difference in crop

[41] Sample size of households with disabled head is small

production levels is relatively small. Table 8.13 below compares the expected Z$ income levels (at current prices) for the same groups from various income sources.

Overall, in communal areas the main differences between food-insecure households with and without chronically ill heads are in formal employment, self-employment and cash crop incomes, where the latter earn significantly more. However the households with heads who are in poor health actually appear to earn significantly more on average from casual labour, remittances and petty trading. The figure for casual labour is unusually high and is counter-intuitive for this group. It is interesting to note that those classified as being in "fair health" (loosely defined in the survey as "sometimes sick") actually have the lowest incomes of all. The biggest differences are among the food secure households, and among income sources the main difference is in formal employment.

Table 8.13: Income Sources[42] 2004-05 by Food Security Status and Health of Household Head

	Health of HH Head	Cash Crops	Livestock	Formal Emp.	Casual Labour	Veg. Sales	Petty Trading	Remittances	Self-Emp.	Total Income
Communal										
Food	Good	9,404	16,747	4,383	17,784	10,069	3,494	5,622	11,854	96,858
Insecure	Fair	8,064	16,113	3,190	9,355	3,702	5,143	3,274	7,777	71,222
HHs	Poor	7,547	19,069	0	29,207	8,219	8,779	9,019	88	97,421
	Total	*9,134*	*16,535*	*3,693*	*16,464*	*8,334*	*4,306*	*5,566*	*9,939*	*90,440*
Food	Good	139,529	564,129	246,294	127,096	66,508	44,888	52,132	102,057	1,437,066
Secure	Fair	68,895	825,260	40,891	62,899	38,138	40,678	13,997	34,492	1,222,595
HHs	Poor	92,393	139,299	48,353	95,104	65,851	21,557	40,810	59,852	640,710
	Total	*123,720*	*583,478*	*197,866*	*113,348*	*61,121*	*42,601*	*44,512*	*87,275*	*1,348,684*
All Sectors										
Food	Good	8,627	15,304	4,492	19,581	10,590	4,266	5,447	13,008	98,646
Insecure	Fair	7,677	15,338	3,036	11,854	4,120	7,035	3,117	8,901	75,557
HHs	Poor	7,331	18,524	0	28,372	7,984	8,528	8,761	1,799	96,352
	Total	*8,482*	*15,311*	*3,754*	*18,182*	*8,802*	*5,195*	*5,367*	*11,154*	*92,543*
Food	Good	222,570	583,774	321,687	141,335	70,840	54,477	54,170	96,792	1,662,388
Secure	Fair	99,777	722,700	163,855	93,286	39,540	46,697	15,328	46,707	1,312,594
HHs	Poor	271,465	355,126	67,958	144,231	57,235	20,415	34,127	46,911	1,069,769
	Total	*224,805*	*592,959*	*278,642*	*132,413*	*64,387*	*50,993*	*45,964*	*84,785*	*1,584,177*

While the household questionnaire asked about deaths in the household in the last 12 months, the data in general is difficult to relate to food security as no indication is given about the time of the year when the death occurred (a more recent death may not yet reveal a marked influence on household food security). Hence preliminary analysis found no clear relationship between recent adult death and food security. Furthermore, the questions around the cause of death are not considered to give a confident indication of whether AIDS was the cause, and therefore no analysis of the impact of a recent death from AIDS has been possible.

Longer-term impacts related to the loss of adult family members are likely to be captured in the findings presented above on female-headed and elderly-headed households, and on households with orphans. However, without enough information on what led the household to be in any of those categories, it is not possible to single out the impact of AIDS over any other causes.

8.5 Conclusions

The analysis in this section provides two broad conclusions. First, for short-term interventions to support those who are projected to be food insecure, generic national targeting criteria should be avoided. The factors that make particular groups more likely to be food insecure combine in complex ways for each individual household and in different geographical areas. A top-down targeting approach will result in guaranteed large inclusion and/or exclusion errors. Using the demographic indicators above, in no case is more than 45% of the population with any criteria food insecure (meaning that at least 55% of that group should not be targeted). Conversely, in no case is less than 25% of any group food insecure, meaning that excluding them would wrongly exclude significant numbers of people. If targeting is carried out at a more local level, with community-based targeting being the most localised form, there is a potential to minimise targeting errors, but administration becomes more difficult and the potential for abuse rises.

[42] at current prices

The second broad conclusion is that food and livelihood security must be addressed from a multi-sectoral approach. Poor health, limited education and issues of discrimination/stigma against orphans – in addition to being issues of concern in themselves – have knock-on effects on livelihoods. Although improving food security can also bring improvements in these other areas (e.g. more food secure households are more likely to be able to afford to send their children to school), greater attention must be paid to those sectors in their own right to maximise people's capabilities.

Chapter 9

Conclusions and Possible Intervention Strategies

This section first presents a summary overview of communities' perceptions of challenges faced during the past year and of livelihood needs during the coming year. Thereafter, specific recommendations regarding food security and other livelihood interventions are presented and discussed.

9.1 Challenges Faced by the Community in the Past year

Communities were asked to classify several potential challenging situations that may have impacted on their food security status during the past year. Each was classified as having been severe, moderate, minimal, or not a problem at all.

1. **Failed or erratic rainfall** was viewed as a severe challenge by 60% of communities, with 4% noting also a major problem with flooding. Only in the A1 newly resettled areas was it felt that erratic rainfall had not posed a serious problem to food security of the community.

Possible Interventions:
a) More water harvesting techniques for crop production should be encouraged or promoted by extension.
b) Equipment to provide localized water conservation should be encouraged .
c) Further development of dams and irrigation infrastructure in the drier areas to enhance crop production

2. **Poor crop production and harvests:** In respect of expected harvests nearly half of all communities considered that poor crop production was a severe problem. More than three quarters classified lack of agricultural inputs, and two thirds noted lack of draught power, as severe challenges to crop production. Conversely, shortages of farm labour were not viewed too seriously (9% severe) and neither were crop diseases and pests (28% severe). A1 newly resettled areas rated poor crop production much lower than other areas, whilst Communal areas rated lack of inputs extremely high. Old resettlement areas rated lack of farm labour higher than did other areas whilst A1 resettled areas gave high rating to lack of draught power. Crop diseases and pests were generally not viewed as a problem in Old resettlement areas

Possible Interventions:
The Government and NGOs should devote more resources to the provision of agricultural inputs, and continue to allow participation of other partners through out-grower schemes which provide support to farmers for the crops in which the partners are involved. While input provision may need to continue on a free or voucher basis in chronically poor agricultural areas, greater use of credit should be made in more productive areas.

3. **Livestock Conditions:** When considering their livestock situation nearly half of all communities rated disease as a severe challenge and one quarter rated stock theft as seriously challenging. Diseases were seen to be most highly ranked in Old resettlement areas but stock theft in these same areas was rated low.

Possible Interventions:
Where livestock provide a major source of income, provision of credit facilities for livestock dipping chemicals and vaccines as inputs, and rehabilitation of dip tanks, should be priorities, similarly to interventions with crop inputs. Communities that have lost large numbers of livestock through sales or death in recent years should be assisted with re-stocking or multiplication projects.

4. Other Challenges : In respect of other more general aspects communities rated as severe

- human disease - 47%
- access to income – 63%
- staple food price increases – 66%
- high cost of commodities – 62%

Human disease was considered a moderate problem in all areas. Communal areas rated access to income a much higher problem than did other areas but all areas except Old resettlement areas highly rated staple food price increases and high cost of commodities.

Figure 9.1 below shows a score representation of the communities' perceptions of challenges during the past year – the score reflects not only the severity of the challenge, but also the proportion of all communities who rated each challenge in each category of severity.

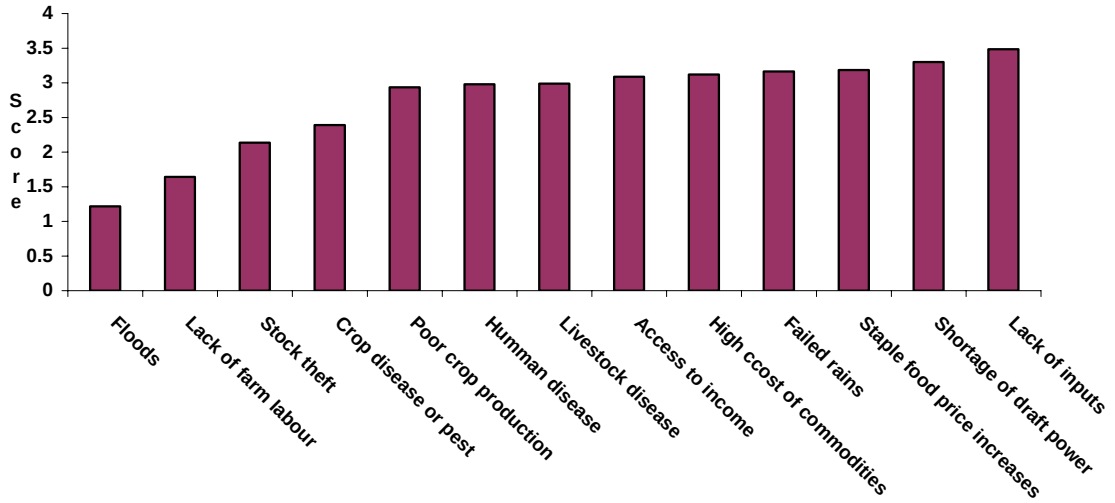


Figure 9.1 : Communities Perceptions of Challenges 2003-04

9.2 Recommendations from Communities: Perceived Livelihood Needs

As part of a general discussion winding up the community interview, participants were asked to discuss and document interventions which would improve the general livelihood situation in their areas. A wide range of specific needs was mentioned, ranging from improvements to infrastructure, to agricultural needs, water and sanitation and health.

Figure 9.2 overleaf represents the scores of the various needs mentioned and ranked by communities – the score represents not only the rank of the need but also the proportion of communities specifying that need.

We can subdivide mentioned needs into a number of categories.

Agriculture: In respect of agriculture we find that in general

- Provision of inputs (seeds, fertilizer, price controls, loans, chemicals, "*Zunde raMambo*" ("Chief's Granary"/ community field) approach highly ranked with nearly half of communities giving this a topmost rank and two thirds mentioning it as an important need.
- Irrigation provision, including piping, dam construction and rehabilitation, dam stocking and gardens, attracted top ranks from more than one third,
- Restocking of livestock, including loan schemes as a vehicle for this, was highly ranked by one tenth,
- Improved draught power and tillage facilities attracted high ranks from nearly one quarter of communities.
- The provision of farm equipment, including implements and fencing (wild animal prevention mentioned) was ranked highly by one tenth, although not mentioned by the majority of communities.
- Technical, extension and veterinary services - including provision and rehabilitation of dip tanks - did not attract high rankings, although one fifth of communities mentioned them as being needed.

Income generation: More than half of communities mentioned various needs, including

- Credit and loan schemes,
- Job opportunity training and creation,
- Investments,
- Women's projects and various other projects designed to assist vulnerable groups
- Improvement in local marketing opportunities and
- Provision of more grinding mills.

All in all one fifth of communities assigned high ranks to these items.

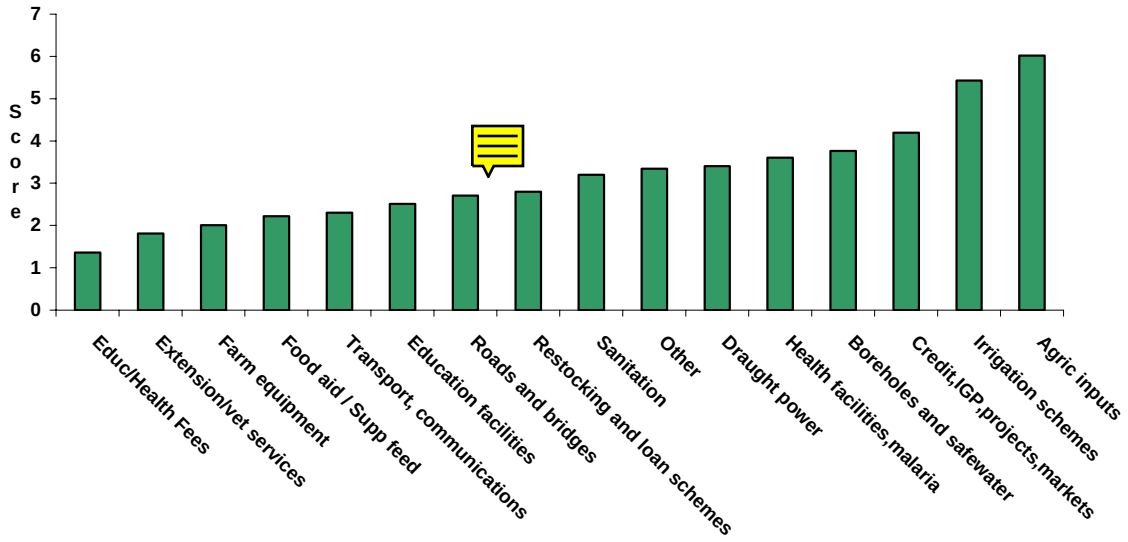


Figure 9.2 : Communities Perceptions of Livelihood Needs 2004-05

Household Hygiene and Health:

Here we find that

- Provision of safe water was mentioned by less than half of all communities , but those that did provided high ranks.
- Similarly, provision of sanitation facilities was viewed as worthy of mention by only one third, who nevertheless assigned fairly high ranks.
- On the subject of health we find communities assigning fairly high ranks to the improvement of clinic facilities, including buildings, staff, availability of drugs, improved access, VHW expansions, counseling, electrification, improved malaria control, and so on.

Education

Similarly, improvement in education facilities focused on buildings, access, provision of books, furniture and stationery and improved staff conditions. Some few mentioned assistance in payment of education and/or health fees, particularly for the most disadvantaged.

Other

A number of items were grouped together in the other category, with very few responses to each but making quite a substantial contribution overall. Issues mentioned included:

- improved access to subsidized GMB grain supplies,
- price controls of staple foods and basic commodities such as soap.
- provision of housing and recreation facilities,
- control of rats,
- access to more productive land and
- provision of greater security, including police posts and prevention of stock theft.

Transport and Communication: Moving onto transport and communications we find that

- One quarter of communities were especially concerned with provision of reliable transport for access to education and health facilities and also to markets,
- Provision of communication facilities
- Rural electrification.
- Improved road networks and repairs to roads and bridges were mentioned by one third with fairly high rankings.

Food Aid

Finally, the issue of general food distributions and/or supplementary feeding for children and other vulnerable groups, and in some cases specifically mentioning the issue of transparency, was noted by one fifth of communities to be an important future livelihood need.

9.3 Possible Intervention Strategies

9.3.1 Short Term Strategies Household Food Deficits

The national grain supply – taking into account production, GMB and food aid carryover stocks, and government's potential to import additional quantities to cover any shortfall –is expected to be adequate to cover the country's consumption requirements up to the end of March 2005. Nonetheless, 2.3 million people in rural areas will not be able to access their minimum requirements and will require assistance to do so. This does not take into account any shortfalls in urban areas.

Such assistance could come from a combination of three measures:

(a) Subsidized prices: By altering the selling price of maize, the government could change the number of food insecure households quite significantly. But such a policy measure would not be adequate by itself, as it would not benefit the worst off. Even at minimum prices, there is still just under 10% of the rural population so chronically poor that their incomes would not be adequate to purchase their cereal requirements. As a guide for policy-makers, the percentage of the sample that would be food insecure in rural areas under various prices is as follows:

- $750/ kg: 41.2%
- $477/ kg: 29.1%
- $300/ kg: 27.0%
- $200/ kg: 23.3%
- $100/ kg: 17.1%

(b) Targeted cash transfers/ safety nets: these would be most appropriate where aggregate supply of food is high (Mashonaland East, West and Midlands provinces), and where the provision of cash to purchase food could benefit local markets. Such transfers should be significantly cheaper to administer than food aid. In other areas, cash transfers would need to be complemented by active efforts to ensure that food would be made available on the market for purchase. As this type of assistance would be relatively untried in Zimbabwe, and as it would involve different management issues to food aid, it should probably only be attempted on a pilot basis. Note that the local cost of the transfers (excluding all administration and management costs) required to enable households to cover the total 177,681 MT cereal deficit would range from just over Z$50bn (US$9.4m) if households could purchase at the current average GMB selling price of Z$285/kg, to Z$140bn (US$26.3m) if they had to buy at the current average parallel market price of Z$783/ kg. For a household of 5 people, the value of a monthly transfer equivalent to an 80% cereal ration (10kg per person per month) would have to range from Z$14,250 to Z$39,150 depending on the prevailing selling price of maize.

(c) Food assistance: Deficits could also be met through the provision of targeted food assistance, as has been done over the last three years. However this year the emphasis should be on local purchase of food commodities, and a much greater effort will be required to ensure that targeting is based on evidence of need, and that targeting processes are rigorously applied. Furthermore, greater account needs to be taken of seasonal patterns of access to food.

As a very rough and indicative guide only, table 9.1 shows the rations per household (indicated both in kgs of cereals and Z$ cost per household of 5.5 persons at current blend prices for cash transfers) for the different categories of food insecure groups:

Table 9.1 : Guide to Ration Sizes and Costs[43] for Food Insecure Groups 2004-05

Sub-Group	April to July 2004			August to November 2004			December 2004 to March 2005		
	% Deficit	Monthly Cereal Ration	Monthly Cash Transfer per Household	% Deficit	Monthly Cereal Ration	Monthly Cash Transfer per Household	% Deficit	Monthly Cereal Ration	Monthly Cash Transfer per Household
75-100% Deficit	80%	55kg	Z$26,235	80%	55kg	Z$26,235	80%	55kg	Z$26,235
50-75% Deficit	0%	0	0	80%	55kg	Z$26,235	80%	55kg	Z$26,235
25-50% Deficit	0%	0	0	50%	33kg	Z$15,741	80%	55kg	Z$26,235
0-25% Deficit	0%	0	0	0%	0	0	50%	33kg	Z$15,741

The precise combination of measures needs to be determined taking cognisance of a variety of logistical, administrative and financial considerations that are beyond the scope of this assessment. At a minimum, for price subsidies and cash transfers in particular to be successful, the **internal movement** of food in Zimbabwe must be facilitated to ensure that food reaches all areas where there are needs. Such facilitation should either be legal, through the enabling of private sector involvement in grain markets on a large scale, or as a second-best option, administered by the GMB but with a greater emphasis on ensuring that food gets to all areas in proportion to requirements. In both cases, active efforts would be required to address the needs of households who lack the capacity to access food through market mechanisms.

Cash transfer and food aid interventions would require the maintenance of a system of targeting and delivery operated in accordance with humanitarian principles.

It is also clear from the data on consumption patterns that the quality of diets remains relatively poor, even though many more households are meeting their minimum energy requirements. It is common for dietary diversity to increase with wealth, but in the short term, if food aid is provided it will be important to include protein-rich foods.

9.3. Targeting Strategies for Short Term Food Security

Vulnerability to food insecurity is a complex and multi-faceted phenomenon. Factors such as the age, gender, health and education status of the household head, the presence of orphans and the dependency ratio interact with many others including land and livestock holdings, weather patterns and market access, to produce different patterns of vulnerability in different areas. For targeting interventions aimed at alleviating short-term food insecurity, the analysis in chapter 8 provides some guidance on specific small population groups that could be safely included or excluded, but there are no identifiable criteria that will accurately capture more than 60-70% of the food insecure population.

Programmers must therefore complement the findings of national surveys such as this with more localised analysis of vulnerability, and maintain a flexible approach to targeting. Maximum flexibility would come from a system of community-based targeting, however such systems have the potential to be dominated or abused by more powerful segments in communities. Programmers must weigh up the guaranteed errors of a more top-down approach to targeting against the possibilities of putting in place systems to minimise errors in a community-based system[44].

[43] Using current blend price of Z$477 per kg

[44] Annex XX provides some further analysis on vulnerability and targeting.

9.3.3 Long Term Food Security and Livelihoods recovery strategies

As acute food security has begun to decrease, it is necessary both to build on the recovery process that has begun and to work towards addressing the causes of vulnerability that will remain.

- On the economic front, measures to control inflation are still required to ensure that food and other basic goods and services are affordable to the population.
- The process of agricultural recovery must continue to be supported. With the exception of areas that have faced a number of years of poor harvests in succession or which have chronically poor production, support for agricultural inputs should primarily be on a credit basis, and crops that are locally appropriate must be emphasized.
- The potential value of livestock to livelihoods this year has been highlighted. Restocking should be supported where herd sizes have been significantly reduced over the last 3 years.
- The potential long term returns to financing quality basic services, in particular health and education, are indicated by the results in this survey relating household food security to the health and education status of the household head. Zimbabwe's success in these areas in the past is well noted, and it is vital that the necessary financing for these sectors is provided.
- It is also crucial that households can access these basic services, and consideration should be given to measures that will enable all children to access these services, e.g. abolition of primary school fees, or provision of safety nets for the poorest households.
- Continued and intensified efforts are required to tackle the HIV/AIDS pandemic, in terms of prevention, mitigation and treatment. This requires finance, but also a strong commitment to address social factors such as stigma.
- There is a need to increase the provision of Voluntary Counseling and Testing services in all communities, while the provision of other services such as home-based care and basic health services urgently needs to be expanded in newly resettled areas.
- In relation to food security and HIV/AIDS, the reduced acute food insecurity provides more scope for supporting community-based efforts to support those affected by HIV/AIDS. Note that outside support for these efforts should be based on facilitation of opportunities identified by the communities, rather than on externally-determined "projects".
- Results from this survey suggest that the status of orphaned children brought into other households is of concern. Greater efforts are required to protect orphans from discrimination, and to sensitize care-givers about the rights of orphans.

In terms of geographical focus, this assessment once again highlights how chronically poor peripheral areas (such as the extreme west, north and north-east of the country) risk being left behind during any recovery. Just as the south of the country has the potential to compensate for poor agriculture through its comparative advantage in livestock and cross-border trade, greater effort is needed to assist other peripheral areas to take advantage of their potential (e.g. tourism and natural resource management in the west).

9.3.4 Monitoring and Further Research

Projecting food security requires making a variety of assumptions, particularly about prices and, in turn, how various income sources may respond to changes in prices. It is very important, therefore, that monitoring of food security and livelihoods is carried out to review the validity of assumptions and to account for any unpredicted changes that may occur. The key variables to monitor at Food Economy Zone level will include:

- Maize prices and availability (both from the GMB and parallel market)
- Livestock prices and terms of trade
- Cash crop prices and returns
- Provision of external assistance (e.g. food aid, other transfers)
- Responsiveness of different income sources to changes in the cost of living
- Utilisation i.e. nutritional indices