





# 2005/6 Agricultural season food security research Report



September 15,2006

#### FOREWORD FROM THE FOSENET CHAIRPERSON

Dear Partners and readers

It is our pleasure as the food security network Trust (FOSENET) to present to you this report on food security issues in Zimbabwe based on a desk study and a targeted household survey that we carried out this year.

We are a network of 24 member organizations with interest in food security issues in the country, and we are brought together by common ethical principles that are:

- i. The right to life with dignity and the duty not to withhold or frustrate the provision of life saving assistance;
- ii. The obligation of states and other parties to agree to the provision of humanitarian and impartial assistance when the civilian population lacks essential supplies;
- iii. Relief not to bring unintended advantage to one or more parties nor to further any partisan position
- iv. The management and distribution of food and other relief to be based purely on criteria of need and not on partisan grounds, and without adverse distinction of any kind;
- v. Respect for community values of solidarity, dignity and peace and of community culture.

The commissioning of this research was prompted by the quest for accurate and reliable information on food security in the country. As some of you might be aware food security stakeholders are facing a lot of difficulties in planning due to lack of information on food security in the country. Such information has been very sensitized and hotly contested.

Though we cannot claim to be the experts in providing all the answers to this problem we hope our contribution would go a long way in providing some of the gaps that need to be looked into in order to enhance decision-making on food security issues. Moreso, we tried to get advice from various stakeholders through an "advisory group" that we constituted during the process of gathering, analyzing and presenting this information.

The primary purpose of this report is to strengthen planning by FOSENET members as they engage in their various livelihoods activities. However, FOSENET will be delighted to hear that other stakeholders also use this information and we would be grateful to continue disseminating such information in the future.

**Tobias Chipare** 

# **ACKNOWLEDGEMENTS**

This report is a result of the food security research that was conducted by FOSENET (food security network) in 6 districts of Zimbabwe to give an overview of the 2005/6 agricultural season food security situation in the country. FOSENET conducted this research to provide reliable information on the food security situation, and then identify any gaps so as to inform better food security interventions by the Government, private and the NGO sectors in Zimbabwe.

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This report was prepared by FOSENET with help from participants in the advisory group. We owe gratitude to the esteemed participants who attended the draft review workshops in June and August 2006 for their generous input in the refining of the survey report .We especially thank FEWSNET, FAO, USAID, Women and Land, Poverty Reduction Forum Zimbabwe, WLWRSA, Farm Community Trust of Zimbabwe, Windmill Pvt Ltd, Seed co, Agpy seeds, Ministry of Agriculture, Parliamentary portfolio Committee on Agriculture and FOSENET member organizations whose numerous comments were very useful in re-tuning the report. We also want to extend our gratitude to Katrina Karenga, an independent consultant who also worked tirelessly and contributed a lot in her individual capacity to this report.

FOSENET also wishes to thank other varied stakeholders and households who participated and contributed to the success of this survey.

Special thanks also goes to **TROCAIRE** who funded this research. The survey would not have been a success without this valuable input from our funding partner.

We hope that this report and subsequent ones will go a long way in improving household food security through better interventions from all stakeholders.

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# **FOSENET MEMBER ORGANISATIONS**

#### MONITORING WORKING-GROUP

- 1. Zimbabwe Peace Project
- 2. Training and Research Support Centre (TARSC)
- 3. Counseling Services Unit (CSU)
- 4. ZimRights
- 5. Zimbabwe Community Development Trust (ZCDT)
- 6. Zimbabwe Teachers Association

#### RELIEF and RECOVERY WORKING GROUP

- 1. Dabane Trust
- 2. Zimbabwe Teachers Association (ZIMTA)
- 3. Zimbabwe Women's Bureau (ZWB)
- 4. Farm Orphan Trust of Zimbabwe (FOST)
- 5. Community Working Group on Health (CWGH)
- 6. General Agriculture Plantation Workers Union of Zimbabwe (GAPWUZ)
- 7. Women and AIDS Support Network (WASN)
- 8. Inter-Country Peoples' Aid (IPA)
- 9. Zimbabwe Project Trust (ZPT)
- 10. Dananai Child Care Organisation (DACHICARE)
- 11. Zimbabwe Community Development Trust (ZCDT)

#### INFORMATION AND EDUCATION WORKING GROUP

- 1. Women and AIDS Support Network (WASN)
- 2. Community Working Group on Health (CWGH)
- 3. Women's Action Group (WAG)
- 4. Women's Coalition
- 5. Civic Education Network (CIVNET)
- 6. ZimRights

## **EXECUTIVE SUMMARY**

One of the Millennium Development Goals (MDG) is to reduce the number of food insecure households by half by 2015. Since 2002. Zimbabwe has been experiencing food shortages due to a number of factors such as drought and severe economic decline and shortages of agricultural inputs. Unfortunately food security information in the country has been highly politicised such that there is little information, making it difficult for better-informed interventions.

Recognizing the importance of such information for purposes of improving household food security situation in Zimbabwe, The FOOD SECURITY NETWORK (FOSENET) initiated a research aimed at providing reliable information on the current food security situation in Zimbabwe. This research was a systematic investigation on the food security status and trends in selected districts of the country where FOSENET implementing NGO partners are operational. The research meant to contribute to the development of a common understanding of the food security situation in the country and develop appropriate intervention strategies and approaches for enhanced impact of food security interventions on the livelihoods of rural communities. The study also sought to identify information gaps and other loopholes on food and nutrition security and build consensus amongst strategic stakeholders, through a consultative process, on what needs to be done to minimize food insecurity.

The study was conducted in two phases, viz, the desk study and fieldwork in order to generate data to feed into the design of food security programming and interventions in rural and urban districts of Zimbabwe. The desk study sought to assess the food security status and trends in Zimbabwe through a close examination of secondary and primary data from stakeholder organisations while the field study administered a household questionnaire schedule and an indepth interview guide in six selected districts which included Zhombe, Makoni, Umzingwane, Lupane, Chikomba and Chivi. A total sample of 360 households and 20 Key Informants were interviewed in the field study.

The desk study report and field study findings were presented as draft reports in two experts' advisory group meetings held in Harare, Zimbabwe in June and August 2006 respectively, and the final report has been revised according to the recommendations of this group.

The report examines among other things, rainfall amounts and distribution patterns compared to normal per given agro ecological zone, the availability and accessibility of food in both the household and on the markets, effectiveness of the entire inputs supply/sourcing and distribution chain, linkages between HIV and AIDS on household food security, impacts of relief food aid on households, and also coping strategies used by food insecure households /communities.

The study suggests that the overall food security situation in the current consumption year (2006/2007) is better than in the previous consumption year (2005/2006) due to improved rainfall amounts which characterized the whole country, with an average of more than 100% of the needed rainfall in most parts of the country. The proportion of food insecure households has dropped from 36% in the previous consumption year to 18% in the current consumption year. This finding

suggests that 18% of the total surveyed population will not be able to meet their food needs in the 2006/2007-consumption year.

Food aid also continues to play a very important role in ensuring food availability in households, and this report also suggests food aid is even leading to savings rather than the usual emergency purposes, as results show households receiving food aid being more likely to be food secure in the following season as they will be able to save.

The improvement in the food security situation has also been attributed to NGO agricultural input distribution in the surveyed districts, and results show that most seed and fertilizers were distributed on time such that many people were able to plant their seed on time.

However, the report also points out that in as much as the situation has improved in the country this season, there is still need for food security interventions to cover the proportion of food insecure households and the Government, private and NGO sectors should join hands to help these people. Close to 76% of the food insecure households attributed their problem of food insecurity to unavailability of agricultural inputs (seed and fertilizer) on the market and shortage of draught power.

The report also points out to a strong relationship between HIV and AIDS and food insecurity. About 71% of the HIV and AIDS affected households respondents were food insecure, and at the same time most HIV and AIDS death cases were also prevalent in food insecure households. This points out to the bi directional relationship between poverty and HIV and AIDS where HIV/AIDS is a determining factor of food insecurity as well as a consequence of food and nutrition insecurity. Most of the households interviewed who had a chronically ill person as head of the households had no draught power, could not produce enough food due to spending more time with the sick person, and also reported that they spent more money on healthcare .As a result of this, most of these households could not be able to meet their food needs, hence were food insecure. HIV and AIDS adversely affects the poor households by depleting them of the labor force required in agricultural activities thus leading to poor yields which puts them in a vicious circle of poverty and hunger. Due to this strong correlation between HIV and AIDS and food security, this report suggests the need for HIV and AIDS mainstreaming in food security interventions so as to improve food security in these affected households. It is also important to conduct a comprehensive impact assessment using indicators sensitive to both HIV and AIDS and food security so as to provide adequate information on the impacts of the epidemic on household food security. This will help stakeholders to develop integrated response strategies that combine short- and long-term interventions in new ways (parallel rather than sequential-food security interventions with an "HIV lens").

The report also points out to a new group of food insecure people –the urban households. Although a smaller sample was included in the survey on the urban households, there is evidence on food insecurity amongst the urban people, and this report suggests further research and also food security interventions in urban areas. Historically, most food security stakeholders (government and NGO sectors) targeted the rural people since most poor people lived in rural areas.

## **INTRODUCTION**

This is a report from a food security research conducted by the Food Security Network (FOSENET) for the systematic study into the food security status and trends in selected districts of Zimbabwe. This study was commissioned by FOSENET in order to generate data that will feed into the design of food security programming and interventions in rural and urban districts of Zimbabwe.

Food security is a concept that has evolved considerably over time. There are approximately 200 definitions and 450 indicators of food security. One volume on household food security (Maxwell and Frankenberger 1992) lists 194 different studies on the concept and definition of food security and 172 studies on indicators.

One of the most commonly accepted definitions of food security is adequate access to food at all times, throughout the year and from year to year. Access is ensured when all households and all individuals within those households have sufficient resources to obtain appropriate foods for a nutritious diet (Riely et al. 1995). It is dependent on the level of household resources—capital, labor, and knowledge — and on prices. It is also important to note that adequate access can be achieved without households being self-sufficient in food production. What is more important is the ability of households to generate sufficient income, which, together with own production, can be used to meet food needs. Moving from household to individual food security requires consideration of two factors.

First, how is food allocated within the household? In households where distribution is unequal, it is possible for aggregate access to improve and for some individuals to experience no change in their food security status. A second consideration is biological utilization; the ability of the human body to take food and translate it into either energy that is used to undertake daily activities or is stored. Utilization requires not only an adequate diet, but also a healthy physical environment (so as to avoid disease) and an understanding of proper health care, food preparation, and storage processes.

Households become food insecure when they are unable to mitigate negative impacts on food availability, access, and/or utilization. Such households balance their uses of private and community resources (including soil, water and vegetation) in an attempt to meet immediate consumption needs while reducing the risk of future shocks. They often face disincentives to longer-term investment in the productive base, including unclear or impermanent land tenure systems (customary or formal), high and unpredictable covariate risks in agriculture, imperfect factor markets, and extractive taxation of rural products (Bergeron and Pender 1999).

# RESEARCH METHODOLOGY

The prominent sources from which the data for the desk study was collected data were: Government departments (Ministry of Agriculture, Ministry of Lands, Meteorological Services, Seed Services, AREX, including the National Early Warning Unit, Parliamentary Portfolio on agricultural inputs); quasi-Government departments (GMB, ARDA); Private Sector (Agro-chemical companies

and Seed Houses, CGIARs (ICRISAT, CIMMYT) and others such as VAC, FEWSNET and FAO/Agriculture Co-ordination Working Group.

The field household survey focused on those districts where FOSENET partners are already operational and active. FOSENET already works through a number of partner NGOs scattered around the country's districts, and these partners, who are well known in their respective districts were used for entry purposes. The survey targeted two levels, *viz* interviewing of FOSENET implementing partners and other strategic stakeholders such as AREX, at both district and ward levels; and meeting and interviewing households on issues pertaining to food security. Six districts were selected for the survey, and these reflected different agro ecological zones. For each selected district, two wards were randomly selected, and surveyed households, who constituted both beneficiaries and non-beneficiaries of food aid, were randomly selected in the chosen wards. The selected districts were Zhombe, Makoni, Umzingwane, Lupane, Chikomba and Chivi. One urban centre, Rusape, was additionally enumerated. Due to the relatively small sample size (10 households), the urban centre is not included in the analysis of the quantitative data, as doing so may have skewed the data. The urban centre has been included in the analysis of the qualitative data. A total sample of 360 households and 20 Key Informants were interviewed.

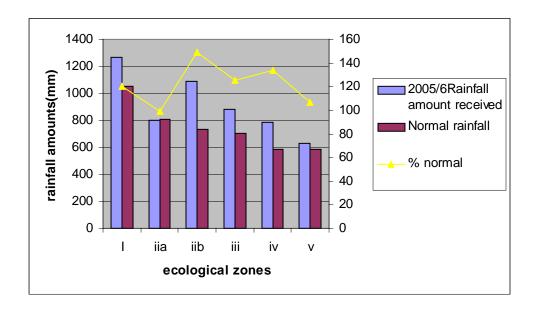
#### **DESK STUDY FINDINGS**

The desk study sought to assess food security in Zimbabwe through a close examination of secondary and primary data from stakeholder organisations. Additionally, the desk study examined the extent to which seed production and marketing have varied in Pre and Post Land Reform Zimbabwe (PLRZ). It is assumed that enhanced farmer seed producer performance will eventually result in higher incomes, enhanced food security through self-reliance and more secure livelihoods.

# 4.1: Rainfall Amounts and Distribution Patterns Compared to Normal per Given Agro-Ecological Zone

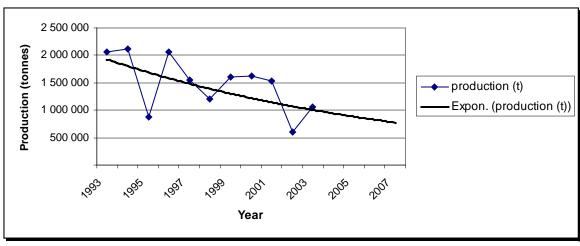
The season was characterized by good rainfall that was in most cases above normal. Ecological Zone 2b received the highest rainfall, that is 149% of normal rainfall followed by Ecological Zone iv which received 134% of the normal rainfall.

#### AGRO-ECOLOGICAL ZONE RAINFALL FOR 2005/ 2006 SEASON



4.3: Crop Production and Food Security a) Maize Crop

Figure #1: Maize Crop Production, Zimbabwe, 1993 – 2007



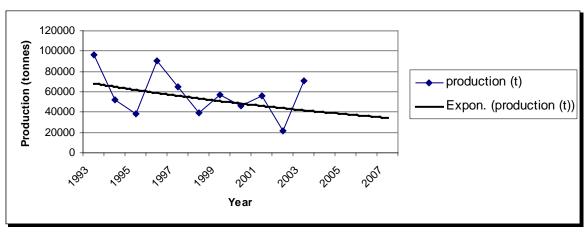
Source: CSO, 2004

Figure 1 shows that maize production in Zimbabwe has been on a decreasing trend since 1997 and the major decline was in 2002 with a total yield of 500000MT. This trend has had a negative impact on the food security situation in the country.

The data shown in Figure 1 is consistent with results from the ZIMVAC 2004 Report which concluded that close to 56% of the rural population was estimated to fall short of their minimum cereal requirements during the 2003/ 2004 marketing year compared to 76% in the 2002/ 2003 marketing year (ZIMVAC, 2004).

# b) Sorghum

Figure #2: Crop Production, Sorghum, 1993 – 2007

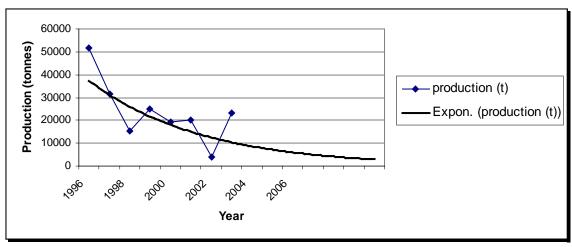


Source: Central Statistical Office, 2004

Sorghum production has been fluctuating between 100000MT and 20000MT in the period 1993 to 2003 however is on the decline (Figure 2). The major decline in the 2001/ 2002 season was mainly due to drought effect to the resource poor communal farming sector which is the major sorghum producers in Zimbabwe.

# c) Millet

Figure #3: Crop Production, Millet (Mhunga), 1993 – 2007



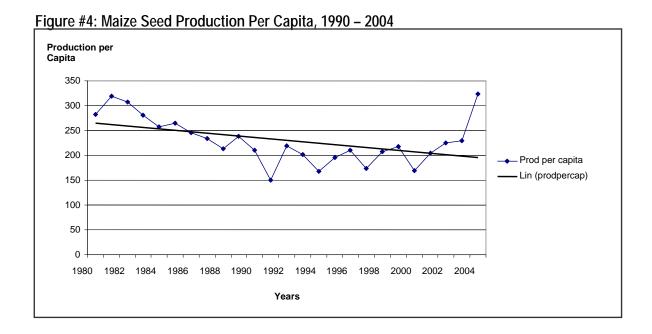
Source: Central Statistical Office, 2004

Millet production declined rapidly from 1996 to 2003 (Figure 3). The 2001/2002 drought reduced production to 8% of that obtained in 1996.

#### 4.4: Fertilizer Inputs

Large commercial farmers used 46% to 81% of all compound fertilizer and 67% to 79% of the nitrate fertilizer in Zimbabwe in the 1998 to 2000 season The large commercial farmers had the money to purchase these inputs because they could access financial loans on the market. In communal farming fertilizer share has been 16 to 17% for all compound fertilizers and 31 to 38% of all nitrate fertilizers in the period 1998 to 2000. The low allocation of fertilizer to the communal areas was due to lack of cash to purchase and transport the fertilizers and them not qualifying to access the financial support offered at competitive rates by financial institutions.

For each agricultural season, 400 000MT of fertilizer are needed if food security is to be realized, and maize alone accounts for 40% of the total amount of fertilizer needed. In the 2005/6, only 178 000 MT were available due to shortages of foreign currency shortages in the country. Most of this fertilizer was used up in larger commercial farms leading to many rural farmers having problems accessing it.



Source: Seed Services, AREX, Harare

By and large, there maize seed production is not declining very much. The number of seed maize growers decreased from 209 growers in 1999 to 102 growers in 2000. Although there was a decline in the number of seed growers, production per capita increased from the year 2000.

Seed production rose from 42036MT in 1993/1994 agricultural season to 49203MT in the 1996/1997 agricultural season, yielding an increase of 17.05%. The 1996 yield was the highest ever recorded in Zimbabwean seed history after independence. The increases were due to the favourable government policies, which preferred the free market economy in which the forces of demand and supply determined the prices of seed. This resulted in seed production being

profitable. Higher levels of seed production are associated with higher crop production (assuming that the seed is affordable to farmers on the market) and therefore enhance food security levels.

#### 4.6: Analysis of Annual Cereal Consumption per Marketing Year

Table #1: Cereal Requirements for 2001/ 2002 to 2005/2006 Marketing Years, Zimbabwe

Per capita	1	Total Human Consumption				
consumpt	ion	Metric Tonnes				
Crop	Unit (kg)	2001/2002 (Pop 11277542)	2002/2003 (Pop11631657)	2003/2004 (Pop11747974)	2004/2005 (Pop11865453)	2005/2006 (Pop11984108)
Maize	120	1353305	1395799	1409757	1423854	1438093
Millets	13	146608	151212	152724	154251	155793
Rice	1	11278	11632	11748	11865	11984
Wheat	29	327049	337318	340691	344098	347539
TOTAL	163	1838239	1895960	1914920	1934069	1953410

Source: FAO (Rome) CFSAM & CSO Population Census Reports

Table #2: Comparison of Annual Maize Consumption and Production Zimbabwe.

Marketing Year	Metric Tonnes				
	Total Human	Production	Gap	Production	Gap
	Consumption	(Scenario1)		(Scenario2)	
2004/2005	1423854	600000	-823854	700000	-723854
2005/2006	1438093	800000	-638093	1800000	361907

Source: CSO Population Reports, 2005

Tables 2 and 3 show data that facilitates comparison of total human consumption of maize vis-à-vis production of the same crop. There are different production figures from Government sources and non-Government sources. This compounds any meaningful comparison of consumption and production. There is a clear deficit between maize production and consumption levels in the country thus leading to vulnerability of households to food insecurity. Given the entry of new farmers into the agricultural sector through the Land Reform Programme, this situation is likely to continue for some years to come. Other households will be food insecure while others will be food secure, particularly those in natural regions 3 to 5 which are more prone to drought.

# 4.8: Macroeconomic Policy and Its Impact on Food Security

Over 70 percent of the population derives its livelihood either directly or indirectly from agriculture and agriculture accounts for at least one-third of formal sector employment. Agriculture has strong forward and backward linkages with manufacturing and the rest of the economy such that policies that negatively impact on agriculture would have large economy-wide multiplier effects.

The policy objectives for agriculture since independence have been consistent: to increase the rate of growth in aggregate output; to achieve diversification in output composition; to maintain food security and self-sufficiency; to raise farm incomes and employment; and to increase the sector's role as a source of raw materials and foreign exchange earner.

# 4.9: The Food Supply Situation, Pricing Implications and Crop Prospects

Prolonged dry spells and reduced precipitation during the critical month of February have undermined crop prospects in several countries, including Namibia, Botswana, Lesotho, Swaziland and Zimbabwe. In Zimbabwe, vulnerable populations are particularly at risk during this critical lean period. Household food security remains precarious due to high unemployment, low purchasing power and unaffordable food commodities. The HIV/AIDS pandemic further remains a major debilitating factor undermining food security in Zimbabwe. According to the Global Information and Early Warning System on Food and Agriculture of the FAO (April 2005) the principal causes why Zimbabwe is listed among the 23 countries in the sub-region facing serious food shortages are adverse weather and economic disruption.

The total rural population food insecure in 2005/ 2006 marketing year were highly dependent on the price at which maize is available on the market. Given that the price of food is the single most important determinant of vulnerability during the 2005/ 06 marketing year, at current income levels, the relative importance of GMB activities versus the prevalence of the open market were of great significance. If grain is mainly accessed from the open markets, the number of food insecure increases far beyond the projected estimates. (ZimVac, 2005 Report).

#### 4.10: Impact of HIV and AIDS on Food Security

HIV/AIDS has emerged as a scourge that in scale, complexity and tragedy, threatens to be as devastating in the 21st century as famine was in the 19th and 20th centuries. With approximately 42 million individuals currently living with HIV/AIDS, the annual death toll exceeds three million and continues to rise (UNAIDS/ WHO 2002). Assuming that each infection bears directly on the lives and livelihoods of just four additional people, there are already almost 200 million people worldwide affected by the disease—most of them in low-income developing countries.¹ Sub-Saharan Africa is the continent most affected by HIV/AIDS and where the disease has become not only the leading cause of adult morbidity and mortality but also a major contributor to recent large-scale food crises (Barrett and Rugalema 2001). HIV/AIDS is also spreading rapidly across Asia. India already leads the world in absolute numbers of HIV infections, currently estimated at around five million, while the scale of the problem in China, still poorly understood, is expected to escalate rapidly in the coming decade.²

<sup>&</sup>lt;sup>1</sup> Micronutrient deficiencies among pregnant and lactating women may also be addressed directly by ensuring that affected mothers and children consume micronutrient-fortified food rations or supplements.

<sup>&</sup>lt;sup>2</sup> Some estimates put China's level of infection many times higher than the official 1 million cases (Barrett and Rugalema 2001).

The disease affects household food security through multiple routes. Firstly, it mainly infects and kills individuals in the most productive 15 to 45 age group, who contribute a lot to food security in their respective families. Infection and death contribute to eroding a household's capacity to secure food security and/or withstand shocks.

# **SURVEY FINDINGS**

#### 5.1: Introduction

Part 5 presents the results from the household survey. The analysis presented in this section focuses on the 2006/07 consumption year in order to aid FOSENET and its partners in effective food security programming.

Table 3: Distribution of Survey Respondents by District (n = 360)

District	Frequency	Percent
Chivi	60	16.7
Chikomba	60	16.7
Makoni	60	16.7
Lupane	60	16.7
Kwekwe Rural (Zhombe)	60	16.7
Umzingwane	60	16.7
Total	360	100.0

A total of 360 households were interviewed in the 6 rural districts. Sixty households were interviewed in each of the 6 districts. The sample of 360 households constituted 2139 persons. The survey response rate was 100%. Figure 1 shows that 61% of the respondents were females while the remaining 39% were males. The mean age of respondents was 41 years.

5.2: Assessment of the Food Security Situation
Figure 5 Distribution of Food Security Groups by District (n = 360)

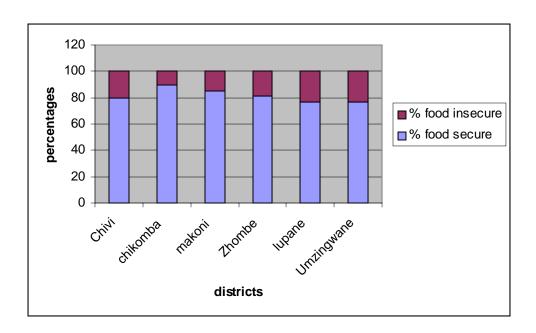
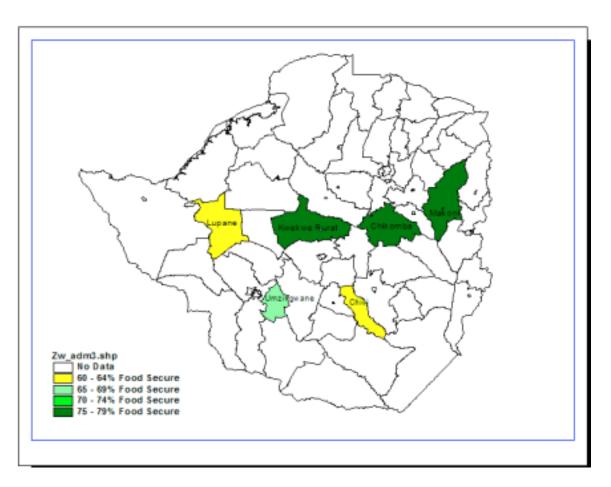


Figure 5 shows that 18% of the surveyed households in the six selected districts are expected to be food insecure in the current consumption year (2006/ 2007). The proportion of food insecure households in the 2005/ 2006 consumption year was 36%, which means that the food security situation this season is better than last season.

Figure 6: Proportion of Food Secure Households by District (n=360)



The data depicted in Figure 6shows that Chikomba, Makoni and Kwekwe Rural districts are in the highest range with 75-79% of the sampled households being food secure. Chivi and Lupane districts are in the least range 60-64% of the surveyed households being food secure.

#### 5.2.1.2: Characteristics of the Food Insecure Households

In order to gain a deeper understanding of the food security phenomenon under study, the current section will present the various socio and demographic characteristics of the surveyed food insecure households.

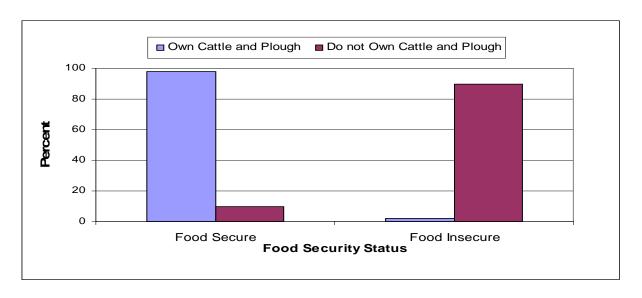
Food Secure Food Insecure

100
80
40
20
1-3
4-5
6+
Household Size

Figure 7: Household Size and Food Security (n=360)

Figure 7 presents data on household size and food security. A larger household, that is those of 5 persons or more, is more likely to be food insecure. This is because the larger households are associated with relatively high dependency ratios.

Figure 8: Ownership of Cattle and a Plough and Food Security Status (n=360)



The data in Figure 8 depict that a higher proportion of the food secure households, 98% owned cattle and a plough. Households without draught power experience constraints in food production because they have to rely on hiring such asset holdings, hence their vulnerability to food insecurity.

The likelihood of having relatives and/ or friends who remit money or food to the households has a significant bearing on its food security situation. Households with relatives and/ or friends who remit food and/or money are more likely to be food secure in the 2006/ 07-consumption year compared to those without such remittances

Figure 9: Food Aid in 2005/ 06 and Food Security in 2006/ 07 Consumption Years (n=360)

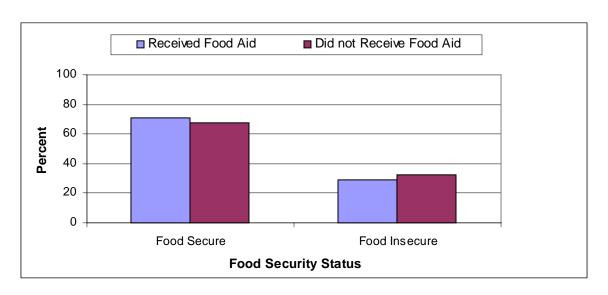


Figure 9 shows that people who received food aid were more food secure than those who did not receive. There is also high likelihood that rural households who receive food aid will be food secure as compared to those who do not in the following -consumption year. This observation underlines the central role that food aid plays in ensuring food security among the rural population in the country, particularly in the semi-arid districts

# 5.2.1.3: Consumption Patterns of the Food Secure and Food Insecure Households

Eighty-five percent of the surveyed households reported having more than one meal a day before the survey. Close to 80% of the rural households in the six surveyed districts projected to be food insecure in the 2006/2007-consumption year reported having sufficient cereal in the month of June 2006. This situation could have been facilitated by the fact that the survey was conducted shortly after harvest in July 2006.

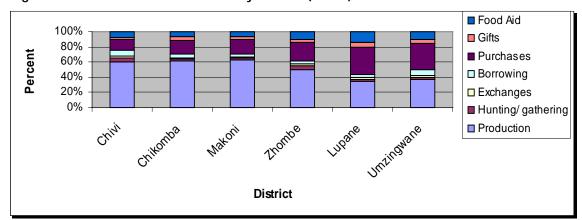
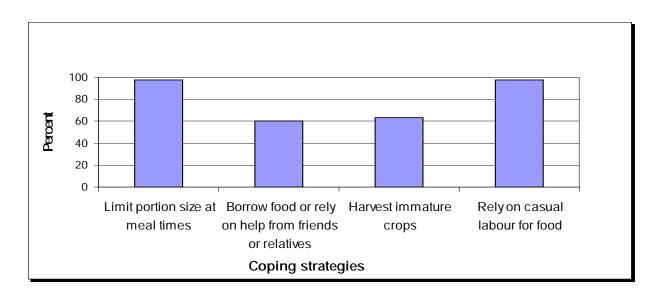


Figure 10: Household Food Sources by District (n=360)

Own production and purchases appeared to be the major sources of consumption in June 2006 in all the six surveyed districts. The survey results seem to suggest that purchases were the most dominant sources of food in Umzingwane and Lupane districts. Own crop production as source of food was least in these two districts, (see Figure 10).

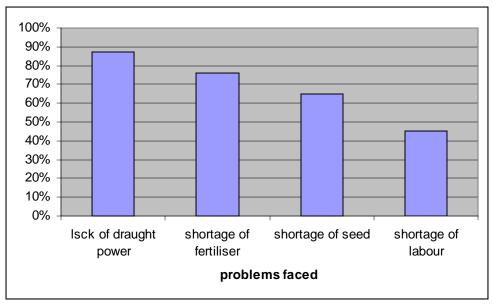
Cereals (maize, sorghum and millets) followed by leafy vegetables were reported to be the most consumed type of foods by both the food secure and food insecure households in June 2006. Cereal and leafy vegetables accounted for relatively higher proportion of the total food consumed by the food insecure households compared to that consumed by the food secure households. The food secure households consumed relatively more the purchased food such as sugar and cooking oil than the food insecure group. This is expected as the food secure households tend also to be better off households with relatively more disposable income. The food insecure households tended to consume relatively more wild foods than the food secure households. The index of dietary diversity is a measure of the number of different foods eaten by the household over a specified time period. There is a positive association between dietary diversity and caloric availability in 2006/07 consumption year.

Figure 11: Coping Strategies Employed by Food Insecure Households (n = 360)



The data in Figure 11 shows the coping strategies utilized by food insecure households in coping with the food insecure situation. We observe that close to 100% of the food insecure households either said they limited the portion size of food at meal times or they relied on casual labour for food. Another 60% said they either borrowed food or relied on help from friends or relatives. In addition, they harvested immature crops, for instance, green maize, in order to obtain food.

# 5.2.1.4: Problems Faced by Food Insecure Households



The survey sought responses on the problems faced by the food insecure households in the 2005/06 agricultural season. The most prevalent problems cited by this group were lack of draught power (87%); shortage of labour (45%), shortage of fertilizer (76%) and shortage of seeds (65%).

#### 5.2.1.5: HIV and AIDS and Food Security

HIV and AIDS reduces food security by requiring that more household expenditure is devoted to health care, while at the same time reducing the amount of labour available to households to engage in food and income-generating activities. Agricultural production in particular can decline, as there is less labour available to cultivate, and therefore families either cultivate a smaller area or switch to less productive and less labour – intensive crops. The household often loses a breadwinner to illness and eventually death, while other household members' time is needed to care for the sick and for dependants such as orphans and elderly people who remain behind.

As a proxy to tracking HIV and AIDS morbidity and mortality, the respondents were asked the health status of the head of household. If the head of household was reported to be ill, they were further asked the state of the illness. Respondents were further asked if there had been a death in the household in the past 12 months and if so, the cause of the death.

The food security status in the 2006/07-consumption year of households with a chronically ill head in the productive age group that had been chronically ill in the past 12 months are more likely to be food insecure in the 2006/07 consumption year than those without.

Table 6: Deaths in the Last 12 Months and Food Security Group (n=360)

		Food Security Group		Total
		Food Secure	Food Insecure	
Cause of death				
Mala	nria	0	1	1
		0%	100%	100.0%
ТВ		3	6	6
		33.3%	66.7%	100.0%
Pnei	umonia	1	3	2
		25%	75%	100.0%
Acci	dent	1	1	2
		50.0%	50.0%	100.0%
Suic	ide	1	2	3
		33.3%	66.7%	100.0%
No E	Death	239	93	332
		72.0%	28.0%	100.0%
Total		250	110	360
		69.4%	30.6%	100.0%

The data presented in Table 6 shows that death in a household contributed a lot to food insecurity. Almost twice as much of the mortality cases due to HIV related diseases (TB, pneumonia) were from the food insecure households. A contributory factor could be the poor dietary make-up associated with the foods consumed by food insecure households. On the other hand, HIV and AIDS adversely affects the poor rural households by depleting them of the labor force required in agricultural activities thus leading to poor yields which puts them in a vicious circle of poverty and hunger.

# CONCLUSIONS

The research revealed that there are different grain crop production statistics from Government and non-Government sources, which makes the analysis of food requirements vis-à-vis crop production, relatively difficult. Agriculture has strong forward and backward linkages with manufacturing and the rest of the economy such that policies that negatively impact on agriculture would have large economy-wide multiplier effects. The HIV/AIDS pandemic further remains a major debilitating factor undermining food security in Zimbabwe. Local maize purchases by the Zimbabwe Government's Grain Marketing Board (GMB) have been significantly lower than expected over the last 3 years, the major constraint being the availability of foreign currency for grain importation. Continuing hyper inflation, estimated at an annual rate of 1 193 percent in May 2006 combined with extremely high levels of unemployment, greatly limit access to food for most households in Zimbabwe.

The results from the fieldwork largely confirm those from the desk study. There was a significant improvement in the food security situation of households in the current consumption year (1 April 2006 to March 2007) compared to the previous consumption year (1 April 2005 to March 2006). This was largely attributed to above normal rainfall that characterised the country in the 2005/ 2006 agricultural season. The percentage of food insecure households dropped from 36% in the

2005/2006 consumption in the current consumption year (2006/ 2007). Eighteen percent (18%)of the surveyed population in the research project is expected to be food insecure in the current consumption year. The food insecure households are likely to be of lower socio-economic status, have less draught power than their food secure counterparts, are characterised by larger household sizes, are more likely to have the elderly, orphans and vulnerable children in their care, were more likely to have experienced a death in the household in the last 12 months before the survey, have limited access to tested seeds and fertilizer and experience lower crop production. Food and Agriculture Organisation of the United Nations (FAO) estimates that between 1985 and 2020, the country will lose 23% of its agricultural labour force because of the HIV and AIDS epidemic (Garbus 2003). The social and economic impacts of AIDS threaten the well-being and food security of households. Government and NGO sector should increase data sharing efforts to facilitate easier identification of households in need of assistance. The results point to the need for the review of targeting criteria utilized in the selection of households for assistance. Moreover, preference should be given to research-based targeting criteria.

### LESSONS LEARNT

- Need for regular and comprehensive studies on food security to complement the ZIMVAC initiatives. Such studies should cover the currently inadequate information on urban, health and nutritional situation.
- Need for contingency measures of food imports to be put in place in preparation for the 2006/07 consumption years.
- Given the shortage of fertilizer and certified seed in the previous agricultural seasons, Government, Private and NGO sectors need to join hands so as to ensure availability of inputs in the coming season in order to maximize yields.
- Food security and HIV and AIDS have multiple linkages in both directions. There is need to continue and start up more food security interventions with an "HIV lens"

# RECOMMENDATIONS

- The survey results show that about 18% of the total population will not be able to meet their food requirements in this current consumption year (2006/2007). This points to the need for FOSENET and partners to strengthen food security programming.
- Most of the food insecure households are those affected by HIV and AIDS.FOSENET should therefore implement food security interventions that target HIV and AIDS affected households. These interventions should also include both short term and long-term interventions.
- HIV and AIDS interventions should also be complemented with education and awareness
  raising in communities about the linkages between the epidemic and food security and even on
  how to prevent and cope with HIV and AIDS.
- The food security situation in the current consumption year was better mostly because of availability or rains. It is therefore important to put irrigation schemes in place to help communities in dry-land areas, and also for use even in drought years to ensure food security.
- Food aid and timely agricultural input distribution to households also played a part in ensuring food availability. Government, private and NGO sectors should continue to carry out these interventions to continue ensuring food security in most households.

- Lack of draught power and shortage of fertilizers were the highest ranked problems this current planting season. It is important for stakeholders to have interventions that also lead to the protection of draught animals (cattle, donkeys etc) as this will also lead to availability of manure that can be used in place of fertilizers in the case of fertilizers being difficult to secure.
- FOSENET should also network with other organizations who are into organic farming so as to minimize the negative consequences of shortages of fertilizers in the communities
- The report suggests that there is also need for FOSENET to also conduct further food security research in urban areas, and food security interventions to be carried out in these areas.

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