The Impact of Non-Governmental Agricultural Recovery Programmes in Zimbabwe: World Vision in Insiza District

by

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DECLARATION

I hereby declare that the work which is submitted here is the result of my own independent investigation and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that the work is submitted for the first time at this university/faculty towards Magister degree in Disaster Risk Management and that it has never been submitted to any other university/faculty for the purpose of obtaining a degree.

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ABSTRACT

The current study was an impact assessment of the Insiza World Vision agricultural recovery programmeme that is a community based famine prevention and mitigation intervention. The research focused on the projects that constitute the agriculture recovery programme. The programme has taken an integrated livelihoods approach to alleviating the immediate needs of the affected communities and to addressing the longer term vulnerability issues resulting in famine and food insecurity.

The programme was designed to prevent and alleviate famine in Insiza that is a drought-prone district of Matabeleland South Province. The key programme components include the rehabilitation of dip tanks, conservation farming, micro-dosing, the establishment of community gardens irrigated by the rehabilitated dams and boreholes, the formation of savings and loan groups and the provision of training in small livestock, crop management and conservation farming. The assessment focused on establishing the impact of the programme to the beneficiaries and the community at large. The impact assessment focused on the direct impact on the food security status, income and livelihoods of the programme beneficiaries. The assessment took place three years after the programme had been introduced in Insiza district. Given this time frame it was expected that the project would have had significant impact on the livelihoods of the beneficiaries by the time the assessment had been carried out in July 2008. To some extent the findings of the assessment confirmed this expectation, although consecutive droughts in the district masked some of the programme impacts. The results, however, do indicate that the programme has had a significant impact on household food security, thus meeting the primary goals and objectives of the project.

Furthermore the assessment was undertaken within a context of hyperinflation. It also coincided with widespread food shortages in the country brought about by government imposed price controls. These multiple shocks no doubt diluted the measurable impact of the project in terms of direct livelihood benefits. Having said

this, the findings suggest that the project has helped people cope with the effects of drought and inflation.

The programme has contributed to a significant improvement in household food security amongst the beneficiaries by providing them with a new source of food, steady supplies of food and nutritionally more diverse types of food. There has also been a significant reduction in the importance of food aid to the household food basket since the programme started. The sale of vegetables from the nutrition gardens, eggs and chickens from the small livestock project has provided people with a new source of income and the findings suggested that a good portion of this income was spent on food.

The programme has had a noticeable impact on the income of the beneficiaries. The new source of income provided by the programme has compensated for ths year's loss of income from cereal crop sales. In this respect the programme has also met its goal of alleviating or mitigating the effects of the ongoing drought. The results also show changes in the relative importance of different income sources, with the projects within the programme being scored as the most important source of income for beneficiaries this year. This income has enabled people to cover priority expenses such as household food purchases, school fees and other household expenses.

Other important benefits include the considerable timesaving on water collection for vegetable irrigation, especially with the use of micro-irrigation. Part of this time saved is now being allocated to food production.

A hundred respondents were identified and these comprised beneficiaries, non-beneficiaries and key informants of the World Vision agricultural recovery programme in Insiza District. In light of these findings from the study, it is recommended that extensive capacity building should be undertaken to enhance food security in the area.

DEDICATION

To my mother, ***Selina Mhlophe***, my inspiration and the one who gave me hope. She was the

one who applauded my actions, but who did not hesitate to scold me when I lacked maturity.

Integrity and honesty, the most valuable characteristics, I learnt from her.

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- Farmers (both beneficiaries and non-beneficiaries), district community leaders, Agritex and Veterinary officers

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GLOSSARY

Conservation agriculture - Encompasses activities such as minimum tillage and zero tillage, tractor powered, animal powered and manual methods, integrated pest management, integrated soil and water management, including conservation farming. It is generally defined as any tillage sequences that minimize or reduce the loss of soil and water and achieve at least 30% soil cover by crop residues.

Conservation farming (CF) – It is conservation agriculture that can be practiced by smallholder farmers using small farm implements such as the hand hoe to create planting basins. Plant residue from the previous crop is left on the land to minimize erosion and provide organic material. CF also aims at achieving soil cover and is actually a modification of the traditional pit systems once common in Southern Africa. It is a variation on the Zai Pit system from West Africa, which may also be considered a CF technology.

CF package – Comprises eight main components that should be followed by farmers practicing CF. The eight components are winter weeding, digging planting basins, application of crop residues, application of manure, application of basal fertilizer, top dressing, timely weeding and crop rotation.

Coping strategy - Specific efforts that people employ to reduce or minimize stressful situations.

Farmer experimentation - This is a process where farmers on their own try out new ideas while support organisations play a supportive role.

Food insecure households - Households that will not be able to meet their daily minimum energy requirements of 2100 calories per person (of which at least 70% will be from cereals).

Food insecurity - A situation where people lack secure access to sufficient amounts of safe and nutritious food required for normal growth and development and an active and healthy life. It may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at household level. Food insecurity may be chronic, seasonal or transitory.

Foods secure household - Households that will be able to meet their daily minimum energy requirements of 2100 calories per person (of which at least 70 percent will be from cereals).

Food security - World Bank defines food security as "access by all people at all times to sufficient food for an active, healthy life." In practical terms, this encompasses the physiological needs of individuals; the complementary and trade-offs among food and other basic necessities (especially health care and education, but others as well); changes over time in terms of people's livelihood strategies and the assets to which they have access; and uncertainty and risk (that is, vulnerability).

Livelihoods - All the activities that the households engage in to earn a living.

Vulnerability – This defines the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a hazard. It involves a combination of factors that determine the degree to which someone's life, livelihood, property and other assets are put at risk by a discrete and identifiable event (or series or cascade of such events) in nature and society.

Baseline data – Baseline information comes from a study done before an intervention. It provides data (information) about the situation before an intervention. This information is very important when it is monitored and evaluated as it enables decision makers to assess what difference the intervention has made.

Efficiency, effectiveness, and impact - Efficiency tells that the input into the work is appropriate in terms of the output. This could be input in terms of money, time, staff, equipment and so on.

Effectiveness – It is a measure of the extent to which a development programme or project achieves the specific objectives it set to achieve.

Impact – Impact tells you whether what you did made a difference to the problem situation you were trying to address. In other words, was your strategy useful?

ACRONYMS

ADP:	Area Development Programme
AGMARK	Agricultural Marketing
AGRITEX:	Agriculture Technical and Extension Services
AIDS:	Acquired Immune Deficiency Syndrome
CBWs:	Community Based Workers
CDP:	Community Developments Projects
CRS	Catholic Relief Services
CSO:	Central Statistics Office
DFID:	Department of foreign and International Development
FAO:	Food and Agriculture Organization
FOODAC	Food for Asset Creation
GMB	Grain Marketing Board
HH:	Household
HIV:	Human Immunodeficiency Virus
ICRISAT:	International Crops Research Institute for the Semi-Arid Tropics
MICHA	Micronutrient and Health
MT	Metric Tons
NGO:	Non-Governmental Organization
OCHA	Office for Coordination of Humanitarian Affairs
OPVs:	Open Pollinated Varieties
OVCS	Orphans and Vulnerable Children
PLWAs:	People Living with Aids
PRP	Protracted Relief Program
RRU	Relief and Recovery Unit
SIDA	Swedish International Development Agency
SL	Sustainable Livelihoods
SLA	Sustainable Livelihoods Approaches
SPSS	Statistical computer Package for Social Sciences
SWOT	Strengths, Weaknesses, Opportunities, Threats
UN	United Nations
UNDP	United Nations Development Program

USG	United States Government
WACCO	Women and Child Care Organization
WV:	World Vision
WVI	World Vision International
WVZ:	World Vision Zimbabwe

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CHAPTER 1: INTRODUCTION

1.1 Agricultural Recovery Programme

World Vision is a Christian developmental and relief organization whose mission is to follow our Lord Jesus Christ in working with the poor and oppressed to promote human transformation, seek justice and bear witness to the good news of the kingdom of God. The Zimbabwe World Vision ministry began in 1973 with the main aim of providing relief in holding camps and institutions. From that time the organization has developed and restructured to meet the demands of the population exposed to a dynamic environment. When Zimbabwe attained independence in 1980, World Vision's (WVZ) focus changed to assisting displaced groups through Community Development Projects (CDPs) (World Vision Manual, 2002).

In the 1990`s WVZ adopted the Area Development Programme (ADP) approach that promoted transformational development through community participatory process in specified geographical locations. The period from 1990 to 2000 was an economically stable period that saw WVZ adopt long term integrated rural development programmes, with interventions in each ADP planned for 15 years. These interventions are reviewed every five years and are guided by annual work plans (World Vision Manual, 2005).

Since 2002 Insiza district in Zimbabwe has experienced successive droughts and severe economic decline, which have both contributed to the much increased levels of poverty and vulnerability to food insecurity. In response to the food security crisis, World Vision Zimbabwe (WVZ) has been implementing food aid and agricultural recovery programmes since 2003 (World Vision Manual, 2005).

In response to the 2001/2002 agricultural seasonal droughts, WV implemented an integrated emergency humanitarian programme focusing upon prevention of loss of life and improving livelihoods among vulnerable communities. Because of the overall need that characterized the complex crisis in Zimbabwe, the emergency relief programme had to include other programmes such as water and sanitation, food

security, food aid and food for work. This was an effort to assist the Zimbabwean Government, which could not cope with the disaster. Different non-governmental organizations, World Vision included, responded to the post- drought shortage of seed and other agricultural inputs by donating in various ways. Agricultural recovery programmes included seed and fertilizer distribution through various modalities (direct, vouchers, fairs), small livestock distribution, gardening support, irrigation rehabilitation and appropriate training and extension. A core strategy of the agricultural recovery programme has been the promotion of conservation farming (World Vision Manual, 2005).

Despite the frequency of agricultural relief programmes, little is known about their efficacy. According to Sperling (1997), seed distribution is assumed to contribute to an expansion of cropped area. It is, however, difficult to find independent data measuring such gains. Fertilizer is assumed to increase production levels and productivity, but most relief programmes simply assume these gains. Nonetheless, each year drought re-occurs and these programmes are simply started afresh (Wobil, 1998). It is therefore the focus of this study to assess the Agricultural Recovery impact on beneficiaries' livelihoods in Insiza District.

The research also assesses the possible backup services that should be packaged together with agricultural input aid to make it more beneficial to the recipients.

1.2 Area of Study

Insiza District is in Matabeleland South Province of Zimbabwe. The district is in agro-ecological Region IV, which is semi arid and characterised by low agricultural output due to persistent drought spells and low annual rainfall.

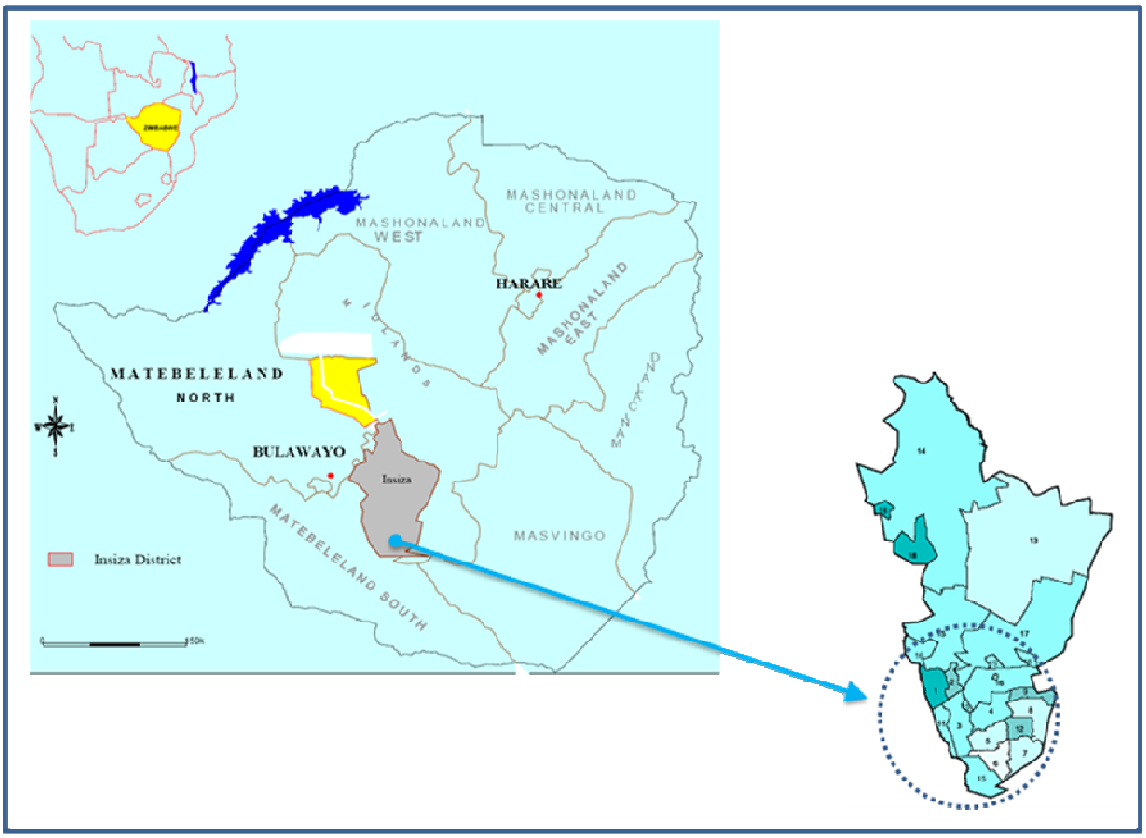

Figure 1.1 Map of Zimbabwe showing Insiza District and the study area

1.2.1 Climatic conditions in Insiza district

Zimbabwe's semi arid areas are classified as agro-ecological or natural regions (NR) IV and V (Table 1). Campbell (1994) reveals that they are unsuitable for crop production, with the government recommending them for semi-extensive NR IV and extensive farming NR V (CSO, 1985). The length of the growing period is quite variable, ranging from 70-100 days in the South East Lowveld (NR V) to 100-135 days in the South East Middleveld, though it is less than 70 days in some of the areas of the lowveld (FAO & ACFD, 1999).

Table 1: The characteristics of the semi arid- areas of Zimbabwe

Region	Area (Million ha)	Description
IV	12.84	▪ Annual rainfall is between 450-650 mm. The area is subject to seasonal droughts and severe dry spells during the ▪ rainy season (mid season droughts). The area is found in the hot, low-lying land and is marginal for rain fed maize. ▪ It is, however, ideal for drought resistant grain and fodder crops and livestock production
V	11.28	▪ Annual rainfall is less than 450 mm and the rainfall is too low and erratic for most crops. The area is very hot, in a ▪ low lying region that is suitable for extensive animal husbandry with drought resistant grain and fodder crops, though ▪ some of the areas on the Zambezi Valley are infested with tsetse fly.

Adapted from: Bird, K., Shepherd, A., Scott, A., and Butaumocho, B. (2002).

The semi arid region of Zimbabwe is characterised by semi-subsistence farming, with low productivity in the communal areas and yields averaging less than 600 kg ha^{-1} for the main cereals, maize (Zea mays L.), pearl millet (Pennisetum glaucum) and sorghum (Sorghum bicolor (L.) Moench) (**Ahmed**, **M.M., Rohrbach, D.D., Gono, L.T., Mazhangara, E.P., Mugwira, L., Masendeke, D.D., and Alibaba, S**. (1997). Vincent and Thomas (1961) in Figure 2 reveal that about 55% of Zimbabwe's land area is semi arid, with more than 60% of the rural population living in these semi arid areas (Mapfumo & Giller, 2001).

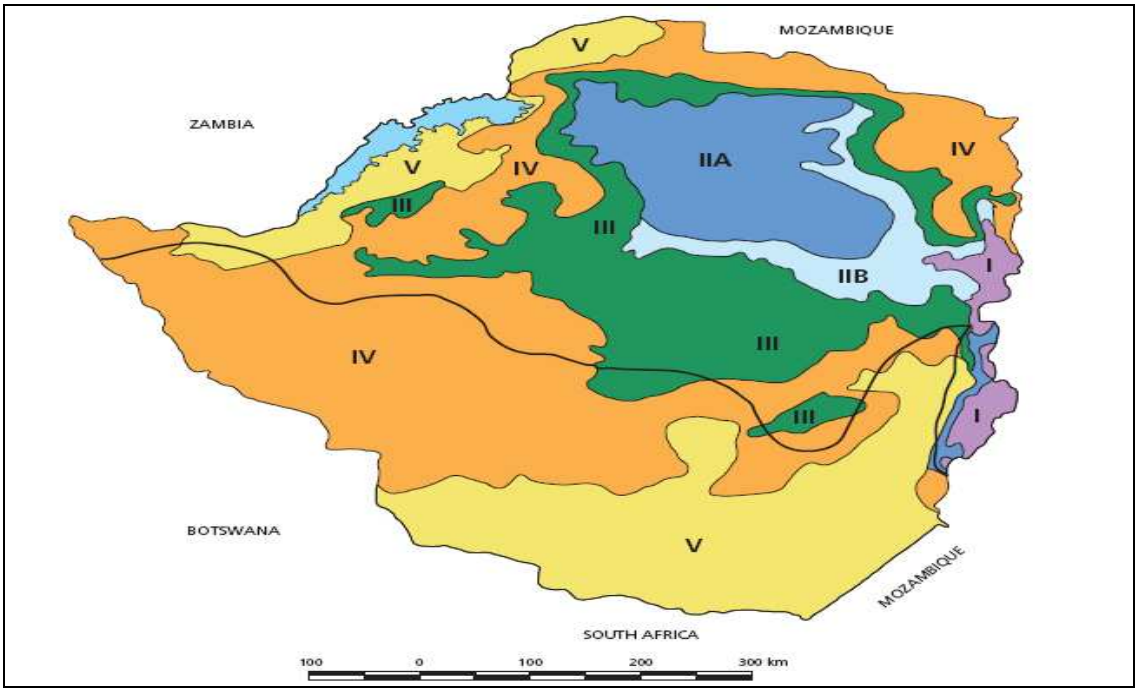

Figure 1.2 Map of agro-climatic zones and farming regions. *Adapted from:* FAO (2006:3*)*

1.2.2. Soils of the Semi Arid Areas of Zimbabwe

Nyamapfene (1991) reveals that the soils in the semi arid regions of Zimbabwe are largely derived from granitic/gneissic parent materials. Most of the soils are sandy textured and they are low in nitrogen (N), phosphorus (P) and sulfur (S) (Mapfumo & Giller, 2001; Nyamapfene, 1981). They are also low in Cation Exchange Capacity (CEC) owing to low organic matter contents (Nyamapfene, 1981). According to **Zingore**, **S., Manyame, C., Nyamagufata, P., Giller, K. E.** (2005) such soils have a limited ability to store organic matter and nutrients. Soil fertility declines rapidly with cultivation (Ncube, 2007). The soils are generally acidic and Grant (1970) revealed that many crops on granite sandy soils in the communal lands have multiple nutrient deficiencies for example N, P, S, magnesium (Mg), potassium (K) and other micronutrients such as zinc (Zn)). Most of the soils are greyish brown sands and sandy loams (luvisols) as indicated in Figure 3, though some very shallow vertisols and leptosols may be encountered (FAO, 2006). The soils have been described as being inherently infertile (Ahmed *et al.,* 1997) suitable for drought resistant crops, though less tolerant crops like maize remain dominant (**Scoones**, **I, Chibudu, C.,**

Chikura, S., Jeranyama, P., Machaka, D., Machanja, W., Maredzenge, B., Mombeshora, B., Mudhara, M., Mudziwo, C., Murimbarimba, F., and Zirereza, B.1996).

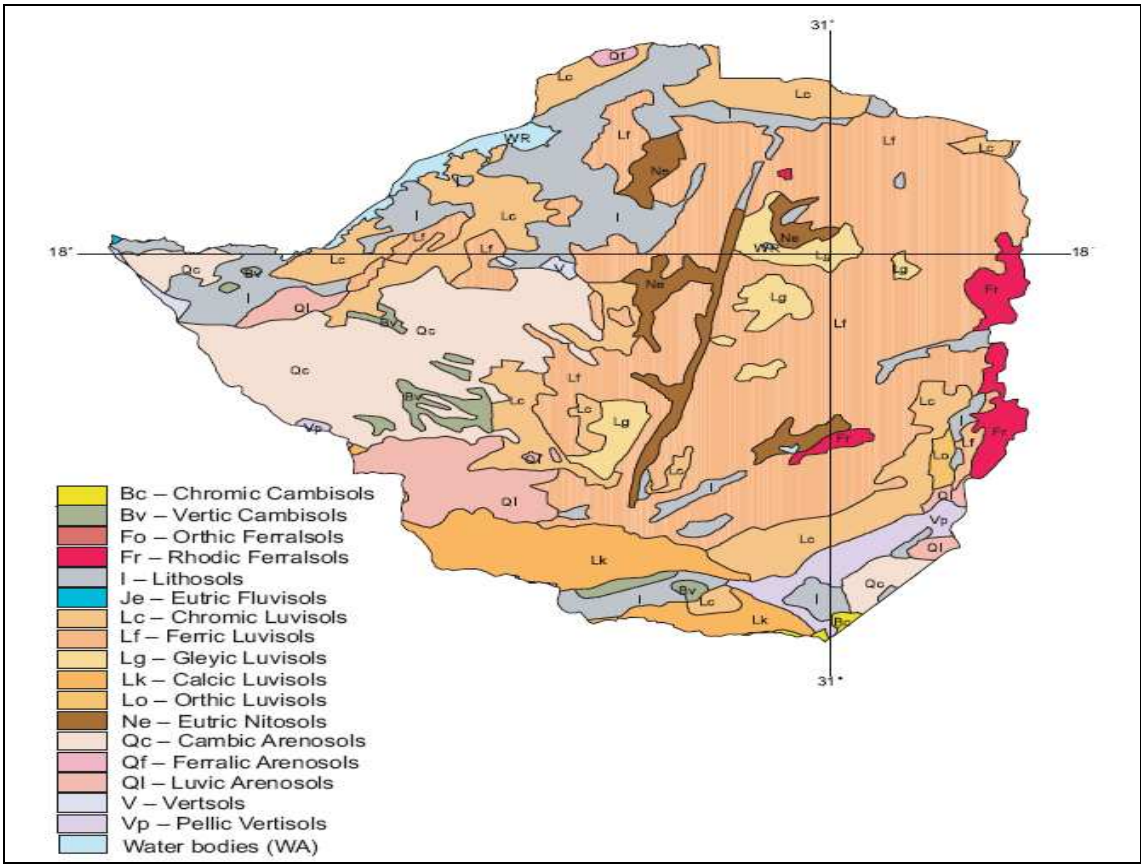

Figure 1.3 *Dominant* soils of Zimbabwe. *Adapted from:* FAO (2006:4)

The majority of Insiza community lives in fragile and vulnerable conditions due to the high poverty levels, lack of access to resources, environmental degradation and low standards of living. The district has experienced perennial droughts, occasional floods and the HIV/AIDS pandemic (CSO, 2005).

Insiza district is largely rural with only two growth points in Filabusi and Shangani. It is divided into 18 wards that comprise commercial farms, resettlements and communal areas. According to the 2002 census, Insiza District had a population of over 85 000. There were 43 989 females and 41 633 males (CSO, 2005). The community, like most other rural communities in Zimbabwe, has a subsistence and agro-based economy with generally unreliable and poor cropping due to undependable weather. Crop production with fertiliser use, cattle rearing /animal husbandry and gold panning are major sources of income. The area of focus for the current study will be the communal area where most NGOs have operated. This is due to the 2003 Zimbabwe Vulnerability Assessment report, which carried out poverty ranking of the wards in the district. Wards that were covered were one, two, nine and twelve.

1.3 Problem statement

Relief and recovery programmes have become a regular and significant component of rural development efforts in Zimbabwe, especially in Matabeleland South Region. According to Rohrbach (2000) distribution of seed, fertilizer and other agricultural inputs have undoubtedly helped smallholder agriculture recover after a drought. However, many questions have been raised about programme strategies and impacts. It is generally acknowledged that the effectiveness of assistance would be improved by better information flow – for example avoiding duplication or overlapping coverage of areas.

Relief programmes in Zimbabwe have expanded rapidly in recent years, providing food, seed, fertilizer and other assistance. The response is, in the first instance, to transitory shocks caused by drought and flooding to a lesser extent. Nevertheless, many of these programmes have evolved into on-going responses to chronic food insecurity. Household food insecurity has limited alternative livelihood opportunities. Households often lack the security of assured access to food (Rohrbach, 2000).

Serious food insecurity and hunger hit Insiza district leaving poor farming households with limited alternative livelihood opportunities due to low productivity. Despite five years of World Vision agricultural relief and recovery aid, agricultural productivity is

still low. In addition there is continued support of Agriculture Recovery by other non-governmental organizations (NGOs) in the district.

It has been observed that NGOs support the same communities each year and most probably the same beneficiaries. In spite of the increase in the number of NGOs administering the same aid to the same communities, beneficiary numbers increase each year (Insiza District Report, 2007).

Household demographics, income sources and expenditure, asset values and access to government schemes continue dwindle increasingly forcing the Insiza community into a bare subsistence existence (Insiza District Report, 2007). Household assets have been sold or lost and purchasing power has been greatly diminished due to huge price increases and an inflation rate that is now over 500 000% (CSO, 2007).

The strong informal social networks dominant in Insiza district among family and friends, which guaranteed access to resources in times of shortage and need, have been destroyed. Internal remittances, loans and gifts from family and friends living and working in urban centres and abroad have dwindled (Insiza District Report, 2007).

Despite the frequency of agricultural relief and recovery programmes, each year drought re-occurs and these programmes are simply started afresh (Wobil, 1998). This research therefore intends to establish the impact of the World Vision Agricultural Recovery Programme on beneficiaries' livelihoods in Insiza District. The study aims to establish whether the agricultural recovery programme has brought any changes to the livelihoods of people in Insiza and how sustainable it is. The research also aims to assess the possible backup services that should be packaged together with agricultural input aid to make it more beneficial to the recipients.

1.4 Research

The study on the impacts of non-governmental organizations on beneficiaries' livelihoods has research questions based on the main research questions that are as follows:

- What are the major causes of food insecurity in Insiza district?
- Why NGOs in relief and recovery programmes continued to exist after a long time?
- How are beneficiaries utilizing aid packages and are the packages sustainable?
- What are the NGOs bringing in to the communities?
- Which coping strategies did this community use before the NGOs aid programmes?
- What is the future of the Insiza community if NGOs pull out? –Sustainability?

1.4.1 Objectives of the study

The study seeks to establish the impact of the World Vision agricultural recovery programmeme on beneficiary's livelihoods in Insiza district. It also aims to assess and determine sustainability strategies for the programme.

The current study on the impacts of non-governmental organizations on beneficiaries' livelihoods has sub-objectives that are drawn from the main objectives, which are as follows**:**

- To assess the level of Agricultural production
- To establish the food security of beneficiaries
- To establish the product price
- To establish the socio-economic status of beneficiaries.

1.4.2 Significance of the study

It is envisaged that the proposed study will be of value to various stakeholders that include government, policy makers, communities, NGOs and academics alike. This study should provide data that reflect on the success of current agriculture relief and recovery programmes in Natural regions IV and V. It should provide guidelines for improvement as well as facilitate the assessment of the impact of NGOs' relief and recovery programmes on beneficiaries' livelihoods. Information is critical for decision-

making. It is hoped that the findings from the study will provide baseline information for decision-making in militating against disasters.

1.4.3 Limitations of the study

Since every research is unique, this study on the impact of the agricultural recovery programme on beneficiaries' livelihoods may not be exceptional. There are limitations and risks relating to the undertaking of a project of this nature, both from the operational and methodological points of view. The time spent on the research may not be adequate since the researcher is a full time employee. Proponents of case study approaches suggest that researchers should immerse themselves in the institutions or communities where research is being undertaken (Borg & Gall, 1989). Unfortunately some beneficiaries and heads of departments may not be willing to give information due to fear of victimization by political leaders. Harsh economic conditions in Zimbabwe may also make it impossible to use various techniques of data collection such as focus community group discussions for triangulation purposes. Recurrent droughts may also have obscured some of the benefits of the agricultural relief programme that were provided by World Vision.

1.4.4 Delimitations

The study was conducted in Insiza District in Matabeleland South Province in Zimbabwe. In this study questionnaire, face-to-face interviews and observations were used. The research will cover a four-year period starting from 2004 when the programme was introduced in Insiza District up to 2008. Any other time than the above stated period is not the concern of this study. In addition the study does not concern other regions, only those in ecological Regions 4 and 5.

1.5 Research Methodology

The research methodology is the planned sequence of the entire process involved in conducting research. The research methodology describes a flexible set of guidelines that connects theoretical paradigms firstly to strategies of inquiry and methods of collecting empirical material. Methodology also refers to the philosophical basis on which the research was founded. This chapter mainly focuses on the research design employed to assess the effectiveness of the agricultural relief and recovery programme in Insiza district. A precise description and explanation of sample size, sampling techniques and data analysis employed are presented. Embraced within this chapter is an explanation of how the questionnaires were administered and the interviews conducted.

1.5.1 Research design

Leedy (1997) defined a research design as a plan for research that guides the collection of data and the methods of analysis that were performed. According to Bell (1987) a design is a set of logical procedures that if followed enables one to obtain evidence to determine the degree to which one is succeeding or failing in an undertaking. A research design is thus a plan and structure of investigation designed to obtain answers to the research questions. It is a procedure for collecting, analyzing and interpreting data so that the research problem can be solved. It is the basic plan or strategy of the research and the logic behind it, which makes it valid to draw more generalized conclusions from it, holds all parts and phases of the inquiry together.

The research design chosen for this study is a combination of both the qualitative case study using structural analysis and the quantitative method where data analysis was based on closed ended questionnaires and tables used for data presentation and analysis. The study, to a certain extent, conducted stratified sampling of the community to select respondents for the questionnaires. Predominantly the study was qualitative since a case study approach was used, studying a particular place, Insiza District.

1.5.2 Qualitative research

Qualitative research is grounded in the assumption that individuals construct features of the social environment as interpretation and that these interpretations tend to be

transitory and situational. Thus, the research was a multi method in approach in its focus involving an interpretive naturalistic approach to its matter.

Gall and Borg (1996) noted that a case study is a method of conducting qualitative research, which evolve a distinctive approach to scientific inquiry. Case studies strive to portray what it is like to be in a particular situation, to catch the close-up reality and give a description of how the participant is living, his experiences and thoughts about the situation. In addition, the study was qualitative in the sense that it used open-ended questionnaires and the sampling technique was purposive.

Capture and discover meaning since the researcher will be immersed in the data.
Concepts are in the form of themes, motifs, generalizations and taxonomies.
Measures are created in an *ad hoc* manner and are often specific to the individual setting or researcher.

1.5.3 Quantitative research

In the use of quantitative methods facts, claims and assertions are presented in numerical forms. Quantitative approaches are generally associated with systematic measurement, experimental and quasi-experimental methods, statistical analysis and mathematical models. It takes the positivist orientation where knowledge is gained through scientific and experimental research and is objective and measurable. Quantitative research assumes that social facts have an objective reality, variables can be identified, relationships measured and data is reduced to numerical indices with abstract language in write-up. The focus of the current study is on the impact of the World Vision Agricultural Recovery Programme on beneficiaries' livelihoods in Insiza district of Zimbabwe. Facts, claims and assertions are provided in narrative form. However, quantitative approaches are used to present facts and claims in numerical forms.

Quantitative approaches tend to test hypothesis that the researcher begins with. In addition, concepts are in the form of distinct variables. In this approach, measures are systematically created before data collection and are standardized.

- **Population**

Marimba and Moyo (1995) define a population as any group of individuals that have one or more characteristics in common that are of interest to the researcher. Schulze (2002) concurs with this definition when he argues that a population is the totality of persons, events, organization units, case records or other sampling units with which our research problem is concerned. A population is defined in terms of elements, sampling units, extent and time. It measures the entire group of objectives under study (Leedy, 1997). According to Wegner (2000) population must be defined in very specific terms to include only those sampling units with characteristics that are relevant to the problem. The population of this project covers the beneficiaries of the Insiza World Vision Agricultural Recovery Programme from May 2005 to July 2008. The population is comprised of 261 farmers drawn from the participating wards.

- **Sampling technique**

Saunders *et al*. (1997) defines sampling as a process of selecting a representative subset for observations from a population to determine the characteristics of the variable under study. The objective of sampling is to estimate information about the whole population when it is impossible to measure or study the whole population. It is therefore of paramount importance that the researcher ensures that the sample is a true representation of the population.

According to Entwhistle and Nesbert (1975) there is no single correct procedure or sampling. The method chosen depends on the purpose of the inquiry, or the type of analysis to be made and on certain restrictions such as time and facilities that have to be accepted as external constraints. The collection of data from 11 wards with a population of more than 10 000 households is an expensive and time-consuming operation. Data was

therefore collected more effectively and more cheaply through random sampling to select the four wards and through stratified sampling to select respondents from the community in the four wards.

The following formula was utilized in calculating the sample size:

$$N = \frac{Z^2 (p)(q)\ deff}{D^2}$$

Where: N= sample size
Z= statistical significance, 1.96 for an error risk of 5%
p=indicator prevalence; p=0.5
q=1-p; q=0.5
Deff=expected design effect, standard=1
D=desired precision or margin of error, expressed as a fraction of 1; D=0.07

A 10% error allowance was added giving a total sample size of 100. Farmers for the quantitative household survey were drawn from four randomly selected wards and from four respective villages in Insiza District. Fifty percent of the total sample size constituted beneficiaries while the other 50% was non-beneficiaries. Stratified sampling was used to select households for interviews from beneficiary lists. Non-beneficiaries were similarly selected from village household registers that are kept by village heads.

1.5.4 Focus group discussion

The evaluation team held community level meetings and focus group discussions. These were conducted in the chosen wards and villages. A checklist of questions (Appendices 1, 2 & 3) was used to probe issues from the various projects that constitute WV Agricultural recovery programme. The meetings covered projects that include dip tank rehabilitation, crop production and small livestock fares, agriculture input distributions, farmer training, nutritional gardens and micro irrigation. Discussions were conducted with beneficiaries of WV Agricultural Recovery Programme, WV officers, Agriculture extension officers, CBWs and non-beneficiaries.

Forming part of the data collection and analysis were questions concerning project management, project performances, projects impacts and challenges faced.

According to Shapiro (2007) the following are the advantages and disadvantages of focus group discussions.

Advantages - The focus group discussion technique is a useful way of getting opinions from a quite large sample of people. Respondents do not only share ideas and give a general opinion but also interact freely in the group.

Disadvantages - It is quite difficult to do random sampling for focus groups and this means findings may not be generalized. People also influence one another either to say something or to keep quiet about something. If possible, focus group interviews should be recorded and then transcribed. This requires special equipment and can be time-consuming.

1.6 Research Instruments

Several methods may be used in a research to collect data. In this study generalized and widely applicable methods such as the questionnaire, interviews and observations were used.

1.6.1. The questionnaire

The questionnaire was used to gather information beyond the physical reach of the researcher. A closed-ended questionnaire (quantitative data) was administered to both beneficiaries and non-beneficiaries. The key informants consisted of different ministries and departments (Social Welfare, Local Government, Education, Natural resources, AGRITEX, Veterinary Services, RDC and the implementing NGO) as well as other non-governmental organizations that were tasked to respond in writing to both open-ended (qualitative data) and closed-ended (quantitative) questions. Questionnaires were drafted to elicit individual information from the beneficiaries of the scheme.

Advantages - There are a number of advantages of using questionnaires, amongst others, massive data may be collected and respondents answer at their convenience. It also allows respondents to refer to documents and provide accurate information.

Disadvantages - The questionnaire is not suitable for an illiterate population. It is also possible of providing faked data amongst others.

1.6.2 Interviews

The fact that the questionnaire is not suitable where there is still illiteracy, makes the conducting of interviews much more relevant. An interview enables you to solicit data face to face from either community groups or individuals. According to the Household Economy Analysis (HEA) (2006) semi-structured interviews can be used either with individuals or with groups. However, it is essential to keep in mind the type of information you are after. As time is usually limited, questions should be focused and should really elicit the necessary information. The report will present findings of the study based on in-depth historical analysis, questionnaires, interviews and observations. The structured and unstructured interviews were conducted with the community/ focus groups.

Advantages - Face-to-face interviews have the highest response rates and permit the longest questionnaires. Interviewers can also observe the surroundings and be able to judge the non-verbal communication and any visual aids.

Disadvantages - The use of interviews in gathering data has a number of limitations that include the expense in terms of training, travel, supervision and personnel costs. Respondents at times become timid due to the presence of the interviewer and interviewer bias is greatest in face-to-face interviews.

1.6.3 Observations/site visits

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According to Chivore (1994) observations are viewed as an exploratory in which the research can reliably and vividly identify the structures available through some form

of planned and systematic deliberate observations. Checklists and observation schedules were used in data gathering during the visits to some projects.

1.6.4 Evaluation

Validity and reliability may be used to judge qualitative data and data analysis. According to Yin (1994) there is no uniformly agreed set of validity and reliability criteria for case studies. Validity refers to the extent to which an instrument measures what it is supposed to measure. To cater for validity a detailed questionnaire was composed in conjunction with the use of multiple methods of data collection such as the focus group discussion among others.

The assessment was guided by several checklist questions that constituted the evaluation guide. The guide set the broad parameters for evaluation, with latitude for the evaluators to probe and delve deeper into issues under discussion beyond the given checklist questions. Some of the areas that the evaluation looked at to guide the data gathering process are in the Appendix.

Field-testing of the data collection tools was done in June 2008, two weeks before the final assessment started. This exercise was used to fine-tune the tools and indicators that had been developed. The exercise took place in the project communities.

Various types of secondary data were used to crosscheck the results of the assessment. These included the baseline survey; project Monitoring and Evaluation (M&E) records and progress reports. M&E data was used to match project service delivery and inputs with the changes (impact) captured during the assessment. Other resource documents that were used for triangulation were the ZIMVAC food security and vulnerability reports for 2004 and 2005, the Zimbabwe Livelihoods Profiles of 2005 and the World Vision Zimbabwe household livelihoods survey of 2006. Focus group discussions were used to compliment the data collected during the household interviews by comparing the perceptions of the FGD participants with the more quantitative perceptions captured in the household interviews.

The results of the assessment were shared with the project participants in Insiza District at the end of the assessment for accountability purposes. This exercise was used to validate the findings and get feedback on the results from the participants.

1.7 Summary

The chapter has given an outline on the research background, research problem, research objectives and justification. The chapter also highlighted the scope and structure of the thesis.

CHAPTER 2: INSIZA WORLD VISION AGRICULTURAL RECOVERY PROGRAMME

2.1 Introduction

The Insiza Agricultural Recovery Programme applies an integrated approach to addressing the acute food insecurity and productive capacity of vulnerable farming households in Insiza District. The programme is sub-divided into a number of projects, namely dip tank rehabilitation, crop production, small livestock fares, agriculture input distributions, farmer training, nutrition gardens and micro irrigation.

2.2 General Input Distributions

This project is targeting farmers with land and work force, but with limited inputs such as seed and fertilizers. Beneficiaries for the summer season receive seed packs that constitute small grains (2kg sorghum and 1kg millet), 4kg cowpeas/groundnuts and 4kg maize. The package also provides 25kg nitrogenous fertilizer such as limestone ammonium nitrate for top-dressing. The main season beneficiaries are split into two, with one group comprising of farmers partaking in conservation farming while the other group engages in micro dosing. Winter season beneficiaries receive seed packs that constitute a variety of vegetables and 4kg of vegetable fertilizer. Both WV and AGRITEX field staff further train farmers on vegetable production.

2.2.1 Conservation farming

This project falls under agricultural input distributions. WV and AGRITEX extension staff train farmers on conservation farming techniques. Beneficiaries of the conservation farming then receive their package and grow their crops following the principles of conservation farming. The project initially targeted poor farmers with no draft power so as to enable them to plant with the first effective rains. However, some better-off farmers have adopted the technology.

2.2.2 Micro-dosing

Beneficiaries receive top-dressing fertilizer such as Ammonium Nitrate or Calcium Ammonium Nitrate at 25kg respectively. Farmers also receive some training on the utilization of these fertilizers. During the trainings, they are advised to split their field into two equal areas so that they are able to compare yields at the end of the season. They are also advised to use small quantities of fertilizer since most of them are poor farmers who cannot afford large quantities. This project targets the better-off farmers who are able to buy their own seed.

2.2.3 Seed fairs

Seed fairs generally take the form of temporary markets organized by WV and AREX to promote the trade of seed among farm households. Beneficiaries are issued vouchers that they use to purchase seed of their own choice from the market that may encompass commercial seed companies as well as local farmers with extra seed to sell. This strategy stems from the assumption that limited seed is available in the market despite the worst drought. A sub-set of vulnerable households does not have the purchasing power to obtain it. Seed vouchers provide this purchasing power and the seed fair offers an organized market in which to redeem the voucher. Furthermore seed fairs offer farmers greater choice of seed to replenish their stocks. Other advantages of seed fairs are:

- The choice of local varieties is supposed to improve bio-diversity.

- More income is believed to remain within the rural community, stimulating an expansion in seed production.

- Seed fairs are run within a day and farmers are expected to complete their purchases within that stipulated period. At the end of the fair WV pays the sellers on surrendering their vouchers.

2.2.4 Sweet potato multiplication and distribution

Interested farmers with access to water during the dry season are identified, trained and tasked with the multiplication of improved sweet potato varieties. Varieties include Chingova, Brondal, Mozambican White and German 2. WV issues vouchers to their seed and fertilizer beneficiaries who then purchase sweet potato cuttings from the multiplier. Multipliers then surrender the vouchers to WV for payment for their efforts.

2.2.5 Nutrition Gardens

Both community and individual nutrition gardens have been set up in the 11 WVZ operational wards. Beneficiaries for this project constitute home-based care (HBC) givers, people living with Aids (PLWAs), widows and the poor. Farmers should have irrigation water close to their homes to qualify as beneficiaries for this project. The organization provides fencing material, seed and fertilizer packs as a start up. Herbal plants have also been included in the package for the benefit of the PLWAs. The gardens are expected to sustain themselves after the first season, that is, returns from the garden should cover the input cost for the next season.

2.2.6 Micro-Irrigation

The term 'micro-irrigation' refers to drip, trickle, spray, micro-jets or mini-sprinkler systems designed to use available water more effectively. Micro-irrigation is a localized irrigation method that slowly and frequently provides water directly to the plant root zone via emitters. In the past decade the concept of drip irrigation has been adapted to small plots that can be handled by a single household. Small-scale drip irrigation systems typically use a bucket, drum or barrel, connected to a filter and a system of pipes, laterals and emitters. Crops are planted according to the emitter positions on the laterals. The water containers have to be elevated

above the field to create the necessary head pressure to enable water release at all emitter points.

Drip-kits are distributed to the vegetable seed pack beneficiaries in both community and individual nutrition gardens. The technology enables farmers to use less water to irrigate their crops as water is applied where it is required, in the root zone. Farmers can also fill up their drums during the day to irrigate in the cooler hours of the day (evening/night).

2.2.7 Small livestock fares

The project entails the provision of poultry units (one cockerel + six hens) to households with limited labour resources and affected by HIV and AIDS. By investing less than 30 minutes a day, households can realize significant productivity compared to traditional poultry rearing by ensuring the provision of adequate water and appropriate shelter. Households can expect 320 eggs and 215 chickens in one season, which contribute meat and protein as well as income to the households. In order to ensure that households are prepared to receive chickens, trainings are conducted for target beneficiaries in chicken pen construction, hygiene, feeding/watering and general chicken husbandry prior to chicken distributions. The project also provides vaccines and training to two people per ward trained as 'Para vets' who will carry out vaccinations of distributed chickens to avert Newcastle and Fowl pox diseases. Where the households lack sufficient labour to complete the poultry shelters, neighboring families and WVZ staff provides assistance in completing the construction.

2.2.8 Dip tank rehabilitation

The rehabilitation of existing dip tanks improves access by livestock to dipping facilities thus animal health is improved in the district due to the reduction of tick-borne diseases. Farmers are given specific training on the rehabilitation and management of the dip tank structures, such as holding pens and races. The

organization provides all the materials to be used while communities supply labour.

2.2.9 Boreholes and dam/irrigation scheme rehabilitation

The rehabilitation of existing borehole and dam irrigation schemes improves access by communities to adequate and clean water. As a result personal hygiene, vegetable and animal production have been improved in the district. Farmers are given specific training on the rehabilitation and management of the boreholes, dams and irrigation schemes. The organization provides all the materials to be used while communities supply labour.

2.10 Conclusion

This chapter presented a brief overview of the Insiza Agricultural Recovery Programme that entails general input distribution, conservation farming, Micro dosing, Seed Fairs, Micro-irrigation, Nutrition Gardens, Small Livestock Fares, Dip Tank Rehabilitation as well as Borehole and Dam/Irrigation Scheme Rehabilitation. The next chapter focuses on the literature review where major theories and findings from other researchers are examined and presented.

CHAPTER 3: LITERATURE REVIEW

A literature review is based on the assumption that knowledge accumulates and that we learn from and build on what others have done. In this study literature review will focus on the following topics: the statistics targeting strategies, agricultural recovery in different countries, recovering livelihoods and sustainable livelihood.

3.1 Strategies to Manage Community Disasters

A combination of targeting strategies works, but not all strategies work under all circumstances (World Food Programme, 2006b; World Bank, 2002). Targeting can be by area (geographic targeting), or by group (administrative targeting). It can mean letting an individual or family decide for themselves if they want to participate (self-targeting), or letting the community decide who will benefit from an intervention and who will not (community-based targeting).

The best approach is often a combination of targeting strategies, depending on the information available and on an agency's resources of time and money (WFP, 2006b; WB, 2002). Done well, geographic targeting (GT) correctly identifies the largest number of needy households. Done badly, it can lead to the inclusion of a large number of less needy households. However, GT often relies on secondary data that do not represent individual villages and households and so they can hide pockets of food, as happened in Malawi in 2002/03 (WFP, 2006b).

Programmes of Cash or Food for Work (CFW/FEW) in the early and recovery stages of an emergency can be very effective if the wage is set at a level that will only attract those in genuine need (WB, 2002). However, care must be taken not to compromise the nutritional value of the cash or food. CFW/FEW can also exclude labour-poor households who are often disproportionately affected by drought, including female-headed households, the elderly and disabled. Either work that is appropriate for these groups should be available, or they should simply be provided with free relief.

Community-Based Targeting and Distribution (CBTD) has certain advantages. Communities often have more information about their members than external agencies can gather, which can be used to target those in need. By involving communities in decision-making, there may be better ownership and monitoring of the process and results (Concern, 2006). CBTD can reduce agency costs associated with administrative targeting and food distribution (WFP, 2006b; WFP, 2004a). However, there are cases in which CBTD does not work and agencies need to be willing to abandon the method when necessary. This was potentially the case in the Joint Emergency Food Aid Programme (JEFAP) in Malawi, when community committees had to decide who would (and would not) receive assistance. The communities felt that this undermined their coping strategy of sharing available resources (WFP, 2004a; SCUK, 2003). At the same time, sharing may contribute to stronger social cohesion, which may in turn help to save lives and protect livelihoods (WFP, 2006b; Oxfam, 2002).

Regardless of the targeting strategy used, successful targeting outcomes are associated with the following:

- A multi-agency structure and inter-agency dialogue, including government and non-government organizations, for making targeting decisions.
- An appeal process communicated clearly to communities: who to appeal to, how appeals should be carried out, and how appellants can expect to be treated (DFID, 2006b). Women's access to the appeal process is very important, as women are often under social pressure not to complain.
- Appeals need to be documented in order to track individual cases and to monitor whether certain groups are systematically excluded or favoured (DFID, 2006b).

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Table 2: Lessons learnt on community-based targeting and distribution (CBTD) in Indonesia

In Indonesia after the 1999 drought related to El Niño, WFP worked with local NGOs to implement a formal survey and CBTD to target urban slum dwellers affected by high food prices and difficulty accessing enough food. CBTD worked best in relatively homogeneous slums, while unregistered slum dwellers risked being overlooked – living nearby did not mean that they were considered 'community' by others in the neighborhood (WFP, 2000). CBTD works best in stable, non-conflict situations; - Where communities are cohesive and well defined; - Where relatively large wealth differentials exist within communities; - Where not all wealth groups are equally affected by food insecurity; - When targeting a fairly large proportion of the community; - When agencies can identify reliable community representatives accountable for targeting the most vulnerable; and - When agencies prioritise monitoring and capacity building.

(Adapted from: WFP, 2006b; SCUK, 2004b; WB/IFPRI, 2002)

3.2 Farmer selection for beneficiaries

About 170 000 farmers throughout the drought affected areas of Zimbabwe; mainly the semi arid areas received some agricultural inputs in the last three seasons (**Rohrbach, Mutiro & Mazhzngara,** 2004). The inputs were primarily distributed with the aim of improving food security of vulnerable households see Table 2 for selection criteria for the vulnerable households). The agricultural relief and recovery programmes aim at strengthening the capacity of farmers to produce their own food and produce some surplus for stabilization of food supplies (Rohrbach *et al.,* 2004)

Table 3: Targeting Criteria for Beneficiaries in Zimbabwe

1. Households without (or with limited) draft power and with limited small stock 2. Female headed (dejure) households 3. Households with limited cash income, no pension, no formal employment and with little or no remittances 4. Households with high dependency ratio e.g. high numbers of children, orphans, handicapped, terminally ill and the elderly male-headed households with limited assets All these households were selected in public community meetings with representatives from donor NGOs, with the community leaders (village heads and chiefs endorsing the process). The recipients were deemed able to fully utilise the agricultural inputs they had received.

Adapted from: Rohrbach *et al*. (2004)

3.3 Agricultural support in Uganda

According to Welz and Macek (2006), Catholic Relief Services have been working with families and individuals affected by the AIDS crisis in Uganda since 1989 and with the internally displaced population of northern Uganda since 1996. In 1997, Catholic Relief Services (CRS) opened a sub-office in Gulu to implement food security projects and support the agricultural recovery of the north. CRS is also an implementing partner under the Title II HIV/AIDS initiative and focuses its efforts under this initiative in Masaka, Rakai and Kampala Districts (Welz & Macek, 2006)

3.4 Agricultural support in Eastern and Southern Africa

According to the Regional Programme 3 Report (2007), relief and recovery programmes have become a regular and significant component of rural development efforts in Eastern and Southern Africa (ESA). These respond, in the first instance, to transitory shocks caused by drought, flooding and civil conflict. However, many of these programmes have evolved into on-going responses to chronic conflict and food insecurity. Correspondingly, the scope of these programmes is widening and the distinctions between relief and development are blurring.

The report states that International Crops research Institute for Semi-Arid Tropics (ICRISAT) and its sister CG Centres have historically played a relatively minor role in the design and implementation of relief and recovery programmes. This participation has concentrated on the identification of seed varieties suited to targeted regions. In some cases, the CG Centres have helped to source seed for these programmes. The report cited potential contributions of these investments to technological change. For example, much of the adoption of new seed varieties in ESA has resulted from the dissemination of these seeds through relief programmes. This has provoked growing interest in using relief programmes to fund a wider array of development interventions targeting improvements in crop management, rural infrastructure and market services (Regional Programme 3 Report, 2007). According to the United Nation's Relief, Recovery and Reconstruction report, United Nations (UN) agencies and their NGO partners designed Food for Seed, Food for Asset Creation (FOODAC) and Food for Work programmes to re-establish community assets by supporting labour-intensive activities in targeted districts. Approximately 3.1 million and 500 000 people benefited from FOODAC and Food for Work, respectively.

In addition, there were school feeding programmes for 150 000 children, support to bakeries, supplementary feeding for 500 000 people, civil service salary supplements for 270 000 people and support to an urban vulnerable population of 250 000 people. There was also drought-affected pre- and post-harvest relief for a planned caseload of over 6.3 million people – 3.1 million under FOODAC and 3.2 million receiving free food – which enabled vulnerable households affected by drought and economic hardship to meet basic daily food needs. Other developments included a resettlement package for up to half a million refugees and ongoing support to mine victims and other disabled and marginalized people (Regional Programme 3 Report, 2007).

3.5 Agricultural support in Afghanistan

As of mid-November 2002, FAO had contributed to the distribution of 3 700 tons of improved wheat seed and 7 000 tons of fertilizer to some half a million people. These included returnees and internally displaced persons (IDPs) in all of the provinces of Afghanistan for the spring planting season, estimated to yield some 120 000 tons of wheat. In addition, 1 200 tons of animal feed and 3.5 million doses of vaccines were procured to improve animal health. Assistance was also provided towards the capacity building of government partners, including the development of an Early Agricultural Rehabilitation Strategy designed to meet immediate needs in agricultural sub-sectors (FAO, 2006).

The findings of the joint 2002 Crop and Food Supply Assessment Survey by the FAO and WFP indicated that agricultural production in Afghanistan improved by around 82% in comparison to the previous year's drought-affected crop. Total cereal production was estimated at about 3.5 million tons. Nevertheless, the report emphasized that although the overall situation had improved, there would be pockets of low agricultural production due to limited or late rainfall, particularly in the south (FAO, 2006). The survey stated that there were a large number of vulnerable people, including the pastoralist Kuchi nomads, IDPs, and returnees, as well as the urban and rural poor. They would continue to have little or no access to

food due to serious erosion of their purchasing power and loss of productive assets, or both. Food availability and access would continue to be most problematic in chronically vulnerable areas such as the Central Highlands, Badakshan and Ghor provinces and the southern provinces where the drought continues. According to the survey, some six million people in Afghanistan would remain highly vulnerable to food insecurity and continue to need relief food assistance over the next year (FAO, 2006).

The FAO also conducted an extensive locust control campaign in eight northern and northwestern provinces, which were threatened by the highest locust infestation in 30 years. The campaign succeeded in keeping crop damage to a minimum. The FAO estimated crop losses in the three most seriously affected provinces – Baghlan, Samangan and Kunduz – at about seven percent. In addition, 5 000 farmers were contracted during the autumn of 2001 for the multiplication of high quality, improved disease-resistant wheat seeds. Total production amounted to 250 000 tons of seed and grain. Continued support was also given to five veterinary service associations and veterinary field units in 255 districts. Up to 11 million livestock were vaccinated, along with 2.8 million de-wormed and 900 000 individually treated. Assistance was provided to farmers for cattle breeding, fodder crop production, integrated dairy development activities and poultry production activities, which involved 2 500 women (FAO, 2002).

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Agriculture in Afghanistan is supplying tons of seed to Afghan farmers. That effort, spearheaded by the International Centre for Research in the Dry Areas (ICARDA), relies on years of seed testing in Afghanistan by the Centro International de Mejoramiento deMaíz Trigo (CIMMYT) and is the first step in re-establishing Afghanistan's agricultural sector. As farming and agricultural production increases, food aid will have to be phased out, so as not to distort markets. That is when IFPRI's strengths will be needed. "IFPRI's expertise in designing and implementing government policies for food, agriculture, and the environment can help us apply the many lessons learned in other countries to rebuilding Afghanistan," (Pinstrup-Andersen, 2006:page 150). According to Gulati (2002) IFPRI perspectives say:

> We have long collaborated with Pakistan on government policies to improve food security in the region. A great deal of research on the link between poverty and hunger on the one hand and armed conflict on the other makes it clear that unless human suffering is alleviated, we will not be able to avoid future conflicts in Central Asia. (Page: 206)

3.6 Revive Afghan agriculture

The agricultural sector was the mainstay of Afghanistan's economy and its regeneration is fundamental to the nation's recovery (Gulati, 2002). With massive and wise investments in seed and crop improvement and diversification, soil and water management, horticulture and livestock, the agricultural sector can thrive again. Prior to the Soviet and civil wars, 85% of Afghans depended on agriculture, horticulture and livestock farming for their livelihoods. Between 1979 (when the Soviets invaded) and 1992, food production in Afghanistan dropped by 40%. Only 12% of Afghanistan's land is arable, of which half is irrigated (Gulati, 2002). Only 40% of arable land is under cultivation due to drought, the shortage of seeds and other inputs, and the collapse of irrigation infrastructure (FAO, 2002). Crop and Food Supply Assessment Mission to Afghanistan estimated that "about one half of irrigated area had gone out of use" and that "rain-fed crops (wheat and barley) had almost totally failed". Until 1988, livestock accounted for 40% of Afghanistan's national exports (FAO, 2002)

3.7 Agricultural support in Sudan

"FAO's role is particularly crucial given the importance of agriculture in the country," said Bauer (2006:page155) Director, FAO Emergency Operations and Rehabilitation Division. Agriculture remains the mainstay of the Sudanese economy, comprising 45% of national gross domestic product. Some 87% of the people of Sudan are dependent on agriculture for their food security and livelihoods. The vast majority practicing subsistence agriculture within traditional, rain fed farming systems vulnerable to dry spells and crop pests:

> Decades of insecurity and lack of access to basic social services have undermined livelihoods, increased levels of poverty, reduced economic and educational opportunities. It has also led to high rates of malnutrition, supporting returnees seeking to resettle will be a top priority, and ensuring adequate materials and services to enable returnees to engage in agricultural, livestock- or fisheries-based livelihoods upon their return will be central to this process (Bauer, 2006:page 170)

Despite progress in 2005, including a peace accord that put an end to more than 20 years of civil war, Sudan's humanitarian needs for 2006 remained immense. The ongoing conflict in Darfur, the risk of a poor harvest in parts of Bahr el Ghazal and Upper Nile, the return of hundreds of thousands of displaced Sudanese and other humanitarian needs, made relief central to alleviating the suffering of the Sudanese people (Bauer, 2006). FAO and its partners promised to support 5.52 million people with relief assistance in Sudan, including 2.5 million people in Darfur, as well as a projected 680 000 returnees from the North-South conflict, and ensure continued relief for other areas emerging from decades of fighting. According to Bauer (2006), FAO's proposed humanitarian assistance for Sudan in 2006 included the distribution of seeds and tools, fishing equipment and livestock medicines to hundreds of thousands of vulnerable farming families, particularly returnees and internally displaced persons, as well as the overall coordination of agricultural relief assistance in the country, "FAO and its partners must build upon ongoing humanitarian assistance to begin the long-term development processes central to Sudan's future" (Bauer, 2006: page180) said. In the agricultural sector, this means introducing new techniques, including training in improved methodologies for delivery of community-based animal health services, agro-processing and local seed multiplication. Support to land tenure is another important issue, as disputes over land and property rights are a root cause of conflict in the country. FAO is seeking funding to assist the Government at every level to promote long-term accountable and decentralized land management. Strengthening the operational capacity of the Ministry of Agriculture and Animal Resources will also be an important focus. "FAO's programmes concentrate not just on providing material assets but on building the knowledge and skills of vulnerable people so that they are better able to cope with future shocks" (Bauer, 2006: page 193)

3.8 Vouchers and Fairs

According to Bramel *et al.* (2005) over the past twenty years Seeds & Tools has become the standard approach to agricultural recovery from disaster. However, rather than leading to sustainable recovery and greater resilience, Seeds & Tools became expensive annual or at least biennial events. Increasingly, both donors and seed aid practitioners began questioning the effectiveness of this approach. Building on key seed aid evaluations in Zimbabwe, Rwanda and Kenya, a more nuanced understanding of seed security and seed systems emerged. CRS accepted a suggestion made by Sperling (2003) of CIAT that if the seed security problem was one of access to seed and not availability of seed or seed quality, then perhaps vouchers would be more effective. The Seed Voucher and Fair Manual (2002), states that a new approach to post emergency seed distribution in Africa, where farmers receive not free seed but vouchers that can be exchanged for seed at a specially organized Seed Fair is now used. Seed Fairs rely on commercial seed firms, as well as local seed producers and traders. This approach allows farmers to choose what crops varieties and quantities they want. The manual provides an overview of seed systems and their components and describes how to plan and implement the seed voucher/seed fair approach. The examples quoted are from southern Sudan, but the approach can be adapted for use in other disaster-affected areas as well (Seed Voucher & Fair Manual, 2002).

3.9 Agriculture recovery in Angola

During the 1993-1998 period, with major support from US AID, DFID, AusAID, CIDA, UNICEF, UCAH, WFP, WVI private funds and other donors like World Vision played an important role in facilitating resettlement and rehabilitation. They assisted returnees and vulnerable populations in their efforts to re-establish mechanisms for attaining a minimum level of food security and access to basic health care services through the provision of direct technical and commodity assistance. According to

Chapman *et al.* (1997), the following situations characterized the problems encountered by World Vision at the initiation of the agricultural recovery process:

* Stocks of seed and planting material were disrupted lost or in short supply. This required an emergency injection of planting materials from outside sources.
* Returning refugees and displaced impoverish populations lacked the means to purchase agricultural inputs. Seed "packs" were therefore distributed free of charge, along with food rations to tide people over until they could harvest crops and begin to feed themselves.

The success of helping the small farm family achieve food security depends significantly on which varieties are included in the seed "pack" (Tripp, 1998). Unfortunately, no varietal screening was done. Therefore, the seed "packs" often included whatever seed was generally available (**Chapman, White & Nankam,** 1997). In some cases, grain was bought and shipped as seed (Rohrbach *et al*., 1997), or a variety was shipped with the commercial name of another variety, e.g. the groundnut variety "Spanish" was shipped as Natal Common, although Natal Common is no longer produced as seed (Hildebrand, 2003). A "pack" consisted of one variety of each of the main staple food crops: maize, beans, groundnut, and cowpea. These "one size fits all" seed "packs" were distributed by PVOs throughout the country, without regard to environmental factors such as elevation, rainfall and temperatures. This distribution of largely inappropriate seeds varieties had the effect of retarding the pace of agricultural recovery because many varieties in the "packs" performed poorly in Angolan environments for which they were not adapted (Hildebrand, 2003). In 1996, World Vision designed a "farmer first" extension service and modified the composition of seed "packs" to include two adapted maize varieties so that recipients of seeds and tools will obtain optimum production from the farm inputs they received.

During the 1996/97 growing season, a Food For Agriculture (FFA) initiative was launched whereby food was used as an incentive to increase cultivated land. A

farmer was given a food ration when he had cultivated a minimum of 2500 m² of land. Through this initiative, cultivated land in 1997/98, increased by 43% in Malange Province and more than doubled in Kwanza Norte, compared to 1996/97 production (FAO, 2002). World Vision programmes emphasized formal training of technicians, extension agents and leading farmers through seminars and workshops. On-the-job training of farmers was a key component of the extension activities. Training was done during visits to farmers' fields, and during farmers' field days organized at demonstration plots. Primary recommendations on farming systems included:

- Plant density: A survey on the rate of adoption of recommendations for appropriate plant density showed that in Kwanza Norte 54.7% of farmers were using appropriate plant density, while in Malange only 19.4% had adopted the recommended plant density. Quantitative data from demonstration plots in Malange showed 18% increase in yield when WVI recommended densities were used compared to plant densities selected by farmers.

- Erosion control: On erosion control, only 22.8% of farmers in Kwanza Norte cultivated their land using contour ridges (perpendicular to the slope), to prevent erosion of topsoil by rains. In Malange, 54% were controlling appropriately soil erosion as recommended by the extension team seed (FAO, 2002).

Table 4: Agricultural and vegetable seeds and tools distributed by World Vision from FY94 to FY98

Financial Year	Number of families	Total beneficiaries
1993-1994	7 963	29 815
1994-1996	25 486	132 410
1996-1997	77 000	385 000
1997-1998	50 852	254 260

Adapted from: Chapman *et al.(1997)*

3.9.1 Production of root and tuber planting materials

As a step towards commercial seed and planting material production, World Vision contracted Sociedade Agro Alimentar Lda (SAA), a private company operating a 1 400 hectare farm in Catete, Bengo Province, to produce and deliver to World Vision 450 000 "cassava cuttings" for distribution to 50 000 farmers and SOF NGOs in 1999. To do this, the farm received technical advice and on-the-job training during field visits from World Vision agriculture staff. The farm was fully equipped with an overhead pivot irrigation system and adequate farm machinery and equipment. Another commercial farm, Kalakala, was contracted to produce 60 tons of the maize variety "Matuba" and 30 tons of bean varieties A286 and A344 for distribution to farmers (Chapman et al, 1997*).*

3.9.2 Seed production by small farm holders

In September 1997, seeds of maize and bean varieties selected by farmers during the 1996/97 on-farm trials (ZM607 and Matuba for maize, Carioca and A286 for beans) were distributed, on a loan basis, to farmers in the World Vision project areas. After harvest, each farmer reimbursed to World Vision the same amount of seeds he or she had received. About 30 tons of maize seeds and 27 tons of bean seeds were received from farmers. These were distributed as uncertified seed to farmers in other communities, which represented 33% of the total seed of maize and beans distributed by World Vision in September 1998. This informal seed production system continued to be used for seed multiplication. Farmers received training in seed production technology in order to produce good quality seed that was to be certified by SENSE and distributed as foundation seeds in other agro-ecological zones where farmers had chosen them. During the 1998/99 seasons, all SOF stakeholders were encouraged to coordinate their seed activities through the SOF coordinator and collect data on the adoption rate as well as seed production of the farmers' selected varieties (Chapman *et al.*, 1997).

Table 5: Production of commercial seed and planting materials in Angola.

Crop type variety	Area (ha)	Expected yield/cuttings	Remarks
Beans A286	20	20	
MaizeA344	40	60	
Cassava	42	2 500 000	50 cuttings per x farmers

Adapted from: Chapman *et al. (1997)*

According to Chapman *et al.* (1997), World Vision conducted a food security baseline survey in August 1997 which indicated that 21% of farmers saved their own seeds, while 48% bought seeds from the local markets, 33% received seed from WVI and about 7% could not plant due to lack of seeds. Only 2 990 farmers were involved in the on-farm trials, although a total number of 10,663 farmers participated in different tests during the field days. The implication of this is that few farmers had access to seeds of selected varieties. The need for seeds of cereals (maize, sorghum and millet) and beans for Angola in the 1998/99 growing season are estimated at 10 000 tons (FAO/WFP Food Assessment Mission, 1998) and in WVI areas, the estimate is 1 300 tons. Will this quantity of seeds be available? If yes, what percentage of these will be farmers' selected varieties? It is clear that seed saved by farmers cannot meet this level of demand. Thus, there is need for developing a strategy for seed production and distribution that goes beyond seed saved by farmers and movement of seed between farmers at the local level (Chapman *et al.*, 1997).

3.10 Agricultural support in Swaziland

It is estimated that 250 000 of 1.1 million Swazis are food insecure (Swaziland National Food Security Policy, 2005). The level of poverty is much greater in rural areas, reflecting the high level of income inequality forthcoming (World Bank, 2007). The government has invested much of its resources into urban areas and

the business economy, achieving economic growth and boosting the living standards of the urban population. Rural areas have yet to receive the state resources needed to address food insecurity.

A Southern African Humanitarian Update (2006) states that food insecurity persists owing to falling household incomes and remittances, high levels of unemployment and high HIV prevalence. Households also face a diminishing range of livelihood options compounded by economic rationalisation, while access to food is undermined by lack of agricultural land, isolation from markets, restrictions on female access to land, resources and failure to implement appropriate policies (Swaziland National Food Security Policy, 2005). Workers' remittances, which contribute to food costs, have decreased with the loss of work opportunities on mines and commercial farms. Persistent drought and consequent water shortages have triggered chronic food insecurity on the Lubombo plateau in 2005 resulting in low yields in an area with the highest stunting and underweight rates (UNICEF, 2006).

Little information is available on nutritional practices reflecting a lack of attention to this critical area. According to UNICEF (2006), 14.4% of all children under five were underweight in 2006 with stunting (chronically malnourished) at 35.3% and wasting (acute malnutrition) at 7.6%. The diet of most rural households comprises mostly maize and lacks essential micronutrients from vegetables, meat and legumes. There are significant deficiencies of vitamin A, iodine and iron. The Swaziland National Food Security Policy (2005) cites the loss of indigenous foods and knowledge of their preparation as contributing to inadequate food utilisation.

Substantial increases in maize prices have compounded the situation, (Swazi Vulnerability Assessment Committee (VAC) Report (2004) eroding the purchasing power of poor households and reducing access to food (maize). Inefficient markets and pricing policies give no incentive to surplus producers in the high veld to sell to the National Maize Corporation due to low prices while consumers in the low veld are unable to buy due to high prices.

The World Food Programme has been feeding close to 200 000 people a month, targeting HIV and AIDS, tuberculosis and mother-and-child health clinics, programmes for orphans and vulnerable children (OVC), and primary school feeding. (**Drimie, S, Borg, W.R. & Bayer, D,** 2006). The government has responded by trying to commercialise agriculture and diversify the economy, largely by exploiting the Africa Growth and Opportunity Act (AGOA) to access markets in the US. The biggest indicator of this is the growth in the textile industry through Chinese investment. The impact of the HIV and AIDS epidemic, is the most serious in the SADC region, has led to an ambitious roll out of antiretroviral treatment and the consolidation of traditional safety nets under the direction of the National Emergency Response Committee on HIV/AIDS (Nercha). These include the revitalisation of the iNdlunkhulu system (chief's fields) and the kaGogo centres. (Drimie *et a.l,* 2006).

3.10.1 Cattle feedlot in Swaziland

World Vision established a cattle feedlot at Ka-khuphuka on the Lubombo plateau to provide income for social welfare activities in the Lubombo ADP, particularly to support OVC and other needy beneficiaries and to equip farmers with commercial husbandry skills. The feedlot was seen as a pilot for future feedlots set up by community farmers, although this would require substantial financial investment. (Drimie *et al.,* 2006).

Working with 15 farmers from the community, World Vision funded the construction of a feedlot, agricultural inputs and the erection of a signboard on the main road advertising the project. The Ministry of Agriculture and Co-operatives assisted with technical expertise and veterinary services. The project was designed to produce ten fattened steers a month. One farmer, selected to manage the venture, was paid an income. A community support group of traditional leaders, elders, home-based carers and Royal Health Motivators identified the most needy beneficiaries. The feedlot helped to build the asset base of the community. Dolberg (2001) observes that the most economically vulnerable households are those with the least assets

and that as asset mix and quantity increase, household vulnerability to financial distress falls. The feedlot and cattle were appropriate assets for the community, as there was a tradition of small-scale subsistence paternalism in the area. The feedlot shifted the 15 farmers to a commercial focus and it was hoped that they would use their new commercial skills at household level, increasing the positive impact (Dolberg, 2001).

Despite the commercial motivation, the 15 farmers offered their time and resources free to the project in the context of general poverty and social dependency. The small profits meant that participating members could support families with OVCS or chronically ill members by supplying nutritious foods. Boyle (2001) argues that when households engage in wider social networks and associations to improve their livelihood strategies, they build social capital. This increases the community's cohesion and capacity to cope with shocks and stresses and was expected to make the project sustainable when World Vision left after two years.

A further positive effect for the community was the links to markets. World Vision helped the farmers to establish formal market relationships with the Swaziland Meat Industries and the Swaziland Dairy Board, while the farmers identified informal market opportunities. Advertising the feedlot on a nearby access road helped to link it to formal and informal markets (Dolberg, 2001). The project enhanced resilience for this small group of farmers by diversifying their livelihood strategies, increasing the mix and quality of their asset base, developing links to markets and improving social cohesion. Whilst it was hoped that the project would be financially sustainable and generate an ongoing source of funds to OVCS, the project faced a number of constraints including livestock health, the commercial skills required and group dynamics (Bayer, 2004). There existed a reasonable market for quality beef but the use of a non-indigenous breed raises sustainability issues as these cattle need more veterinary care and tick control and supplementary feeding for improved productivity (Bayer *et al.,* 2004). Using Nguni cattle, an indigenous breed, may have reduced costly inputs and been better suited

to the venture. On the downside, lower market demand for Nguni beef would reduce revenues.

The commercial success of the feedlot depended largely on the commercial skills of the employed project overseer and the 15 farmers. World Vision has attempted to build the project management capacity of the group through training in business management, sustainable agricultural production and project monitoring. Ongoing mentorship may be required to ensure effective management. (Drimie *et al.*, 2006).

Another important consideration for sustainability in Swaziland was the rules for disseminating profits to OVCS. Conflicting interests and personal agendas may undermine the enterprise if the venture grows. World Vision has partly dealt with this through a constitution covering the aims and objectives of the project, the duties and powers of office bearers and board and other administrative matters. (Drimie *et al.*, 2006).

3.10.2 Community gardens and market access in Swaziland

World Vision Swaziland has become well known for supporting community gardens, particularly for establishing earth dams to store water in drier areas such as the lowveld. While the gardens promote crop and diet diversity, these activities have achieved mixed results in building permanent community assets and World Vision is reconsidering its long-term development initiatives. Those identified as good practice reflected strong community leadership, were initiated in response to a community defined need, were close to main roads with informal markets and water, involved a financial commitment from members and were not World Vision initiated projects (Drimie *et al.*, 2006).

In many cases, community gardens were established to secure food for interested households and to encourage dietary diversity by producing vegetables to complement the staple diet of maize. Four gardens initiated by community members were evaluated across the lowveld in the Ngudzeni and Lubombo ADPs. In two instances, World Vision provided limited support to enable the schemes to

become relatively sustainable. Building an earth dam at the first garden meant a consistent supply of fresh vegetables was available to participating households and for sale to the wider community throughout the year. Development of a nearby secondary road indicated an active interest in produce from the garden. (Drimie *et al.*, 2006).

The second communal garden was initiated by the community in 1990 and had received support from a number of agencies. World Vision had helped construct a fence around the gardens to limit theft and keep out livestock. Unfortunately, theft of a water tank undermined production and many participants left. The remaining benefited from own production, despite having to carry water. (ibid). The two other community gardens were initiated through consultation between a small Farmer's Association and World Vision. These gardens relied on irrigation from dams, which had ensured an adequate water supply thus far, though extended drought might compromise it. The gardens did not meet all the household food needs of participants, but had improved their nutrition through a more diversified diet. A key benefit for one garden was its proximity to main roads where produce could be sold bringing in regular income (Drimie *et al.*, 2006). Notably, members of one community garden had pooled their funds to purchase inputs and had co-ordinated pest and disease control benefiting from bulk discounts. Annual membership fees may have had a positive indirect influence on the success of the garden. Another benefit was that the gardens provided an avenue for other agencies, including government extension services, to bring in expertise and other inputs. This assisted in the transfer of agricultural knowledge, skills, technologies and attitudes to rural communities. Unfortunately, lack of capacity in the Swaziland extension services limited this benefit (Drimie *et al.,* 2006).

3.11 Building resilience by addressing malnutrition in Malawi

Kubinga Nyakwawa 'model' village located in World Vision's Chata ADP is one of several projects in Malawi supported through the Micronutrient and Health (MICAH)

programme (Drimie *et al.,* 2006). MICAH ran from 1995 to 2005 in five African countries; Ethiopia, Ghana, Malawi, Senegal and Tanzania. The programme worked to reduce micronutrient malnutrition by addressing three key, inter-related areas:

- Increasing intake and bio-availability of micronutrients (for example iron, iodine and vitamin A) by supplementation, fortification and dietary diversification and modification including exclusive breastfeeding, home gardens, fruit trees, and solar dried foods;
- Reducing the prevalence of diseases that affect micronutrient status by improving water and sanitation, immunisation, malaria control and worm and parasite treatment; and
- Building local capacity for delivery systems to improve micronutrient status by training staff and influencing policy issues.

In Kubinga Nyakwawa government departments, World Vision and local community structures supported various household activities. A common understanding of the importance of health and nutrition reinforced this collaboration (Drimie *et al.*, 2006). The positive impacts were the result of several years of community visits, training, education and support on micronutrients and health. The years invested in capacity building in various sectors at all levels provided an effective foundation for delivering the integrated strategies set out in Table 6 below.
Success was based on the community understanding the underlying causes of malnutrition. This resulted in the emphasis on water and sanitation shown in the table. Furthermore, households used insecticide treated nets to prevent malaria especially among children.

A small animal project aimed to increase iron intake from animal source foods and reduce iron-deficiency anaemia (IDA), a major health problem in Malawi largely due to the lack of a diversified diet (MICAH Small Animal Revolving Fund, 2005). Households received a breeding pair of rabbits, which built their asset base, diversified diets and provided manure for backyard gardens. Households used income from sales to purchase other foods and send their children to school. World

Vision had to begin reminding households not to compromise the nutritional benefits of eating rabbits by selling them to purchase small quantities of maize. The government veterinary department staff and World Vision continued to provide technical support in the management of small ruminants (Drimie *et al.,* 2006).

Each household started a backyard garden growing indigenous vegetables, tubers, cassava and fruit trees. According to World Vision Malawi, a noticeable increase in micronutrient intake helped reduce levels of malnutrition, particularly among women and children. On their own initiative, some farmers formed an association to market produce and access finance. They have received orders from big buyers such as the World Food Programme, which purchases seed for distribution to other areas in Malawi. Other NGOs have provided the skills to diversify into selling dried cassava and sweet potato. This has brought training benefits to the rest of the community and World Vision gets a regular supply of seed for distribution to other areas. The village iron supplementation programme also increases micronutrient intake. Village health volunteers administer supplements to pregnant mothers and provide advice on other health concerns such as testing for the presence of iodine in salt. Women's groups are also actively involved in preserving vegetables and fruits using solar driers, a method that preserves vitamins otherwise lost through cooking vegetables before drying them.

Table 6: Kudinga Nyakwawa "model" village

Project	**Activities**
Water and sanitation	Village controlled diarrhoea by installing toilets with a san plat facility and a tip-tap (for washing hands). Households used insecticide treated nets to prevent malaria. Clean surroundings with all necessary sanitary amenities such as rubbish pits, drying line, dish rack etc.
Small ruminants	Rabbits kept for consumption and sale

Backyard gardens	Root and tuber nurseries, vegetable nurseries, fruit tree nurseries, growing indigenous vegetables and fruit trees
Health	Health volunteer administers drugs, including Iron tablets. The Bicycle ambulance provided by WV ferries - severe cases to the health centre 11 km away.
Education	A kindergarten was established in the village and served as a feeding centre. HIV and AIDS activities were also integrated.
Food preservation and use	Solar drier for preserving vegetables and fruits
Kitchen installed mud stoves	Locally known as “Mkazi Changu” that uses little fuel - wood
Income generating activities	Vary per households e.g. handicraft

Adapted from: Drimie *et al.* (2006)

3.11.1 Winter cropping project in Malawi

A community-initiated winter cropping projects in Lobi village, Dedza district provided further insights into interventions to underpin resilience in communities. The project was initiated in 2003 through the village AIDS committee and was later co-ordinated by Save the Children US. It evolved in response to a village crisis of escalating numbers of orphans. The headman allocated land for households with orphans, households with chronically ill members, the elderly and the disabled to grow crops. However, households were allocated individual plots and cultivation was largely done collectively, particularly to meet the needs of orphans. In 2004, Save the Children began providing equipment, seed and fertiliser. Five hundred families benefited; 222 male-headed households, 278 female-headed households and 105 orphans (Shava, 1999).

Save the Children helped to extend the production season by providing a range of vegetables for home consumption and income generation. The partnership between agricultural extension officers, the farmers and Save the Children has helped to lessen hunger and vulnerability in the village. The project has also been used as a demonstration plot and for village nutrition classes (Shava, 1999). He also noted that the farmers have a ready market for green maize in the village, but have had limited success marketing their vegetables. Proceeds from sales have been used to send orphans to school and to meet food requirements. The fact that the community initiated the project has led to a strong sense of ownership and responsibility and a high level of sustainability, which is enhanced by the involvement of agricultural extension officers who can continue support when the NGOs leave.

Community mobilisation has been a key intervention strategy of World Vision and organisations such as Save the Children. For external help to reinforce social relations through building capacity and skills requires a proper understanding of the social setting and cultural norms of communities. This calls for a long process of community interaction. Baseline surveys can also provide valuable information on

gender roles, property relations and vulnerable groups. Taking such, an approach will help address the needs of different groups more effectively (Shava, 1999).

3.12 Agricultural support in Zimbabwe

The Zimbabwe Vulnerability Assessment (ZIMVAC) estimated that at least 2.9 million people or 36% of the rural population were in need of food assistance during the 2005/2006 marketing year on the assumption of food requirements of 2 100 calories per person per day. However, different analysts predicted that these figures could be much higher due to the rampant inflation (1000% in September) that had eroded the purchasing capacity of many households in Zimbabwe. Different, recently undertaken, household economic surveys reported that food insecure households have been engaging in negative coping mechanisms such as reduction of the number of meals per day (62%); reduction in expenditure in education (41%); reduction in health expenditure (36%); reduction of expenditure in agricultural inputs (35%)(ZIMVAC, 2006).

Cereals, maize and bulgur wheat from WV, followed by leafy vegetables were reported to be the most consumed type of foods by both the food secure and food insecure HH in October 2007. Cereals and dried traditional vegetables accounted for a relatively high proportion of the total food consumed by the food insecure HH compared to their counterparts. While consumption of animal proteins, milk and pulses by both food security groups was low, the food secure HH tended to consume more of these foods than the allocated percentage (ZIMVAC, 2006).

According to Hove (2005), drought relief programmes have been implemented more or less on an annual basis in some parts of Zimbabwe's smallholder agricultural sector since independence in1980. Seventy-five percent of this smallholder sector is found in the semi-arid regions of the country (Natural Regions IV and V).

The most common response to drought by the government and humanitarian relief programmes is to distribute food and seed of new crop varieties. In some

instances fertilizer was provided with a view to address the short-term nutritional requirements and production constraints faced by farmers, (Hove, 2005). This is based on the assumption that when food supplies are so limited, farm households will consume their planting seed. In fact, this assumption is generally wrong. A growing amount of evidence suggests that most farmers carefully save their planting seed despite food shortfalls. Recent ICRISAT surveys clearly show that the factors that most influence the food security of smallholder farmers in drier areas is access to fertilizer and technologies that overcome the draft power problems faced by many rural households.

According to Hove (2005), a recent response to this survey work has been the incorporation of a recovery component into humanitarian relief programmes. It is envisaged that the provision of food, seed and fertilizer handouts coupled with the development of farmers' skills and knowledge with respect to simple technologies that ensure proper use of the seed and fertilizer, and the development of rural markets for these inputs, will assist farmers achieve food security in the long term.

Historically, national research and extension systems have been solely responsible for agricultural technology promotion and development in smallholder farming systems. The promotion of technologies by NGOs is a recent development, necessitated by changes in the broader political and economic environment, especially in Zimbabwe. Under the Protracted Relief and Recovery Programme (PRP) funded by DFID, NGOs are facilitating the dissemination, testing and adoption of conservation agriculture among smallholder farmers in the dry areas of Zimbabwe. Such efforts require NGOs to go beyond the traditional investments in relief programmes. There is a need for more skilled staff with better understanding of the technology options on offer, as well as the capacity to resolve a shifting array of implementation problems. Technology transfer also generally involves multi-year commitments to work with farmers and communities to test and adapt technology options. Such commitment is inherent in the efforts of local government extension staff, but not so obvious in many NGO efforts (Hove, 2005).

3.12.1 The European Commission in Zimbabwe

The map below shows The European Commission funded area in Zimbabwe. The Commission promised to continue to support humanitarian interventions in Zimbabwe in order to mitigate the impact of an enduring crisis on the most vulnerable population groups. The call was made after an estimated 3.9 million people were said to be in need of emergency food assistance in marketing year 2005/2006 following a poor cereal harvest early in 2005.

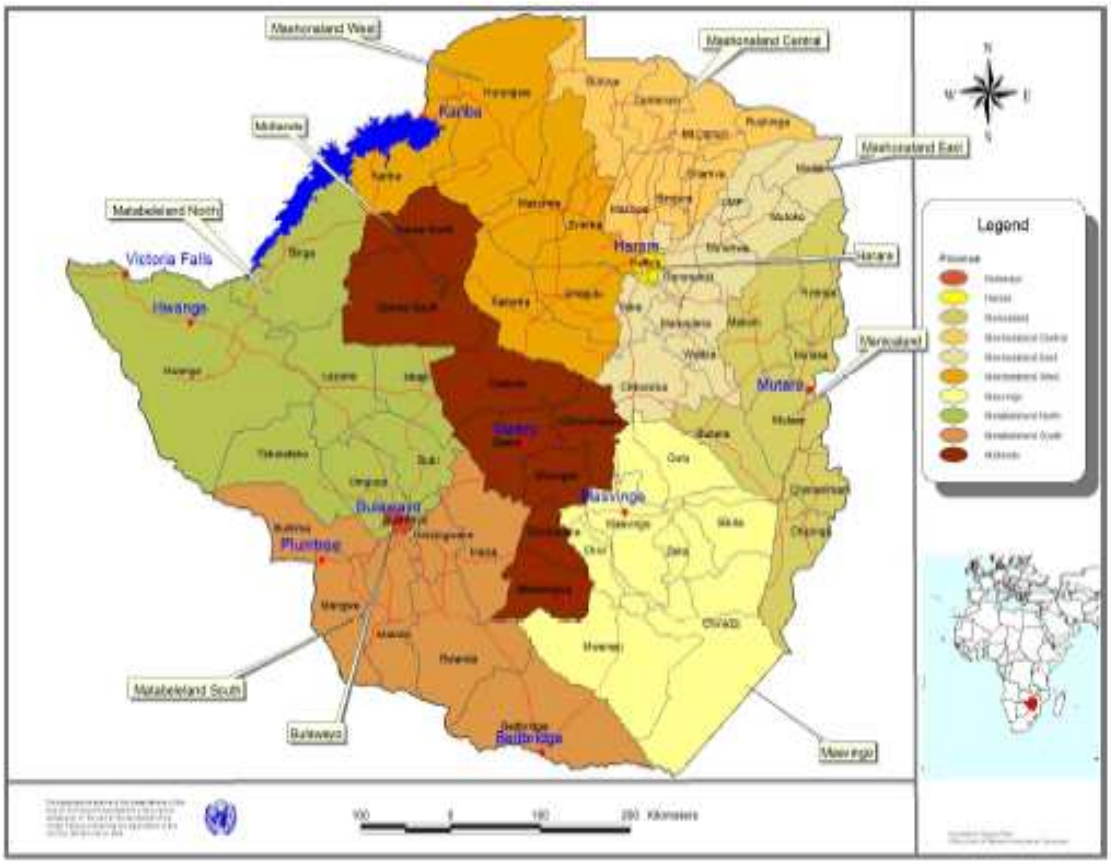

Figure 1.4: Map illustrating ECHO operations in Zimbabwe. *Adapted from:* UN (2006**)**

The resulting food shortages, rising staple food prices and diminished income-earning opportunities led to an upward revision of the number of people at risk of food insecurity. Despite this, the Government of Zimbabwe refused to formally appeal for food aid (Hove, 2005).

In accordance with its policy as a humanitarian donor, the Commission's response to the persisting crisis – a result of major policy constraints, continued bad governance, the devastating effects of the HIV/AIDS pandemic and erratic weather conditions - must be pertinent to its emergency mandate and type of response, which is short-term in nature. In the light of above the principal objective of the Commission's humanitarian interventions in Zimbabwe in 2006 was limited to alleviating the impact of the deteriorating situation on vulnerable

populations at particular risk and contributing towards strengthening positive coping mechanisms of vulnerable populations through integrated assistance, food security and water and sanitation interventions (Hove, 2005). As long-term programmes are a more adequate tool to engage in a recovery of a permanently food insecure population, a proposed decrease in ECHO's support to short-term humanitarian interventions was to be considered with a view to the funding allocated by the other financial instruments of the European Commission.

3.12.2 Assistance to Zimbabwe

US AID/Zimbabwe is currently providing humanitarian assistance to the people of Zimbabwe for emergency feeding during the current food crisis, to provide seeds to some of the poorest farmers and to help victims of torture and violence. The United Nations estimates that more than six million people face extreme hunger and starvation. Since March 2002, the United States Government (USG) has contributed approximately 217 000 MT of food assistance to Zimbabwe, valued at 111.6 million US dollars. The assistance has been provided through the World Food Programme (WFP), World Vision (WV), Catholic Relief Services (CRS) and through an NGO consortium of WV, CARE and CRS known as the Consortium for Southern African Famine Emergency (C-SAFE) (UN, 2006).

Since March 2002, the USG has provided more than $3.5 million (US) of non-food assistance to Zimbabwe. This total assistance has been provided through five implementing partners: the United Nations' Office for Coordination of Humanitarian Affairs (UN OCHA), WFP, CARE International, CRS and WVI (UN, 2006)

Since March 2002, US AID/OFDA has provided $881 525 (US) through UN OCHA to support the UNDP Relief and Recovery Unit (RRU). The RRU serves as the primary point of coordination for humanitarian activities in Zimbabwe, consisting of information collection and sharing, Internally Displaced Persons

monitoring, government liaison, and inter-agency coordination functions (UN, 2006).

A number of non-governmental organizations have taken it upon themselves to respond to food crises in the drought stricken Zimbabwe. WFP, CARE International, CRS and WV International are some of the organizations that have come on board with different drought mitigation strategies to alleviate famine in the country (UN, 2006).

In FY 2003, US AID/OFDA provided $100 000 (US) to WFP to support the second round of the emergency Vulnerability Assessments in Zimbabwe (ZimVAC). The Southern Africa Development Community (SADC) Food, Agriculture and Natural Resources (FANR) Unit, with the cooperation of international partners, regionally coordinated ZimVAC (UN, 2006).

In FY 2002, US AID/OFDA provided more than $945 000 (US) to CARE International to support agricultural recovery. CARE's Emergency Agricultural Recovery Project (EARP) seeks to improve agricultural recovery coping mechanisms of vulnerable farm households in five districts. The EARP distributed 950 metric tons of maize seed to more than 90,000 families (UN, 2006).

CRS, in collaboration with the Community Technologies Development Trust, a local NGO, supported agricultural recovery/mitigation, through the organization of 21 seed trade fairs from October through December 2002. More than 300 metric tons of seeds were traded, benefiting 25,500 communal farmers. (UN, 2006)

In FY2002, US AID/OFDA provided approximately $550 000 (US) to WV for agricultural recovery activities. WV distributed 450 metric tons of seeds to more than 30 000 beneficiaries. WVI also provides extension services to beneficiary families to maximize returns on investment in farm inputs (UN, 2003).

3.12.3 Distribution strategies in Zimbabwe

Relief programmes in Zimbabwe have experimented with several strategies for seed distribution in recent years. In general, direct distribution of free handouts is being replaced with more market-oriented strategies. (Rohrbach *et al, 2004*). These include:

- Credit programmes requiring farmers to deliver a portion of their harvest in exchange for inputs

- Vouchers redeemable for inputs 'sold' through rural retail shops

- Seed fairs where commercial and informal traders exchange vouchers for seed supplied.

According to Rohrbach (2004), the advantages and disadvantages of these approaches are still being assessed. In general, an efficient methodology for input distribution is expected to:

    - Minimize errors of inclusion/exclusion (i.e., assisting non-deserving households or leaving out deserving households) at the beneficiary identification and selection stage

- Provide farmers with inputs for which they have the agronomic knowledge and skills, and which relate to their crop production preferences. In addition, new products can be introduced provided farmers are given relevant training

- Enable farmers to receive inputs in a transparent and corruption-free fashion

- Minimize administrative costs of delivery

- Minimize donor dependency

- Minimize the disruption of input markets; and where possible, facilitate market development (Rohrbach *et al*. 2004).

Ultimately, multiple strategies may be needed in order to reach different segments of a population. The choice of strategy may depend on the capacity of NGOs, the strength of local markets, and the political and economic environment (Rohrbach *et al*. 2004).

This is the traditional method – small packs of seed and related inputs are distributed directly to individual farm households. Recipients are first selected and registered. The registered households may receive an identification card or simply have their national identification cards listed. When seed or fertilizer is available, they are informed and mobilized. Distribution is done in coordination with local district and ward authorities. NGO staff may address a meeting explaining the distribution procedure. Beneficiaries are grouped into village units, the names checked against the registration lists, and recipients' identities confirmed by village officials (Rohrbach *et al*. 2004).

Beneficiaries are asked to sign for their input package before collecting it. Some NGOs ask for additional confirmation. The beneficiary signs a statement acknowledging receipt, and/or local officials or AREX staff counter-sign to confirm that the seed has been collected. The key advantage of this strategy is its simplicity (Rohrbach *et al*., 2004). Communities are mobilized in the same way as for food aid distribution, so community leaders and participating households are familiar with the process. Some argue this method is cheaper to implement than some of the alternative methods described below. However, a strict analysis of relative costs of alternative distribution strategies would need to be done to confirm this (ibid).

In the main government programme of input delivery, seed and fertilizer are distributed on credit through the Grain Marketing Board (GMB). In effect, farmers receive seed and fertilizer in return for a promise to sell their grain to GMB at the end of the season. In 2003/04 farmers had to show that they had sold grain to

GMB in previous years. Farmers who had repaid their earlier credit inputs could essentially obtain what inputs they desired (Rohrbach *et al*., 2004).

Little information is available about the details and success of this programme. An unknown proportion of farmers receiving credit in 2002/03 did not repay, and therefore did not qualify for loans the following season. The requirement of sales to the GMB effectively restricts participation to better-than-average farmers who had surplus grain despite the drought last season. Correspondingly, very few farmers in drier parts of the country have qualified for these loans. The advantage of this programme is it reduces dependency on free inputs. The terms of the loan are more liberal than terms offered through the banking system; so farmers can build a credit rating while bearing only limited risks. The imposition of market control appointing GMB as the sole buyer in the country has increased the likelihood of repayment. However, this may be difficult to enforce (ibid).

3.12.4 Seed fairs in Zimbabwe

Catholic Relief Services (CRS), in collaboration with ICRISAT, have developed a strategy of using community seed fairs to deliver relief seed to small-scale farmers. The main objective of these fairs is to give farmers a choice of seed types and varieties. In particular, farmers can obtain traditional varieties from other farmers or local traders, instead of unfamiliar modern varieties. Farmer beneficiaries are first identified and registered. Arrangements are then made for a market day (fair) where anyone wanting to sell seed can participate: formal seed companies, local small-scale retailers and local farmers with surplus seed. Each beneficiary is given a set of vouchers (different denominations for convenience), which they can use to 'buy' seed with from any seller at the fair.

On the day of the fair, traders are registered and allowed to display their seed stocks. There is no restriction on formal sector participation. Some fairs are open to those selling not only seed but also other inputs such as tools or fertilizer. Some fairs may restrict the number of informal traders (ie local farmers selling

seed), to keep the fair of manageable size. In most fairs in Zimbabwe, seed prices are set in advance, for example standard prices for a bag or cup of cereal/legume seed. In other countries, prices are left to market forces. The seed prices being set at fairs in Zimbabwe are commonly higher than seed prices on local markets. This is viewed necessary to encourage more traders to participate. But this also contributes to seed price inflation (Rohrbach *et al*. 2004).

Informal traders are expected to have their seed inspected for quality. However, this is sometimes difficult for field staff trying to manage large numbers of trader and buyers. Good advance planning is essential. The total quantity of seed offered by each trader is weighed and recorded both at the beginning of the fair and at the end. This helps the organizers monitor seed prices and limit cheating. Farmers must spend all their vouchers on the day of the fair. After this, these vouchers are worthless. The seed fairs essentially build on the cognition that local seed stocks are usually available, often in substantial quantities, despite floods or drought. Village seed markets continue to operate. The fairs are predicated on the assumption that the main constraint facing vulnerable households is their inability to purchase the available seed. This assumption may merit further investigation (Rohrbach *et al*., 2004).

One of the main gains from the fair is a substantial infusion of money into the rural community. This may have multiplier effects as seed sellers use their earnings to purchase labour or other village-produced commodities. The main disadvantage of the fair is the complex logistics. The organizers never quite know how much seed will be available until the fair opens; and may consequently set seed price higher than needed. Little is known about the impacts of seed fairs on local seed markets. Surveys in Zimbabwe suggest that fairs are monetizing a transaction that would normally take the form of a gift. Poorer households normally obtain free seed from their neighbours following drought years; and are expected to reciprocate in future years when fortunes are reversed. The introduction of external institutions and large amounts of money to finance seed transactions may undermine such community obligations. However, the

significance of this problem is unknown. Seed fairs have proved effective and popular in several countries, including Zimbabwe, Kenya, Uganda and Sudan (Rohrbach *et al*. 2004).

3.13 Vouchers

CARE is implementing a programme similar to seed fairs, where vouchers are distributed to target beneficiaries, and are redeemable for inputs at local retail shops. This takes advantage of the substantial market infrastructure in Zimbabwe's rural areas. Shops can be found in most rural communities that regularly sell hybrid maize seed. Nevertheless, this retail trade is severely compromised by the free distribution of relief seed. Even the prospect of such programmes discourages retailers from stocking seed (Rohrbach *et al*., 2004).

Similarly, seed companies are discouraged from distributing seed through wholesale and retail channels if they can more easily, and perhaps more profitably, sell in bulk to a few relief programmes. The voucher programme is a natural extension of CARE's recent efforts to provide business training to rural retailers, in order to improve their investment practices and entrepreneurial skills. In non-drought years, commercial suppliers were encouraged to provide inputs on credit to retailers thus trained. CARE agreed to provide monitoring support. The Citizen has implemented a similar programme of business training Network for Foreign Affairs, in a programme ultimately managed by AGMARK. Though this is a more market friendly approach to the delivery of relief assistance, CARE still takes responsibility for buying all inputs to be delivered through these programmes. This has remained necessary, partly because suppliers no longer provide inputs on credit to retail traders, in turn because of high rates of inflation in Zimbabwe (over 500%) (Rohrbach *et al*. 2004).

When inputs are available, they are distributed to the designated retailers and farmers are notified to trade in their vouchers for a mandated package. The farmers must pay a small fee to cover the costs of input storage and handling by

the local retailer. This is said to reduce dependency on free input delivery and ensure that farmers recognize the value of what they are receiving. Even the poorest farmers seem to have little difficulty paying these service fees (Rohrbach *et al*. 2004). The income earned by the retailer has to be reinvested into the business. In the future, farmers may be given more choice of what inputs to purchase. This is currently not possible because of the logistics. The seed and fertilizer packages being distributed must match the value of the vouchers being redeemed. In addition, seed must be reserved in bulk to ensure it is available. However, subsidies empowering poorer farmers to make choices are probably a more efficient means to provide agricultural assistance than mandated purchases. The main disadvantage of this programme is the complex logistics. Retailers must be identified and trained, vouchers distributed and farmers organized on the day of input delivery. The main advantage is this creates or strengthens market linkages that will continue to function after the relief programme has ended. As such, this may be the most sustainable of the delivery strategies currently being implemented in Zimbabwe (Rohrbach *et al.*, 2004).

Table 7 Advantages and disadvantages of alternative distribution strategies

Advantages	**Disadvantages**
• Free, direct distribution • Similar in logistical requirements to food aid delivery • Most NGOs are familiar with the procedures for free input delivery • Low establishment costs	• Provides no choice of inputs • Undermines retail trade of inputs • Creates dependency on free handouts
Credit programmes	
• Reduces dependency on free handouts in so far as farmers have to repay loans • Provides some choice in the type and quantity of input to be obtained	• May undermine formal credit systems if credit is subsidized • Risky to administer in drought prone regions
Seed fairs	

• Provides farmers choice of inputs to be purchased • Encourages local seed producers to expand their production • Encourages development of informal, community seed market • Brings cash into the rural community	• High start-up costs in staff training and community organization • May undermine local seed markets • Inflates local seed prices • Input availability is not guaranteed; need to check if seed is really available on local markets; can be difficult to determine if farmers are hiding stocks in order to qualify for handouts. Elderly, disabled may have difficulty obtaining seed in a crowded fair • May increase dependency on external interventions
Vouchers redeemable at retail shops	
• Encourages development of wholesale and retail input markets. • May provide choice depending on how the programme is run • Reduces risks of stocking agricultural inputs	• High start-up costs in organizing and training retail traders • Still unclear how much collateral investment will be made by input of supply companies in developing such retail trade. • Possibly prone to corruption e.g. trader provides partial allotments or asks for bribes

Adapted from: Rohrbach et al (2004)

3.14 Recovering livelihoods in Sri Lanka

Austcare's livelihood programmes in Sri Lanka have focused on rebuilding the lives of tsunami-affected women.

More than 30 000 people were killed and 550 000 lost their homes when the 2004 tsunami hit Sri Lanka. Two years later, people are still struggling. As well as

losing family and friends, many survivors lost their farms, businesses and even simple tools of trade, like hoes and weaving equipment. Earning an income has become difficult. In partnership with Action Aid International and Women and Child Care Organisation (WACCO), Austcare is contributing to a livelihood recovery project for tsunami-affected women living in the eastern coastal region of Trincomalee District. Rajaratnam, Action Aid's programme officer, describes the involvement that the community has had in planning:

> The decisions came directly from the community. They decided who receives what and why, identifying the most marginalised people in the villages, mostly women and other vulnerable groups. Together, we then looked into the livelihood opportunities and skills available in their villages that will help these women and the broader community to gain more confidence and a good income. (2006: page: 113).

The detailed programme plans, which were then developed, were implemented. Rajaratnam (2006: page: 122?) reported that:

• 40 women were employed in a green house cultivation centre in Anandapuri village

• In Periyakulam, a variety of crops were planted on 10 acres of land provided by the government

• A chili production facility has created jobs for 30 women in Puthukudiyiruppu village.

Local co-operatives have been established to increase the bargaining power of women who produce goods for sale at local markets. By forming co-operatives, they can increase their income and reduce the risk of their being exploited. Co-operatives are being set up in the fishing, agriculture, coir fiber production, sewing and leather-working industries (Rajaratnam, 2006).

3.15 Aceh in Indonesia

Pidie District in Aceh is an agricultural centre where 30% of people live below the poverty datum line. Austcare have been helping farmers in the region to recover for the past two years with the support of Austcare's Farming for Aceh. Following the tsunami, an increased salt content in the soil meant that traditional crops were failing. Different crops were introduced, and farmers trained in new technologies and different planting systems. Mariah, a peanut farmer in Peukan Baro says, "Now I have more land to plant and more time to work. This project has given me income so I can use it for my children's school and for next season" (Rajaratnam, 2006: page: 127). Building upon the success of the completed agricultural projects, Austcare is now working with 450 farmers to grow chili. Chili is in high demand and can be grown throughout the year. The crop can be harvested within three months of planting so it quickly produces an income for the farmers. Austcare continues to help farmers obtain land, seeds, fertiliser and the technical knowledge to maximise their crop yields. Part of this training includes knowing how to use environmentally friendly pesticides and fertilisers to successfully grow their crops. The first chilies harvested offer the promise of many more to come as many farmers reported an average increase of 25% from their income before the disaster (Rajaratnam, 2006).

Sustainable Livelihoods Approaches (SLA) emerged as a means for more effective and more relevant poverty reduction through understanding poverty from the perspective of the poor. Originally conceived in the 1980's in the context of Farming Systems Research and Education, the approach was developed through the 1990's and crystallized as SLA in the late 1990's by the Department for International Development (DFID) (Carney, 1998; 1999). A number of organizations have employed the Sustainable Livelihoods Approach and Framework. The framework has been used as a programming framework (UNDP); for programming analysis, design, monitoring and evaluation (CARE Household Livelihood Security); and for integrating environmental sustainability (The SL Approach to Poverty Reduction, SIDA; Carney, 1999). The Department

for International Development (DFID) has sought to advance poverty reduction results through mainstreaming good development principles associated with the SLA (people centred, responsive, multi-level, conducted in partnerships, sustainable, dynamic) and by applying a holistic perspective in programming support activities to ensure relevance to improving peoples' livelihoods. Although there has been an evolution in the principles that can be included in the SLA and framework and an acceptance of how these reflect good development practice, the question remains, *"is poverty being reduced?"* (Carney, 1998:page187).

The Food and Agriculture Organization of the United Nations has built upon the SLA to find ways and means to improve the sustainable livelihoods of rural dwellers. In 2003, during its 17th Session, the FAO Committee on Agriculture (COAG) discussed the role of SL approaches in FAO programmes and projects. As an outcome, the Committee "requested FAO to identify and document specific examples where applications of the rural livelihoods approach had led to success in reducing rural poverty."(Carney, 1999:page:201). In an initial effort to respond to this request, the Livelihoods Support Programme is supporting the desk study reported on in this document.

Good examples of livelihoods focus are demonstrated in Honduras, Yemen and Ethiopia. What was difficult to clarify from the existing documentation was the degree to which livelihood strategies were intentionally developed based on pre-existing livelihood strategies and assets analysis of the 'beneficiary' communities, or based on over-riding intentions of the project donor organization. Examples from Ethiopia, Pakistan, Yemen and Gambia demonstrate the divergent approaches to incorporating livelihoods focus.

Table 8 A livelihoods focus in practice

In Ethiopia, the IDRP sought to render existing livelihood strategies more sustainable by coupling natural resource recovery measures with training in

improved agricultural practices. Further training was provided in non-traditional farming activities such as bee keeping, which takes up minimal or no land space and is thus a feasible strategy for small landowners as well as landless persons.
In Pakistan, the PUCD programme sought to empower women by developing livelihood strategies adapted to the practice of purdah in the area. Whereas previous initiatives focused on 'traditional' activities such as embroidery, the PUCD piloted projects in household poultry raising, sheep rearing, tailoring, latrine construction and homestead fruit and vegetable production.
Table 8 continued on next page
In Yemen, the 'livelihoods focus' principle was operationalised through the provision of development and vocational training, and through the creation of a community credit fund. Together, these allowed the expansion of existing livelihoods strategies and the identification and realization of new, viable income-generating activities, helping to diversify household income sources and to increase household income levels.
In Gambia, LADEP focused exclusively on increasing yields of monoculture rice in order to boost food security and income levels. It did so at the expense of other livelihoods strategies however.
Human and financial capitals were diverted away from upland crops (groundnuts) to lowland rice production, with potentially negative implications for nutritional levels and increased vulnerability to natural and economic shocks affecting rice.

Adapted from: Carney, (1998)

3.16 Conclusion

The chapter on literature review has established the major mitigations strategies by Non Governmental Organizations in Africa and the world over in reducing the effects of disasters in the regions. The next chapter presents the findings of the study. The findings are presented in tables, figures and charts for easy assessment and analysis.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents research results established by the study. The coding of the questions was done during administering the questionnaires. Each response to all pre-determined responses was given a numerical value. This was followed by analysis of data using a statistical computer package for social sciences (SPSS). Tables and graphs were used for data presentation to give an overall view of the findings, to identify trend and to establish relationships between parts of the findings. The researcher used histograms and pie charts to facilitate summarization of communication of the meaning of data. Accrediting the secondary data was necessary before blending it with primary data to obtain maximum validity of the findings. According to Borg and Gall (1983), validity means the ability to produce findings that are in agreement with theoretical or conceptual values.

4.2 Demography

Figure 4.2.1 below shows that the majority of respondents were drawn from females. Beneficiaries had the highest frequency of 30 females while non-beneficiaries and key informants had a frequency of 16 and 8 females respectively. The reason being that females were in most cases forthcoming to undertake some community projects given the fact that most of the families were headed by the mother in the absence of the father, who might have migrated to other areas due to economic hardship brought by drought in the rural areas. One of the female beneficiaries noted that she had actively participated in the WV conservation-farming project, managed to build a house, and paid fees for her children with the money she raised from crop sales. She reported that the programme had assisted her a lot since she was responsible for the welfare of the family of six children and three grand children.

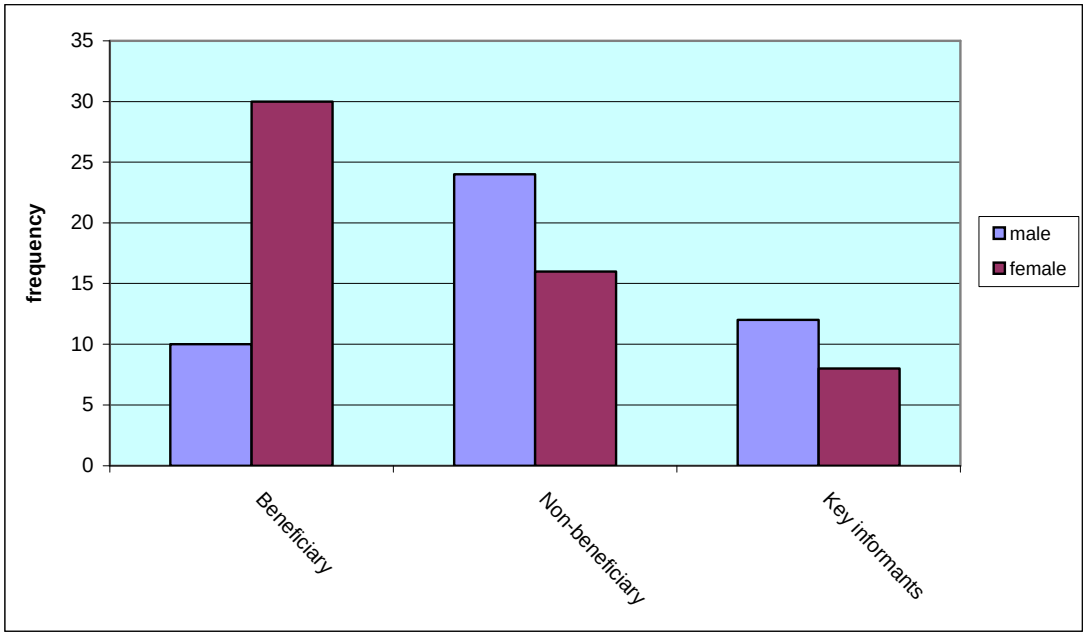

Figure4.2.1 Distribution of respondents by sex

Beneficiaries **Non beneficiaries**

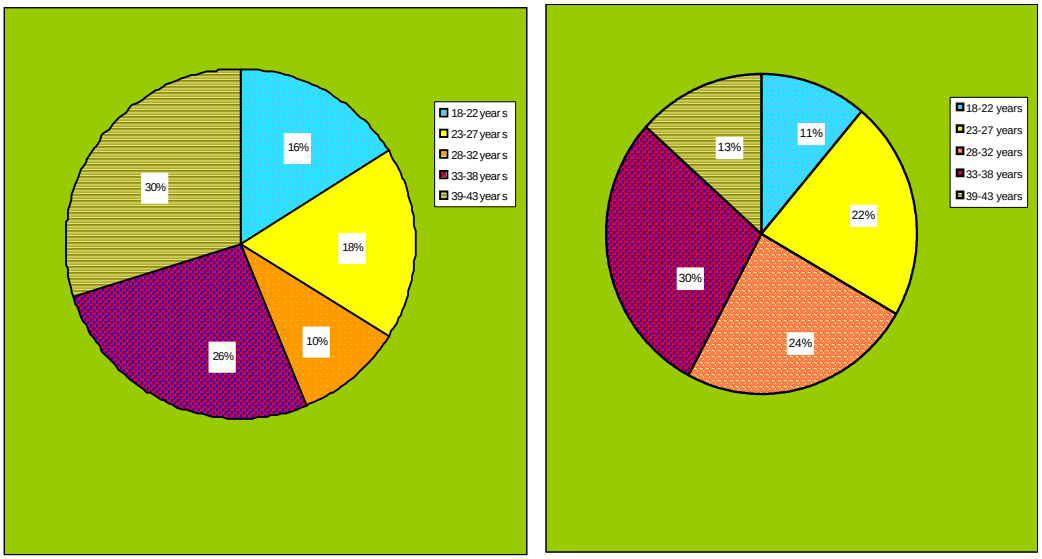

Figure: 4.2.2 Distribution of respondents by age

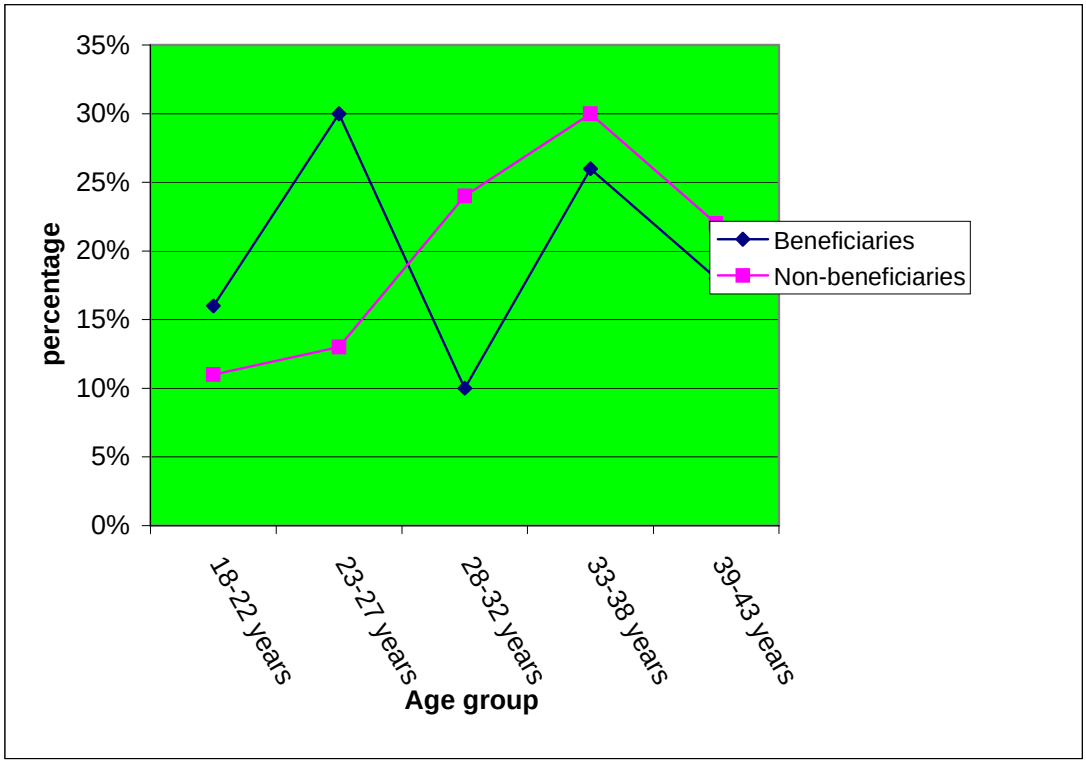

Figure: 4.2.2.1 Distribution of respondents by age

The study established that the majority of the beneficiaries were aged between 28 and 38 years, which had a cumulative total of 54% while very few numbers of people were between the ages of 18-22 years (11%) and 39-43 years (13%) respectively (figures: 4.2.2&4.2.2.1). Most of the beneficiaries were within the age groups that are still physically fit to undertake projects such as mitigation gardening and crop production in general. While on the part of non-beneficiaries, the majority was in the age group 33-43 years (30%). Still these were in the middle ages to participate in crop production and other mitigation interventions. . One would then wonder why World Vision, which is said to be working with the poor and other vulnerable groups is living out most of the 33-43year age group. According to the research findings most members of this group were also poor and had high dependents ratio. However one should not loose sight that these people live in the same villages and wards with those who benefit, in some cases in the same homestead thus, tend to benefit indirectly. The study established that

at the end of the day, non-beneficiaries benefit indirectly by sharing inputs with their friends, neighbors and relatives. They also benefit from rehabilitated dams, boreholes and dip tanks.

4.2.3 Distribution of respondents by marriage

Figures 4.2.3.1 and 4.2.3.2 below show that the majority of beneficiaries, 50% are widowed while 5% are divorced beneficiaries. The percentage of single parents was very low although two of them had 3 and 5 children respectively. On the other hand, the percentage of married non-beneficiaries was high (52%) as compared to their counterparts (widows, single parents and the divorced). The findings illustrate that these donor-funded programmes favour widows. The selection criteria were some times questionable as the researcher found that the level of vulnerability between the single mothers and widows in some cases is the same. Therefore the selection criteria concentrate more on terminology than practical situation as mentioned above that one interviewee who is a single mother had 5 children who are suffering from malnutrition while one beneficiary widow had two healthy children as she had inherited livestock and other assets from the late husband. The donor belief was that where they are able-bodied married persons they could better cope with the drought impacts as compared to their counterparts.

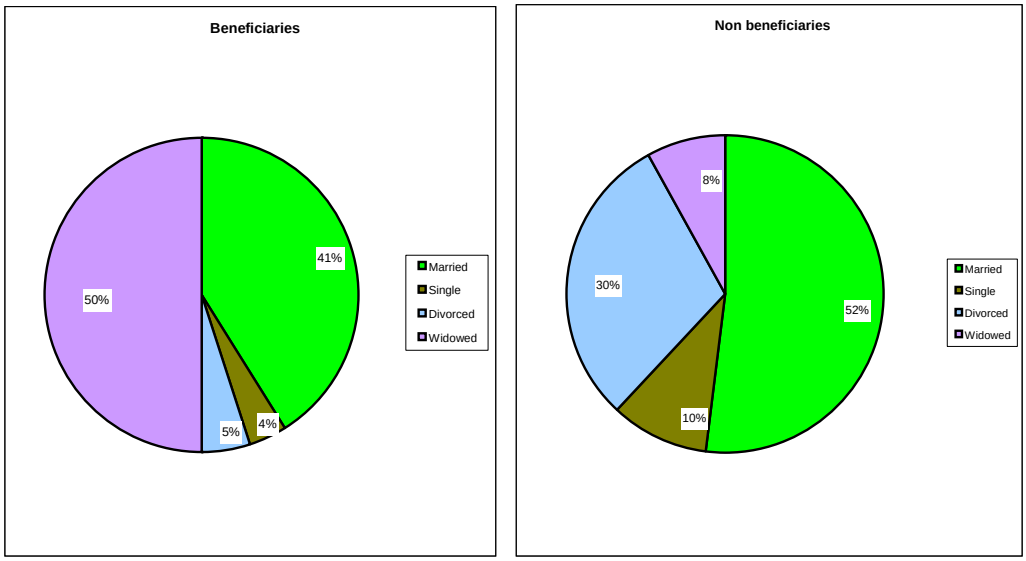

Figure: 4.2.3.1 Distribution of respondents by marriage

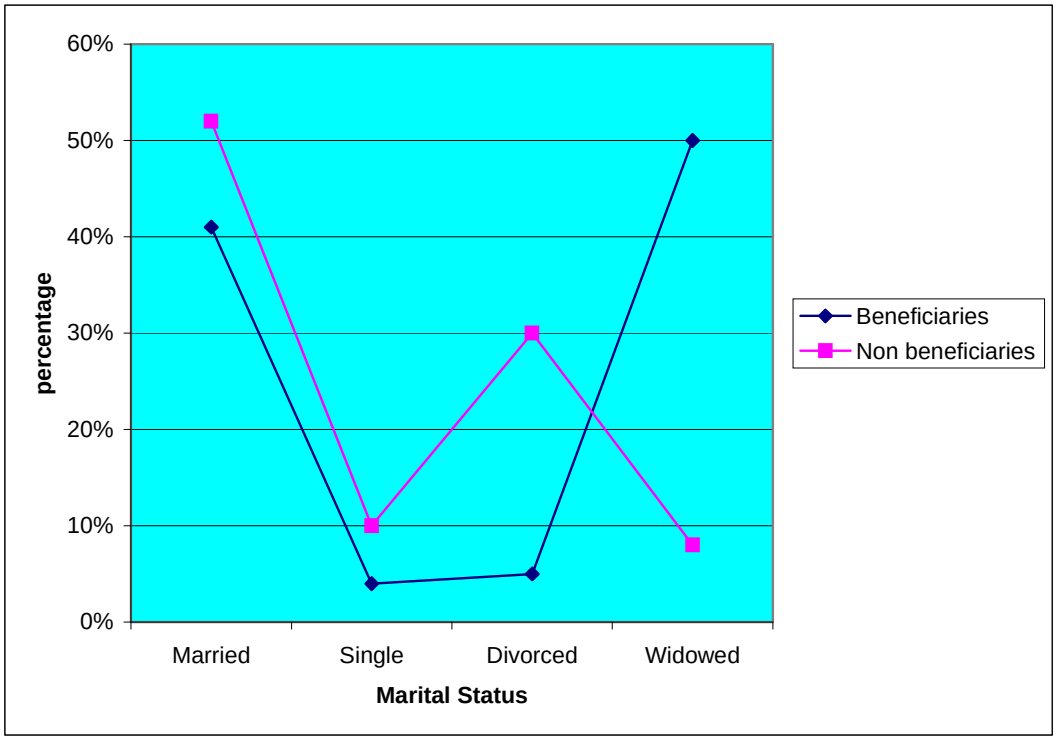

Figure: 4.2.3.2 Distribution of respondents by marriage

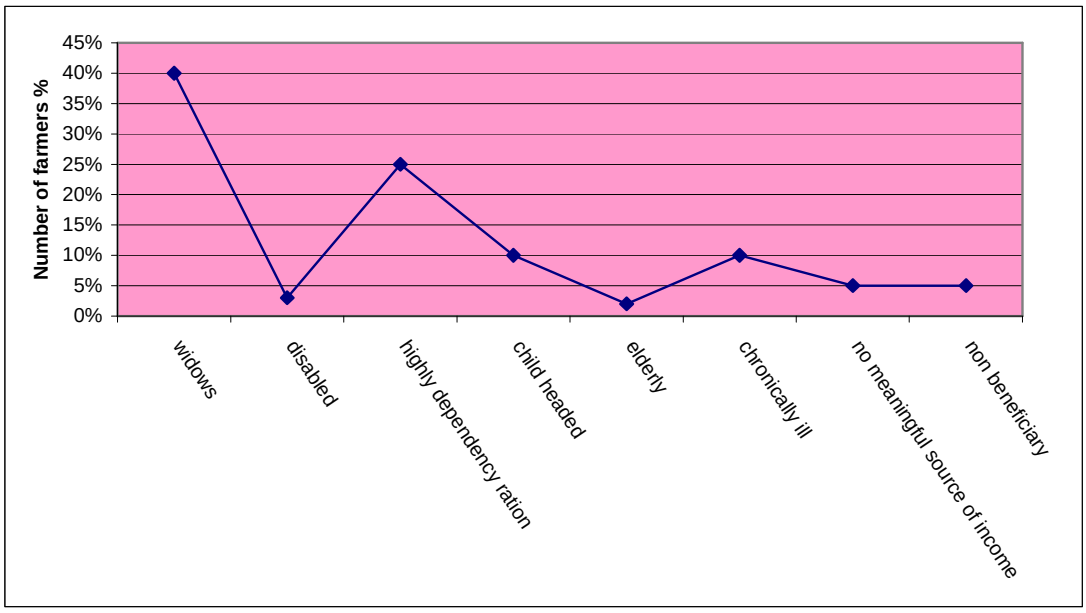

Figure: 4.2.4 Beneficiary characterization

The study revealed that child-headed and the disabled household were not considered seriously as indicated by their percentages (10% & 3% respectively). The focus group discussions in all the sampled wards revealed that during selection, it was taken for granted that these two groups were not capable to take up the interventions and were taken care-off by the able bodied and the extended families. However, some community members noted that in these hard times of drought and a dysfunctional economy in Zimbabwe, households were no longer willing to care for the extended families. Thus, in future programming these should be included in NGOs' different interventions.

4.3 Household assets by beneficiary status

Figure 4.3 below shows that most of the non-beneficiaries had a better asset base as compared to the beneficiaries. The findings illustrate that the programme targeted vulnerable households with a low asset base but being able to improve themselves if given the opportunity. For example one widow responsible for the welfare of six orphans was able to pay their school fees as well as food requirements after a bumper harvest she got under the WV conservation-farming programme. The average asset base for non-beneficiaries

was 50% while that of beneficiaries' was 29% (figure4.3.1). Some beneficiaries however reported that they had realised some significant gains from the programme. Mr. Sibanda of ward 2, a small livestock beneficiary said that he was very grateful to WV who gave him seven chickens and at the time of the assessment had bought five goats from the chicken and egg sales. He also managed to diversify into guinea fowl production.

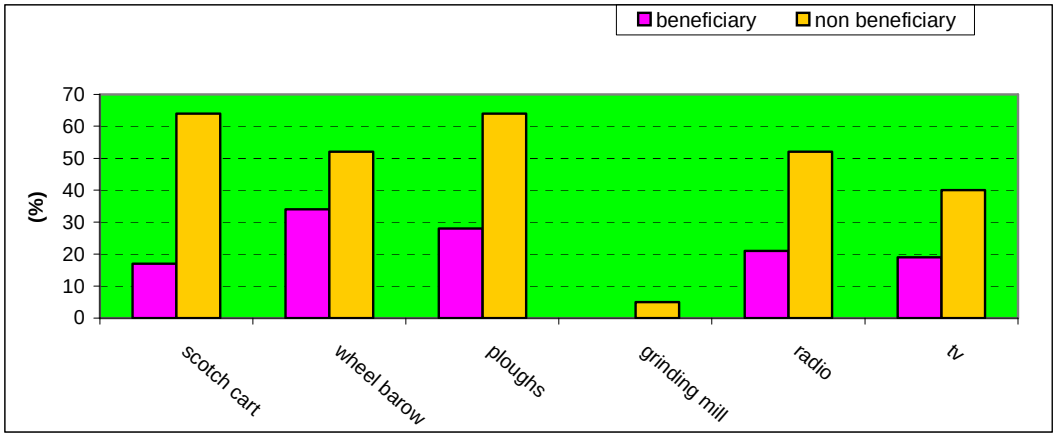

Figure4.3.1 Household assets by beneficiary status

4.4 Extension support received by farmers

Figure 4.4.1 illustrates that 40% of the farmers were trained in vegetable production and 25% in small livestock. Very few farmers were trained in livestock management and HBC (10%) The study established that training was not limited to beneficiaries as 40% and of non-beneficiaries were trained by the organization's extension workers (figure 4.4.1).

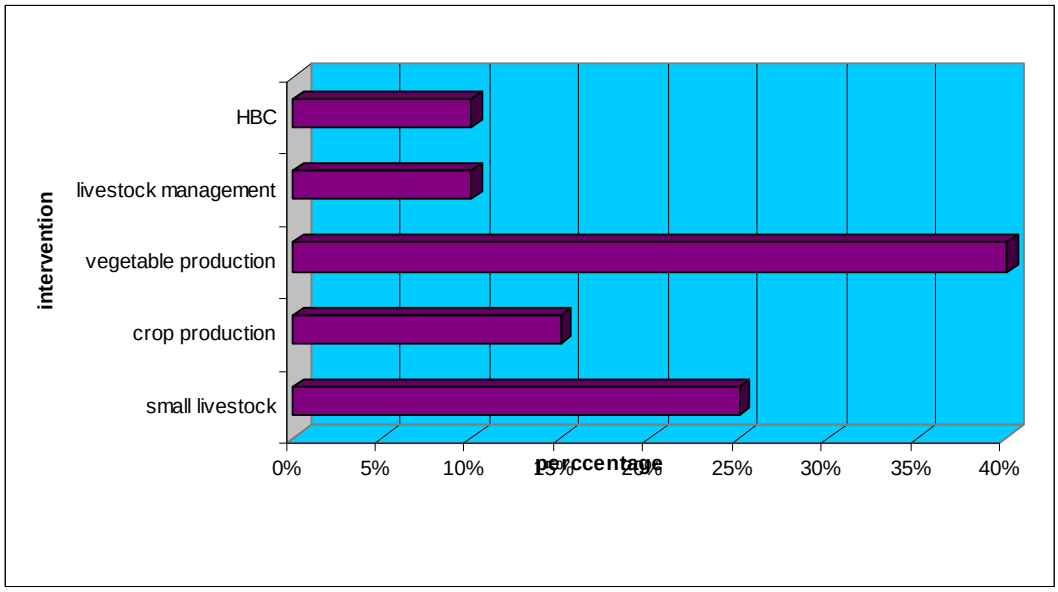

Figure4.4.1 Type of training

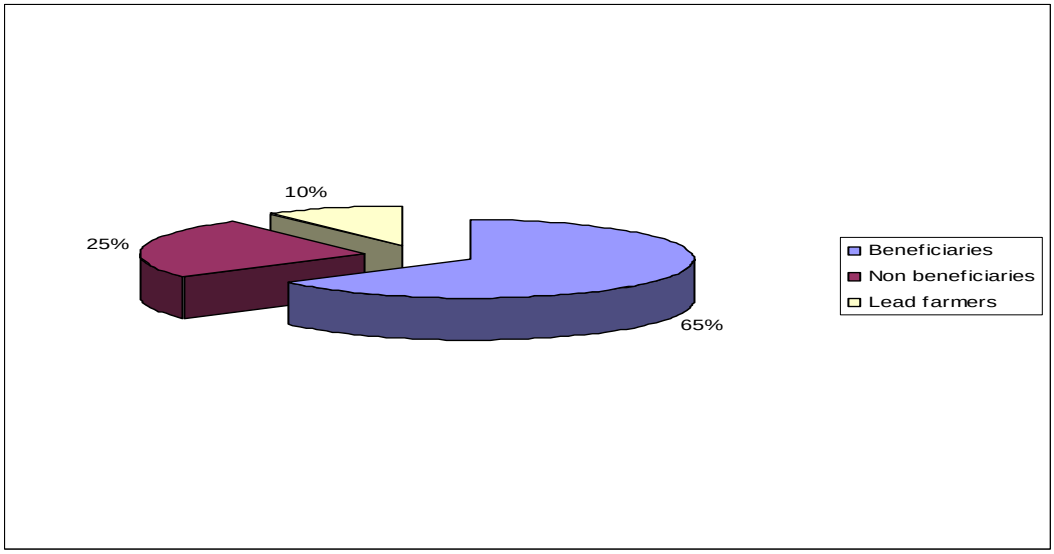

Figure 4.4.1.2 Percentage of farmers trained

The above pie chart above shows that lead farmers trained by WV later trained other farmers in their respective wards and villages. The training was open to every interested farmer as indicated in the table that 65% were beneficiaries while 25% were non-beneficiaries.

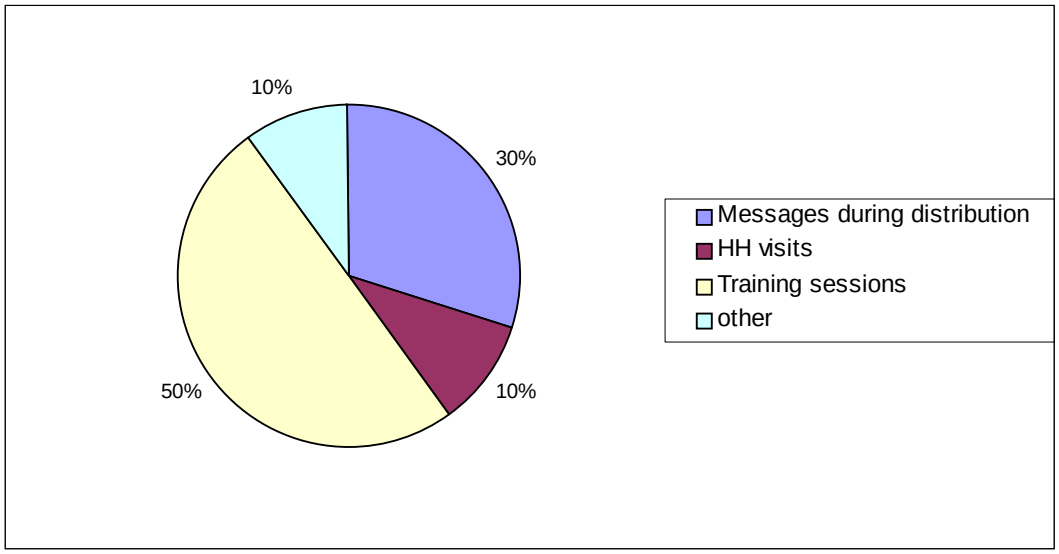

Figure 4.4.2 Training methods

Figure 4.4.2 above shows that most training was conducted through training sessions (50%) and messages during distributions (30%). Household visits were rarely done since they were said to be time consuming (10%).

4.4.3 Organizations involved in farmer training

Figure 4.4.3 below shows that most training was conducted by lead farmers (40%). These are farmers who were trained by WV field workers to train other farmers in their respective wards and villages. Other organizations involved in farmer training included WV (30%), AGRITEX (17%), GMB and other companies were pegged at 8% and 5% respectively, figure 4.4.3 below.

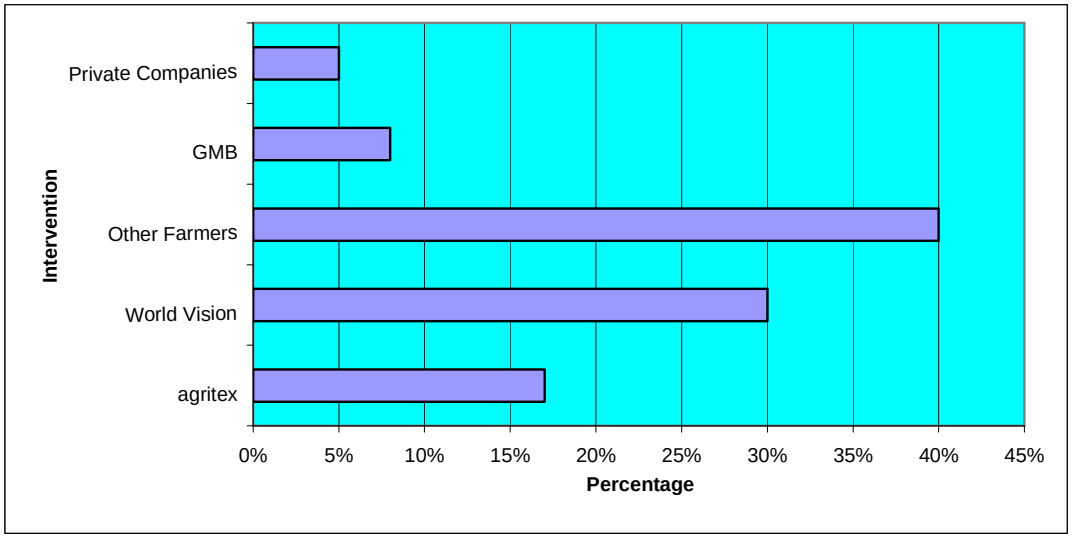

Figure 4.4.3.1 Organisations involved in farmer training

4.5 Projects supported by World Vision in Insiza District

Figure 4.5 below shows that (40%) of the farmers supported by WV in Insiza district fall within the category of agricultural inputs. The reason being that all farmers should at least have some arable land to produce food for their families. Besides providing agricultural inputs in form of seed packs during the planting season, WV had also significantly contributed towards the building of livestock in the district (figure 4.5.1). In 1999 World Vision Area Development introduced a Pass the heifer and keep the calf scheme which ended with phase five in 2005 where a group of five people were given a heifer which would move from one beneficiary to the next, this came in handy as a mitigation strategy in restocking livestock after the disaster of the drought of 1992 and cyclone Eline .In a way the project was a failure as they was a stereotype in the community that the heifers belonged to the organization which lead to death, theft and general negligence by the owners. After that experience the organization had a paradigm shift as it introduced a scheme of loan a goat or sheep, where a farmer was provided with 4 goats, 3 females (does) and one buck (he goat). On producing the first offspring, the four initial goats were given to the next beneficiary until all the benefiting households were covered. The mitigation strategy had assisted most vulnerable individuals in the district to have livestock for their relish, school fees and other related family needs. At the time of the assessment the spirit of

community ownership of projects sponsored by WV seemed to be prevailing among the Insiza rural communities. This had gone a long way in assuring the organization, stakeholders and the community of the projects sustainability.

Small livestock fairs were favored in the district because they were easy to raise and tended to multiply very fast. In addition, they were less expensive as compared to other types of livestock; thus, funds available could cover more beneficiaries.

Nutrition gardens (15%) had also helped the Insiza community in terms of relish and income after marketing their vegetables. In addition, dip tank rehabilitation (5%) had also been provided where farmers are assisted with resource materials to rehabilitate their dip tanks and also provided them with chemicals to improve the health status of their livestock. By providing dip tanks and agricultural inputs, WV was trying to run away from the concept of providing handouts year after year, but to come up with a concept of empowering communities to be self-sufficient and provide for food security on their own with technical assistance provided by donors.

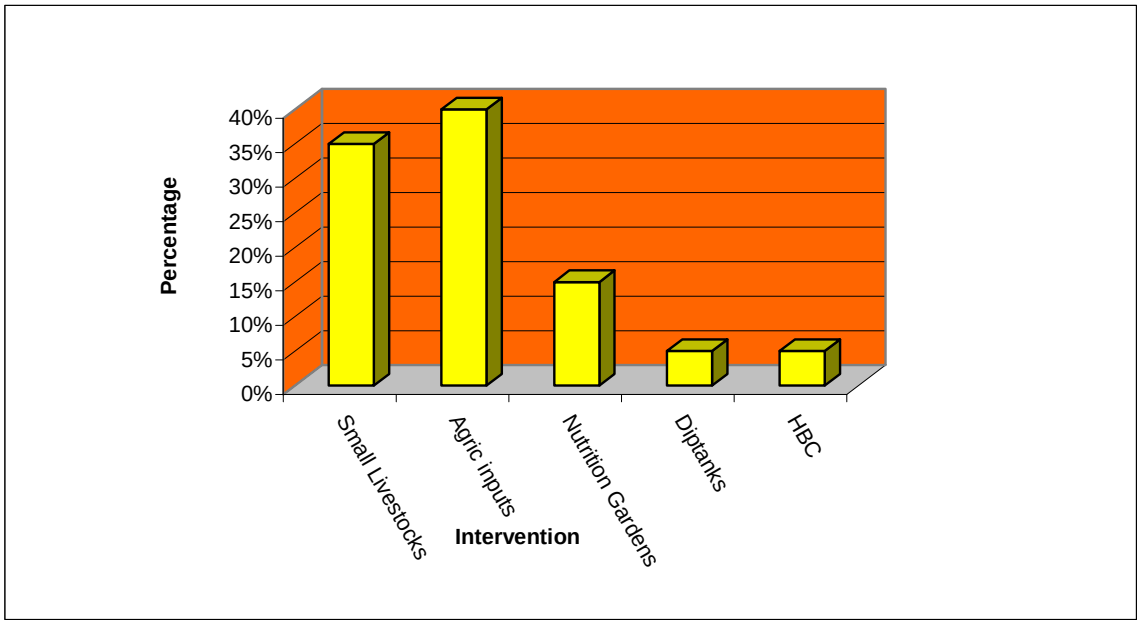

Figure 4.5.1 Projects supported by World Vision in Insiza District

4.6 Time saving in watering gardens and livestock.

The secondary data suggests that the time saving benefit on watering gardens with the introduction of micro-irrigation using drip-kits ultimately translates into improved vegetable production, while dam construction and dip tank rehabilitation translates to livestock health and improved milk production. The study established that most households fill up their kits during the day, but only irrigate in the evening when the hit from the sun had subsided. This was done to reduce the loss of water to evapo-transpiration during the hot hours of the day. The findings of this research points to the fact that WV had also done a lot in terms of capacity building to the local communities in this case with agricultural technology.

Water for domestic use was identified as the third most important benefit from the dams. Other benefits identified included essentials used for cooking, consumption and bathing.

4.7 Impact on Agricultural Production

The perceptions of the programme beneficiaries in Insiza indicate that there had been a forty to fifty percent mean increase in the volume of the household food basket since the programme started (figure 4.7.1). The figure shows that eggs and white meat from chickens and guinea fowls as well as vegetables such as carrots, butternut and onions from the nutrition gardens are now regularly consumed, as are foods such as meat, bread and sugar, which were purchased using income from the sale of crops from the programme. Improvements in both the quality and quantity of the household food basket could largely be attributed to the interventions such as nutrition garden small livestock, sweet potato production and conservation farming. These had gone a long way in answering the question of malnutrition as children, the chronically ill and the community at large now had access to a balanced diet as illustrated in fig: 4.7.1 below.

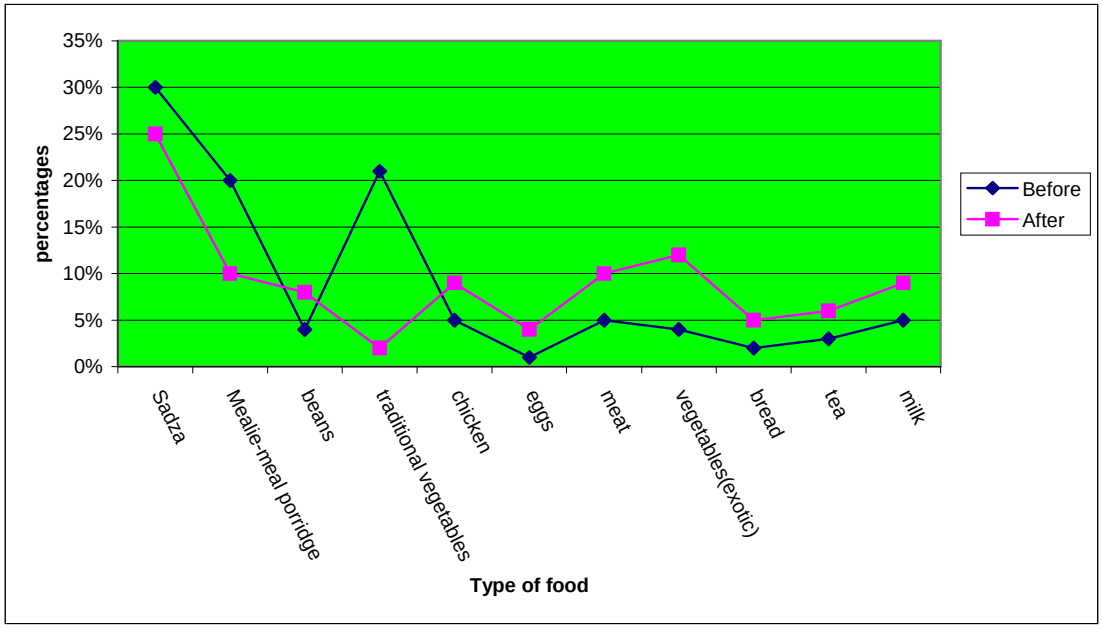

Figure 4.7.1 Type of food eaten by HH before and after the programme

4.8 Food Access

The results indicate that over fifty percent of the household food basket including non-beneficiaries, now comes directly from the programme, suggesting that for

2007/08 season this was the single most important source of food for the Insiza community. The study revealed that there were relative changes in the importance of different food sources from before the programme and at the time of the assessment. The most dramatic changes included a decline in the importance of food- aid assistance and the relative increase in the importance of the programme as a new way of accessing food (figure 4.8.1). This had however been negatively affected by persistent drought in the district and Zimbabwe as a whole. The decline in the importance of food aid could partly be explained by the fact that food aid deliveries have been ratcheted down over time and were discontinued during and shortly after the harvest period. Nevertheless, this does indicate a positive food security trend, which suggests a decreased dependency on food aid.

A significant change in the importance of the programme as a way of accessing food would be expected as this source of food was not available before the programme, and this trend is reflected in the results figure 4.8.1. However, in terms of impact what was most striking was that for the beneficiaries this now constitutes the most important food source now available to the communities. The results show a significant reduction in the importance of casual labor as a source of food. There also appears to have been a slight decline in the relative food basket contributions from rain-fed crops, homestead garden crops, and gold panning and a slight increase in the importance of small livestock, none of these changes was significant.

There was practically no change in the contribution from food purchases to the overall food basket and food purchases remain the most important household expenditure. This was interesting as one might expect that production from the programme would compensate for and reduce the need to fill the household food deficit through purchases. A possible explanation for this was that the assessment took place shortly after a failed maize harvest. Considering that sadza (maize meal) was the primary staple and its availability was a key determinant of household food security, people might try to replenish their maize deficit through

purchases. In the case of the programme beneficiaries in Insiza district, this was done using income from the sale of crops from the programme.

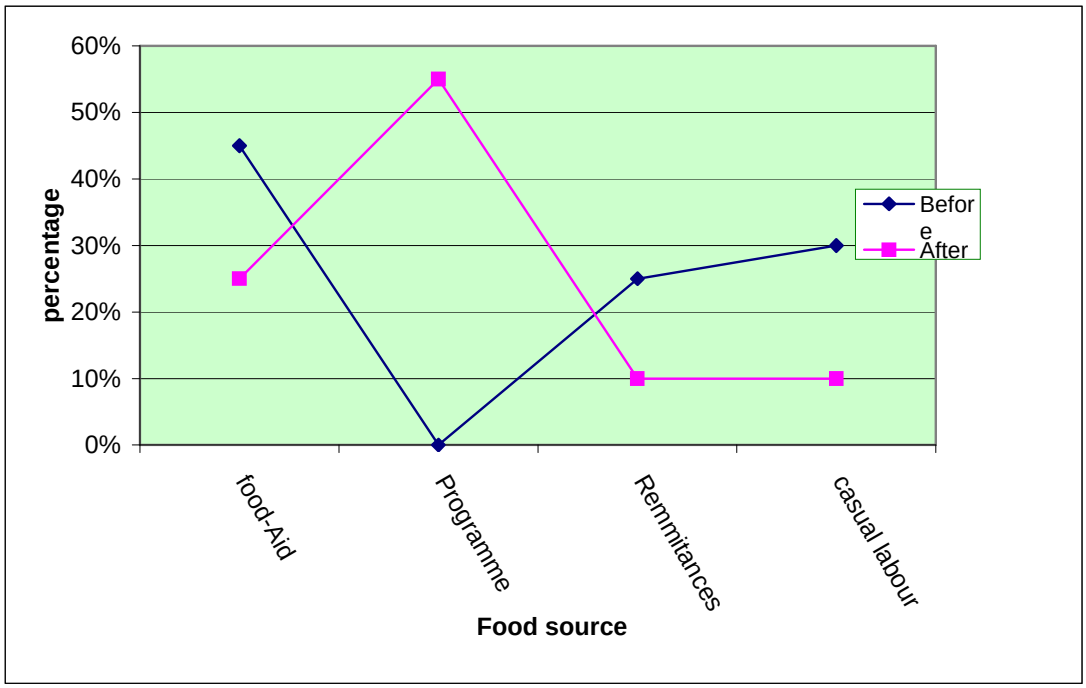

Figure 4.8.1 Food sources before and after the programme

4.9 Impact on Household Income

Although the programme beneficiaries reported that they had observed an overall increase in income, the effects of inflation and rising living costs would probably had offset much of these income gains. Nevertheless, the progarmme had essentially provided people with a new source of income, which at the time of the assessment was perceived to be the most important income source for the programme beneficiaries in Insiza district. Before the programme was introduced, the most important sources of income to the Insiza community were from gold panning (35%), casual labor (25%), remittances (9%), sale of rain-fed crops and petty-trade (10%), **(figure 4.9.1).** Although the relative importance of these income sources had declined, this probably had as much to do with the drought and failed

cereal harvests as with the alternative income sources provided by the programme. On the other hand, it would be reasonable to suggest that the income from the programme had compensated for the loss of income from rain-fed crop sales in the last 10 years.

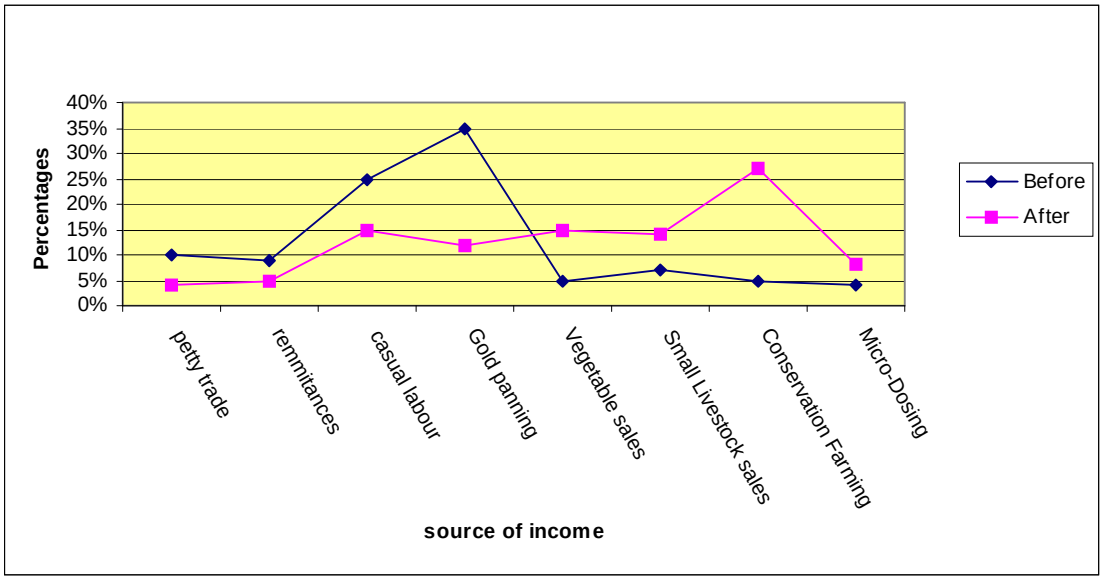

Figure 4.9.1 important source of income before and after the Progamme

There had also been a significant decline in the importance of crop sales from household gardens although a shift in emphasis from household production to community garden production would be expected. The decline in the importance of earnings from casual labor might in part be attributed to the drought and the subsequent shortage of on farm employment opportunities (**figure 4.9.1).** On the other hand, an increase in the number of people engaging in other forms of casual employment was considered a crisis-warning indicator within the greater programme livelihood zone. Furthermore, during the field visit in July 2008 savings group members in Insiza suggested that casual labor was only engaged in as a last resort. Within this context, the decline in the importance of this income source **(figure 4.9.1)** suggests that the programme beneficiaries were now better equipped to cope with the effects of drought and inflation, in this sense they were now better off than they were before the programme started.

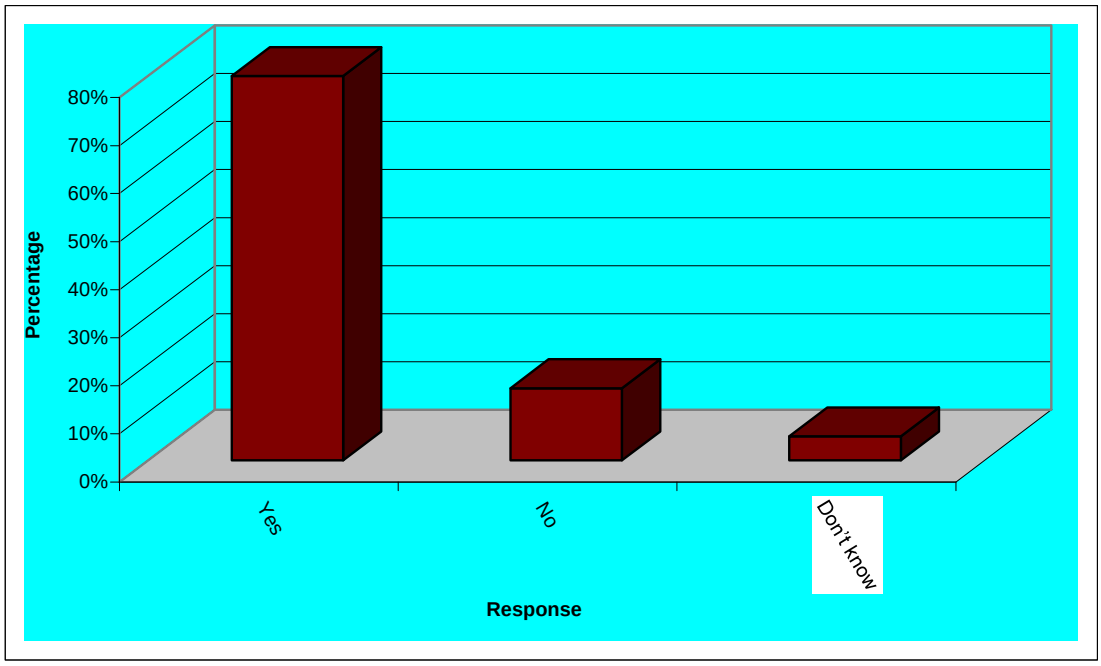

Figure 4.10.1 Program Sustainability

Figures 4.10.1 above and 4.11 below show that 80% of the interviewed beneficiaries were able to sustain themselves when WV pulls out because of skills gained, especially in conservation farming (40%), gardening (30%), and small livestock (20%). However 15% were not able to continue after WV due to unavailability of inputs (35%), drought (30%) and lack of money to buy inputs (15%), figure 4.12.

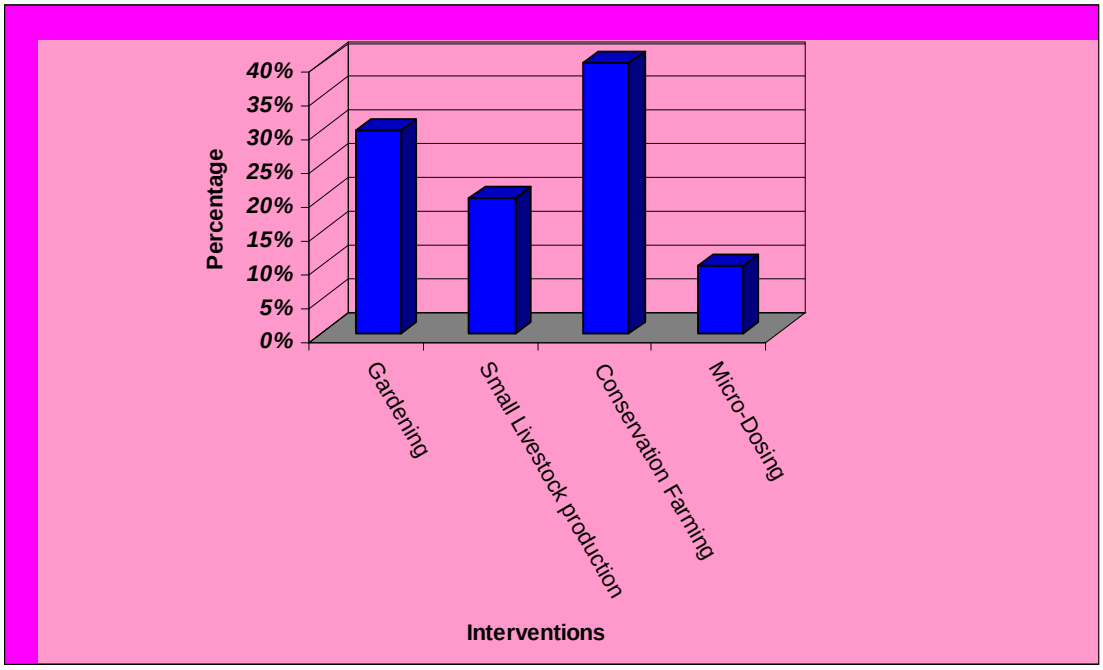

Figure 4.11 Skills gained by farmers

Figure 4.11 above shows that quite a number of farmers in Insiza district had gained agricultural production skills due to their participation in the programme. The Insiza community (both beneficiaries and non-beneficiaries were trained in conservation farming (40%), vegetable production (30%), small livestock (20%) and micro-dosing (10%).

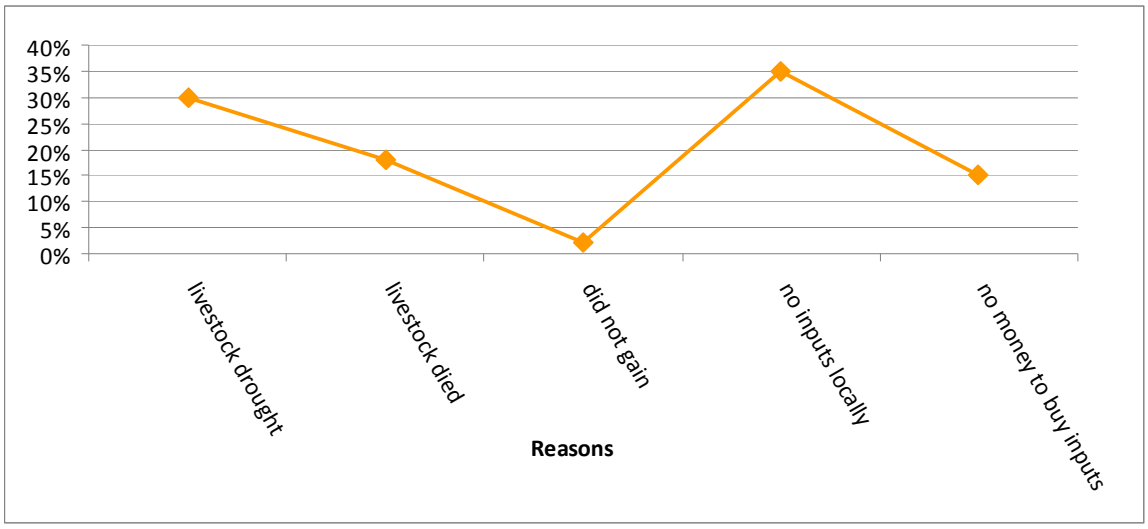

Figure 4.12 Reasons for non-sustainability by farmers when WV pulls out

According to figure 4.12, there were several reasons for farmers failing to sustain themselves when WV pulls out. Some of the were:

- Non-availability of inputs in the local market (35%),
- Drought (30%)
- Death of livestock (20%)
- Lack of money to purchase inputs (15%)
- Did not gain anything (4%).

This reveals that, although the organization had done a great job, an exit strategy should be put in place for program sustainability. Seed fairs and seed multiplication should be encouraged to improve availability of agriculture inputs locally. In addition, irrigation scheme construction should be considered since the district is located in the semi-arid region. This would greatly improve crop production there by improving food security in the district. Beneficiaries who can afford should also contribute a certain percentage towards what ever they are benefiting. This tends to instill a spirit of ownership of the projects by beneficiaries as it was noted that some of them do not give proper care to livestock and seed/fertilizers their receive. It was also noted that 4% of the respondents who said they did not gain anything from the program were non-beneficiaries. These were not correct in the sense that they benefited indirectly from dip-tanks, community gardens, dams and the Home Based Care Program. The study established that in a community like Insiza, almost every

household would want to benefit from NGOs even if they do not suit the selection criteria. Some well-off people in decision making positions in the wards and villages would want to benefit at the expense of the OVCs, the chronically-ill and other disadvantaged groups. For example one businessman in ward 4 argued that these people who are said to be poor are very lazy, thus should not be assisted, as they will develop a dependency syndrome.

4.13 WV Aid Rating by farmers

Respondents indicated that aid was useful and appropriate to the Insiza community.59% reported that aid was very useful, 37% said that it was useful while 4% felt that aid was not useful at all, figure4.13.1 below. It was however noted that only non-beneficiaries were for the idea that aid was not useful. The feeling of non-beneficiaries was that the organization was assisting people who are incapable and very lazy leading to poor performance of the interventions. They suggested that the better-off households, with more assets should be provided with inputs so they could produce more for the district.

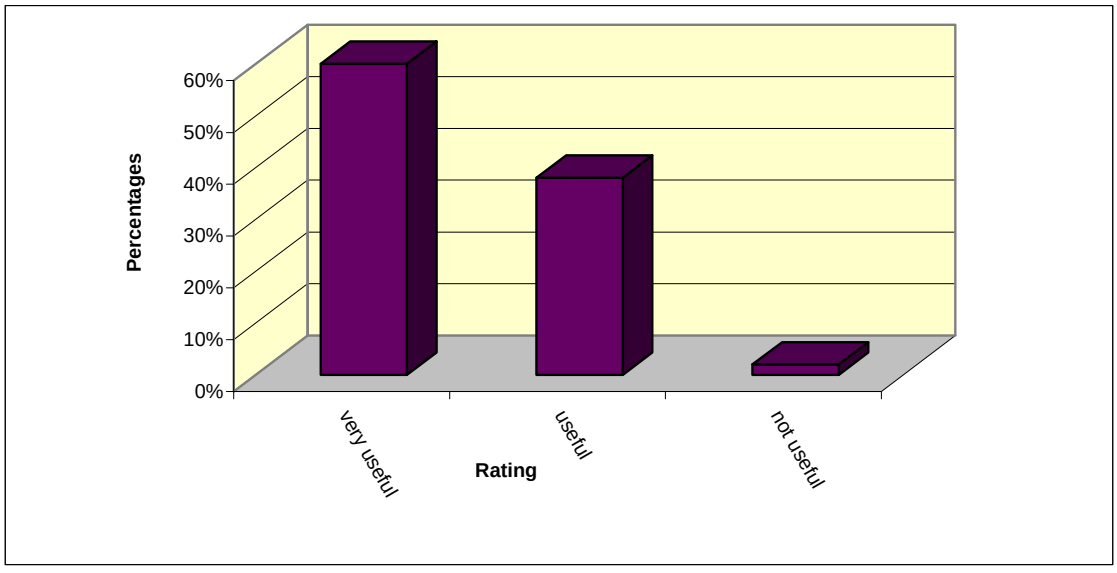

Figure 4.13 .1 WV Aid Rating by farmers

4.14 Improvements provided by the programme

Figure 4.14.1 below shows the improvements provided by the WV agricultural recovery program. These include:

- The improvement of food availability in the district (30%)
- Improvement of yield (25%)
- Improved livelihoods (20%)
- Improvement of HH income (15%)
- Improved nutrition (10%).

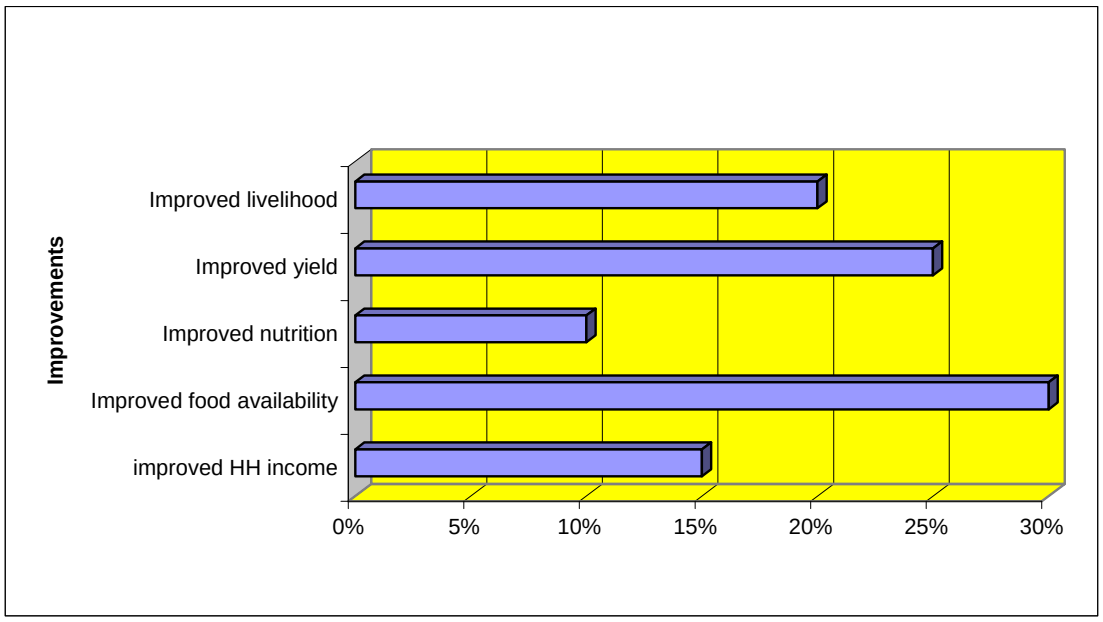

Figure 4.14 Improvements provided by the programme

4.15 Cereal Prices

The price of grain was particularly crucial to food access in Insiza at the time of the assessment. In the July assessment, the poor harvests in rural areas resulted in the population in all wards assessed being found to rely on market purchases to get over 90% of their food. Furthermore, most non-beneficiaries were most reliant on market purchases, while the beneficiaries tended at that time to have some food

stocks from their harvests, figure4.15.1 below. The same figure shows that 55% non-beneficiaries had already finished their stocks.

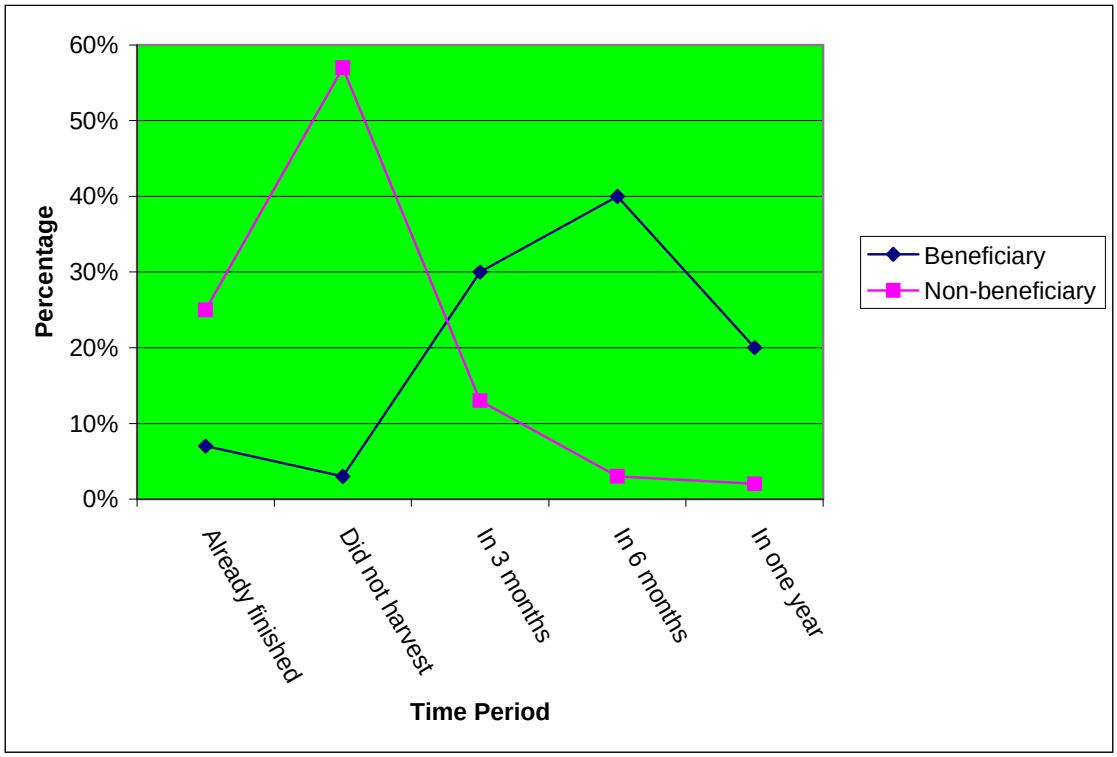

Figure 4.15.1 Time period in which harvest will run out.

The most obvious development since May in relation to cereal prices was the 167% increase in the uncontrolled price of maize, while the controlled price remained almost unchanged. This has further increased the divergence between the controlled price of grain sold by or through the GMB, and the prices on local markets. The assessment also indicated that programme beneficiaries were more food secure as compared to their counterparts, figure 4.16.1 below.

Figure 4.15.2 below, represents the cereal price across all three suppliers of cereal to the Insiza community. However from the first glance one would assume that it was cheaper to buy from the retail shops or the GMB, in actual fact none of these two had the commodity in stock as people were living in a highly corrupt society .All the grain was channelled to the parallel market where it fetched exorbitant prices.

Retail shops were always up in arms with the government for over charging, as maize is a controlled commodity in Zimbabwe. Their prices were not stable as they sourced the commodity from Botswana and South Africa. To safeguard their livestock and other valuable assets people were deeply involved in agricultural production so as to ensure food security. Therefore the programme had come in handy and served people's lives.

The other contributing factor to high maize price at the time of the study was the fact that food aid from NGOs was suspended in the country due to political reasons. Thus, food was limited, which meant that who ever had access to grain charged whatever price they wanted. This scenario affected the most vulnerable groups and some of them were forced to exchange their valuable assets cheaply to obtain food (figure 4.17.1).

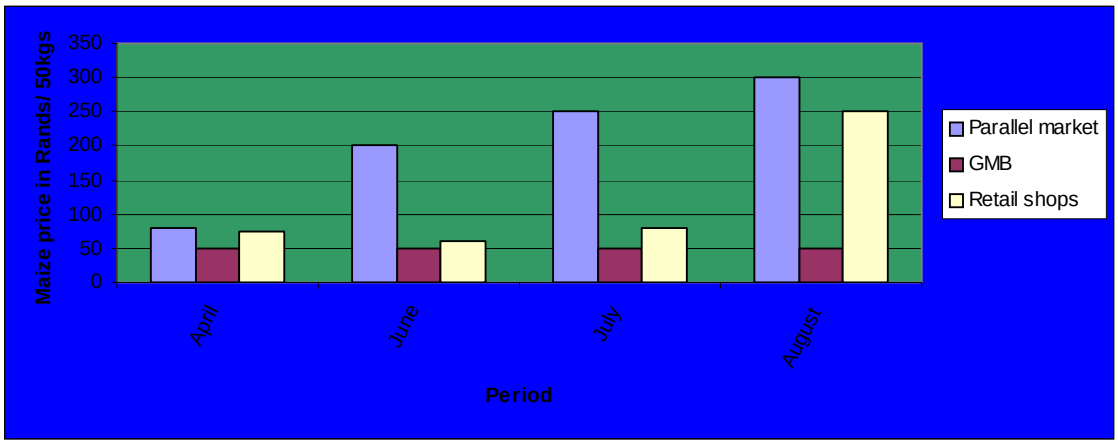

Figure 4.15.2 Cereal prices for the period of April to August 2008

4.17 Impact on Livestock Prices

Although in typical situations of food shortages in rural communities we expect to see livestock prices decline, in Zimbabwe and Insiza in particular livestock prices – like almost all other prices - were nominally increasing. However, to understand the real value of an animal it was necessary to indicate the terms of trade between livestock and grain, i.e. the quantity of grain that could be purchased with the cash from the sale of an animal. Using this indicator, we clearly see the expected pattern of declining real value of livestock. Given that quotas were imposed on the quantity

of grain that any individual could purchase from the GMB, the terms of trade below were based on the local uncontrolled price of maize. Thus, both livestock and cereal prices were increasing, but cereal rates of increase far outpaced that of livestock, leading to a severely declining terms of trade for smallholder farmers (figure4.17.1).

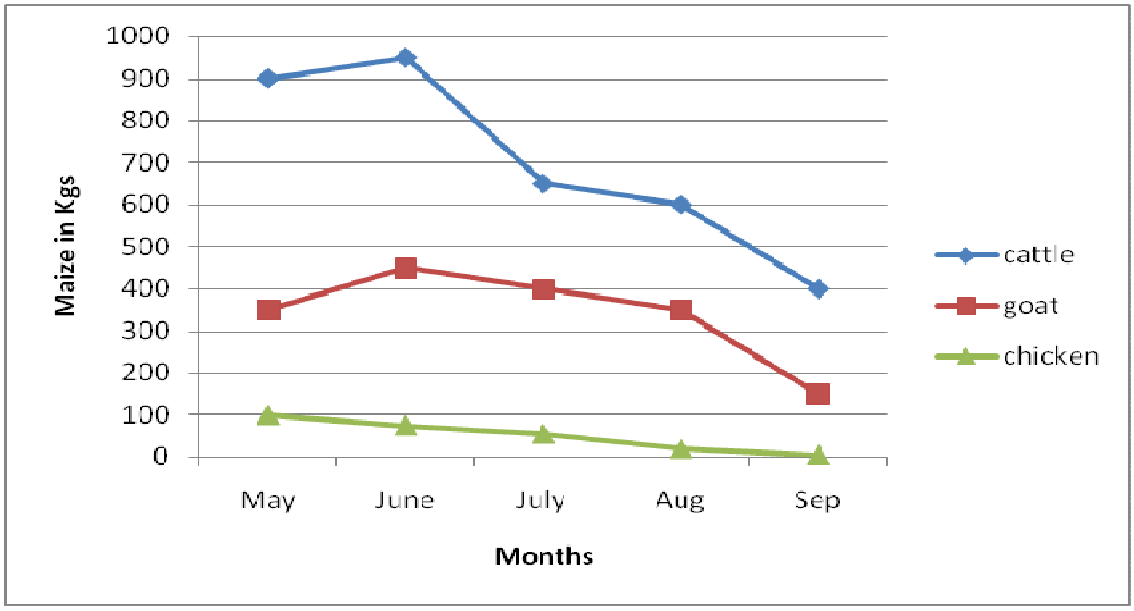

Figure 4.17.1 Changes in the Average Nominal Prices of Livestock, May- Sept (2008)

4.18 Impact on food security

The respondents defined food security as maize availability or the cash to buy it, or the possession of livestock assets, which could be converted into maize. The programme contribution to food security comes from the conversion of income from small livestock and vegetable sales into maize, or the increase in vegetable consumption that allowed households to stretch their maize budget. The income either generated directly through the sale of crops from the programme or indirectly through petty trade and other small business activities had helped people to cover school fees, hospital fees and purchase household items. These were prioritized as shown in figure4.18.1 below. Program derived income enabled beneficiaries to pay back loans, and this income along with the program food security benefits have

reduced people's dependency on casual labor as a way of supplementing their income and supporting their families, (figure 4.9.1).

Program Benefits

Stakeholders and beneficiaries identified the following outcomes of program impact during the field visit in July 2008. These include benefits derived from the small livestock, the project gardens and conservation farming among others:

- Improved nutrition and household food security
- Improved income to pay for school fees, uniforms and text books
- Improved income to purchase foods such as tea, sugar, and sadza (maize flour)
- Improved income to buy household items (cooking utensils, blankets, soap)
- Improved income to buy livestock and poultry
- Improved income to buy clothes and shoes
- Improved income to purchase seeds and farming tools.
- Improved nutrition and household food security
- Improved income to join a savings group
- Improved income to pay for medical expenses (better health care)
- Improved income for veterinary drugs (improved animal health)
- Improved home improvements (new structures such as huts constructed from crop and livestock sales).

These benefits were argely attributed to the combined impact of the different interventions that constitute the Insiza WV Agricultural Recovery Programme.

Figure 4.18.1 below shows some of the benefits that occur to communities because of participating in the programme. These benefits included food security, household assets, improving the home structure, school fees, purchasing of livestock, food purchases and purchasing agricultural inputs among any other related community needs. The WV programme was seen to be a blessing to the people of Insiza district. In almost all the four wards visited by the researcher, most of the communities noted that they had benefited so much from programme. One beneficiary noted, *"The food we eat the cloth we wear and all that is around us in our homes is a result of WV projects"*. The study therefore established that

the WV programme had gone a long way in providing especially for the food security in Insiza district, which falls in region 4 and 5 that does not receive enough rains for crop production. The study also established that some families had moved away from their poor status to a better-off status because of the interventions sponsored by the organization. One village-head was proud to say that he recently purchased a new bicycle from the money that he raised from the community nutrition garden and the bicycle had become a village assert in that it was used to carry some ill persons to the nearest clinic (Avoca).

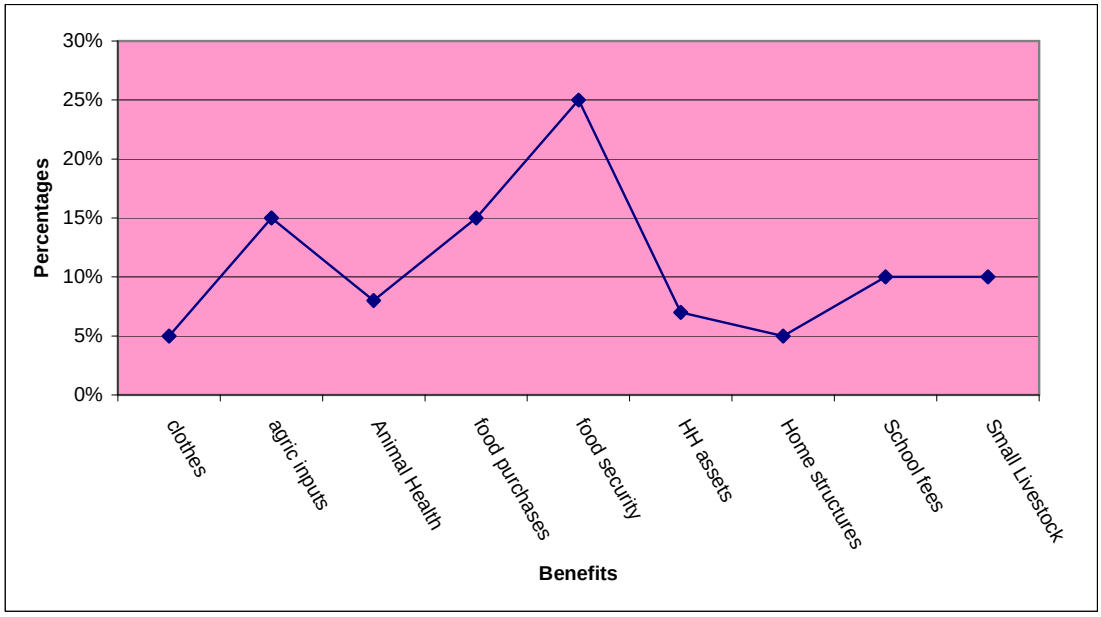

Figure 4.18.1 Program Benefits

In terms of impact, this finding essentially points to the food and income benefits derived from the programme nutrition gardens and underscore the importance of food security as a key project benefit. Although the impact of this would largely apply to project nutrition gardens beneficiaries, secondary data from the July 2008 field visit suggests that the dams had enabled the community to start cultivating household gardens. It is therefore possible that some non- programme beneficiaries were also realizing irrigation benefits from the dams. Thus, moving the programme from a group of people to the whole community.

4.19 The intervention that must be dropped.

Figure 4.19.1 shows that the majority of the respondents suggested that dip irrigation should be dropped in future programmes (85%). This was most probably due to it being labor intensive considering water scarcity and the fact that most beneficiaries for this intervention were the chronically ill**.**

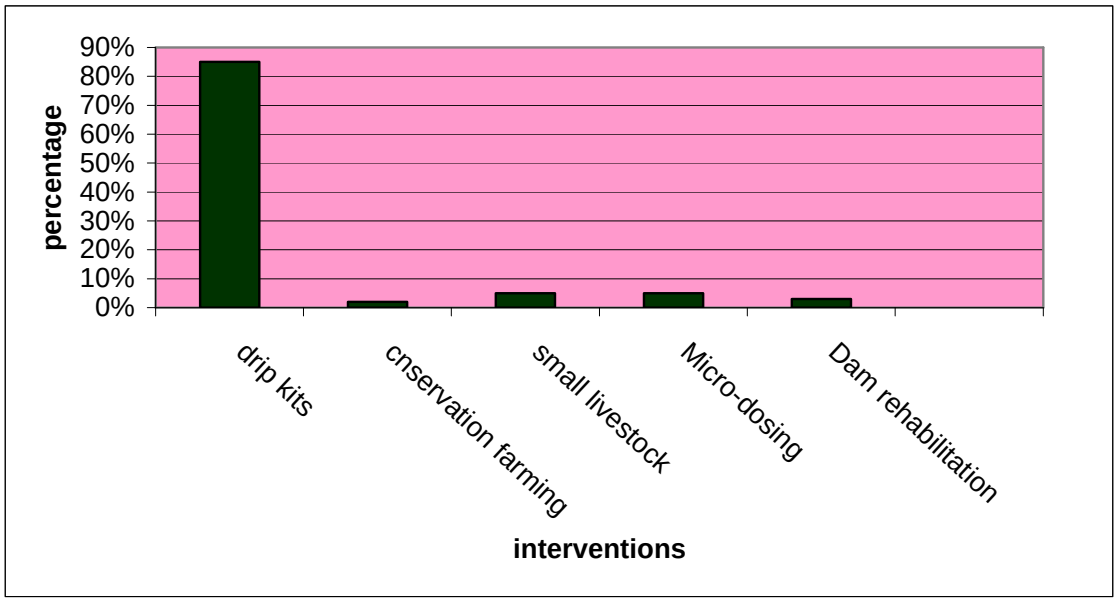

Figure 4.19.1 Interventions that must be dropped in future programming

4.20 Focusting the situation without the programme in the district.

The data collected from the respondents show that the WV Agricultural recovery program had highly contributed to the Insiza community. Figure 4.20.1 indicate what could happen without the programme and these were:

- High rates of migration and malnutrition (25%)
- An increase in gold panning (20%) that had already caused land degradation in the district.
- An increase in theft, especially stock theft (15%)
- High rate of school drop-outs
- Prostitution, which exposed the community to the risk of HIV/AIDS.

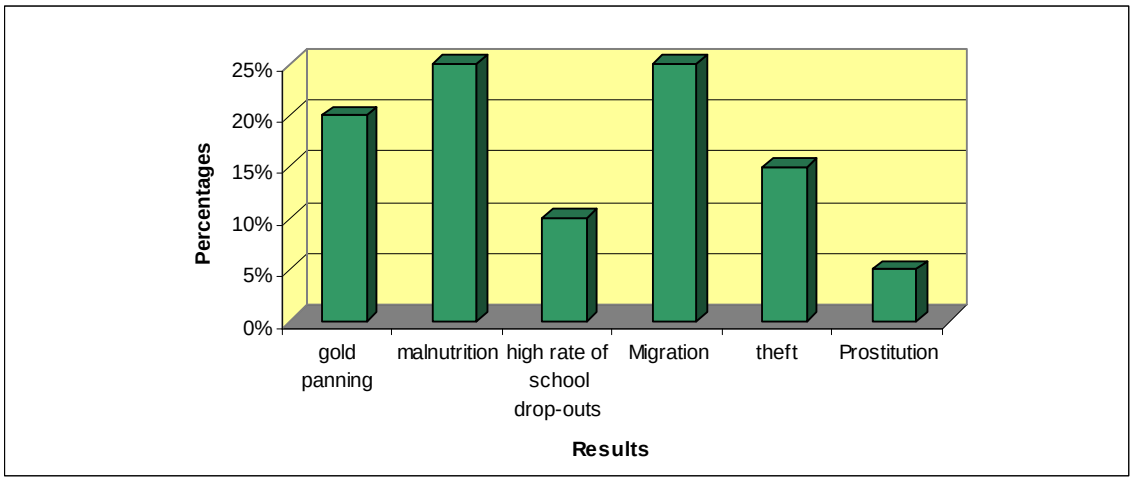

Figure 4.20.1 Without NGO assistance

Table 10 The SWOT analysis of the Insiza Agricultural Recovery Programme

Strengths	**Weaknesses**
• This programme brought people together and helped bring teamwork. • It has improved food security at household level. • It has enabled communities to buy school uniforms, books and pay fees for their children. • It has encouraged hard work within the community. • It has helped to enhance saving club members to have money to save. • It has greatly improved the nutritional status of households. • The community now has healthier livestock because of	• There was very low response of the community initially due to poor mobilization. • The non-beneficiary community members are stealing from the projects especially small livestock and nutrition gardens due to high levels of unemployment. • Inputs received (seed and fertilizer) are few to cover the whole field. • Lack of marketing strategies among community members.

improved dipping facilities	
Opportunities • With income from this programme beneficiaries are able to grow savings club to provide financial security and buy HH goods • If the programme also included borehole drilling and dam construction, communities could grow fruit trees and produce more crops throughout the year thus, further enhance nutrition and food security status in the district.	**Threats** • Non-beneficiaries are jealous of the beneficiaries and may continue to steal from the gardens. • Crop production is also threatened due to persistent drought in the district. • Destruction of crops by pests such as the armyworm.

Strengths, weaknesses, opportunities identified by the Insiza community during focus groups discussions in July 2008

The table above shows that while the programme had weaknesses here and there, it had stronger chances of growing into a much larger programme. Most of the people in Insiza benefited from opportunities provided by the WV agricultural recovery programme. Some beneficiaries reported that the food they ate, the cloth they wore and all that was around them in their homes was a result of WV interventions.

CHAPTER 5: CONCLUSION

The assessment took place during a period of hyper inflation, political instability, acute food shortages and when basic staples were limited in the local market centers forcing people to spend the day queuing up to purchase these supplies. This meant that many of the programme participants were unavailable for interviews during the assessment and a number of household interviews had to be re-scheduled.

The research team also faced a number of challenges in conducting focus group discussions due to political instability that was prevailing in the whole country as political parties were campaigning for the presidential elections. Regular programme interruptions made it impossible to complete some of the interventions on time. Thus in reality this did not allow enough time for the programme to have the desired impact on the livelihoods of the beneficiaries.

The formation of the saving and lending groups was also an innovation introduced by the programme in the Insiza communities. However, these groups were designed for support by income earnings from the community garden therefore this component could not really be assessed in isolation from the garden component. Consistent with this the income and related food purchase benefits identified represent the combined impact of both project components.

The field visits in July 2008 aimed at establishing the effects of the programme on the beneficiaries' livelihoods. This included indicators such as an increase in small livestock (chickens and goats) and home improvements resulting from the sale of produce from the programme. The assessment took place after three years of its inception. There was a notable conversion of the programme-derived income into livestock and other assets, especially vegetable harvests from the community gardens, field crops from conservation farming, micro-dosing and small livestock.

The negative impact of the programme identified by the community is that it has brought some elements of disharmony between beneficiaries and non-programmeme beneficiaries. Allegedly non-project participants have been stealing crops from the community gardens, although this may potentially be an issue that needs addressing within the district.

Findings of the study established that the programme has contributed to a significant improvement in household food security amongst the beneficiaries in Insiza. The Agricultural Recovery Programme has provided the beneficiaries with a new source of food, a steady supply of food and nutritionally more diverse types of food. It has also had a noticeable impact on the income of the beneficiaries participating and the community at large. Thus, livelihoods have been positively impacted as the communities now have diversified sources of income from the interventions.

From the facts and findings presented by the study, the researcher makes the following recommendations:

- There is a need for contingency measures for food imports for 2008/9 to be put in place. Government should reconsider the potential role of the private sector in importing food.
- The need for humanitarian assistance will continue into 2008/09, hence the need to start planning for assistance of potentially equal, or greater magnitude than current levels.
- Widen the selection criteria to include able farmers to increase production there by boosting food security in the district.
- Creation of multiplication units for both small grains and small livestock for easy access by farmers within the district.
- Construction of dams and irrigation schemes to promote food security in the district.
- Market linkages need to be created especially when production is high to facilitate timely marketing of farm produce.

- WV should consider supporting their beneficiaries for at least three years if the progrmmes is to have a clear impact,
- Promotion of OPVs in different agricultural interventions and seed retention in order to counter the high costs of agricultural inputs.
- Promotion of conservation farming to address the problem of draught power.
- WV should make regular follow up visits to project sites after the inception of interventions to encourage, advise, monitor and evaluate progress.
- Government extension services to be involved in the all-agricultural programme at all levels.
- Communities should be in the forefront in all phases of the project cycle (project identification, implementation, monitoring and evaluation).

Recommendations for further research

- Reasons why rural communities do not commit themselves to donor aided programs: The study revealed that communities do not have sense of ownership to most donor sponsored projects, which has led to their failure
- Relief intervention most suited for the Zimbabwe's semi arid regions.
- The best selection criteria for Agricultural relief and recovery programs in Zimbabwe: It has been noted from the study that the criteria that is used for beneficiary selection is not justified in some instances, for example vulnerability of female headed families. Some widows were discovered to be better off in terms of asset ownership as compared to other female-headed families, but were included as beneficiaries of the program.

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APPENDICES
Appendix 1

FOCUS GROUP DISCUSSION/ COMMUNITY MEETINGS
1. What coping strategies have the people of Insiza employed against drought before the World Vision agricultural recovery programme? 2. What benefits has the WV programme brought to the community? 3. Are there any improvements on the community livelihoods? 4. Who is currently benefiting from the project and in what ways? 5. Do the inputs (in money and time) justify the outputs and, if so/if not, on what basis is this claim justified? 6. What would improve the efficiency, effectiveness and impact of the current project? 7. What other programmes do you see as beneficial to the community? 8. Which projects can be dropped? 9. Is targeting appropriate? 10. What can be done to stop dependency from future WV projects?

Appendix 2

BENEFICIARIES AND NON-BENEFICIARIES QUESTIONNAIRE

QUESTIONNAIRE ID: District Code |__|__| Number |__|__|

DATE OF COMPLETION:____/____/2008
dd mm

Introduction

You have been selected by chance from all farmers in Insiza District. The information that you provide will be used for academic purposes. This survey is voluntary and the information you give will be confidential. Do not write your name on any part of this questionnaire. Please honestly complete all the relevant questions according to instructions.

A.

1	Household beneficiary status	1=beneficiary 2=Non-beneficiary	
2	What is the gender of the HH	|=Male 2=Female	
3	Age of Respondent	1= 18- 22 yrs 2=23- 27 yrs 3= 28-32yrs 4=33- 38 yrs 5=39-43yrs	
4	Marital Status of Respondent	1=Married 2=Single 3=Widowed 4=Divorced/Separated	
5	Assets (wealth ranking)-Number of cattle	1=0-3 2=4-7 3=8-11 12 and above	
6	Number of small livestock	Goats |___|___|	Sheep |___|___|
		Chickens |___|___|	Other |___|___|
7	Homestead condition (Circle All)	1=Brick house 2=asbestos roof 3=corrugated roof 4=grass roof 5=mud and pole hut 6=other(specify)……. …….	
8	Other assets (multiple response)	1=Scotch cart 2=Wheelbarrow 3=Ploughs	

		4=grinding mill 5=radio 6=TV 7=other(specify)……. …….
9	Which projects does WV Agric Recovery in this area support? (multiple response, circle all that apply)	1=Small livestock fares 2=Agric input distributions 3=Dip Tank Rehabilitation 4=Nutrition Gardens 5=Dam and irrigation scheme rehabilitation 6=other (specify)……
10	Previously, how were you coping in your livelihood? (multiple responses, circle all that apply)	1=Remittances 2=casual labour 3=vegetable sales 4=informal employment 5=petty trade 6=livestock sales 7=crop sales 8=gold panning 9=Other (specify**)……**
11	How were you selected as a beneficiary of these projects? (multiple responses, circle all that apply)	1=widow/er 2=Chronically ill 3=Disabled 4=High dependency ratio 5= Child Headed 6=Elderly

		7= no meaningful source of income 8=Non beneficiary
12	What was the important source of income for your HH during the past six months(multiple responses, circle all that apply)	1=Remittances 2=casual labour 3=vegetable sales 4=informal employment 5=petty trade 6=livestock sales 7=crop sales 8=gold panning 9=Other (specify)……
13	You are a WV Agric recovery beneficiary of (multiple responses, circle all that apply)	1=Small livestock fares 2=Agric input distributions 3=Dip Tank Rehabilitation 4=Nutrition Gardens 5=Home Based Care 6=other (specify)……
14	What extension support did the HH receive this season (multiple responses, circle all that apply)	1=crop production 2=crop, vegetable, small livestock 3=small livestock 4=livestock management 5=other (specify)……
15	I f yes in number 9,from which	1=AGRITEX

	organization? (multiple responses, circle all that apply)	2=WV 3=GMB 4=Other farmers 5=Private companies 6=Other (specify)……. …….
16	What was the training on? (multiple responses)	1=land preparation 2=conservation farming 3=livestock management 4=crop management 5=irrigation 6=Other(specify)……. …….
17	How was the training delivered? (Multiple responses)	1=messages during input distributions 2=Visits at HHS 3=training sessions 4=Other (specify)…….
18	How would you rate aid received? .	1=very useful 2=Not useful 3=0ther(specify)……. …….
15	Did you participate in the aid choices?	1=Yes 0=No
16	How has WV agric recovery aid assisted you? (multiple responses, circle all that apply)	1=improved HH income 2=improved HH food availability 3=improved HH nutrition 4=improved yield 5=Other(specify)…….

		…….
17	Prices on livestock-have these changed due to aid in the area	1= increased 2- remained the same 3= decreased
18	Prices on crops-have these changed due to aid in the area	1=yes, increased 2- No, remained the same 3= Yes, decreased
19	If WV pulls out of this district today, would you be able to sustain yourself	1= yes 0= No

20a)	If yes to number 19, how?	1=Gardening skills acquired 2=Small livestock skills improved 3=Other. ……
20b)	If no to number19, why?	1=Recurrent drought destroyed my crops 2=Livestock died due to diseases 3=Did not gain adequate production skills 4=Other, specify
21	What other improvement has the programme provided?	1=improved HH income 2=improved HH food availability 3=improved HH nutrition 4=improved yield 5=improved livelihoods 6=Other (specify)……..

22	What problems has the programme brought to the HH?	1=dependency syndrome 2=hatred among communities and HHs 3=division among communities 4=Other (specify)……

Thank You

APPENDIX 3

STAKEHOLDER QUESTIONNAIRE

QUESTIONNAIRE ID: District Code |__|__| Number |__|__|

DATE OF COMPLETION: ____/____/2008

dd mm

Introduction

You have been selected from all stakeholders of WV in Insiza to respond to the questionnaire pertaining to the Agricultural Recovery Programmeme. The information that you provide will be used for academic purposes. This survey is voluntary and the information you give will be confidential. Do not write your name on any part of this questionnaire. Please honestly complete all the relevant questions according to instructions.

1	What is your role in the World Vision agricultural recovery programmeme?	1 = Facilitator 2 = Advisor	3 = Stakeholder 4 = Other……
2	What is the current drought situation in this district?	1 = Severe 2 = Serious	3 = Moderate 4 = Other……
3	Do you think the community is benefitting from this programmeme?	1 = Yes Explain your answer …… ……	2 = No
4	What has changed in relation to food access in the district since the programme started	1 = Increased 2 = Decreased	3 = Remained the same 4 = Other ……
5	What are the copping	1 = Remittances	5 = Livestock sales

	strategies used by the community against drought us?	2 = Casual labour 3 = Vegetable sales 4 = Petty trade	6 = Crop sales 7 = Other ……..
6	What would happen to this community without NGO assistance	1=Gold panning 2=Malnutrition 3=High rate of school drop out	4=migration to urban areas 5=Other……. ……..
7	Is the programmeme appropriate to this district?	1=very appropriate 2=Appropriate 3=Inappropriate	
8	Does the programmeme provide backup services?	1=Yes	2=No
9	What programme targeting strategies would you prefer?	1=high dependency ratio 2=chronically ill 3=widow/er	4=disabled 5=Other ……..
`10	Are the beneficiaries utilizing aid packages	1=Yes	2=No
11	What benefits has the programme brought to the community	1=Improved HH income 2=Imprved HH food security 3=Improved HHnutrition	4=improved livelihoods 5=Other…… ……
12	What are the impacts of the programme on sustainability of agricultural production	1=Dependency syndrome 2=improvement of seed bank 3=improved breeding stock 4=Food security 5=Other……	

13a)	What are the effects of the programme on food prices	1=Increased 2=Decreased	3=Remained the same 4=Other specify ……
13b)	Input prices	1=Increased 2=Decreased	3=Remained the same 4=Other specify
14	Which groups are worst affected by food shortages	1=high dependency ratio 2=chronically ill 3=widow/er 4=disabled 5=Other	
15	Which projects do you think should be dropped	1=Drip irrigation 2=Conservation Farming 3=Small Livestock 4=Micro-irrigation 5=Other……	
16	What other projects do you see beneficial to this community	1=Borehole drilling 2=Dam construction 3=Pass the Heifer Scheme 4=Other……..	
17	What problems has the programme brought to the community	1=Dependency Syndrome 2=Conflicts among community members 3=Community cohesion 4=Other…….	
18	What could improve the impact of the current programme	1=Involvement of communities in all programme phases 2=Monitoring of programme by stakeholders 3=Monitoring of projects by the community 4=Other…….	

Thank You