A study of rural women farmers' access to markets in Chirumanzu

by

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Thesis submitted in fulfilment of the requirements for the degree

Master of Philosophy in Sustainable Development Planning and Management at

Stellenbosch University

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Faculty of Economic and Management Sciences

March 2013

DECLARATION

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March 2013

ABSTRACT

This thesis investigated the issues that rural smallholder women face in accessing markets in developing countries. Market access for rural smallholder farmers is increasingly being promoted as a means towards catalysing sustainable rural development. However, without addressing the gender specific issues that rural smallholder women farmers face in accessing markets, market access as a strategy towards sustainable rural development may fail to achieve its ends. This thesis gathered evidence from a group of smallholder women farmers in Chirumanzu, Zimbabwe, who are part of a market access project run by Oxfam, in order to highlight the issues that they face in accessing markets for their produce.

Primary and secondary data were used in the study. First, a literature review was conducted to assess the issues that smallholder rural women farmers in developing countries face in accessing markets and how the issues differ to those faced by male smallholder farmers. A thematic assessment of the issues was conducted, beginning with the production for market through to the actual market engagement. Secondly, primary data was collected in Chirumanzu, from rural smallholder women farmers who are participating in a market access project being facilitated by Oxfam. Data was collected through focus group discussions, key informant interviews and document review. Five focus group discussions were held with a total of 40 participants in August 2011. Some of the key findings were that rural smallholder women farmers face challenges in terms of meeting the labour demanded for market production, accessing market information and having to contend with high transport costs. The data was then compared with the points raised in the literature review. The comparison showed that most of the key issues raised in the Chirumanzu case study were similar to those identified in the literature review.

The study came to the conclusion that rural smallholder women farmers face different issues and more challenges in accessing markets compared to male farmers. Market access initiatives that do not recognise and address the gender specific challenges that women smallholder farmers face may therefore not be catalysts for sustainable rural development. Therefore recommendations are that market access initiatives should go beyond facilitating access to markets to address the structural social, economic and cultural issues that present special challenges and constraints to women smallholder farmers.

OPSOMMING

Hierdie tesis het ondersoek ingestel na die kwessies waarvoor landelike vrouekleinboere in ontwikkelende lande te staan kom om toegang tot markte te verkry. Marktoegang vir landelike kleinboere word toenemend aangemoedig as ’n manier om volhoubare landelike ontwikkeling teweeg te bring. Indien die geslagspesifieke kwessies van marktoegang waarmee landelike vrouekleinboere te kampe het egter nié hanteer word nie, kan marktoegang as strategie vir volhoubare landelike ontwikkeling in gebreke bly om sy doel te bereik. Hierdie tesis het bewyse ingesamel van ’n groep vrouekleinboere in Chirumanzu, Zimbabwe, wat deel is van ’n marktoegangsprojek deur Oxfam, ten einde die soeklig te werp op die uitdagings wat hulle ervaar om marktoegang vir hul produkte te bekom.

Die studie het van primêre sowel as sekondêre data gebruik gemaak. Eerstens is ’n literatuuroorsig onderneem om te verken watter probleme landelike vrouekleinboere in ontwikkelende lande ondervind om marktoegang te verkry, en hoe dit verskil van die uitdagings waarvoor hul manlike eweknieë te staan kom. Die kwessies is tematies beoordeel en het gestrek van markgerigte produksie tot en met werklike markskakeling. Tweedens is primêre data ingesamel onder landelike vrouekleinboere in Chirumanzu wat aan ’n marktoegangsprojek deur Oxfam deelneem. Data is deur middel van fokusgroepbesprekings, onderhoude met sleutelinformante sowel as ’n dokumentoorsig bekom. Vyf fokusgroepbesprekings is in Augustus 2011 met altesaam 40 deelnemers gehou. Van die belangrikste bevindinge was dat landelike vrouekleinboere bepaald uitdagings ervaar wat betref die vereiste arbeid vir markgerigte produksie, toegang tot markinligting sowel as hoë vervoerkoste. Daarná is die data met die hoofpunte uit die literatuuroorsig vergelyk. Die vergelyking toon dat die meeste van die kernbevindinge in die Chirumanzu-gevallestudie met die bevindinge in die literatuuroorsig ooreenstem.

Die studie kom tot die gevolgtrekking dat landelike vrouekleinboere voor andersoortige kwessies en meer uitdagings as hul manlike eweknieë te staan kom ten einde marktoegang te verkry. Marktoegangsinisiatiewe wat nié hierdie geslagspesifieke uitdagings van vrouekleinboere erken en hanteer nie, kan dus in gebreke bly om waarlik volhoubare landelike ontwikkeling teweeg te bring. Daarom beveel die studie aan dat marktoegangsinisiatiewe oor méér as die blote fasilitering van marktoegang handel, en ook aandag skenk aan die strukturele maatskaplike, ekonomiese en kulturele kwessies wat besondere uitdagings en beperkings vir vrouekleinboere inhou.

ACKNOWLEDGEMENTS

I would like to thank my supervisor, Candice Kelly for her guidance and endless patience in refining my thinking. She challenged me to go beyond my comfort zone, from her I have learned to ask the right questions.

I would like to extend my appreciation to the Sustainability Institute staff and students, for giving me a sustainability lens and radically transforming the way I see the world. I am privileged to have had the opportunity to be part of the institute.

My thanks to Oxfam for affording me the opportunity to undertake this study, especially to the project staff and the rural women farmers that I engaged with during the research.

Finally I would like to thank my family for all the encouragement and support, especially my little boy for generously sleeping quietly while I studied.

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LIST OF ACRONYMS AND ABBREVIATIONS

ASPO	Association for the Study of Peak Oil and Gas
CICs	Collection and Information Centres
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
IAASTD	International Assessment of Agricultural Knowledge, Science & Technology for Development
IFAD	International Fund for Agricultural Development
MDG	Millennium Development Goals
NGO	Non Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
UNCTAD	United Nations Conference on Trade and Development
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN HABITAT	United Nations Human Settlements Programme
WCED	World Commission on Environment and Development

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CHAPTER ONE: INTRODUCTION

1.1 Introduction and background

Sustainable rural development is an issue that many developing country governments, donors and nongovernmental organisations continue to grapple with. Agricultural markets are promoted as a possible pathway to rural development, as they are seen as important for economic growth and addressing poverty (IFAD 2010). Access to markets for smallholder rural farmers, however, is fraught with challenges. Market access issues present local to global connections that prove to be both opportunities and challenges for rural smallholder farmers. On one hand the structural changes in markets through integration on national, regional and international markets provides an opportunity for participation and profit for smallholder farmers who are able to supply new product lines and meet the market's needs (IFAD 2010). On the other hand, however, these new opportunities present risks of marginalisation of small rural farmers in favour of larger producers who are able to meet the stringent market requirements and meet the higher entry costs (IFAD 2010). Therefore market access issues touch on a range of other issues that need to be addressed if rural smallholder farmers, especially women farmers, are to benefit from market access.

Women farmers contribute significantly to agriculture in developing countries for instance, women comprise at least half of the rural agricultural labour force (FAO 2011, World Bank 2006). Despite this contribution, women's visibility, access to productive resources and contribution remains largely unacknowledged in statistics and policy making (FAO 2010, Doss 1999). Whereas smallholder farmers face challenges in participating in agricultural markets, smallholder rural women farmers have extra challenges associated with their lack of ownership of livestock, land, low education levels and low use of technology as well as demands on their time by other household duties (Grace 2005, Dolan 2001, IFAD 2010). And yet ensuring that smallholder rural women farmers have access to markets and a secure income benefits the entire rural household and economy in terms of improved access to education, health and nutrition for children (Fletschener and Kenny 2011, Smith, Ramakrishnan, Ndiaye, Haddad, and Martorell 2003, Quisumbing and Maluccio, 2000). Despite this, policy makers and development interventions often treat men and women smallholder farmers the same way when introducing and supporting market access interventions without seeing the differentiated issues that women face. The argument of this research is that there is a need to address the differentiated needs and inequality faced by rural smallholder women farmers if market access interventions are going to be successful as catalysts for sustainable rural development.

A case study of rural smallholder women farmers from Chirumanzu, a district located in the Midlands province of Zimbabwe, will be presented. The study will draw upon the experiences of these smallholder women farmers showing the problems they face in accessing markets, as highlighted above.

1.2. Defining the research problem and questions

Bryman (2008) highlights the importance of formulating research questions, when he noted that they guide the literature sources to be searched, assist in deciding the data to be collected, give guidance in data analysis and write up, and keep the research focused. In formulating research questions Bryman suggests that the questions should be formatted in a way that makes them researchable and not abstract. Questions should be clear, linked to each other and having a connection to "established theory and research" (Bryman 2008:74). Having a connection to established theory and research means that a body of literature must exist on which the researcher can draw in order to address the research questions. He further adds that research questions should be able to in some small way add to the body of knowledge on the topic to be researched. It is important that research questions should not be too broad or too narrow as this presents challenges in answering them (Bryman, 2008).

Mouton (2001) suggests four steps in formulating research problems: firstly, a preliminary literature review, whose purpose is to learn about the various ways in which the chosen topic can be examined. Secondly, to establish clarity on the unit of analysis; thirdly, to establish clarity on the general and specific objectives of the study and finally consider whether the formulation of the problem is feasible in terms of resources such as time and money

A preliminary literature search found that the subject of market access for rural smallholder farmers has been dealt with by various authors, who mainly focused on dealing with issues of market liberalisation and its effect on developing countries; the 2008 food price crisis and other aspects such as market infrastructure. It was clear, therefore, that a body of literature to draw on was present. Secondly the ultimate aim of the research was established as being to clarify what issues rural smallholder women farmers (as opposed to all smallholder farmers) were facing in accessing markets, taking the deliberate focus on women because some of the literature did not specifically address rural smallholder women's issues, assuming they are the same as those of men.

Finally a case study approach was settled on because it appeared that many authors on the subject of market access use case studies to make their arguments; including Jagwe, Machethe and Ouma (2010) on transaction costs and smallholder farmer participation in banana markets, Carr and Hartl (2010) on labour saving techniques and technologies for rural women and Mwakaje (2010) on rural farmers' market access. A case study approach allowed for an in depth exploration of issues that rural smallholder women farmers face which other approaches may not have provided. Therefore the aim of the case study of the project in Chirumanzu was to ascertain what issues the women in the project face in accessing markets and what the project was doing to address these issues. Due to my position at Oxfam as the Gender Coordinator supporting sustainable livelihoods projects, I would be able to access the information on farmers fairly

easily. It is important to clarify that the case study was not an attempt at an evaluation of the project as it is on-going but rather an attempt to understand how the project's configuration and implementation is addressing the market access issues raised by the rural women smallholder farmers who are part of it.

In this regard the following questions were formulated:

i) From the literature, what are the issues that rural smallholder women farmers face in accessing agriculture markets?
ii) What are the issues faced by rural smallholder women farmers in Chirumanzu?
iii) How has the Oxfam project addressed the issues faced by rural smallholder women farmers in the Chirumanzu market access project?

1.3. Key concepts

From the questions above there are several key concepts that need to be explained in order to keep the research questions clear as well as define the parameters in which certain words and terms are to be understood in this research.

Smallholder farmer: for the purposes of this research a smallholder farmer in Zimbabwe shall be regarded as a farmer located in the communal areas with a land holding of less than two hectares. This is the average land holding in the area of study. Smallholder farmers can also be viewed as farmers that derive their livelihood from growing crops or keeping livestock and are vulnerable to natural and economic shocks due to limited access to assets, power and markets (African Smallholder Farmers Group 2010).

Market access: for the purposes of this study market access shall be regarded as having the opportunity, capacity and ability to engage with sellers and buyers.

Female-headed households: For the purpose of this research these are households led by women, including those who are unmarried, widowed, divorced and with male partners who have migrated. These households are recognised as vulnerable, due to the lack of male headship and are characterised by a lower social status and less productive resources. Due and Gladwin (1991) classify female headed households into two; into de-facto and de jure with de–facto female headed households being a household where the male partner is away for long time periods making it necessary for the female partner to make decisions and support the family, male partners may be sending income periodically. De jure female headed households are those in which the female household head is single or widowed and makes all the decisions.

1.4. Introduction to research design and methodology

The main research problem to be investigated centred on women smallholder farmers' issues in market access. As such, two research designs were selected, a literature review and a case study. The literature review was used to answer question one:

i) From the literature, what are women smallholder farmers' issues in accessing markets?

Literature reviews are used in non-empirical studies to provide an overview of "a certain discipline through analysis of trends and debates (Mouton 2001:179). The findings of the literature review were presented in Chapter three, organised thematically.

In order to answer questions two and three, on the ii) market access issues faced by rural smallholder women farmers in Chirumanzu and iii) how the Oxfam market access project is addressing these issues, it was necessary to use a design that would allow for data collection from selected smallholder women farmers in Chirumanzu. This was done through a case study of the women who are part of the Oxfam project. Data was collected from the women on how the Oxfam project was addressing the issues that the women raised concerning market access. Data was collected and analysed using focus group discussions, key informant interviews and analysis of project documents. The data was analysed and presented thematically in Chapter Four.

1.5 Significance of the study

This study will be useful in assessing the barriers that women face in developing sustainable livelihoods through the strategy of market access. It will highlight the issues and challenges faced in accessing markets that are unique to women as opposed to all smallholder farmers. By taking the Oxfam project as a case study, the research sought to discover if any of the issues reflected in the literature on women's market access also apply to the women in the Oxfam project and what other context specific issues emerge. Thereafter the experiences of the women in the Oxfam project in using the project's model of market access will be examined in order to understand if the project is actually addressing the issues that the women face in accessing markets. Therefore the study will be helpful to the Oxfam project in Chirumanzu as it has the likelihood to improve project implementation and extend the benefit to project participants. The findings will also be useful for feeding into the Oxfam and perhaps other NGOs' market access projects in the future.

1.6. Outline of the thesis

Table 1: Outline of thesis

Chapter One	Introduction
Chapter Two	Research Design and Methodology
Chapter Three	Literature Review: Sustainable Development and Market Access
Chapter Four	Women's Market Access Issues in Chirumanzu
Chapter Five	Conclusions and Recommendations

CHAPTER TWO: RESEARCH DESIGN AND METHODOLOGY

2.1. Introduction

This chapter introduces the research design and methodology that was used to answer the research questions in this study. First, some background on the derivation of the research design from the research objectives will be given, then an overview of each of the two selected research designs and their suitability for the study will be given. Thereafter the methodology for each research design is outlined and justified. The data collection process is then described together with the challenges that emerged during the collection process. A section on objectivity is given to show how strived to remain objective during the data collection exercise. Finally to conclude the chapter a background to Chirumanzu district is given to provide context to the case study which was selected as one of the research designs.

2.2 Research design

2.2.1 Selecting the appropriate design

A qualitative approach was used in the research, rather than a quantitative approach, because data gathered from the qualitative approach allows for detailed descriptions, and provides an explanation of processes occurring in a defined context (Miles and Huberman 1994). In this research, a detailed description of the situation of smallholder rural women farmers in Chirumanzu was necessary in order to establish the market access issues they faced. The process of establishing linkages to formal and informal markets was a key part of the research. This was done in order to establish how the Oxfam market access project has met the challenges that the women farmers were facing in accessing markets, therefore a qualitative approach was deemed most appropriate. Miles and Huberman (1994) suggest that qualitative data is able to reflect chronological flow, connecting events to consequences, while giving fruitful explanations. These attributes of the qualitative approach were deemed important in this research because the research sought to show the situation faced by rural smallholder women farmers before and after the Oxfam market access project. It also aimed to analyse how the introduction of the market access project affected market access. Therefore the chronological flow of events before and after the commencement of the project as well as the consequences of engaging with formal and informal markets by the women farmers could be described.

According to Mouton (2001), the research design can be likened to a blueprint such as that used in the design and building of a house. Its function is to guide the construction process (Mouton 2001). Therefore the function of the research design is to guide the research process of a given project. Given this definition, the research design has to be influenced by the kind of study or project that is to be undertaken and the results that the researcher is seeking (Mouton 2001). In the research design consideration should be given to the kind of evidence required to adequately respond to the research question (Mouton 2001). Patton (2002) writes that the purpose of research largely determines not only the design to be selected but also

the measurement and analysis to be used. Patton distinguishes between different types of research based on their purpose, such as:

i. action research, which focuses on solving a particular problem;
ii. basic research, which focuses on contributing to knowledge and theory;
iii. summative evaluation, which aims to determine programme effectiveness;
iv. applied research, which seeks to throw light on a societal concern
v. formative evaluation which seeks to improve a programme (Patton 2002).

While underlining the importance of purpose, Patton (2002) however notes that there is no one perfect research design and trade-offs must be made due to real life limitations such as the time available to conduct the study. In order to select the right research design, I needed to consider the questions that the research sought to answer:

i. From the literature what are the issues that rural smallholder women farmers face in accessing agriculture markets?
ii. What are the issues faced by rural smallholder women farmers in Chirumanzu?
iii. How has the Oxfam project addressed the issues faced by women in the Chirumanzu market access project?

The formulation of these questions gave clarity as to the sources to be searched (Bryman 2008): these included peer reviewed journals and organisational reports (e.g. the Food and Agriculture Organisation on agriculture, rural farmers and market access. They also gave an indication of the kind data to be collected, that is, data on women's challenges in accessing markets as well as data on the experiences of women in Chirumanzu and in the Oxfam project. The questions are clearly linked to each other, with question i, providing the broader context for women farmers in the region and the world, while question ii narrows down the research area to women in Chirumanzu and finally question iii is about how a specific project in Chirumanzu is addressing the issues highlighted in i and ii. As suggested by Bryman, the questions above are connected to a body of literature that addresses agriculture markets and women in agriculture, for instance the FAO report, *The State of Food and Agriculture: Women in Agriculture, Closing the Gender Gap,* provides a good synthesis of women, agriculture and market access. Lastly the formulated research questions do contribute in a small way to the illumination of particular women's issues in accessing agriculture markets in Zimbabwe.

Having considered the questions to be answered, I thought about the data I would require to answer them, in order to guide the selection of the research design:

- Current thinking around market access for rural smallholder farmers
- Issues surrounding rural smallholder market access and sustainable development
- Market access issues unique to rural smallholder women farmers

- The importance of agricultural markets for smallholder women farmers
- Evidence on the ground around the issues that rural smallholder women farmers face in accessing markets and what is being done to address these issues

In order to find this data, a literature review seemed the most appropriate research design because it gave insight into the questions and an overview of the issues around rural smallholder women farmers. Secondly, a case study approach was selected in order to provide real life empirical information on the issues that rural smallholder women farmers face in accessing markets. This is because a case study would provide in-depth information, and also lend credence to the issues found in the literature. Hence the resultant research design used two approaches.

2.2.2. Research design one: a literature review

The aim of the literature review was to answer research question i**:** from the literature, what issues do rural smallholder women farmers face in accessing agriculture markets? In conducting the literature review, I was guided by Mouton who prefers what he calls a 'scholarship review' as compared to a literature review, instead of a collection of literature, he points out that within this 'scholarship review' one should consider what other scholars in the field have produced including theories, definitions and models. A scholarship review also includes a review of what measuring instruments have been used in previous related studies to the one to be undertaken. The importance of the 'scholarship review' is that it minimises chances of duplicating previous studies. Other types of literature reviews that Mouton (2001) highlights are integrative literature reviews, state of the art reviews and critical literature reviews. Mouton, however, does not elaborate on the use of these types of literature reviews, which prompted me to find more information on literature reviews. I found information on traditional literature review, systematic literature review, meta-analysis and meta synthesis. The following table shows the different types and their descriptions:

Table 2: Types of Literature Reviews

Type of Review	Description
Traditional literature review	This type of review critiques and summarises a given body of literature made up of relevant studies and draws conclusions about the given topic. The traditional literature review is useful in gathering, summarising and synthesising a volume of literature in a given subject area. It provides the reader with a broad background of current knowledge and is useful in identifying gaps and inconsistencies in a given subject area.
Systematic literature review	The main purpose of this type of review is to give a comprehensive list of relevant studies in a given area to answer well focused questions. This type or review takes a more rigorous approach to reviewing the literature in a given area than does a traditional review.
Meta analysis	This type of review is considered to be a form of systematic review that takes a large body of quantitative findings, and conducts statistical analysis with the aim of integrating the findings to improve understanding by tracing patterns and relationships within the findings. It is viewed as largely a statistical technique
Meta synthesis	A meta synthesis, deals with multiple qualitative studies. It is a non-statistical technique that integrates, evaluates and interprets the findings of multiple studies in order to identify common themes and key elements. The aim of this type of review is to analyse and synthesise important elements in each study in order to change into new interpretations and conceptualisations

(Excerpted from Cronin, Ryan and Coughlan 2008:38-39)

The purpose of the literature review in this study was to give an overview of the issue of markets and their role in sustainable rural development, as well as to give details about the issues that rural smallholder women farmers face in accessing markets. Given the above table, a traditional literature review was considered an appropriate design for this study because it provided a good overview of writings on market access issues faced by rural smallholder women farmers and highlight any gaps in scholarship that might be of interest. More details on how the literature search was conducted will be given in section 2.6.

2.2.3. Research design two: ethnographic case study

As per the research design, this part of the study was meant to answer questions ii and iii:

ii) What are the issues faced by rural smallholder women farmers in Chirumanzu?

iii) How has the Oxfam project addressed the issues faced by women in the Chirumanzu market access project?

The type of research design selected to answer the above question was that of a case study. According to Mouton, ethnographic case studies are mostly qualitative and are meant to give a detailed description of a selected number of cases (Mouton 2001). For an ethnographic case study, there usually is no formulated hypothesis but certain broad ideas and expectations are used to guide the study (Mouton 2001). According

to Denscombe (2007:61) ethnography refers to “a description of peoples and cultures. It has its origins as a research strategy in the works of the early social anthropologists, whose aim was to provide a detailed and permanent account of the cultures and lives of small isolated tribes.” From these early definitions and other developments in ethnography, it is described as having the following characteristics:

- long periods of time spent in the field to directly observe people,
- the recording of everyday life of people,
- the world view of the people being studied,
- a holistic approach to the culture and various relationships and connections therein and finally,
- the product of the research is dependent on the researcher’s skills to construct what they have discovered rather than to just describe (Denscombe 2007).

The focus of ethnography lies in the study of cultures and groups and emphasises on the importance of “understanding things from the point of view of those involved” (Denscombe, 2007:63).

Given this insight offered by the above paragraph, the research into the issues faced by smallholder women farmers in Chirumanzu in accessing markets would not be a true ethnographic study in that it would not involve all the characteristics of ethnography such as describing the culture. Rather it would take certain aspects, such as attempting to understand the issues of market access from the point of view of the women farmers.

In other texts, the term ethnographic case study was not used; rather I found what was termed a case study approach. Denscombe (2007:35) describes the ‘case study approach’ as an approach whose purpose is to highlight “instances of a particular phenomenon with a view to providing an in-depth account of events, relationships, experiences or processes occurring in that particular instance.” The idea of focusing on just one instance appealed to me, particularly the opportunity to gather information and insights that may be lost or overlooked when focusing on a wider more general spectrum (e.g. conducting a survey) (Denscombe, 2007). Denscombe elaborates to say that relationships and processes are key elements of case studies, giving the researcher the opportunity to understand why certain outcomes occur through engaging in a process that seeks to understand the details and not just focus on the outcomes themselves. A key advantage of using the case study approach is that the case is not usually created for the research but already exists before the research and is likely to continue existing thereafter (Denscombe, 2007). Denscombe also notes that the case study approach is most commonly used for the discovery of information rather than the testing of theories although this is also possible. Also important is that case studies allow for the use of different types of data including the use of direct observation, reading of documents as well as conducting interviews.

Combining the ethnography and case study approaches was deemed appropriate for use in this research because it allowed for the detailed examination of the case of women farmers participating in the market access project in Chirumanzu. This was done in order to have an in-depth and holistic understanding of the issues they face in accessing markets for their agricultural produce. As noted in Chapter One, previous studies on market access for rural smallholder women farmers have taken the case study approach to show evidence of the issues that farmers face. Specific methods and tools used for the case will be discussed in detail in section 2.6.

2.3. Units of analysis

Having selected an ethnographic case study as a research design, it was necessary to go on and define the units of analysis. A research design specifies the unit or units of analysis which in turn determines the type of data collection, how the data will be analysed and what can be said about the findings and conclusions (Patton, 2002). Patton suggests that if the unit of analysis is a programme or a group of people, then the data collection method would need to involve observations and descriptions of the group of people under study. Key to consider when making decisions about units of analysis is knowing the intentions and purposes of the researcher as well as what they want to achieve at the end of the study, such as to make statements about the experiences of the people in the project or about the programme process (Patton 2002). In this case, the purpose of the study is to find out issues smallholder women farmers face in accessing markets and to determine how the Oxfam project addresses these issues, the units of analysis selected are both the women participating in the Oxfam project (as represented by their committee representatives) as well as the market access project itself. The committee representatives in the project are organised into Collection and Information Centres (CICs), more information on CICs and their structure and function is provided in section 2.6. The choice of the two units of analysis was influenced by the perspective that

i. the committee of women represents the women who share a common experience, being rural women farmers who are facing challenges accessing markets, and
ii. the project is a unit of a bigger organisation programme in Oxfam, and is likely to be the configuration of many other such projects in other organisations and therefore findings or recommendations based on a project are likely to be useful to other organisations.

2.4. Sampling

In order to select the participants for the study, a purposive sampling approach was done in order to identify what (Patton, 2002) calls typical case samples. Typical case sampling involves selecting cases that show or describe what is typical about the participants in the area of study and is illustrative rather than definitive (Patton, 2002). In this study, the sample was defined by the project that Oxfam is running, that is, the project participants within the market access group. These participants were from 20 participating gardens,

with at least 13 members each, it would have not been feasible to involve all of them in the study due to time and resource constraints. However being guided by project staff, it was decided that the Collection and Information Centre (CIC) committees would be the best to sample. The CIC committees are composed of representatives of the garden groups, each committee represents three or four groups and is responsible for the marketing, transportation and production of the produce generated in the cluster of gardens. A detailed description of the CIC concept is presented in section 2.6.

2.5. Why rural smallholder women farmers in Chirumanzu?

The choice of the project was guided by convenience in terms of location and access to the Oxfam project. Because I am currently employed by Oxfam it was easy for me to gain access to the participants. Another reason is that market access interventions seem to be in the pilot phase in many parts of the country and they are being implemented by various (mostly) non-governmental organisations (including SNV Netherlands Development Organisation and Action Contra la Faim). It seemed easiest to target Chirumanzu where I was aware of the situation before the intervention, and could easily access information about how the project was begun. Noteworthy is that many of the groups of the more established individual or groups of men and women who have been involved in market gardening for lengthy periods have been largely peri-urban and not rural based and therefore are unlikely to face the same challenges that the rural smallholder farmers targeted in the research face. In terms of location, Chirumanzu provided a typical picture of a rural area characterised by long distance from urban area, limited transportation availability, limitations in information access as well as the agricultural conditions including the land access and types of agriculture practised there. More information on Chirumanzu is provided at various points in the rest of the thesis.

2.6 Research methodology and data analysis: literature review

According to Mouton, the methodology focuses on the research process and the “kind of tools and procedures to be used” (Mouton 2001: 56). Hart (1998:28) gives the definition of methodology as “a system of methods and rules to facilitate the collection and analysis of data”. This section will focus on the literature review methodology, as well as the data analysis

2.6.1. Literature review methodology

Mouton gives examples of several databases that can be consulted for conducting the literature search; however, in order to get a more comprehensive picture of the information available, the following sources were consulted: peer reviewed online journals, Google Scholar, websites, Oxfam publications and various books. The Stellenbosch University librarian provided assistance in consulting online journals. In order to get a comprehensive overview of the information available, the following search terms ranging from the general to the specific were applied:

General: women AND agricultural markets; agricultural markets AND sustainable development; where and how do women sell their agriculture products
Thematic: women, credit AND market access; women, labour AND market access; women's barriers to market access; transport AND women's market access; rural women's mobility AND market access; information and market access; impact of global food price crisis on smallholder rural farmers; land grabs AND smallholder rural farmers.
(NB. The "AND" is being used to join search terms as a Boolean operator)

The specific search terms were gleaned from a reading of Oxfam reports, including the baseline analysis for the market access project that my thesis considers as a case study. A reading of these reports as well as a preliminary reading of the literature gave an indication of themes including transport, credit and information as possible issues that women face in accessing agriculture markets. The process was iterative in the sense that reading a journal article about one issue often raised other issues that would lead to start another search in pursuit of details concerning the new issue.

During the time of the literature search (January 2011 to August 2012[1]), many initiatives by non-governmental organisations (NGOs) on rural market access were being initiated. Due to my role at Oxfam, I was exposed to many of these projects at conferences and meetings. It was also through talking to various project staff that some of the possible issues faced by women in accessing markets were highlighted, and included in the literature search. The findings of the literature review are detailed in Chapter Three.

In conducting the literature search, very little information specific to Zimbabwe on women's market access issues was found. There was limited information from some websites for organisations supporting market access for rural farmers. Journal articles that were found typically focussed on one particular issue in market access for women such as women's transport and mobility constraints and a lot of the journal articles and websites discussed the challenges of smallholder rural farmers in general, but did not single out women as a subject. These include

- Jagwe, Machethe and Ouma (2010) on transaction costs as a factor reducing participation of smallholder rural farmers in banana markets,
- Kleih (1999) on transport availability and market participation,
- Hellin and Higman (2002) on smallholder farmers' participation in niche markets and
- Croplife International on barriers facing smallholder farmers in participating in global markets (Croplife International 2011).

[1] The literature search occurred in several stages. An initial search was performed while I was conceptualising the research problem and writing my proposal. A more detailed search was performed in early 2011, but due to the iterative nature of research, the literature search continued in some form until August 2012.

The FAO report (2011) on *The State of Food and Agriculture* for 2011 was particularly useful because it gave a synthesis of the 'gender gap' in women farmers' access to land, education, extension services among other factors that would enable their full participation in agriculture. Some of the issues arising in the literature that affect women smallholder farmers' access to markets include:

- limited access to extension services (Abedi, Allahyari and Khodamoradi, 2011),
- social and cultural factors restricting women's participation (Bradi, Ahmed and Ejail 2008),
- insufficient access to capital and credit (OECD, 2006) and
- insufficient access to transport services (IFRTD, 1999).

More detailed findings are presented in Chapter Three.

2.6.2. Literature review data analysis

This section talks about organising the literature review findings for the answer to research question (i): what are the issues faced by small holder rural women farmers in accessing markets? According to Mouton (2001), a literature review can be organised in many ways including by chronology, by hypothesis, by method, by school of thought ,theory or definition ,by case studies and finally by theme or construct. Following this advice thematic presentation made the most sense given that the review aimed at identifying issues that rural smallholder women farmers face which closely relate to the idea of themes. The findings were grouped thematically as:

- transport and mobility,
- access to information,
- cultural and social norms,
- productivity and so forth.

More details on the findings of the literature review are presented in Chapter Three.

2.7 Research methodology and data analysis: case study

This section describes the methodology and data analysis used for the case study design.

2.7.1. Ethnographic case study methodology

When considering collecting data, I began to think of questions and discussion points that I would present to the group of women in the gardens. These questions would help describe the programme, the social environment that the women exist in, and the history of their economic activities and market access issues. Through the questions the Oxfam project and how it is addressing market access issues would be highlighted. Also considered was observation where women farmers were systematically observed as they worked and prepared to market their agricultural produce. The feasibility of observations was reviewed in

terms of time and value of data that was going to be yielded by the process. An alternative was to observe the women as they interacted with the market. Having considered the time available and the required information, focus groups seemed to be able to yield enough data without having to spend time observing the women in their gardening and marketing environments. Observing the women selling their goods would have provided important information; however, due to time and budgetary constraints, it was ideal to obtain the information from the project manager who was in constant interaction with the buyers in the market. The observation of women farmers' interaction with the market would have yielded information on the extent of the issues that they raised as problems, for instance, the women noted that in the informal market they face challenges of having to tussle with rowdy youths and pushcart operators who were said to be aggressive. Attending a market day would have enabled me to ascertain the extent to which these rowdy youths affect the ability of the women farmers to transact, whether this was a minor inconvenience or a consistent entrenched problem. However, I felt that the project manager would be able to provide good information because from the onset of the project he had made initial contact with the buyers and established the connections with the CIC committees. Another advantage was that he had been responsible for training the CIC members on market engagement and taken them personally to meet the buyers in order to establish business relationships.

In order to triangulate information, I realised the importance of analysing the project documents, files and records such as sales and income statements from the project. I hoped that the data gathering by administering the questionnaire to the women's focus groups as well as key informant interviews with staff and market destinations of the women's goods would help me to describe the project and understand it as well as be able to identify the gaps or non-occurrences if any. These would be instrumental in making the final recommendations from the research.

In order to collect data, the instruments finally selected were focus group discussions, interviews and analysis of project documents. These three instruments were selected in order to adequately describe the experiences of the women in the market access project, which could be triangulated with experiences of the project staff and records from the project.

Focus group discussions

Focus group discussions are useful in data collection as they give an idea of whether there is some agreement and shared opinions in a group of people, in relation to a given topic (Denscombe 2007). Given the structure of the market access model, where 20 gardens with at least 13 members each are participating, focus groups were seen as ideal. The group discussions helped gauge the existing market access issues and the consensus of how the Oxfam project was addressing these.

The recommended size for focus group discussions is between six and nine people, although there can be more or less depending on the researcher's situation (Densconmbe 2007). Initially I had envisaged that

FGDs would be conducted with between eight and 12 women from all the gardens in the ward, that is each garden in a ward was to second two or three members. However after discussions with the project officer, it was deemed more prudent to select members of the CIC committees. The CIC committees are made up of four members from each of the gardens in a ward, that is, if a ward has five gardens, the CIC is made up of 20 members, four seconded from each garden, who are responsible for organising transport, packaging the produce and taking it to the market as well as distributing the income after sales. The CIC committees were therefore purposively selected for their knowledge of both the garden operations and also the market side of the project. This was in line with Denscombe who recommends that the researcher should take a purposive sample for recruiting FGD participants based on attributes relevant to the research (Denscombe 2007).

Discussion guidelines were prepared in advance and translated into the local Shona language. The guidelines aimed to address the two parts of the research: what are the market access issues that the women in Chirumanzu face and secondly how has the Oxfam project addressed these? The project manager and the project officer were given training in administering the focus group discussion, a task which was easy given that both had firsthand experience implementing the project and were able to offer insight on how to phrase certain questions. The entire team (myself included) and the targeted group spoke Shona as the first language and therefore there was good understanding in terms of language. As the Gender Coordinator, my work involves supporting different teams within the Oxfam country programme and my role in the market access project was to provide support on the gender aspect of the project by helping the team to analyse the gender dynamics and respond in order to get the best outcomes for men and women in the project. In this role however my contribution is subject to the willingness of a given team to accommodate and implement my recommendations although the organisation's priority is to take into account gender and particularly women's rights issues in all programming. My role in the market access project therefore was to advise the programme team, none of whom directly report to me.

Five FGDs were held, with 40 members of CIC committees in the four wards of the project. Each CIC should have 20 members but the actual sample size was reduced due to the long distances that some members had to walk. Although mobilisation of the groups had been conducted prior to the day by a project officer, the risk that some members would not attend is constant given the distances, and in many cases, groups believe that other members of the group will represent them. All the FGDs were conducted in one day on the fourth of August 2011, and it was made clear to the participants that they were participating in a data gathering exercise for the project. Because participants routinely participate in monitoring and evaluation exercises, including FGDs in the course of the project without signing consent forms, it was deemed unnecessary to introduce consent forms for participating in the FGDs. When conducting the FGDs an Oxfam framework was used which defined the facilitator's role, gave recommendations on the location, materials required and types of participants as detailed in Appendix A.

Despite being the main facilitator I asked the project manager to introduce the research team and explain the purpose of our visit which is the first part of the FGD guideline. The project manager was asked to do this because he was in charge of the project from its onset and knows best the local customs in greeting and introducing the different leaders who may be among the participants, for instance if one of the participants is a local village head, a special greeting using his/her totem is made before the general introductions.

The project manager also explained to the participants that notes of the meeting would be taken in order to adequately capture the discussion. He encouraged the participants to feel free to express their views. He also gave an indication of the time we were likely to spend that is between an hour and an hour and a half**.** As the main researcher, I then took the lead in asking questions but both the project officer and the project manager were able to ask follow up questions. Both the project officer and I took written notes of the discussions.

It is important to note that the participants in the project are used to routine monitoring and evaluation visits from the project teams from previous projects in the area and therefore the FGDs for this research were not a new experience. However, there were chances that respondents were going to give subjective views just to impress the Oxfam staffers present. In mitigation though, I felt that the participants were likely to be honest because of the presence of the project staff that worked with them on a day to day basis and who could corroborate or challenge some of the information.

Table 3: FGD Attendees

CIC Location	Men	Women	Total	Actual Number in CIC Committee
Chinyuni CIC - 4 gardens	2	10	12	16
Maware CIC– 5 gardens	1	6	7	20
Mhende CIC – 3 gardens	1	3	4	12
Siyahowkwe CIC – 4 gardens	1	9	10	16
Charandura CIC – 4 gardens	0	7	7	16
Total	**5**	**35**	**40**	**80**

As seen in the table above, half of the CIC committee members managed to attend the FGDs, although mobilisation for the FGDs had been done prior to the day and all the FGDs were conducted inside the CIC buildings of each ward. The less than full attendance could be attributed to the fact that some of the CIC committees still have to walk long distances to their CIC centres, and usually if the chairperson, secretary and treasurer are available they are seconded to represent the rest of the committees. Although it would have been ideal to have all the CIC committee members, given that in all the cases the chairpersons, treasurer, secretary or vice secretary and or a committee member were available, it was agreed to proceed with the FGDs. The lowest attendance was in Mhende ward, however, the members who managed to attend were the treasurer (a man), the chairperson and a committee member, so it was agreed to go ahead with the FGD on the strength of their representation. It is, however, important to acknowledge that since it was the project assistant who mobilised for the FGDs in the five wards which are a considerable distance apart and in each ward she needed to locate the central person such as the chairperson of the CIC or the ward councillor to pass on the information, she may have faced challenges in passing on the correct information about who was required to attend. From personal experience in mobilising similar rural communities, locating a focal person for communicating a mobilisation message to relevant stakeholders can be a challenge. If the focal person is not available, one simply leaves a message, although increasingly some have mobile phones which make communication easier.

The questions asked of the participating women and men were aimed at answering two research questions: the issues and experiences of women smallholder farmers in Chirumanzu in accessing markets, as well as how the Oxfam project was addressing these. The questions focused on:

- Capturing the historic perspective – what was the situation like for the women in the project in the past in terms of market access?
- Description of the social environment – what are the livelihoods options in the area, what are the social and cultural issues that affect women and men in pursuing a livelihood?
- Capturing the prevailing situation - what market access issues are the women facing and how has the Oxfam project addressed these, if at all? What recommendations can the women make for improvement of the project?

According to Barbour (2007), FGDs have been regarded as appropriate for eliciting women's views because they are thought to closely resemble women's patterns of interaction. Barbour also notes that when analysing group interaction in FGDs it is important not to overlook individual voices which may offer insights based on individual circumstances. Taking note of this, I found that I recorded a large number of direct quotations, in order to capture the essence of a contribution on a given issue. In some cases a departure from the FGD guide was necessary in order to accommodate an emerging perspective that I had not foreseen. A copy of the FGD guide with my planned questions is attached in Appendix B. Detailed findings from the FGDs are presented in Chapter Four.

Interviews

In order to gather information from project staff, interviews were deemed the best method. Only two semi-structured interviews were conducted with the project manager and the project officer; however a lot of information was gleaned from informal discussions over the period of July 2011 to July 2012. Semi-structured interviews were used to collect data to facilitate flexibility such that pre-planned questions followed a logical sequence and new questions could be developed on the spot allowing for issues arising in the interview to be explored. According to Gibson and Brown (2009), semi-structured interviews are distinguished from structured and unstructured interviews in that the order in which questions asked is flexible and the researcher is sensitive to issues emerging in the conversation. Structured interviews on the other hand do not allow for flexibility in the wording or order of questions (Gibson and Brown 2009), and I wanted to be able to allow the interviewees to be free to express their opinions on the market access project, rigidity in wording and question order was not really necessary as no comparison on the information would be made. The information from interviews held with the two project staff is presented in Chapter Four after the findings of the focus group discussions.

Review of Project Documents

Gibson and Brown (2009) make the point that documents can offer distinctive analytical insights, especially if combined with other methods of generating data. They further note that because documents are generated by organisations and individuals, they can be used as a means of social investigation by researchers. Therefore, in order to gather more information about the market access project, several documents were consulted. The documents reviewed in the study include the project baseline that was conducted in 2010 by Oxfam for three districts (encompassing Chirumanzu) prior to the commencement of most of the activities in the market access project. Monthly project reports including the 2010-2011 annual report for the project were referred to. When examining documents, Gibson and Brown recommend that one asks questions concerning

- the author of the document,
- the time when the document was produced,
- the purpose of the document,
- its intended audience,
- other related documents,
- ownership of the document and alterations that may have been made on the document (Gibson and Brown 2009).

Taking this advice, relevant elements were incorporated into the table below to summarise the documents that I consulted, the time they were produced, the author, and the key highlights in each document.

Table 4: Reports and documents reviewed

Report Name	Dates	Prepared by	Highlights
Market Linkages Annual Report	2010 - 2011	Masimba Ndoro - Project Officer	Project inception and initial market access engagement
The Food Security and Livelihoods Project Baseline Survey Report, Chirumanzu, Gutu and Zvishavane Districts	2010	Dr Mharapara - Consultant	Baseline information on livelihoods issues e.g. information on gardens, crop production ,livestock ownership
Chirumanzu District Quarterly Report on Market Linkages	April to June 2011	Masimba Ndoro – Project Officer	Progress on garden, production and CIC marketing activities for three months
Quarterly Progress Report	October to December 2011	Masimba Ndoro – Project Officer	Progress on garden activities from production to marketing for the three months
Chirumanzu market linkages report: January	January 2012	Vimbai Chiuya – Project Assistant	Details of garden activities: establishment of nurseries, CIC progress update for the month
Market linkages presentation (Powerpoint)	February 2012	Masimba Ndoro-Project Officer	Review of project showing production, sales volumes and challenges faced by farmers.
Quarterly Progress Report	April to June 2012	Chengetai Jiri – Project Manager	Progress on garden activities from production to marketing for the three months
Mid-term Evaluation of the Food Security and Livelihoods Programme in Zimbabwe	May 2012	AEMA Development Consultants	Recommendations for project improvement: post harvest processing to add value to vegetables
CIC Model Development Review (Powerpoint)	June 2012	Masimba Ndoro-Project Officer	Presentation of CIC model, experiences and challanges.

Gibson and Brown noted that by combining document analysis with other forms of data collection, documents can be used to triangulate information (Gibson and Brown 2009). In this case most of the documents detailed in the table above are updated reports. I essentially used them to track the performance of the project, since this started out as a pilot project. The Mid-term Evaluation Report was interesting because of its recommendations on how the project can be improved. Information arising from the document analysis is incorporated into Chapter Four.

2.7.2. Ethnographic case study process and data analysis

As with the literature review, analysis of the data was conducted thematically according to the issues emerging in the FGDs. As indicated before, Mouton notes that an ethnographic case study does not

necessarily start with a formulated hypothesis but is guided by general ideas, therefore the thematic areas were used as ideas to guide the analysis. When analysing focus group data Barbour (2007) advises that one should keep the following points in mind:

- take care not to take excerpts out of context, rather locate them in the discussion and consider what the speaker is aiming to accomplish with the utterance
- pay close attention to group dynamics, whether the group is coming to a collaborative account or a possible solution to a problem, noting how individual opinions are being influenced by the group dynamics
- pay attention to individual voices, focus groups can tend to overemphasise consensus and yet individual voices can reveal nuanced differences
- be open to alternative explanations for patterns found in the data, which may originate from the sampling decisions made or the groups dynamics or differences in characteristics among participants.

Taking guidance from the above, the analysis of the FGD data includes the excerpts from individual members, especially where the few men in the groups voiced an opinion, often to validate what the women were saying. The data analysis also includes some reflection on the group dynamics. The notes taken during the FGDs detailed the date, number of men and women present and in addition to participant discussions contained reflections on the group dynamics. Data analysis depended on the notes taken by the researcher and the project officer because taped recordings were not possible. Making taped recordings in rural areas is regarded as suspicious by state security agents who fear that political messages may be transmitted in this way, special clearance from the police would have been necessary but this is typically time consuming and permission may not be granted, therefore they were ruled in favour of taking notes. The notes were then collected and compared on the evening and the day following the FGDs. An example of the notes is given in appendix C.

2.8. Challenges

During the course of this research, from 2011 to 2012, the project under review as a case study was going through changes; hence the original findings at the time of the initial research had changed by the end of the project. These changes were a result of two factors: internally Oxfam was embarking on a learning process of which I was a part, focusing on improving women's leadership in enterprises and was concerned with making the market mapping and implementation a gendered process. The market mapping is a process where the programme identifies potential buyers of the women's produce, their location, prevailing prices in the market and then links the women farmers to these buyers.

Secondly the project itself was experiencing changes, the initial data was collected after only one season of vegetable sales, however with time, the project had gone through three more seasons of selling and several factors had affected their participation in the market process including changes in water availability,

heat and frost effects on the crops among others, as a result the findings in this research must be understood in the context of these constant changes. These changes are detailed in the findings in Chapter Four.

2.9. Objectivity

Mouton indicates that in order to maintain objectivity as a researcher, one ought to adhere to the highest research standards, clearly indicate the limitations of the research and the methodological constraints as well as present the results of their findings accurately and not falsify data (Mouton 2001). In conducting this research I fully acknowledge the challenges presented by the fact that I am an employee of Oxfam, whose project in Chirumanzu I was attempting to examine. The difficulty presents itself in that I had a great deal of background information on the project which posed the danger that I would assume that the reader will get the same understanding of the description of the project as I had. In order to mitigate this, my supervisor assisted by pointing out gaps in what background information I was neglecting to inform readers of.

Another risk was that as the Gender Coordinator I was partly responsible for the improvement of the project regarding its focus on women, since my study began soon after the project had become operational, no work to improve the gender aspects of the programme had begun, the initial months had been spent in setting up the project. Since the project was in its pilot phase, I did not have any experience integrating gender into a market access project, in fact the organisation was in a learning process on gender and market access and towards the end of this study I was involved in the implementation of a new initiative called Gendered Enterprise and Markets (GEM)[2] to improve the gender aspects of the Chirumanzu programme. It was therefore difficult to stay focused on what was actually documented of the project and not all the planned and prospective changes which the GEM initiative would introduce but had not yet been realised. However to mitigate this tendency, the analysis of data remained that which I had collected on the 4th of August 2011 and information gathered from project documents and project staff through semi-structured interviews. Any planned activities were excluded. Part of the reason I chose to select the Chirumanzu project as a case was to inform my own work of integrating gender into the market access project. I hoped that I would be able to influence the direction of the project based on my findings. The GEM initiative was a great addition, because it provided a platform for me to learn and share my findings towards the development of an organisation wide understanding on integrating gender into market access projects.

2.10. A background: Chirumanzu District, Zimbabwe

This section aims to give a general overview of Chirumanzu as a district in order to provide a context for the case study. The market access project is located in Chirumanzu district in Zimbabwe, a district in the Midlands Province of the country. Most of the information presented in this section is derived from Oxfam's background reports, and information from staff, given that Oxfam has operated in the area for over eight

[2] More can be read on the GEM Initiative within Oxfam more generally here: http://policy-practice.oxfam.org.uk/our-work/food-livelihoods/gem

years. Zimbabwe is divided into five agro-ecological zones[3], also called natural regions, according to the rainfall patterns and soil types. According to this classification, Chirumanzu falls into both regions three and four, with the four wards in which the project is being implemented being predominantly in region three, which presents challenges in terms of soil fertility and water availability for agricultural activities.

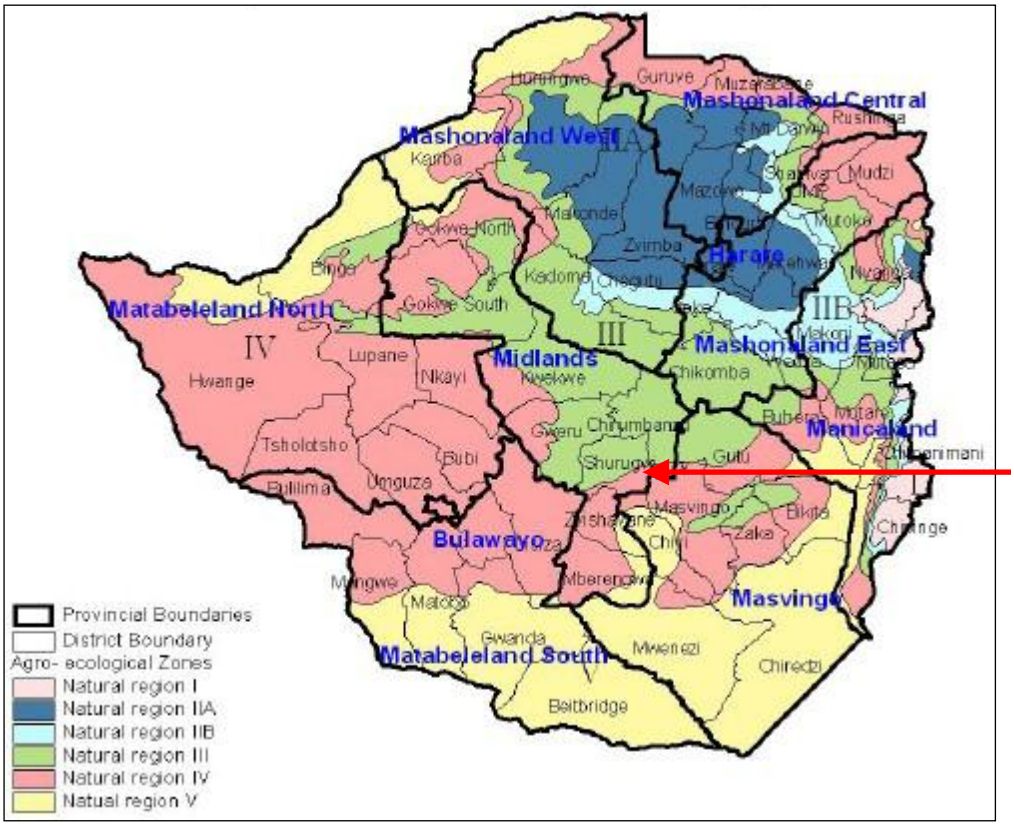

Figure 1: Zimbabwe Agro- ecological Zones

Map adapted from http://reliefweb.int/map/zimbabwe/zimbabwe-agro-ecological-zones-map-2-2

Figure three above provides a picture of the agro-ecological zones in Zimbabwe. Located in the Midlands district Chirumanzu is marked by the arrow on the map. As shown in the map, Chirumanzu falls in natural region three which is characterized by moderate rainfall (650-800mm/year) but also experiences severe mid-season droughts or dry spells which make it difficult for crop production alone but would require livestock production as well (Vincent and Thomas 1960).

Chirumanzu has a total of 19 wards, although the project is operating in only five wards. Twelve of the wards are communal while three are urban, new resettlement and old resettlement respectively. According

[3] An agro ecological zone is a geographically delimited area with similar climatic and ecological characteristics suitable for specific agricultural uses (IAASTD 2009).

to the 2002 census, the district had a total population of 70,441 people (16,319 households). The district has 17 clinics (three private, three Mission hospitals and one government hospital, the rest being Rural District Council clinics). There are six dams in the district with two of these close to the border of the district. There are 12 irrigation schemes, four of which are in the communal areas. The irrigation plots range from 0.1 ha to 1 ha in size. Some of the irrigation schemes are not fully functional because of financial and management problems (absent landlords) as well as inadequate water capacity in the dams (Oxfam 2005).

Historically the district has three urban centres: Mvuma, Lalapanzi and Charamba, of which, Mvuma town houses the rural district council (there is no large city in the district). Mvuma town was founded on gold mining operations in the 1960s and at the closure of the mines in 1992, development of the town has largely stagnated, although there has been a recent upsurge of mining activities (UNICEF 2010). As with many rural locations in the country, the urban settlements such as Mvuma provide employment for the surrounding areas, but with the decline in mining operations, one can infer that the surrounding rural areas have not had a source of formal employment, leaving them with agriculture alone to provide a livelihood.

Chirumanzu area was significantly affected by HIV and AIDS before the widespread availability of treatment medication. From 2004 to 2008, Oxfam provided support to St Theresa hospital, a Catholic mission hospital, to care for orphans and to promote the activities of support groups for people living with HIV, which included funding for seeds and tools for nutrition gardens. The rural business centre located closest to the project sites is Charandura business centre, which is the main business centre, where bars, shops, a post office, St Theresa Hospital and the Grain Marketing Board are located. One of the CICs in the project is located at this center. The offices for the agricultural extension services are also located there. Buses, taxis and cars to Masvingo, the nearest city which is 60kms away, as well as to Mvuma are to be found here. Despite the presence of the hospital and one of the two boarding schools in the district (Hama High School), the centre remains small and dealings like banking are conducted in the city. The roads leading to the centre are not all tarred and this limits the number of transport operators willing to service the route. Most transport operators include individual shop owners with cars, usually trucks, a bus company and the taxi operators.

Food security has been a challenge for some of the communities in Chirumanzu, which has seen Oxfam operating in the area to promote food security since 2004 including emergency food aid as well as cash transfers in lieu of food aid. In the 2010-11 season, in Chirumanzu, out of an estimated population of 69,339, 10,633 were thought to be food insecure representing 15 percent of the population (ZIMVAC 2010). The transition to cash transfers was informed firstly by the recognition that through cash transfers Oxfam could contribute to the availability of cash in the rural economy and allow those with surplus grain to sell to those without. This also made sense to Oxfam from a cost perspective because the expense of moving tonnes of cereals, legumes and oil were costly in terms of the staff employed and the transport charges. Cash transfers require less staff and less transport costs. Other nongovernmental organisations have also

implemented food security and livelihoods projects in the area. The rainy season usually lasts from November to April, while winter is largely between May and July. Cultivation of food crops in the main fields usually takes place from October to harvest in May, while gardening activities were traditionally done in the off peak season from May to September. However due to persistent low harvests since 2010, some of the farmers in the Oxfam project have begun to cultivate their gardens all year round to ensure that some food is harvested for the family.

2.11. Chapter summary

In this chapter the research design was shared, being a literature review as well as an ethnographic case study. The methodology for each was detailed, which included a literature search on online databases, websites and books for the literature review, while the case study methodology was the use of focus group discussions, informant interviews and review of projects documents. The chapter also gave information on why the Chirumanzu project was selected as a case study as well as a background of Chirumanzu district. The challenges experienced relating to developments in the project during the course of the study were discussed. The issues of objectivity given my role as a staff member contributing to the project were also highlighted.

CHAPTER THREE: LITERATURE REVIEW ON SUSTAINABLE DEVELOPMENT AND MARKET ACCESS

3.1. Introduction

In this chapter, literature review on sustainable development is given to provide a context in which the main concerns of this thesis should be understood. The literature review focused mainly on sustainable rural development and market access (especially for smallholder women farmers). Elements of the global polycrisis affect rural smallholder farmers in many ways and connections will be made within the literature review. The overview is based on Swilling and Annecke's conceptualisation of the global polycrisis (Swilling and Annecke, 2012), which is a collection of six documents and a website that discuss issues on ecosystem degradation, oil peak, food insecurity, urbanisation, inequality and climate change. The chapter also provides an overview of the role of markets in rural development and concludes by exploring literature on the issues that rural women farmers face in accessing markets.

3.2 Sustainable development and the polycrisis

The concept of sustainable development originated from the World Commission on Environment and Development held in 1987. It was then that the definition of sustainable development was first coined as "development which meets the needs of the present without sacrificing the ability of future generations to meet their needs" (WCED, 1987). This definition is said to represent the tension between the needs of the developing countries to overcome poverty and the needs of the developed countries to respond to ecological limits that were becoming a concern in the wake of the green movement's work to raise awareness on environmental limits (Swilling and Annecke, 2012). Gallopin's approach towards sustainable development using a systems approach emphasises notions of context, relationship and connectedness. Thinking in these terms allows for the full complexity of sustainable development and sustainability to be examined. As Gallopin notes, this requires a combination of social, economic and cultural factors**,** re-examining approaches to development; both bottom-up and top-down, while at the same time considering local to global connectivity and the requirement of intra-generational and inter-generational equity (Gallopin 2003). In bringing issues of the polycrisis forward, the core logic of the argument is that these issues are connected. Taken together they give a picture of an insecure future threatened by climate change and energy crisis, hampered by degrading ecosystems, weighed down by inequality and rapid urbanisation and food insecurity. The notions of connectedness, relationships and context will be carried throughout this paper in order to show the role of agriculture markets and access by smallholder women farmers within the polycrisis (both how they contribute to the polycrisis and how they are impacted by it).

3.2.1. Ecosystem degradation

All human life depends on the earth's ecosystems and the services that they provide, which include climate regulation, water and food provision (MEA, 2005). However in the last 50 years human activity has rapidly changed ecosystems in order to meet needs such as water, food and fuel (MEA 2005). Although human

beings have benefited, the benefit has not accrued to all groups of people. The associated costs and problems of ecosystem service degradation seem to have affected the poor disproportionately. Statistics given by the report show that 60 percent of ecosystem services which include water purification, pests, protection from natural hazards and fresh water have been degraded (MEA, 2005). However the costs of degradation are largely borne by the poor and, as the report notes, degradation is a barrier to achieving the Millennium Development Goals. This is because many of the regions that are likely to fail to meet the MDGs are also the same regions affected by the challenges of ecosystem degradation.

The main aims of the MEA were to investigate the current status of ecosystems, future changes in the services provided by ecosystems and possible impacts on human welfare. An important outcome of the MEA, which involved 1,360 experts from 95 different countries, was to identify priorities for actions that will enhance human welfare and meet sustainability goals (MEA, 2005). The findings of the report suggest that changes in drivers like population of a region can affect the drivers of biodiversity change, which will in turn affect ecosystem services and finally human welfare. Despite the problems of degradation and the likely continuing trend, the MEA suggests that with certain changes it will be possible to meet both human welfare goals and sustainability goals. This change would be in “institutions and governance, economic policies and incentives, social and behaviour factors, technology and knowledge” (MEA, 2005:17). The integration of ecosystem services management into sectors such as forestry, agriculture and health, among others, are some of the changes that would need to be taken.

The MEA document is key to the issues covered in this research on smallholder women farmers because it alludes to the growing inequality in terms of access to ecosystem services. Smallholder farmers in developing countries face significant challenges in continuing with production, because as the report rightly points out, it is the poor that mainly depend on ecosystem services for a living. Being unable to produce due to ecosystem degradation (such as soil loss and water unavailability), has a significant impact on the livelihoods of these farmers. While not all ecosystem service protection is within their control, it is essential that these farmers use farming methods which support and enhance ecosystem services, rather than degrade them.

3.2.2. Global warming

The trends reported in the 4th Intergovernmental Panel on Climate Change (IPCC) report reinforce the findings of its previous reports, that due to greenhouse gas (GHG) emissions in the atmosphere, global temperatures are rising, especially at higher northern altitudes, with land regions warming faster than the ocean regions (IPCC, 2007). The increase in GHG emissions since the 1970s has been attributed mostly to burning of fossil fuels (Stern, 2006), deforestation and agricultural production.

The trends are not confined to rising temperatures alone, since a rise in temperatures causes a decrease in snow and ice cover in mountain glaciers for both hemispheres and rising sea levels (IPCC, 2007). The report also notes an increase in precipitation in certain regions and a decline in others, such as southern

Africa and the Mediterranean. The report also suggests that it is likely that drought affected areas globally have increased (IPCC, 2007). The impacts of climate change are likely to be felt on health, food, water, ecosystems and on the coasts (IPCC, 2007). For Africa, the impact of climate change is dire; by 2020, the report suggests that yields from rain fed agriculture may decline by 50 percent in some countries (IPCC, 2007). This has an implication of reduced productivity by smallholder subsistence farmers who depend on rain fed agriculture. Climate change will impact negatively on food security, with a suggested rise in malnutrition (IPCC, 2007). In addition a projected 75 to 250 million people in Africa will face water stress, but low lying coastal areas will be under threat from rising sea levels.

What is crucial about the report is that it shows that Africa is the least prepared to cope with the impact of climate change (Swilling and Annecke, 2012), which the IPPC report notes would cost at least 5-10 percent of Gross Domestic Product. Climate science cannot fully address global warming issues and would need to be supported by a reconfiguration of global and national economic policies to factor in mitigation and adaptation measures as well as move to low carbon economies. Economic sectors such as transport, forestry, agriculture and construction should take into cognisance issues of GHG emissions and the consequent effects of climate change (Swilling and Annecke, 2012). Moving to low carbon economies, however, is likely to be the result of efforts by different social and economic interest groups affected or likely to be affected by climate change rather than the large corporations that have driven the carbon intense growth so far. Debate may occur on whether the basis for paying the cost of mitigation and adaptation should be per capita or per country, but of importance as noted in the Stern Report is that the cost of paying now is far less than the cost of paying for the consequences of climate change after the damage has been done (Stern, 2006).

As pointed out in the paragraphs above, the effects of climate change on Africa will have a significant impact on smallholder subsistence farmers, whose productivity is likely to be affected by reduction in rainfall, increasing droughts, and extreme weather events. This is despite the fact that most countries in Africa are the least responsible for GHG emissions as noted in the Stern report when it stated that: “generally, poor countries, and poor people in any given country, suffer the most, notwithstanding that the rich countries are responsible for the bulk of past emissions” (Stern, 2006: 28). With reduced productivity will come reduced food access as well as reduced participation in economic activities including markets. Climate change thus has a strong bearing for smallholder rural farmers in developing countries. Adapting to and mitigating the effects of climate change will require developing countries to develop national policies. And farmers, such as those in the Chirumanzu market access project, will have to factor the effects of climate change into their agricultural activities, by trying to both mitigate and adapt to the effects of climate change. Scientists, governments and NGOs need to assist small farmers with this.

3.2.3. Peak oil

The peak oil discussion centres around Hubbert's theory that oil availability and extraction, like other finite resources, will follow a bell-shaped curve that is it will reach a peak beyond which it will start to decline (Bardi, 2008). Oil is a finite resource which must be discovered before it is processed and used (Association for the Study of Peak Oil and Gas (ASPO) - South Africa, 2007). With the decline in the availability of easily accessible oil reserves, the cost of production will increase, which will affect the price and availability of oil. The advent of peak oil is likely to affect the world economy significantly because it will affect other sectors including food security, transport and financial markets and settlement patterns (ASPO-South Africa, 2007). To exacerbate the matter, consumption of oil contributes to the emission of GHGs that result in global warming and climate change.

Of importance is that oil peak may be occurring at a time when developing economies like India and Brazil are growing and increasing demand for oil. Without a switch to more renewable sources of energy and more investment in discovering oil, this may spell a future problem for these countries. If the transition from oil to other sources of energy happens as a crisis then the global middle class- will be the most affected because of its high energy consumption through transport, and reliance on goods transported from all over the globe (Swilling and Annecke, 2012). Poor people in developing countries would be affected negatively in that oil peak may have a negative effect on meaningful economic growth (Swilling and Annecke, 2012).

Given that many smallholder rural farmers depend largely on fertilisers and other chemicals derived from petrochemicals for pest and weed control, the impact of peak oil will be felt by them in declining yields, especially coupled with the low fertility of their soils. There is also the likelihood that they will not afford to transport their produce to markets, where consumers may be less able to afford food. For those that still purchase a large amount of food from markets, food affordability and availability will become an issue.

3.2.4. Poverty and Inequality

According to Swilling and Annecke (2012), the 1998 United Nations (UN) UN Human Development Report is unique in that it manages to combine an analysis of poverty and inequality. Most academic discussions focus on poverty but few on inequality, yet the two are connected (Swilling and Annecke 2012). The 1998 report states that human consumption has increased in the twentieth century, which has contributed to human development. Consumption contributes to human development when "it enlarges the capabilities and enriches the lives of people without adversely affecting the wellbeing of others" (UNDP, 1998,1). However despite this positive contribution, the report notes that present day consumption where the rich few consume more than the poor majority is undermining the environmental resources and increasing inequalities (UNDP, 1998). The report describes a consumption-poverty-inequality nexus which is accelerating (UNDP, 1998). In order to address this nexus, it will be necessary to move from conspicuous consumption to meeting basic needs, empowering poor producers, adopting cleaner technologies and changing from polluting to cleaner goods (UNDP 1998). Trends in the report show that African household

consumption is declining; “the average African household consumes 20 percent less than it did 25 years ago” (UNDP, 1998:2). Lack of consumption in developing countries means lack of basic sanitation, inadequate shelter, lack of clean water, dietary deficiencies and lack of health services. Although Africa and other developing countries bear the brunt of poverty, under consumption and human deprivation are also found in sections of the developed countries themselves (UNDP 1998). This shows that inequality can exist even in countries with high resource consumption, if distribution is not equitable. Unequal political and economic power relations uphold structures of inequality.

For rural smallholder farmers inequality and poverty are two factors that deprive them of a sustainable livelihood. Inequality is due to a lack of investment in rural economies by responsible governments, which, coupled with increasing urbanisation, has resulted in rural areas lagging behind in terms of infrastructure and other essential services (IFAD, 2011). This means that smallholder rural farmers struggle to compete with commercial farmers and corporate entities because they have no market power. Also this means that the infrastructure necessary for rural smallholder farmers to participate in urban and other markets from roads to telecommunications is missing and disables them from making a sustainable livelihood. From a gender perspective, inequality plays out in rural women farmers’ inability to access productive resources and other support from the state such as extension services, which is rooted in cultural and social norms that perpetuate inequality, where men hold the power (Abedi, Allahyari and Khodamoradi, 2011; Bradi, Ahmed and Ejail, 2008).

3.2.5. Urbanisation and slums

The world population is forecasted to grow to eight billion by 2030 and nine billion by 2050 (UN 2006). This forecasted population increase is likely to happen in African and Asian countries where the population growth has not yet stabilised (UN-Habitat, 2003). These population increases will happen not in the major cities of these countries but in secondary and tertiary cities. Since 1950, mankind has endured its most rapid expansion, from 2.5 billion to 6 billion people. Sixty per cent of this gain has been in urban areas, particularly in the urban areas of the developing world, where the urban population has increased more than six-fold. Humanity is only about half way through this great transformation to urban living. The greatest impact will be felt in the developing world especially South and South-eastern Asia and sub-Saharan Africa. During the next 15 years, many large cities in Asia and Africa will nearly double their population (UN-Habitat 2003:5)

A key trend, reported in the UN report *Challenge of Slums* (2003), connects the forecasted urban future with the rise of slums. According to report, the locus of poverty is moving to the cities as more and more people in developing countries are becoming urbanised and moving into the slums, an easy initial entry point for rural immigrants. With a forecasted increase of two billion slum dwellers over the next 30 years, there exists an urgent need to address the requirements of this population for water, sanitation, infrastructure and a way to address increasing poverty and inequality (UN-Habitat, 2003)

In slums, poor people build their own homes and networks that enable their survival mostly without state of non–profit sector support. The states and non-profit sector actors all seem to have failed to address the growth in slums. The notion that urbanisation equates to an escape from poverty especially in developing countries has been challenged by the existence of slums, where poor people exchange rural poverty for urban poverty (Swilling and Annecke 2012). The fact that many people in developing countries move to the city does not mean moving out of poverty is an important factor in this thesis because the thesis aims to investigate how market access for poor smallholder farmers, especially women farmers, can improve their livelihoods and by default enable them to stay on their land in rural areas rather than join the urban poor who often have less resources such as land available to them. One of the arguments is that, by providing a more secure livelihood to rural farmers and their families, the pressure on the forecasted urban cities is decreased.

According to IFAD, urbanisation has come with a challenge that the urban economy cannot absorb all the rural migrants. *The Challenge of Slums* (2003) report notes that many of the new arrivals to the urban area are becoming inhabitants of the slums and are exchanging rural poverty for urban poverty (UN-Habitat, 2003). However, one school of thought is that there are still opportunities within the rural economy through agriculture as well as the rural non-farm economy that may have positive impact on the livelihoods of the current and future populations (IFAD, 2010)**.** There are opportunities for the rural smallholder farmers to supply high value products to the burgeoning urban population with adequate support. The IFAD report argues that with a more comprehensive approach to the rural economy by governments and other players, rural smallholder agriculture has the potential to meet the challenges of climate change, demographic changes and new market dynamics and allow rural areas to become the sites of pro-poor growth (IFAD, 2010).

3.2.6. Food security, soils and the future of agriculture

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) report is pivotal in the sustainable development discourse because it highlights key issues in agriculture, food security and sustainable resource use - especially soils. The report was co-sponsored by various UN agencies, and was the first large scale global scientific assessment of agriculture. The report highlights the multi-functionality of agriculture in providing fibre, food and fuel and its role in carbon release and sequestration (IAASTD, 2009). The report shows that agriculture provides for the livelihoods of at least forty percent of the world's population. Because of agriculture's role and variability in systems and scales, which either makes it sustainable or not, it is a major contributor to some of the issues of the polycrisis such as ecosystem degradation, loss of biodiversity and climate change (IAASTD, 2009).

The report flags four very important issues:

i. the expanding global middle class's increasing demand for a wide range of (food) products,
ii. increasing malnutrition in developing countries (excluding China),

iii. rising food prices and
iv. degrading soils and related ecosystem services.

These four issues are connected to other issues, such as the fact that poor consumers are the worst affected and the reduction of malnutrition will be slow. Drivers of these four trends include issues of increased food demand based on population growth in Africa and Asia. Demand for meat and milk products as a result of the aforementioned growing middle class in Asia, will result in a strain on prices of maize and other grains. Also increased bio-energy demand will increase competition for land and water resources, with food production (IAASTD, 2009).

Rising oil prices are a factor in increased food prices, due to the reliance of modern food production on chemical inputs both in developed and developing countries. Therefore a rise in oil prices, whether or not attributable to Oil peak will affect populations in developing countries negatively.

While issues of food price increases due to growing demand and increases in the price of oil are commonly discussed, the issues of soil and land degradation are often left out. This is a serious oversight in that the ability of the planet to produce food depends largely on soils. The report notes that not only are soils degrading but the demand to produce more from those soils is also increasing. In Africa 65% of agricultural land was degraded by the 1990s and yet Africa is one of the continents receiving a large amount of free fertilisers. Swilling and Annecke suggest that perhaps the free fertilisers are at the root of the degradation problem (Swilling and Annecke, 2012). Despite this dire situation the report notes that there is no clear plan on how to address the situation and yet the potential gains from rehabilitation of these soils are enormous. The thinking that promoted the green revolution and its use of chemical inputs and the thinking around the genetic modification are not the answer to the problem (Swilling and Annecke, 2012)

The implications of the report for smallholder farmers is that their productivity will be affected due to degrading soils and ecosystems thus compromising their ability to produce food for themselves. With low production smallholder farmers will have a limited ability to participate in markets to sell their produce which will affect their livelihoods negatively. Rising food prices will make it difficult for the rural poor including smallholder farmers to procure food and the trend of increasing malnutrition noted in the report will continue.

3.2.7. Food security and poverty

Although the IAASTD report has been reviewed in section 3.2.6. above, the issues of food security and poverty are elaborated in this section as key themes within this study in order to make connections between food security, poverty and market access issues for smallholder rural farmers.

Food Security

The first Millennium Development Goal (MDG) is aimed at reducing extreme hunger and poverty by the year 2015. Setting a goal with both dimensions of poverty and hunger is a clear testimony to the interwoven nature of the two issues. Agriculture is a vital tool in achieving this MDG (World Bank, 2007) although the national poverty reduction strategies of developing countries did not always specifically focus on rural poverty or agriculture, partially due to the trend of governments reducing support to agriculture (Global Donor Platform, 2008).

The issue of hunger is connected with food security. Food insecurity poses a great threat to achieving sustainable development, reducing poverty and inequality and achieving the MDGs (FAO, 2008) .Food security is defined as existing "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (World Food Summit, 1996). The dimensions mentioned in the definition include availability, access, utilisation and stability; these dimensions are elaborated as follows:

Food availability*: The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid).*

Food access*: Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources).*

Utilization*: Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. This brings out the importance of non-food inputs in food security.*

Stability*: To be food secure, a population, household or individual must have access to adequate food at all times. They should not risk losing access to food as a consequence of sudden shocks (e.g. an economic or climatic crisis) or cyclical events (e.g. seasonal food insecurity). The concept of stability can therefore refer to both the availability and access dimensions of food security*

(FAO, 2006:1)

This definition of food security is useful in that it enables an analysis of food security that links well to an analysis of poverty. Food availability relates to agricultural production, and it is usually the poor who cannot manage to produce enough food for themselves due to a variety of reasons including climatic conditions and access to productive inputs. In Africa the problem of hunger is associated with the continent's inability to feed itself (Rukuni, Tawonezvi, Eicher, Munyukwi-Hungwe and Matondi, 2006). Food access affects the poor in that they are the least likely to be able to afford to buy food, as witnessed during the food price

hikes of 2008, where it was the poor who were affected the most (UNCTAD, 2009). Food stability depends on production, markets and income, and can be negatively affected by economic and political factors as well as natural disaster (FAO, 2008). Utilisation of food relates to the proper processing and storage of food, however the poor are the least likely to have adequate storage facilities (Oxfam, 2010).

Global food supplies are able to provide everyone with adequate food for survival, however, the supply of food is not distributed equally, with a significant portion of the population in developing countries, in particular Southern Africa, consuming less than the required calorie intake (FAO, 2008). Half of those struggling to access adequate food are smallholder farmers who lack the ability to meet their food requirements either through purchase or own production (FAO, 2008). In fact the FAO predicts that "the developing world as a whole and most of its regions will fall short of the World Food Summit hunger reduction goal in 2015 and that more people will be undernourished than in 1990 in Sub-Saharan Africa and the Near East" (FAO, 2008:22).

Zimbabwe is a country that has struggled with issues of food security in the last few years. The Zimbabwe Vulnerability Assessment Committee (ZIMVAC) assessment report for the 2009 - 2010 season estimated that 1.6 million people living in the rural areas would be food insecure (ZIMVAC, 2009), while the 2010 report (2010 - 2011 season), estimated that at the peak of the hunger season (January to March), 1.3 million rural people would not be able to meet their minimum cereal requirements (ZIMVAC, 2010). This figure represented 15 percent of the total rural population of the country (ZIMVAC, 2010). In Chirumanzu, out of an estimated population of 69,339; 10,633 were thought to be food insecure representing 15 percent of the population (ZIMVAC 2010). Although the number of food insecure rural people seems to be declining in the years noted above, the numbers remain high for a country that once produced surplus food for its requirements. Although the ZIMVAC reports do not give reasons as to the causes of food insecurity, they do give an indication that production of cereal crops in both years was lower, and also that the prevailing unpredictable economic and political environment were contributing factors (ZIMVAC ,2009).

Poverty

Food security issues are difficult to separate from issues of poverty. The dimensions of food security such as food access directly relate to issues of poverty. As noted above it is the poor who are least likely to be able to produce or access food**.** During the 2005- 2008 food price crisis, global food prices rose by 83 percent (UNCTAD, 2009). These included prices of essential staples like maize, wheat and rice. Although the effects of the rapid increase in food prices were felt globally, the most affected were countries with low incomes, food deficits and limited food stocks (IFAD, 2010, Marros and Martin, 2008). The number of hungry and undernourished people in the world increased significantly, with the FAO estimating that in 2008, 40 million additional people were pushed into hunger (FAO, 2008). Those most affected were the urban and rural poor people, who depend on the markets for accessing food (UNCTAD, 2009). Although food prices have declined since their 2008 peak, they have remained higher than they were before the price

increases and predicted to remain higher in the near future (IFAD, 2010, UNCTAD, 2009). In addition to the food price increase, the FAO noted an increase in the price of seed, fertiliser and other inputs since 2006, which would likely hamper the ability of poor farmers in developing countries to increase their productivity, thereby affecting the availability of food (IFAD, 2010, UNCTAD, 2009). In this year, due to a drought that has reduced the expected corn and soya bean harvest in the United States, the Economist magazine predicts a steep hike in prices of corn, which will in turn affect the prices of animal feed in America, but more importantly, it will affect world markets especially those in developing countries who do not have the reserves that the more developed countries have (The Economist, 2012).The magazine notes that the effect of a price hike of American corn could reach and surpass the 2008 food price crisis levels (the Economist, 2012), and again it is the poor who will suffer the most to access food.

Causes of the food price crisis include a decline in agricultural productivity due to a reduction in investment in agriculture and a reduction of the state's role in supporting agriculture in developing countries, as well as a reduction in research and development on agriculture by governments and institutions (UNCTAD, 2009). Other causes for reduced productivity were noted as the effects of climate change resulting in floods, droughts and severe cold temperatures which affected crop production (FAO, 2008). Additionally countries are said to have had reduced grain stocks, partially due to the liberalised agriculture markets which in theory would even out demand and supply (UNCTAD, 2009). Other factors cited for the price increases are increasing demand from emerging economies like India and Chins as well as an increase in demand for bio-fuels which both had the effect of pushing up the prices of food (UNCTAD, 2009).

Whatever the causes, however, it is clear that agricultural productivity, investment in agriculture and agriculture policy are central to achieving food security and addressing poverty especially for the world's developing nations. One recommendation in the wake of the food crisis is that in order to meet the productivity challenge and ensure access and affordability to all, especially poor low income households, developing countries must support smallholder farmers to be more effective in meeting food needs of their populations (IFAD, 2010). Agriculture as a tool for development has been shown to be four times more effective than growth in other sectors in increasing the income of the very poor (World Bank, 2008), hence investing in agriculture to increase incomes of poor people who can then better access food in the market. Smallholder agriculture in developing countries especially also has a role in supplying national and regional food markets (IFAD, 2010).

Agriculture's role in overcoming poverty is clear since the majority of the poor people in the world depend on agriculture for a living (World Bank, 2007). Also noteworthy is that three out of four people in developing countries, where the majority of the world's poor are to be found, reside in rural areas (World Bank, 2007) therefore investing in smallholder rural farmers makes sense in order to address both poverty and hunger. Animal husbandry and the emergence of high value market chains present opportunities for investment in the smallholder rural farming sector (World Bank, 2007). However, in achieving poverty reduction goals, agriculture still has to be mindful of its impact on natural resources:

> *Smallholder agriculture can offer a route out of poverty for many of them – but only if it is productive, commercially oriented and well linked to modern markets. But at the same time, agriculture today must use the scarce and fragile natural resources on which it is based more carefully: it must be environmentally sustainable and more resilient to increasing climatic variability* (IFAD, 2010:9).

3.3. Summary of the global polycrisis

The real issue behind today's sustainability crisis is the quest to end poverty while at the same time rebuilding the degraded and degrading ecosystems that support the continued survival of the human race. The development aspirations of the world's poor cannot follow the trajectory, in terms of consumption and resource use, of the world's developed populations, who consume the majority of the world's manufactured and natural goods, because of the finite nature of resources available. Meeting the needs of the world's poor, given the growing populations and emerging middle class with more demand for food and natural resources, means changes in production and consumption are necessary. This means a change in the way the global economy is structured (Swilling and Annecke, 2012).

From the above review, the interwoven nature of issues affecting smallholder farmers is made apparent. Although the study focuses on market access, the above issues are indirect factors that all have implications on the ability of farmers to access and participate in markets and will need to be taken into account at the policy and programme levels if market access is to be a successful intervention in promoting sustainable rural development. As noted in the IAASTD report, agriculture plays a multi-faceted role especially for developing countries, where a large portion of the rural population depends on agriculture for food and for a livelihood (2009). However, as has been noted in the MEA report, human activity has rapidly changed the performance of eco-systems in the last 50 years, causing degradation to soils and water that will make it difficult for future generations to benefit from the same ecosystem services if nothing is done. Agriculture production is one of the elements that has contributed to ecosystem degradation, but will also be one of the areas to be worst affected by degraded soils and ecosystems thereby resulting in lowered production. Climate change will worsen the situation by presenting changes in climate that may not be conducive to agricultural production, including rising temperatures and decreasing rainfall in some areas. Developing countries, as noted above, are likely to be worst affected. If agriculture production is negatively affected by climate change and ecosystem degradation, the food security of poor people will be seriously hampered.

The IAASTD report already notes a trend towards increasing malnutrition, which will likely increase with lowered production. If oil prices rise due to scarcity as envisaged by the peak oil position, then food prices will rise and this will affect the poor in developing countries disproportionately. Also fertilisers derived from oil will become more expensive and scare, which will affect farmers in developing countries, who depend on them for good yields. Many poor people in developing countries, including smallholder farmers, live in the rural areas (World Bank, 2007), there is likely to be an increase in food insecurity and poverty in the rural

areas, especially since a decline in agricultural production also means a decline in opportunities for earning a livelihood through crop production. Some rural areas in developing countries are already affected by a decline in investment. If productivity declines due to climate change and ecosystem degradation, then the urbanisation trend is likely going to continue resulting in a rise in slum populations and associated urban poverty.

3.4. The role of markets in rural livelihoods of smallholder rural farmers

3.4.1. Introduction

This section aims to give a literature review of the role of markets and markets access for smallholder farmers, showing how markets are an intrinsic part of their livelihood. The first part of the section deals with the importance of markets in agriculture. Following this, a brief outline of global trends in agricultural markets is given, showing that there is increasing integration of national, regional and international markets as well as the concentration of market power in the hands of a few players. Thereafter the need for a gender perspective in market access issues is presented showing that women farmers have little voice in policy making and their work is not always recognized in statistics. A literature review of the issues that women face in accessing markets is then presented highlighting issues that include; limited access to market information, extension services, livestock and land.

3.4.2. The importance of agricultural markets

Markets play a crucial role in agriculture in that the livelihoods of the majority of the world's poor people depend on participating in markets either as workers or producers, with many successes in poverty reduction historically being associated with the growth of "markets and private economy" (FAO, 2009:4). Markets are said to be the "main transmission mechanism between growth in the wider economy and the lives of the poor" (DFID, 2005:5). Through access to different markets, poor households are enabled to access inputs, credit, market their produce, access other consumption goods as well as learn about and adopt new technologies (FAO, 2009). Thus markets are a link between the local and global economy especially for poor people. Markets are said to play a role in facilitating economic efficiency through promoting the exchange of goods, services and other resources (FAO, 2009). Markets are so pivotal in that their functioning determines the "pattern of growth and consequently the speed and extent of poverty reduction" (DFID, 2005:5). Despite the pivotal nature of markets, however, they do not always work for poor people, especially those in rural areas for whom the cost and risk of participating in markets is too high (DFID, 2005).

Without participating in markets the rural poor remain isolated from the national and global economies. The neo-classical economics standpoint is that "perfectly competitive markets lead to an optimal allocation of resources, where it is impossible to improve anybody's welfare through changes in production or exchange without worsening someone else's welfare" (DFID, 2005, p.6). However, as noted by the DFID report, perfect market conditions hardly exist in real life and particularly in developing countries, and it is possible

for well-functioning markets to exist together with poverty because issues of equity and distribution are not addressed by the market (DFID, 2005). Therefore market access for the poor is a crucial development issue that relates to addressing poverty and equity because markets are not only an economic issue but are embedded in social and political institutions as well (DFID, 2005).

Livelihoods include not only income but the resources, both tangible and intangible, that households use to generate income (IAASTD, 2009), as such, markets form a key part of the livelihoods of smallholder rural farmers. Failure to access markets would mean that such households would lose an opportunity to earn an income and would be forced to depend on themselves to produce all the goods that they need (FAO, 2009). Access to a market for agricultural produce means that a farmer is able to get a better selling price by selling directly to the market, rather than selling to middleman, who will resell in urban markets (FAO, 2009).

In times of disasters, not having access to markets to buy and sell agricultural produce may be a catastrophe to poor rural smallholder farmers. Crop failures occur in southern Africa once every five years and during this period the local price of food rises above the import parity price, a disproportionate rise which affects poor rural farmers negatively as they cannot afford to buy food (Poulton, Kydd, Wiggins and Dorward, 2006). If on the other hand local markets are strongly integrated with global markets, occurrence of a poor harvest will not have much effect on the local price of food (Poulton, Kydd, Wiggins and Dorward, 2006). Without the access to a market in which to sell, the occurrence of an irregular bumper harvest will have the effect of lowering or depressing grain prices, which affects the smallholder farmer's income negatively (Poulton, Kydd, Wiggins and Dorward, 2006).

Markets play a crucial role in the adoption of new technologies. Market access is one of the factors that can transform smallholder agriculture in developing countries towards commercialisation (Jagwe, Machete and Ouma 2010). For transformation to happen there is need for access to market information, intelligence, markets themselves as well as effective farmer organisations (Jagwe, Machete and Ouma, 2010).

Well-functioning markets enable smallholder rural farmers to invest in their land for productivity through the income earned from market activity. IFAD gives an example of smallholder dairy producers who have been able to commercialise their milk production through zero grazing, and supply milk to the Nairobi market (IFAD, 2010). The example shows that by producing crops for the market, smallholder farmers have an opportunity to buy inputs for the production of food crops through the income earned.

3.4.3. Global trends in market access

3.4.3.1 Market power in the hands of a few

The global agri-food system is controlled by a few players, concentrated in the more wealthy and industrialized countries (Millstone, Thompson and Brooks, 2009). Governments in these countries provide

both financial and regulatory support to agriculture through, among other provisions, policies that set price floors and ceilings to limit fluctuation of prices (Millstone, Thompson and Brooks 2009). Such policies have provided price stability and enabled farmers to receive adequate incomes and consumers to access food at reliable prices within the developed countries (Millstone, Thompson and Brooks 2009). However, protecting domestic agricultural industries has affected farmers in poor countries, who face tariff and non-tariff barriers that restrict their exports to developed countries. These tariffs are usually imposed on products that the developed countries can produce including corn and wheat, leaving out exotic products like coffee and tea (Millstone, Thompson and Brooks 2009). This way, farmers in developed countries remain protected from competing on the global market. Governments in developed countries like the United States and the European Union also further harm farmers in developing countries by subsidising the export of surplus agricultural commodities (Millstone, Thompson and Brooks, 2009). In addition farmers in developed countries have benefited from agricultural and scientific research and development, enabling them to reduce production costs and increase productivity of labour and land (Millstone, Thompson and Brooks, 2009). The support that poor farmers in developing countries receive is in sharp contrast to those in developed countries, with many developing countries experiencing low investment in agriculture.

Most value chains for food and agricultural products involve many intermediaries between producer and consumer, and at each step there are further risks and transaction costs, all of which reduce market efficiency. As noted below different interest groups hold power:

> *Market power is rarely equally distributed along the value chain and this enables the more powerful to pass costs and risks to the weaker actors – typically smallholder farmers (but also casual workers in agriculture and agro-processing). In some cases, market power asymmetries are intensified by a high degree of concentration of control over specific value chains. In Latin America, for example, four firms control 75 per cent of the Brazilian hybrid maize market, and four control the same percentage of the coffee market. In Colombia, four companies make up 72 per cent of the market for oils and four others comprise 94 per cent of the market for potatoes, yucca and bananas. In El Salvador, two mills dominate 97 per cent of the market for wheat, and four companies control 87 per cent of the dairy market* (IFAD, 2010:117)

3.4.3.2. Changes in the supply chain

Through the increased integration of regional and global markets, changes in the supply chain driven by supermarkets and exporters have resulted in the increased demand for products like vegetables, fruits and nuts especially by urban retailers (FAO, 2009). Urban retailers often have very high health and hygiene standards, and demand strict quality and appearance levels. Given these new requirements, the concern is whether rural smallholder producers will be able to fulfil the requirements and successfully supply urban retailers especially since they are also in competition with larger producers (FAO, 2009). Rural smallholder

farmers will require different types of interventions and support for them to be able to participate in these new markets (FAO, 2009).

In addition to trends towards changes in the supply chain noted above, stakeholders involved in supporting rural smallholder farmers have also changed, with the government and private sector becoming increasingly working more closely to provide support to smallholder farmers. Stakeholders include non-governmental organisations, private sector, governments and civil society organisations (FAO, 2009). These new stakeholders and partnerships may result in different types of market interventions that will enable smallholder farmers to participate in the new supply chains (FAO, 2009).

3.4.3.3. Competition in national, regional and international markets

For smallholder farmers to successfully compete within urban and other emerging markets they are required to meet market requirements that include: high quality products, demand for specific and often increasing volumes of produce, producing according to a seasonal criteria, comply with formal and informal requirements of the market among other things (FAO, 2004). While these factors may be a challenge for smallholder farmers, larger competitors would easily be able to meet these criteria, leaving the supermarket, wholesale buyer and other market players with no incentive to promote the smallholder farmer's participation. In order to be nationally and regionally competitive smallholder farmers are required to adopt creative marketing strategies such as participating in Fair Trade arrangements, as well as adopting farm management practices and forms of producer organisations that enable them to innovate, utilise technology and develop new products (FAO, 2004), these requirements may be a challenge for smallholder rural farmers.

3.5. The need for a gendered perspective to market access

3.5.1 Introduction

This section has been incorporated to show the context in which many rural women survive and make a living through agriculture. The section aims at showing how and why challenges for women smallholder farmers are different from those of their male counterparts by showing the myriad complexities that exist within women's lives and livelihoods. As noted in a FAO report:

> *The emergence of contract farming and modern supply chains for high-value agricultural products, for example, present different opportunities and challenges for women than they do for men. These differences derive from the different roles and responsibilities of women and the constraints that they face* (FAO, 2010:7).

This section also aims at showing that an information gap exists regarding women's involvement in agriculture, especially in agricultural markets, given that market access is becoming a popular buzzword in development initiatives in Zimbabwe. It was therefore worthwhile to highlight this gap and show the unique

factors surrounding women that must be taken into account by development interventions. Below is a discussion outlining some of the issues that include the burden of HIV, women's low involvement in policy making and women's household work and time. All these issues paint a picture of inequality where women are at the bottom of the development ladder. It also makes recommendations that interventions aiming to pursue a sustainable rural development agenda cannot do so without addressing these underlying inequalities.

Gender can be regarded as an important tool for analysing agricultural societies (Linares, 1985) in that it goes beyond the roles and responsibilities of men and women to consider asset ownership and control as well as the fact that these patterns of work and ownership change over time and location. Given the dominance of patriarchy in Africa, and its attendant disadvantages for women, gender considerations are important in understanding these patterns of work and ownership. A consistent pattern is that women have little ownership, access to and control over assets such as land and yet they carry a significant share of agricultural work (IAASTD, 2009). The gender lens therefore can be used to understand an individual's position in society given the cultural, economic, political, social attributes that are associated with being male or female when analysing agricultural issues.

3.5.2. Data on women and their involvement in agriculture

As highlighted in the introduction, there is an information gap on women's agricultural activities, in particular rural smallholder women farmers. Data on women farmers is not usually separated from that of the household as a production unit and therefore remains hidden (FAO, 2010). Data on female headed households is usually derived from surveys but cannot be used to represent the status of all women farmers, as in some regions they are a minority, although sub-Saharan Africa generally has a higher prevalence than other regions (FAO, 2010). A FAO report also notes that studies that provide disaggregated data for mechanisation (that is, use of tools and farming equipment), according to gender are rare. Similarly studies that provide information on land ownership by women farmers, who are not necessarily from female-headed households, are rare (FAO, 2010). Due to male migration to urban areas for better livelihood opportunities, a larger percentage of rural women act as household heads, but lack resources since they are likely to be less educated, and have less access to productive resources like land, capital and credit facilities as compared to male headed households (FAO, 2010). Without accurate information on female agricultural activities, initiatives for sustainable development of agriculture have an important and risky gap.

As noted above, women have a key role to play in agriculture and the rural economies of developing countries (FAO, 2010), but the trend is that women face limited access to productive resources including land, capital and labour (IAASTD 2009), which has a negative implication on their productivity. Furthermore, women are at the forefront of ensuring household food security through various activities that include gardening (IAASTD, 2009). In cases where women farmers lack access to storage facilities or credit, they

are forced to sell their crops soon after harvest when they are likely to get the lower prices (IAASTD, 2009). However during the hungry season, these same farmers buy food when prices are at their highest (IAASTD, 2009).

HIV has affected rural livelihoods significantly, with women and girls bearing the brunt of the HIV epidemic as care givers for the sick and orphaned (UNAIDS and WHO, 2005). Due to loss of adults in the economically active bracket, the pressure to earn a living is placed more on women, who have to undertake most of the farming and household work and compensate for lost labour. In some countries, there has been an increase in the female share of the agricultural labourers due to the combined effect of HIV, migration and conflict.

3.5.3. Women and agriculture policy

In terms of agricultural policy, rural areas are usually isolated from the consultation undertaken by policy makers. Rural populations, and women in particular, are said to be invisible to policy makers and service providers and do not have representation or voice to make known their concerns (IAASTD, 2009). Because of this, rural areas have remained neglected with little investment in infrastructure, for example, during periods of structural adjustment, where services such as roads, public extension systems, education, health and other essential services were not prioritised leaving the areas with inadequate facilities (IAASTD, 2009). Rural areas also tend to have more people living below the national poverty datum line than those in urban areas (IAASTD, 2009). The IAASTD report notes that “If it were measurable, the urban-rural disparity in political power would most likely be greater. The male-female power disparity certainly is” (IAASTD, 2009, p.45). IFAD notes that women are less represented in governance processes, and in leadership positions and that, in some cases, leadership by women is associated with violence or other social backlash (IFAD, 2010). Therefore women’s concerns and voices are usually not heard at the national level.

3.5.4. Women’s household work and time

In most rural societies, the primary caregivers are women, who also perform the bulk of the agricultural work. In fact, an FAO report notes that women in Sub-Saharan Africa have the highest average rates of participation in agricultural labour in the world and that cultural norms in the region give greater responsibility for women in agricultural production and encourage them to be self-reliant (FAO, 2007). Income earned by women is typically invested back in the household. Women work longer hours than men, often doing repetitive routine tasks which take up much of their time. Despite their contribution to agricultural work, women’s contribution remains largely unrecognised and excluded from statistics and as noted before ignored by policy makers (IFAD, 2010). Much of the work done by women including caring for family, market work, collecting water and firewood and livestock rearing is not measured in the national accounts but is crucial to the sustenance of the rural households (FAO, 2007). To lend credence to the fact of women’s invisibility, the growth in demand for high value products by urban markets has brought with it

major structural transformation in agriculture, but the impact of this transformation on women's employment in the sector has received scant analysis or attention (Maertens and Swinnen, 2009). Yet these new market opportunities will have different opportunities and challenges for men and therefore considering the differences is a worthwhile pursuit. For instance, it is thought that, in some cases, by increasing engagement with market opportunities, production of food crops for household consumption might be compromised. In Kenya, Dolan presents the case where rural women have had to give up land that they have traditionally used for household vegetable production to the production of vegetables for export controlled by men (Dolan, 2001). This will have an especially negative impact on rural women farmers as they are less able to control the proceeds of the sales to manage household food security and other monetary requirements.

3.6 Issues rural smallholder women face in accessing markets: a literature review

3.6.1 Introduction

In order to answer question one (from the literature what are the issues that rural smallholder women farmers face in accessing agriculture markets?), a literature review was undertaken on issues that smallholder women farmers face in accessing markets. Although some of the factors also affect men, they often affect women more than men due to social norms or institutional discrimination. These factors outlined below include lack of land holding, livestock and access to extension services among others. These factors are identified and differentiated from those faced by men in order to show that smallholder women farmers' issues require particular attention in market access intervention. The conclusion to the section will show that because many of the issues facing smallholder women farmers are regarded as part of a social and cultural norm, they are often accepted as normal and as a result smallholder women farmers fail to optimise the benefit of participating in market access programmes.

The Rural Poverty Report (IFAD, 2010) gives a good overview of the issues around market access for rural smallholder farmers below:

> *Agricultural produce markets typically work better when they are competitive, when they are served by good transport and communications infrastructure, when information flows freely among participants, when access is unrestricted, when power asymmetries among participants are low, and when supply and demand do not fluctuate wildly. Unfortunately, such circumstances rarely apply. Poor smallholder farmers typically have limited amounts of produce to sell, and what they have may be only occasional or of low value or quality. They face high transport costs, are often dependent on buyers coming to them, lack information on market prices beyond their nearest small town and typically need cash from sales immediately. This creates high levels of risk and uncertainty for smallholder producers and high transaction costs for buyers, in a situation that is typically characterized by low trust between the two sides* (IFAD, 2010: 116)

Some of the issues highlighted above including issues of competition, information, power, transport and transaction costs will be further unpacked in the discussion below.

3.6.2. Market information

An essential element for smallholder rural farmers to be able to participate in markets is information, not only information on what prices are prevailing but also information on trade contacts and technical matters (Kleih, 1999, FAO, 2011). However rural areas are typically starved of information due to various factors including lack of access to mass media (Kleih, 1999) and therefore smallholder farmers in these areas are disadvantaged, for instance without information on supply and demand setting prices is difficult. Information on the type of goods demanded by the market could be unavailable, (OECD, 2006), meaning that farmers can make decisions on what to produce for the market with inadequate information. Without information, farmers are susceptible to middle men, and farm gate traders that buy produce at below cost price, to the disadvantage of the farmer (ASFG ND). Historical market information can assist farmers in making planting decisions and decisions about new crops (Shepherd, 1997). Where farmers have full access to information, shifts toward higher value produce have been noted, which is beneficial to the farmer (Shepherd, 1997). Local markets may not offer a solution for farmers as they can become quickly saturated with all farmers trying to sell their produce at the same time (ASFG ND). Having adequate market information assists farmers in making decisions about intra- and inter-season storage of their produce in response to market conditions (Shepherd, 1997).women farmers

The cost of obtaining information is one of the transaction costs that smallholder farmers face (Jagwe, Machethe and Ouma, 2010). Usually these costs are the cost of transport to distant markets to obtain information, as well as the opportunity cost for labour (Shepherd, 1997). In order for information to stop being a barrier to participation in markets for smallholder farmers, it needs to be efficient, relevant and sustainable and usually involves both government and private sector in establishing a market information system. Moreover, a study in Nigeria showed that women smallholder farmers not only need information about markets but information about other agricultural issues such as improved inputs, storage methods and irrigation which would enable increased production and improved market participation (Okwu and Umoru, 2009). The same study showed that women farmers face challenges in accessing information, with the major sources of agricultural information being husbands, other women, mass media, other unnamed sources and extension agents in that order (Okwu and Umoru, 2009). The report suggests that age and income are correlated to women's access to information. Although this may differ from region to regions, the challenge of accessing information, in particular market information, is a barrier for smallholder women farmers because of the male bias of agriculture officials such as extension workers who often provide this information (Okwu and Umoru, 2009). Women farmers also face barriers in accessing market information due to lower education and literacy levels (Okwu and Umoru, 2009).

3.6.3. Extension services

The aim of agricultural extension services is to provide services from experts to farmers in the different areas of agriculture, in order to improve the productivity of rural farmers (FAO, 2010). Provision of extension services has proved to increase yields (FAO, 2010). However there has been a decline in government funding for extension services in developing countries (Rusike and Dimes, 2004). It is argued by critics that public extension systems need to be reconfigured and revitalised for them to be effective (Rivera and Cary, 1997). The decline in government funding means that rural smallholder farmers are unable to access expert advice on crop and animal production, which compromises their productivity and their ability to participate in urban and other markets. Some statistics indicate that as many as two out of three framers in Africa, particularly small scale women farmers, do not have access to extension services (FAO, 1990). Although men and women smallholder farmers in developing countries have low access to extension services, women tend to have even less access than men (Meizen-Dick, et al., 2010; IAASTD, 2009). One of the causes of this difference is that extension services are often channelled towards farmers who have more sufficient resources to adopt modern innovations, and are located in well-established areas, women are less likely than men to access productive resources and are easily passed over by extension services (Meizen-Dick, et al., 2010).

Another constraint for women is the way in which extension information is made available to farmers. The use of written material may disadvantage smallholder women farmers from participating as women tend to have lower levels of education in developing countries (FAO, 2010). In addition women in some communities face cultural constraints and also time constraints and are unable to attend some extension activities like field days if they are held outside their villages or in mixed groups with men (Meizen-Dick et al., 2010). Also extension systems seem to have a largely male representation, with men controlling the information and communication. It is also men who are then considered as household heads to receive information, thereby leaving women out (IAASTD, 2009). It is estimated that only 15 percent of extension agents in the world are women (Abedi, Allahyari and Khodamoradi, 2011). Without access to extension services, women smallholder farmers are unable to get information that would improve their productivity and quality of produce and thus enable them to participate effectively in markets.

3.6.4. Livestock ownership

Livestock ownership has an important implication on women farmers' participation in markets in that it often impacts on productivity in terms of draught power and access to resources such as credit in order to finance production for the market. Livestock is regarded as an essential asset in rural areas (FAO, 2009). Aside from their cultural value, representing income and wealth, they also provide important draught power for transport, ploughing and land clearing activities in many regions (FAO, 2010). Livestock ownership enables households to cope in times of shocks such as drought through sales (Grace, 2005). In many cases however, the trend is that men own the larger livestock, which is a key resource, enabling them to be

more productive than women. The fact that livestock ownership, especially ownership of larger livestock such as cattle, represents income and wealth makes it the domain of men. Despite the fact that owning livestock would enable women to earn more income, some of the constraints women face in owning livestock include lack of land and shelter for the livestock, lack of credit lines as well as traditional and cultural barriers that stop women owning livestock (Grace, 2005). Even if a woman buys livestock, it does not mean that she automatically owns it (IFAD, 2003), which points to the cultural and social norms of given societies, where women may not own or make decisions on household assets.

3.6.5. Access to labour

Sources of labour for agricultural production for smallholder rural farmers are typically family labour and hired labour from the local markets (FAO, 2010). However, labour constraints can be more visible for female-headed households than in male-headed households due to gender specific constraints faced by women (FAO, 2010). These constraints include the fact that female-headed households usually have fewer household members but more dependents, therefore less labour available, and even though in some cases male relatives may give assistance to female headed households, they prioritise their own plots first (FAO, 2010). The migration of men from the rural areas also adds to the labour shortages experienced by women-headed households.

Having gender specific household and community tasks constrains women farmers' ability to produce as much as men (FAO, 2010). This is because certain tasks at the household and community level are seen as women's tasks and they must be done by women at given times. Women farmers therefore have limited flexibility to respond to a rise in crop prices and are unable to take advantage of that potential increase in income. Cultural norms in some areas, direct that certain farming activities be conducted by women and others by men. Women-headed households without male labour thus have to face a delay in spraying the crop while they wait for a male relative that may result in output losses (FAO, 2010).

On the other hand the emergence of high value horticultural supply chains and markets has provided women with income as smallholder farmers; it has also provided employment opportunities in large scale enterprises. In some cases it is more beneficial for women to work in large agricultural enterprises than farming as smallholders, because they receive payment for their labour, whereas in most instances as smallholder farmers, they provide unpaid family labour (Maertens and Swinnen, 2009).

3.6.6. Credit and financial services

In order to produce competitively for urban and other markets, smallholder farmers may require access to credit and other financial services (Croplife International, 2011). However, women face legal and cultural norms that prevent them from accessing financial services such as owning a bank account or accessing a loan for purchase of inputs. In some cases institutions carry on the discrimination against women by giving women smaller loans than those given to men for similar activities or limiting the number of women

benefiting from loans (Fletschner, 2009). For instance a study in Uganda showed that female headed households desired to expand their agricultural production and required money to purchase the inputs such as seed and fertiliser as well as land, and to hire labour, but their biggest constraint was lack of access to credit (Ellis, Manuel and Blackenden, 2006). Fletschner and Kenny note that:

> *Rural financial programmes have been largely designed, crafted and implemented with the male head of household as the intended client and fail to recognize that women are active, productive and engaged economic agents with their own financial needs and constraints. Women constitute approximately half of the rural labour force and, while not always counted, they are economically active in each subsector of the rural economy* (Fletschner and Kenny, 2011:2)

Financial institutions often require that women produce collateral such as proof of ownership of houses, machinery or land; assets for which women usually have no title (OECD, 2006). Where women have low levels of education, they may lack the skills to complete complicated application procedures and therefore may not apply (OECD, 2006). Some financial institutions have minimum loan sizes and their repayment schedules are inflexible. This makes it difficult for smallholder women farmers to access small loans for activities that yield income in the long term (OECD, 2006). The location of financial institutions outside their communities may affect women's access if they have mobility constraints in travelling outside their community to access loans (OECD, 2006). Mobility constraints are highly likely, given that most women smallholder farmers are located in the rural areas, and financial institutions are usually located in urban areas.

3.6.7 Technology

Access to technology has great benefit to smallholder farmers, especially as it related to accessing information. Mobile phone technology has increased rural farmers 'capacity to access market information such as prices of commodities (IFAD, 2010). Compared to men, rural women are less likely to own a mobile phone, yet there are benefits for women farmers who can access a mobile phone, because women can directly contact the buyers of their produce instead of relying on middlemen. This is an advantage especially where women have social constraints in interacting with men (IFAD, 2010). Accessing technology through mobile phones has other advantages:

In India, ownership of mobile phones has been found to increase women's economic independence and make it easier for them to travel alone; the mobile phones are worth the equivalent of two to four extra years of women's education in terms of reducing gender inequalities (IFAD, 2010)

Through the use of technology women farmers would be able to transact in real time and obtain the correct commodity prices (IFAD, 2010). In addition, new technological advances allow farmers to send and receive money through their mobile phones easy payment methods resulting in reduced transaction costs (IFAD, 2010).

Access to technology is however not confined to mobile phones, but also includes technology to do with production. Gender inequalities in accessing technology mean that rural smallholder women farmers have reduced productivity compared to male farmers. Gender gaps exist in accessing technologies such as new forms of pest control, improved plant and seed varieties, tools, machines and management techniques (FAO, 2010). The lack of access to new technology is interlinked with some of the factors already highlighted above such as women smallholder farmers owning few valuable livestock as assets and having reduced access to extension services. In addition adoption of technology by women farmers is positively related to education, that is, the more a woman farmer is educated the more likely she is to be able to access technology (Blackeden, et al., 2006). It has also been suggested that women's adoption of improved technologies is constrained by women's limited ability to absorb risk (FAO, 2010).

3.6.8. Transport and equipment

As with the other inputs, transport is a crucial factor for smallholder farmers to get their produce to the market. However, underdeveloped road networks are among the chief factors limiting access to input and output markets for rural smallholder farmers (FAO, 2005). Expansion of market-related infrastructure including transport, energy and water is very slow, with the region of Sub Saharan Africa being said to have an infrastructure gap (IFAD, 2010). Transport linkages to urban markets are therefore difficult and create a disabling environment for the rural smallholder farmers to take advantage of market opportunities. There can be gender differences in accessing transport where in some cases lack of transport limits women's mobility to the market. The cost of transport increases significantly where roads are not paved, with one survey conducted in Benin, Madagascar and Malawi finding that the cost of transport may account for up to 50 or 60 percent of the total marketing costs (IFAD, 2010).

Kleih conducted a study on the impact of transport on community access to marketing opportunities on four rural communities in Malawi, in which the importance of the road network in a household's engagement in marketing activities was highlighted. The study shows that farmers in remote areas have struggled to access markets. In the four districts where the study was conducted, poor roads, lack of access to information, lack of means of transport as well as inadequate markets in terms of infrastructure and distance were identified as the main factors that constrain farmers in rural remote areas. In addition, the study found that it is mostly women, due to their reproductive[4] and productive roles who have to head load produce for sale to distant markets due to transport unavailability. According to the findings, the causes of the problems faced by these farmers were; lack of investment in roads based on poor government policy, faulty road and bridge designs as well as a lack of motivation by the affected communities to repair and maintain their own roads. The study also showed that farmers in areas where the government supported marketing corporation Agricultural Development and Marketing Corporation had been withdrawn faced challenges in selling their agricultural produce as well as in accessing food and inputs (Kleih, 1999:1).

[4] Reproductive roles pertain to roles performed by the woman for the maintenance of the household and working force, including child bearing and rearing, cooking and cleaning. Productive roles pertain to market work, including field work and other work for wages.

3.6.9. Land

In Africa, land is central to social identity and cultural cohesion and is the base for a sustainable livelihood (Nzioki, 2006). One of the key factors constraining women's land ownership are social and traditional norms about land ownership, where women typically do not inherit land because they are women. For instance in a study in Afghanistan, of 360 households being studied, only in 1.87 percent of women owned land in their own names, with culture being cited as a strong constraint to women owning land (Grace, 2005). Communal ownership of land in some African countries means that women must rely on chiefs and other traditional authorities for land allocation, these authorities however have a male bias and women face difficulties in acquiring their own land (Kachika, 2009). Although women may have access to land, they have little control over it which constrains their production choices and ability to use the land for accessing other resources such as credit. Even in matrilineal societies where women are allocated land in their own names, the control remains in the hands of male relatives or clan heads (Kachika ,2009)

For households that depend on agriculture for a livelihood, land is an important asset for production but also because it is associated with wealth, power and status (FAO, 2010). Lack of control and secure tenure is one of the reasons why female farmers are excluded from benefiting from modern contract farming. A study in Kenya shows that less than 10 percent of farmers involved in the export of fresh fruit and vegetables are women (Dolan, 2001). Ironically it is women that provide most of the labour for free as family labour for the production of export produce, while men control the land and the income realised from the production. Because women work on the land contributing labour, does not mean that they control the proceeds. While men are more likely to have land ownership than women, their land holdings are also likely to be larger than those of women (FAO, 2010), which implies that men are better able to expand productivity where necessary to meet market supply requirements than are women farmers who typically have smaller land holdings. Globally, men's landholding is said to be on average three times that of women (IFAD, 2010). This is part of "interlocking depravations" that include lack of access to education, low asset ownership , lack of time and restrictive social norms that merge to make rural women poor (IAFD 2010). In a study of women's land and livestock ownership in Afghanistan, it was revealed that land ownership increases women's decision making power inside the household and increases their control over income earned (Grace, 2005).

3.7. Chapter Summary

This chapter began with an overview of the need for sustainable development and described the global polycrisis, highlighting the key issues of the crisis. The role of agriculture markets in sustainable livelihoods was presented detailing issues of income, increased farmer production as well as the potential of markets to transform smallholder agriculture to commercial. The chapter also addressed research question focusing on the issues faced by rural smallholder farmers in accessing markets. These issues, which were not specific to women smallholder farmers in isolation were noted to be lack of market power by smallholder farmers, changes in the supply chain as well as the competition for smallholder farmers in participating in

integrated markets. The chapter then ended by focusing on the concerns that rural women smallholder farmers face in accessing markets which include lack of access to information, livestock, land, technology and transport among others. Some of these concerns found in the literature review above are highlighted in greater detail in Chapter Four, which focuses on question ii); on the specific issues faced by smallholder rural women farmers in Chirumanzu in accessing markets, giving details of the situation before and after the commencement of the market access project.

CHAPTER FOUR: FINDINGS ON WOMEN'S MARKET ACCESS ISSUES IN CHIRUMANZU

4.1. Introduction

This chapter introduces the findings of the case study that was conducted to answer research questions ii and iii:

i. What are the market access issues faced by rural smallholder women farmers in Chirumanzu?
ii. How has the Oxfam project addressed the issues faced by women in the Chirumanzu market access project?

The chapter will begin by outlining the background of the market access project in Chirumanzu, in order to give a context to the findings. This background draws from documents pertaining to the project including the *Food Security and Livelihoods Baseline Report* conducted in 2010 and the 2010-2011 *Annual Report* for the project. Some of the information was also provided by conversations and interviews with project staff as well information that I already knew about the project by virtue of my role at Oxfam.

The second part of the chapter focuses on the actual experience of the women in the Oxfam project in Chirumanzu before the project and during implementation (derived from the FGDs and information provided by project staff in interviews). The situation before the project highlights the issues that these women farmers faced in accessing markets while the second part reflects on the current situation during the Oxfam project and how this project is responding to the issues. Thereafter an interpretation of these findings is given in order to show how both questions that the chapter aims at answering have been answered. The chapter concludes by showing that smallholder women farmers may seem to face the same issues as male farmers on the surface, but a deeper analysis indicates that cultural, economic, and environmental factors can significantly affect women's participation in markets and therefore a special lens must be taken when addressing market access issues for women in order to achieve secure livelihoods for women. An attempt will be made to show the similarity of issues raised by women farmers in the Oxfam project in Chirumanzu to those found in the literature, and it will be argued that women smallholder farmers in Chirumanzu face challenges in accessing markets and unless these are addressed sustainable development cannot be achieved at the local rural level nor the national level.

4.2. Baseline information on Chirumanzu

The market access project is a component within a broader sustainable livelihoods programme run by Oxfam which commenced in April of 2010 which comprises: conservation agriculture, input support to farmers, market linkages and small livestock provision. Prior to this, Oxfam was running a livelihoods project from 2004 to 2008; hence the organisation has been in the area for a long time. The programme is being implemented in three districts in the country; Chirumanzu, Zvishavane and Gutu respectively. In Chirumanzu district, Oxfam implements the programme directly, that is it employs staff on the ground to run the different components of the project, whereas in the other two districts, local non-governmental

organisations have been engaged to implement the programme. Of the three districts, Chirumanzu was the first to roll out the market access project and was therefore selected to be the case study of choice in this research. The Food Security and Livelihoods baseline report conducted in 2010, a few months after the commencement of the entire programme, and aimed to provide essential information on key indicators including: market linkages, asset base of small holder farmers, conservation agriculture and drought tolerant input support and also a gender and HIV analysis. The baseline used the household vulnerability index (HVI) in order to identify vulnerable households, the dimensions of vulnerability of different households to different shocks and what can be done to mitigate these shocks (Oxfam, 2010). The HVI allows the project to be able to improve targeting of vulnerable households based on the situation at the household, include the affected communities in data collection, facilitate an integrated approach by outlining the different initiatives that an intervention can provide to a household for it to meet its development needs and helps to rank interventions required at household level according to priority (Oxfam, 2010).

The baseline contacted 373 households (25 households per ward), and provides a context for each of the three districts, including information on agricultural practices. Considering the information that the baseline sought to collect, to give an overview of issues in the area, 25 households per ward appeared an appropriate number. According to the baseline, Chirumanzu lies in natural region three. Natural region three is characterised by 500-750mm of rainfall per year, high temperatures and is prone to mid-season dry spells (Oxfam, 2010). Smallholder farmers dominate the area, and production is mainly of drought tolerant crops including maize (which is the staple grain) and livestock (Oxfam, 2010). Cash crops that can be grown in the area include cotton and sunflowers (Oxfam, 2010).

Table 5: Findings of the baseline study

	Female	Male	Other information
Gender disaggregation – household heads	32%	67.9%	
Illiteracy according to sex	66.7%	33.3%	
Percentage completing primary school	15%	85%	
Average age of household head			37.32 years
Average household size			4.87 people
Households with food diversity i.e. adequate food from different food groups: starches, vegetables, oils and sugars			53.2%
Predominant method of land cultivation			Ox-drawn plough
Equipment asset base			204 out of 373 respondents had no equipment that is: scotch carts, wheel barrow, ox drawn plough, tractor or cultivator.

The table shows that in the three districts, there were more male household heads than female headed households. According to the baseline report, this can be attributed to the prevailing patriarchal system where women are considered household heads only when they are widowed divorced or separated. In situations where the male partner works away from home and returns at the month end or weekend, he is considered the household head and makes all important decisions. Therefore the implication is that although there are more male household heads it does not necessarily mean they are living at home all the time, but that even in their absence their female partners regard them as household heads. Of the 32 percent female headed households, 21 percent are widows, a figure which is very high and which the report attributes to the effects of HIV in the districts. Also noteworthy is that there is a low number of single household heads, at 3.8 percent which the report attributes to migration by that age group in search of better livelihoods.

The higher illiteracy levels among females reflect the gender disparities in the three districts. The reason for the high levels of illiteracy and low levels of education, as given by the report, are due to lack of money for school fees. Therefore it can be inferred that where resources are scarce then girl children are least likely to attend school. As indicated in Chapter Three above, low education levels among females have an effect on their ability to access credit, extension services and information and therefore hamper their participation in markets.

The household sizes range between one and ten people with the average being 4.87. A reason given for this household size is the high dependency ratio due to the high number of orphans. The report suggests that farmers may choose to have large families in order to access labour for agricultural production.

Dietary diversity gives an indicator of a household's vulnerability to hunger and malnutrition. The majority of households interviewed in the report consumed vegetables the most followed by maize, oil, fat and sugar. This gives an indication of the importance of vegetable gardens in supplying food for households. It also implies that the communities in the three districts are unable to produce or access enough maize for their consumption. Most of the household indicated having only two meals composed of sadza (maize meal paste) and vegetables which showed a lack of variety in the diet. Food security is therefore a concern in the three districts.

The table notes that most farmers in the three districts use ox-drawn ploughs to cultivate their fields. However those without ploughs have to rely on their neighbours and often experience a delay in planting, since they get their fields cultivated last. As has been indicated in the literature review in Chapter Three, women farmers are less likely to own equipment and livestock for ploughing compared to their male counterparts and are therefore most affected by the lack of draught power in terms of productivity because planting late reduces yields if crops do not get adequate rainfall. Similarly those without equipment highlighted above including scotch carts and wheel barrows are likely to be women, all of which compromises their productivity.

From the baseline, the field crops grown in Chirumanzu include maize and groundnuts, which are the main crops grown in the three districts, with sorghum, round nuts, rapoko and millet also being grown at a smaller scale. There is also potential for sunflower and cotton production in the district although none of the interviewed households were growing these crops. 85 percent of the respondents favoured maize, followed by groundnuts at 45.5 percent and sorghum at 18.6 percent. The report reflects that, despite favouring maize, the majority of the respondents were not able to go from season to season with adequate maize stocks and many did not have any storage facilities for any surplus which left households vulnerable during droughts and having to rely on remittances and donations from relatives (Oxfam, 2010). The presence of grain storage facilities is used as an indicator that a household usually produces surplus for consumption

throughout the year, the lack of facilities can be taken to mean that there is not much surplus realised by households (Oxfam, 2010). A recommendation by the report is that smaller grains like millet, rapoko and sorghum, which are drought tolerant, should be promoted in the area to increase food availability (Oxfam 2010). The implication of this is that field crops have failed to ensure food security for households in Chirumanzu, since the majority of them cannot go from season to season on the harvest of maize which is the staple food. Community gardens thus appear to contribute significantly to food security given the failure of food crops.

The baseline report indicates that households either have a household garden or are part of a community garden (Oxfam, 2010). Community and household gardens existed prior to Oxfam's advent in all of the three districts. Community gardens are gardens where a group of mostly women farmers come together to access land for cultivating vegetables for household use. Usually these gardens are located near water sources. Where possible, households have their own vegetable gardens which may not necessarily be located near the household but in a place with access to water. In some cases a household may belong to a community garden and also have a family vegetable garden. In Chirumanzu, initiatives promoting gardens have been successful, and many of them produce excess, but women do not have a market to supply (Oxfam, 2010). Seed for the gardens is usually purchased, self-grown or supplied by friends (Oxfam, 2010). As will be discussed in the findings section below, this has implications for the quality of vegetables produced. Because many people in the area grow the same produce, including leaf vegetables, tomatoes and onions, the local market is very limited. According to the baseline report, a key challenge in accessing markets was the lack of transport to the urban market. This information was later corroborated by the women that participated in the FGDs. The report reflects that the gardens have however been a success in contributing towards food availability at the household level, but as a business enterprise, they have limitations relating to the size of each plot available for production as well as the market access as indicated before (Oxfam, 2010).

Figure 2: A typical community garden in Chirumanzu

(photo credit: Oxfam, 2010)

The photo above shows a typical garden; each household owns one row, made up of different beds, where different crops are grown such as cabbages, onions, tomatoes and rape.

The main source of income for households (in all the three districts included in the baseline survey) was informal work, as indicated by 63.2 percent of the respondents, while sales of livestock comprise 8.4 percent and vegetable sales comprise 6.5 percent (Oxfam, 2010). Despite producing excess vegetables, limited access to markets prevented the households from earning more from vegetables. This reinforces the importance of market access for these communities in order to promote a more secure livelihood. Most of the income received by the household is spent on food (89.6 percent), followed by school fees at 5.6 percent and non-basic goods at 3.4 percent. This large expenditure on food appears to be an indication of the food insecure status of the communities. Although gardens have made a significant contribution to food availability, usually vegetables are grown while maize and other grain, sugars and oils must still be purchased, hence the high expenditure on food. Although maize can be grown in the gardens, the size of each individual plot means that only a limited quantity of maize can be produced, whereas with the same

plot size, the amount of vegetables that can be produced is significant enough to feed the household and remain with a surplus.

4.3. The establishment of the market access project

Having noted the potential of the community gardens to generate surplus vegetables and possibilities for earning income, the initiative was taken up to try and link the "garden" farmers to markets. The community gardens selected to be part of the project were initially supported by Oxfam from 2004 to 2008 under a separate project with fencing, tools (including hoes, wheel barrows and watering cans) and seed. At the commencement of the market access project in April 2010, the gardens had not received support for at least 2 years and were largely being driven by community efforts. Although the project officially commenced in April 2010, actual garden activities such as land preparation began in October 2010, therefore this date should be regarded as the official commencement date of the project. Although gardens existed prior to the Oxfam project, there was a need to work with the farmers on land preparation according to the principles of organic farming, learn how to manage pests from an organic farming perspective as well as learn how to grow a nursery.

According to the annual report of the first year of the project, April 2010 to February 2011, the selection of 20 gardens to participate in the project was largely determined by whether the gardens had permanent sources of water to enable them to produce all year round, were securely fenced and whether the garden members had a constitution (Oxfam, 2011). In total the 20 gardens selected in the Chirumanzu project had 864 members, with their gardens having between 13 and 120 members each, with each member having between 12 m^2 and 170 m^2 of land available for irrigated production (Oxfam, 2011).

The baseline report, for the three districts, found the following information concerning households in Chirumanzu in relation to gardens:

- Although vegetable gardens had been established primarily for household food consumption, some of the gardens were producing vegetables in excess of their requirements.
- The most commonly grown vegetables were tomatoes, onions, beans and leafy vegetables.
- Farmers had some surplus vegetables that they were willing and able to sell, but sited the lack of a market as their reason for not doing so. Lack of transport to take the vegetables to the urban centres of Masvingo, Mvuma or Gweru was noted as a factor stopping farmers from selling their excess vegetables.
- Some of the garden units allocated in the garden per farmer were too small to generate meaningful income (making it impossible for the concerned farmer(s) to take their vegetables to market individually). The report recommended that farmers may be organised into marketing groups in order to bulk up their produce for sale when approaching markets.

- 66.1 percent of the farmers purchased the seed that they used in the gardens, while 15.8 percent were given and the rest raised their own seed. Of note is that there is no local outlet selling seed, but the farmers have to buy their seed from the urban centre. The researchers in the baseline survey identified an opportunity here where farmers can raise seedlings for sale to other farmers as a business venture.
- There is a limited market in the villages because most of the farmers grow the same produce. The report recommends that farmers be encouraged to grow different crops in order to get a local market.

(Oxfam, 2010)

From the above points in the baseline and from project reports, the issues that needed to be addressed by Oxfam were around helping the farmers to access both input and output markets and market information. Other issues that were not flagged by the baseline report, but were gathered from the project proposal and reports, were that the farmers in the gardens would require capacity building of garden groups in order for them to produce to the level required by the market and function effectively as a group to access markets. The need for start-up capital to purchase inputs was also identified.

The market access project was thus formulated to respond to the above concerns. The market led production model that was adopted has gardens organised around Collection and Information Centres (CICs). Each CIC was developed to serve three to five gardens, which would be conveniently placed in each of the five participating wards in Chirumanzu, to minimise initial transport costs of produce from the gardens. Garden groups would be responsible for the selection of their own management committees and their representatives on the CIC management committee (Oxfam, 2010).

4.4. Findings of the case study of women farmers in the Oxfam project

4.4.1 Introduction

As mentioned in Chapter Two, a case study approach was adopted in order to answer questions two and three of the research:

i. What issues do rural smallholder women farmers in Chirumanzu face?
ii. How has the Oxfam project addressed the issues that smallholder farmers in Chirumanzu face in accessing markets?

The methodology selected was FGDs with women and men who are members of the CICs because of their unique position, first as farmers in the gardens participating in the project, but secondly as representatives of their gardens in the CIC committee who travel to the urban area to conduct market transactions on behalf of the whole group of participating farmers. Five focus group discussions were held with 40 of the 80 CIC committee members in attendance in August 2011.

The FGDs were conducted on the basis of a questionnaire designed to prompt the groups into discussions (see Appendix B); the questions were grouped into four sections: capturing historic information, description of the social and economic environment, describing the current situation of the Oxfam project's response to market access issues and finally recommendations. The findings will therefore be given to follow these sections.

4.4.2. Capturing the historic perspective

4.4.2.1 Activities of the project thus far

Participants in the FGDs were asked to give a brief description of the market access project and give details about garden membership. This was done in order to ascertain whether all the participants were clear about the objectives of the project and that they were actually participating in the project. In response to this question, participants described the activities that they had undertaken in the project at the time of the focus group discussions (August 2011).

These activities were detailed as:

- Training on the CIC concept, record keeping, transport and payment logistics and crop budgets
- Land preparation activities including fertility trenching, looking for the biomass to use in fertilising, creating composts and collection of cow dung. The women in all the FGDs noted that this part of the project had been difficult for them because it was labour intensive. A lot of labour was required to collect the required biomass of leaves ad grass which they had to walk long distances to obtain as they are not readily available in the vicinity of the gardens. Labour was also required to dig the trenches and follow the organic fertility methods recommended by the project officers. When prompted, the women reflected that the effort invested in land preparation had been worthwhile since they could see a better quality of vegetables than they had before the project had begun.
- Training on use of chemicals for pest management.
- Establishment of nurseries for tomatoes, onions, cabbages and green pepper. In all the FGDs the women noted that they had never grown green pepper prior to the project and this was something new to them.
- Establishment of the CICs in each ward and initial accompanied visits to Masvingo to visit vegetable wholesalers, hotels, supermarkets and the informal vendors market

This information obtained was triangulated with the project manager and the project officer, who gave extra details such as the fact that the establishment of the CICs involved rehabilitating old disused buildings at the ward business centres by repairing windows, painting and buying doors. The CIC were also furnished with desks, plastic crates for transporting produce and platform scales for weighing the produce.

4.4.2.2 Garden membership

Garden membership was reported in all five FGDs to be largely dominated by women, because they are primarily responsible for household food supply and the garden produce enabled them to take care of the family's food and nutrition. In some cases the membership was passed from mother in law to daughter in law, where the mother is old and no longer able to work. Although women dominate, some members are men. Reasons given by the participants (translated from Shona) for the limited male participation are quoted below;

- It is difficult for men to work in the garden because women are used to working in their own way – they make fun of each other and gossip, which is not easy for a man to adjust to (Male comment)
- Men spend more time drinking beer so they don't have time to come to the garden (Female comment)
- If each household had its own garden then men would likely contribute more labour to the gardening than they currently do, but it is difficult for men to work in groups and among groups of women in the gardens (Male comment)
- Few men understand that all work can be done by both men and women – there is no men's work and women's work (Female comment)
- Men make a living in other ways so sometimes they don't see the necessity for coming to the garden (Female comment)
- Some more informed men come to work in the garden with their wives though, especially if there is income (Female comment)
- Women dominate the garden work because they are the ones that cook and they know the costs of food and therefore they have to grow their own food (Female comment)
- Before we knew they could earn money from participating in the market we used to say it is women's business, so now we come and maybe we shall even take over from the women (Male comment)

From all five FGDs and from reports about the programme, women do indeed constitute the majority of farmers in the gardens. The general feeling from the FGDs was that men were seen to be coming to assist them and not necessarily as members in their own right although there are some men who are members in some gardens and assume leadership positions. From the responses given by the women, it appears to be the norm that garden work is for women; it has become part of the division of labour and is seen as connected to the female role of providing food for the household so men are not really expected to be members.

4.4.2.3. Production before the project

In order to capture the historic perspective, the questions asked were about describing the situation of market access before the project (see questionnaire attached at end of chapter). First to be presented is

information on how women were producing vegetables in their gardens before the project, following that information on the markets to which they were selling before the project is presented.

Information on garden production prior to the market access project was sought from the FGD participants in order to see if women in the project had similar productivity challenges as those raised in the literature review in Chapter Three which include challenges in accessing extension services, technology and information on production as well as lack of equipment among other factors. From the FGDs it was gathered that before the market access project started, leaf vegetables, tomatoes and onions were mostly grown and maize was planted in the garden during the rainy season. There was consensus in all the FGDs that leaf vegetables were a fixture in the gardens because they were the household relish. The Jam variety of tomato dominated; this is a small tomato, which has not much demand in the urban market due to its small size and appearance. Gardening activities were largely seasonal, with women working there during the dry season after harvest and before the next rainy season. The garden was largely viewed as a hobby for the dry season and was not taken seriously by men, since women performed the work and men were largely uninvolved, as one woman indicated in the FGD, “they only know how to ask for more vegetables, they do not know or care where they (vegetables) come from”. There was limited knowledge of what to grow at which time as the farmers did not follow a cropping calendar, therefore crops were planted randomly and each farmer grew whatever they preferred. There was also an indication that the variety of crops grown was limited

The farmers indicated that as garden project members, they were not organised to sell their produce together resulting in each person finding their own market. Drying vegetables, giving away and throwing away were some of the ways in which the surplus was dealt with if it was unsold. The quality of vegetables produced was not up to the standard that an urban market would require. This was because of the poor production methods, lack of knowledge on pest management and the seed used. From the responses detailed above it is apparent that women in the project did face some productivity challenges due to lack of information on what crops to grow and demands on their time.

Farming practices within the gardens were largely conventional, there was not much regard to natural methods of fertility and the use of pesticides was common, however, it appeared that one particular pesticide, roga[5] (demethoate), was routinely used for every kind of pest problem that they would experience on any of their garden crops.

It appeared from the discussions that access to extension services for the gardens was limited due to the lack of equipment and capital by the farmers which would make whatever advice they received from the

[5] Roga (dimetheoate) is a chemical meant to be used for controlling of aphids on vegetables, and not for every kind of pest.

extension worker difficult to implement. For instance, if the extension worker advised the use of a certain pesticide, the garden members would not be able to afford it. This finding corroborates the findings in the literature review in Chapter Three that women farmers often receive less extension support because they lack the equipment and capital to implement extension advice, with extension workers working more with male farmers who have equipment and capital. Access to extension services seemed correlated with the existence of a project supported by Oxfam, the agriculture extension workers were supportive and encouraging during the life span of the project because Oxfam directly engaged them to support the garden farmers, and had equipped the gardens with the tools and seed to work with, after the end of the project extension support to the gardens was less consistent. This was due partly to the lack of equipment, seed and resources that the gardens faced.

4.4.2.4 Market access issues before the project

Market availability and lack of information

Throughout all the five FGDs, the lack of a market to sell surplus vegetables was highlighted. The women did not have information on where to sell their vegetables, since locally everyone had similar vegetables. This finding is in line with issues highlighted in the literature review on the role of markets in facilitating trade with the national economy because the local economy is usually flooded by farmers who have similar produce. The lack of information on markets was highlighted in the literature review as contributing to lack of participation and increased transaction costs. The availability of cash was noted as a constraint, there was not much cash circulating in the rural economy hence there were few sales. In some cases, barter trade was used, exchanging vegetables for soap or cooking oil. In other cases middle men would come to the gardens to buy vegetables for resale in the urban centres. It can be surmised that the arrival of middlemen was erratic due to the transport costs and the lack of formal agreements for supply with the women. Some of the farmers indicated that they would take advantage of gatherings like school sporting days to try and sell their produce but these were one off events and not a dependable market.

Transport

The farmers knew that they could obtain better prices for their vegetables in Masvingo, which is the nearest city to Chirumanzu (a distance of approximately 60 kms) but could see no way of getting there. They also had little information on where to sell in Masvingo. The cost of transport was highlighted as a major constraint with women indicating that they could not afford the bus fare to Masvingo, having very little income to start with; also the amounts which they sought to sell would not be enough to recoup their transport costs. As one woman noted, “We used to spend hours walking through the villages hoping to make a sale, with a basket of tomatoes on our heads - it was difficult”. Even at the small business centres located within the villages and wards, the women reflected that they did not have the financial capacity to set up a local market there, since they needed to pay a small fee to the council to do so.

Income

The women indicated that it was very difficult to get money for school fees or food since they had no steady income. Before the project, income from garden produce was never enough to pay schools fees. The women indicated that income from the sale of vegetables used to be little and irregular, one could get a dollar after spending the whole day selling, and this made it difficult for the women to plan on the use of the income or to even trace how much money they were making from vegetable sales. The sale of vegetables brought in very little income which impacted negatively on women's decision making in the household. The limited income was difficult to budget and document and this encouraged the perception by men that the garden activities were mostly for women to provide for household food needs and not for income generation.

Decision making

Most of the women reflected that before the project, they had little decision making power in their households because they were not able to contribute significant income consistently. Male partners would make most of the major decisions on the use of income in the household because they were primarily the breadwinners. Also of note is that; culturally men are regarded as the ultimate decision makers because of patriarchy which brings into play issues of male payment of bride price for women and women then being regarded as men's property. During the discussion, the women seemed particularly pleased because of the increased income contribution into the household, in two FGDs the women noted that they have become part of savings and lending schemes which has enabled them to buy blankets and pots for themselves, something they had difficulty putting onto the family budget agenda before they were earning their own money.

Access to cow dung for fertilising the garden was limited because the cattle belong to the men and only they can make decisions about the use of cow dung. Usually cow dung is used to fertilise the main fields that produce the family staples and allocating cow dung for the garden may not be a priority. The lack of influence over the cow dung by women appears to be directly related to lack of ownership of larger livestock like cattle. Culturally, it is rare for women to own cattle which are a significant form of wealth.

4.4.3. The social and economic environment of Chirumanzu

In order to understand the social and economic environment within which the women farmers in the project live, a set of questions on division of labour, livelihood options for men and women in the area and socio-cultural issues that affect women and men's livelihoods were presented to the FGD participants. This information was deemed necessary in order to establish environmental factors affecting women's market access. The findings on the livelihood options and division of labour are presented first followed by the findings on the socio-cultural factors.

4.4.3.1 Livelihood options and division of labour

From the FGDs, the men earn a living from building, piece work (temporary employment such as making a fowl run, digging a field etc), cutting and selling firewood, digging wells, moulding bricks, sculpting and wood carving to make household implements as well as roofing huts.

Mostly women do the household chores, work the garden(s), brew beer for sale, make crafts and also work in the family field to cultivate food crops like maize. Although both men and women work in the family field to produce household staple food, it appeared that the women spend more time working there than men. Also in all groups, it was noted that income from crop sales produced in the main field is very low, mainly because there is limited excess of staples to sell but men usually are in charge of making these transactions to the grain marketing board.

Though both men and women earn income from non-crop production activities, the livelihood activities undertaken by men resulted in them realising more income than the livelihood activities undertaken by women. This is due to the nature of the work, for instance although women make crafts the market for these is irregular and craft production is usually not demand driven, whereas men's work such a digging wells earns more money and usually the men are contracted by someone before commencing the job. From the discussions it was apparent that women spend more time working than men.

4.4.3.2 Socio-cultural issues in Chirumanzu

The social cultural issues highlighted in the FGDs relate mostly to women's high labour burden, limited decision making and women's mobility. Regarding labour, the women noted that women have more labour intensive roles than men, and this is something that is socially acceptable. As one woman noted, "women have too many household chores and men don't care about household chores, they ridicule each other for doing household chores during beer drinking". The issue of women's multiple roles taking up all their time was raised in the literature review as a potential barrier to productivity.

Decision making, especially on household income, was said to be the domain of men, where women were neither consulted nor asked for their opinion and this often resulted in conflict due to the fact that men and women's priorities for the use of income were different. As one woman noted "culturally our husbands are not supposed to be our friends, they were people we were supposed to be afraid of". The baseline conducted by Oxfam at the onset of the market access project also noted that decision making is largely a male affair in Chirumanzu and the two other districts in which the baseline was conducted. Socially it is the norm that women defer to the decisions made by men, due to the patriarchal nature of Zimbabwean society. It was noted during the discussions that it is worse when women do not have a means to earn their own income and contribute to the household. Without decision making power, women's ability to participate and negotiate around issues like household chores and reducing the labour burden they face is limited. The

lack of income and decision making connects to women's mobility constraints. In the FGDs women noted that mobility is an issue for them not only because of the cost but because of social constraints, most of the women's livelihood activities noted above (beer brewing, gardening etc.) happen in and around the homestead to limit women's movement. According to the FGD discussions, traditionally it is the men in the community who migrated or went to urban areas to engage in waged employment, therefore having women going to the urban area to trade and make income appears to be a radical role reversal that many men do not accept. This allows men to monitor the movements of their female partners, and even in the case of widows and single women, some of the community members frown upon women who seem too 'independent'. These constraints have a negative impact on women's engagement with non-local markets.

4.4.4. The response of the market access project

Before describing the market access project's response to women's market access issues, an outline of the project is given, detailing the value chain approach used by the project as well as the project timeline. The discussion on the current situation was answered by asking questions relating to current garden production, the CICs' function, the women's experiences engaging with the market as well as what issues women are facing engaging with the market under the project. The findings to be presented first are on describing the market engagement process through the CICs, followed by the women's concerns with regards to engaging markets.

In implementing the project, Oxfam worked with International Development Enterprise (IDE[6]), in the first year (April 2010 to February 2011), due to their expertise in market linkages. Although this relationship was later discontinued in the second year (March 2011 to February 2012), the original staff from IDE continued with the project and there was no significant interruption of activities. Annual and progress reports compiled for the first year are used as reference in this research.

At the commencement of the project the value chain approach was taken which entailed the following steps:

- Socio-economic household analysis
- Market sector and sub-sector analysis
- Market systems analysis
- Enterprise evaluation
- Assess new value chain

[6] IDE is an international non profit organisation that works with rural smallholder farmers to facilitate sustainable rural livelihoods by providing technology for accessing water and other interventions. See http://www.ideorg.org/WhatWeDo/Water.aspx

- Identify, select and engage new stakeholders
- Design programme
- Monitor, evaluate and prepare for scale up

In addition to these processes was a strong emphasis on the production side, the promotion of organic farming methods and integrated pest management methods in order to reduce costs for farmers thus making their activities more sustainable. According to the annual report, at the commencement of the project many of the gardens had sandy soils which are low on nutrients and suffered from nematode infestation, hence the need for the project participants to undertake training on fertility enhancement and pest control. It is important to note that at the commencement of the project, there was recognition that gender and HIV would be mainstreamed within the market access project, however, for gender, clear issues to be mainstreamed had not been identified. Hence this study became part of the analysis of the gender issues the project ought to address. As mentioned earlier the GEM initiative was also a learning process on gender mainstreaming. In the conclusions in Chapter Five, developments resulting from this study will be discussed.

The project commenced in April 2010, but the actual groundwork in Chirumanzu commenced in October of 2010, therefore the first phase of production is considered as January 2011 to May 2011, which means crops were planted in January and harvested in May. The second phase of production was from June to September 2011, while the third and last phase for 2011 stretched from October 2011 to December 2011. The phases roughly follow a four month pattern but may be shorter or longer depending on circumstances, for instance if a crop does not germinate well in the nursery phase, a new crop has to be sown and nursed before transplanting and that may mean the extension of a phase by two to three weeks before it is harvested and sold. The fourth phase of production was from January 2012 to May 2012, the fifth phase being from June to September 2012.The FGDs to collect data were conducted after the first phase of production had been completed, so other sources of information were sought to update the findings in the final chapter of the thesis.

The market access project adopted the concept of CICs in order to help farmers bulk their produce order to meaningfully engage the market with significant vegetable supplies. The CICs are responsible for the actual marketing function of the groups, that is, they physically interact with the markets in selling the collective produce of the gardens they represent. The CICs serve the function of a hub for marketing and information for the farmers in the garden groups. Each CIC committee received training on marketing and was taken on learning visits by project staff to meet some of the potential buyers. The project assisted the CICs with the provision of crates in which to transport the produce as well as scales with which to weigh the produce. The CIC members operate on a voluntary basis and are not paid to do any of their duties just as the garden committees are not paid to execute their duties. In their absence, members from their gardens take turns to

water and tend their plots so that they do not miss out on production. Transport costs to the market for CIC members are deducted from the income received from sales. The rentals for the CIC centre are typically between $10 and $12 and are paid for by garden contributions. The CICs offices are located at the small business centers in the wards, the buildings rented for use as CICs were mostly in a state disrepair and the project assisted in bringing them to a usable state. The owners of the buildings are private individuals who were failing to maintain these buildings; hence the rentals they charge are low to reflect this history.

Table 6: The composition of the CICs

Name of CIC	**No. Of Gardens**	**Committee Members**		**Total**
		Male	Female	
Charandura	4	0	16	16
Maware	5	4	16	20
Chinyuni	4	2	14	16
Mhende	3	1	11	12
Siyahokwe	4	1	15	16
Total	20	8	72	80

The farmers in each garden aggregate their produce and then, through the CIC, send it to the market. As part of the project, the CIC committees were trained in market engagement. IDE coordinated several visits for members of the CIC committees to interact with various markets. As a direct result of these visits, each CIC produced a crop production plan for its gardens. These varied from CIC to CIC based on their individual capabilities and their perception of the risk attached to various crop combinations and timings (Oxfam, 2011).

At the CIC centre the produce from each garden is weighed, graded, packaged and stored by the CIC committee awaiting transportation to the market. The CIC members are responsible for arranging transport, either with local businessmen who have shops at the rural business centres or with the bus service that has scheduled times. From there the CIC members actually travel to the town, in this case Masvingo which is 60kms away. Through the market engagements that the CIC have made with assistance from the project they deliver the vegetables either to supermarkets, hotels and restaurants or they go to the open market where hawkers buy in bulk for resale. Upon return the CIC members distribute the earnings to each garden

and each member based on the quantities and grading of that the vegetables have fetched. It was reflected in the focus group discussion that this system worked well because it freed other garden members to conduct other business instead of having everyone spending time trying to sell their produce.

4.4.5. The current situation

This section reflects firstly on the current situation with production, which can be contrasted with the situation before the market access project. It then moves on to show the participants' experiences of operating as CICs, and then their reflections on how it has been interacting with various markets. It ends by sharing some of the remaining frustrations and challenges which the participants were still facing at the time of the FGDs (August 2011).

4.4.5.1 Current production

The garden groups received training in market led production, soil fertility enhancement, nursery management and crop budgeting (Oxfam, 2011). Through these trainings, the farmers in the FGDs indicated that they were now able to compile a cropping calendar, grow better quality produce that the market would accept (and buy at a higher price), and could trace their costs and income. This appears to be a key factor in the motivation to engage in market activity because the women reported that they felt confident of their produce since they were now producing for the market.

There were indications that the initial labour required to undertake the fertility management including the fertility trenching was intensive and the women found this a significant challenge. Through the project the farmers in the 20 gardens were provided with high quality seed and assisted to create nurseries so that all the farmers in the garden plant their crop simultaneously, to ensure adequate collective quantities for sale. The project also synchronised the cropping calendar of all the twenty gardens so that in any given season, all twenty gardens would produce the same vegetables such as tomatoes, in this way the CICs would be able to sell large quantities and achieve economies of scale.

The project directly provided extension services through a full time agronomist and officer, to advise on planting times, pest control and other aspects of production. This was done in liaison with the government trained extension officers who work in the area. The access to extension services increased the quality of vegetables that the women produced.

4.4.5.2 Reflections on the CIC

As a means to accessing markets, the CIC members who were in the FGD reflected that:

- The CICs are a good way of selling because they have established contacts with buyers and networks in the open market. They communicate with buyers before they make a trip to the market with their vegetables. In doing this they do not waste time looking for customers

- Due to the good quality of produce that the farmers were supplying to the open market, some buyers now travel to the CIC to buy directly from the farmers, which saves them on transport costs (this was the case in only one CIC – Siyahokwe CIC)

- Being able to supply big orders to supermarkets and restaurants has increased the women's confidence in their abilities, as one woman said, "I had never been to Masvingo all my life, but because of the project I now have the confidence to go there even on my own".

- There is increased confidence among the farmers to sell other crops from the fields and not from the gardens as individuals in the urban market due to the market knowledge they have gained in the project.

- Through the project, new crops which the farmers did not know were introduced and have been selling well in the markets; these include green pepper and butternut. The farmers indicated that this also improves the variety of food they can feed their families on.

- Through bulk selling as a group, the farmers have realized more income from their sales and they have been able to plan for its use because it comes as a lump sum, instead of the occasional dollar that they used to receive in the past when selling in the village. They are also better able to strategise on the use of their income since it is planned; one lady indicated that she was able to send her son to high school from her vegetable earnings coming from the garden.

- As a result of the increased income from vegetable sales, the women have started savings and 'lendings' clubs within their garden groups, which enables them to earn even more income.

- Decision making: many of the women farmers agreed that due to the income from the vegetable sales, they have seen a change in their relationships with male partners. Some indicated that there is now joint decision making within their households because women are also contributing income. This enables women to prioritise issues such as payment of school fees unlike when the money has been earned by the male partner only, where the female partner is hardly consulted on its use. There is also a reported decrease in household conflict over resources; the women indicated that they no longer have to put pressure on the male partner to give them money for soap, salt or any of the smaller household needs. A small portion of the income from vegetable sales is given to the male partner for beer drinks, which was said to help significantly because the women were then given access to cow dung for use in the garden because the men could realise benefits from the sales. Male participants in the group discussion agreed that with women earning an income from the sale of vegetables, there was reduced pressure for them to provide all the household needs. An increase in male participation in garden work was reported; men were now contributing more labour, helping with harvests and sometimes watering because they could see the benefit that proceeds from the garden was giving to the household. Although on the other hand women

expressed a fear that the men may eventually take over the gardens if they continued to be lucrative and thus take away women's income.

- Income and asset ownership: as a result of proceeds from the sale of vegetables which come they receive at one time, women have been able to buy small livestock including goats and chickens, they have also bought household goods such as blankets, pots and plates and are able to send children to school.

- Time spent in trying to sell vegetables to the local market has been reduced by the CIC model. This is because only a few members are seconded to go to town and do the actual selling, while the other farmers are free to continue with other productive activities. The CIC members going to the market do not lose out on production as garden members take turns to tend to their plots in their absence.

- Social norms: due to the project there has been an increase in women's confidence to interact with markets. The women farmers report that to some extent there has been an acceptance by their society that women can get on buses and cars, go to the market, transact and come back home without being labelled prostitutes or loose women as before. The women farmers also have increased social status and self-confidence because they have been able to earn money, as one woman said "I no longer go around looking dirty because I can now afford to buy soap and lotion for myself" (Mutenderende CIC).

4.4.5.3 Experiences of CIC members of selling in the urban market

The five CIC committees interviewed indicated the presence of the formal and the informal markets. The informal market is the open market where they sell their vegetables in bulk to hawkers and it is located in an open area. The second market is supermarkets, hotels and restaurants. The CICs also sell locally to a boarding school in Chirumanzu.

Reflecting on the selling process to the informal open market the CIC members in the FGDs felt it is an advantage because the farmers get immediate payment for their vegetables. However, the prices in the open market are much lower than those from the formal market because of the competition from other farmers bringing their produce to market. An example was given in one of the FGDs, where the Chirumanzu farmers had set a price for their tomatoes, when a truckload of tomatoes from a commercial farmer arrived at the market and immediately plunged the price very low. The farmers also indicated that they found it very difficult initially to negotiate the prices and even the measurement of vegetables. For instance, to the farmers, one bucket is a full 20 litre bucket (filled to a level with the brim), while at the open market the vendors consider a full bucket to be heaped above the brim, this means the women end up

getting less income than they had planned. Initially the farmers said it was difficult breaking in to the networks that had been created by other farmers and the hawkers but eventually they managed to do so by becoming a frequent feature at the market.

At the open market the farmers have to arrive very early in order to make sure that all their produce is bought by the hawkers who want to quickly go and resell. This presents a challenge given that obtaining convenient transport is often difficult for the farmers. If they use the bus, they must then unload their crates from the bus, and hire another form of transport – either push carts operated at the bus rank or another vehicle. This makes the venture expensive for the farmers. In addition theft is common at the open market and the farmers have to be alert when offloading and selling their vegetables. The women indicated that physically they are weaker than men and when involved in a tussle with vagrants at the market the lack of physical strength works against them. The type of clothing worn by women farmers, that is skirts and dresses, was said to work to their disadvantage because they cannot be as physically mobile as men especially in lifting and shifting their crates at the market. As one of the women said “if you are selling food products like vegetables, you have to be smart or else people will not buy from you, but then in a dress it is hard to physically haggle with a forceful customer, sometimes they even steal from you and run and you cannot pursue”. This issue of theft was raised in three of the five FGDs and appears to be an important issue.

Dealings with the supermarkets, hotels and restaurants were said to have the advantage that the farmers fetch a higher price for their vegetables than the open market. Here the farmers initially presented their graded samples of vegetables, then agreed on the delivery terms, prices and quantities before entering into agreements with the buyers for the different institutions. The process of entering into negotiations with buyers and signing a formal agreement was new to the farmers, being women most of them did not have much education, but they indicated that having been to the initial visits with IDE helped them to become more confident. Despite getting a better price for their vegetables, the farmers only receive payment for their vegetables two weeks after delivery, this was said to be a disadvantage because the farmers have to incur another transport cost to come and receive payment. The perception that selling to the supermarkets is better than going to the open market was overwhelming due to the higher prices offered and the guarantee of a sale due to the contract they have entered into.

4.4.5.4 Challenges: Issues faced by women in the project

Despite the advantages highlighted above the women still face some challenges from some of the social and economic issues of accessing the market. A challenge related directly to the CIC model is that the prices of vegetables change unexpectedly at the open market due to competition. This change means that the women do not realize as much income as they had forecasted if the price is lower and communicating this to the rest of the garden members was seen to be a problem. Garden members were said to accuse the CIC members of stealing some of their money, although with the passage of time, members are

beginning to understand how the markets work. This was seen to be a disadvantage of having a selected group selling on behalf of everyone else instead of everyone selling on their own.

Transport

None of the women farmers own any form of transportation, they have to rely on local businessmen who have cars or the bus. This was seen to be a challenge because it is difficult for the women to negotiate good rates and consequently a significant portion of their earnings goes to paying for transport. It was also felt that although male farmers face transport constraints, they are better able to afford transport than women because they have other sources of income such as formal and informal work and they own assets such as goats and cows that they can dispose of. Women started the project with no income and at the household level own nothing worthwhile to sell and get income for transport.

Mobility

In order to be able to go to the market to sell their vegetables, women have to undertake some negotiation with their male partners. In the FGDs, the women mentioned that it is socially and culturally frowned upon for women to engage in activities that take them away from home especially if they are without a male chaperone. Hence some of the women mentioned that they had been discouraged by their husbands to be part of the CIC committee because this would mean that their husbands cannot control their movements when they go to the market. This is especially a problem when women arrive late at the informal market due to transport difficulties or other logistics, and their vegetables are not all bought, and they need to sleep over in order to sell the following day or because there is no longer any available transport back to their rural location. This was regarded as an absolute taboo, with male partners worrying that their wives are being unfaithful or are vulnerable to attack. The women reflected that the men do not face this constraint at all because they do not need to consult their wives on any proposed journey and because they are the leaders of the home they can make independent decisions about travel and are not worried about their own safety due to their physical strength. In order to mitigate this, the women leaders in the CIC have resorted to taking along male members of the garden groups as ‘guardians’ in case they have to sleep over or travel late from the market. The women have also resorted to giving a portion of their income to their husbands so that they can be allowed to engage in market activities.

Information

The farmers indicated that, despite having contacts in Masvingo town, availability of information, especially on prices is still a challenge in the informal market. The informal market is often more convenient for the women than selling to the supermarkets because the open market accommodates all the different grades of vegetables that the women produce, whereas the formal market requires the highest grades only. The fact that there is stiff competition at the informal market with other producers means that prices are often lower than expected, and this coupled with the transport costs reduces the earnings of the farmers. They would

need to increase their production, get better networked for information and obtain cheaper transport in order to maximise their earnings.

Maintain supply to the market

Interviews with the project officer revealed that the farmers were failing to meet some of their supply obligations and this was causing them to have a reputation for being unreliable among the formal buyers of their produce. This was echoed by the women, who indicated that there was much higher demand for their vegetables from both the formal and the informal markets than they were able to meet for certain types of vegetables. These include butternut, carrots, green pepper and cabbages. Some of the reasons cited for failing to supply the market are related to production – the farmers are not able to produce the quantities demanded due to limitations in accessing water in some of the gardens. Although the water sources are meant to be perennial, there has been an increase in the last few years of water sources running dry prematurely, this then limits the area under production and hence the quantities that go to market. Where water and land for expansion are available, the labour involved in increasing the area under production, when women are head carrying water for distances of up to 100 metres to water each bed individually makes it difficult to increase production. In some cases the women farmers mentioned that growing new crops such as green pepper was difficult for them since they were not sure how to use it in their own consumption, therefore if a market is not found they are stranded with it, so they end up not producing it at all despite having committed to supply it in the formal market.

Informal market transactions

As indicated before, women face challenges transacting in the informal market due to their physical strength and way of dressing. Having to deal with rowdy youths, push cart operators and some of the more aggressive customers was noted as a challenge for some of these rural women who are interacting with markets in this way for the first time. The women noted that they preferred to deal with women hawkers as customers because they could negotiate better with them.

Women's household roles and responsibilities

Women's household responsibilities are treated as a priority above all the other activities. These include cooking, washing, caring for children, the sick and the elderly, duties which usually confine women to the vicinity of the household. The women farmers noted that their male partners were not very happy with them engaging in market activities which take them away from home because this is seen as a neglect of household duties. Coming from a patriarchal tradition where the men went out to work to earn income, this reversal of roles where the woman goes to the market in the urban area is seen as radical and unacceptable to the men. Male partners do not see themselves as able to take over any of the household duties to allow for women to participate in market activities. From an outline on division of labour and livelihoods options in section 4.4.4.a, men were said to earn a living from cutting and selling wood, roofing

huts, building and other forms of temporary employment, these duties typically take them away from home, while women mostly work in the fields, made crafts, brewed beer for sale or worked in the garden, all of which duties do not take them much away from their household duties, hence having one's wife away from home selling in town is something unusual.

It is notable that in many cases the women in the CICs are widowed or single mothers, who do not have male partners to direct their movements. Ironically the women indicated that their male partners are very supportive of them spending time in vegetable production when they bring home money, but it is the actual travelling to the market in the city that they do not approve of. In the words of one woman, "If i come late from the market who will cook?", therefore in order to avoid conflict with male partners, it was found that certain female members of the CIC committee were the ones who kept going to the town to sell, while the other performed other functions. This can be both an advantage and a disadvantage in that the model allows those women whose mobility is curtailed either by household responsibilities or by cultural norms to still be able to sell their vegetables and get income. On the other hand, it is a disadvantage because the amount of work women have to do is increased by market led production and they are not able to engage with the market on their own which limits individual growth and the development of assertiveness and independence by women farmers.

Water

Although the gardens are located near water sources, not all of the sources are perennial, most of the water sources include small dams, streams, and in some cases wells that have been dug in the gardens. None of the gardens have an access to mechanised irrigation; all irrigation is conducted manually done by women who carry watering can on their heads. Initially, gardens were only taken seriously during the off season therefore the water challenge was not felt to the magnitude it is currently felt. However, currently the water challenge is limiting production of vegetables.

4.4.6 Recommendations for improving the market access project

From the FGDs the following recommendations were made in order to enable women farmers to better participate in the market access project:

- Irrigation technology should be availed to assist women in watering their gardens and maintaining productivity in the face of challenges associated with irrigating manually. Drilling boreholes within the gardens would mitigate water shortages, given the drying up of water sources.
- Increased support with fencing in order to facilitate expansion. Some farmers have small plot sizes and are unable to expand without support with fencing and other garden equipment.

4.4.7. Issues raised in the literature compared to issues raised by women in the Chirumanzu market access project

From the reading of the literature on women farmers' market access issues detailed in Chapter Three, the following issues were raised: women's limited access to extension services, limited access to market information, women's limited livestock ownership, limited access to labour, limited access to credit and financial services as well as access to transport and equipment. From the FGDs held with women in Chirumanzu not all these issues were raised. Comparing the two the following points are worth noting:

- Extension services: in the literature extension services were said to be biased towards male producers because they are likely to have the resources to implement extension guidelines as compared to women, but also low literacy levels were a barrier for women to access extension services. Social norms that did not allow women to directly associate with male extension workers also constrained women's access, given that most extension workers were said to be males. In the FGDs with farmers in Chirumanzu, extension services were also noted to be an issue. The women had limited access to extension services before the market access project begun because they did not have the resources (tools and inputs) to implement the production information given by the extension workers. It can be inferred that even women farmers in Chirumanzu who are not part of the gardens but lack the resources to implement extension advice will probably be overlooked by extension workers. From the baseline conducted by Oxfam, women in Chirumanzu were noted as having higher levels of illiteracy than men, which may be a barrier in accessing extension services as noted in the literature, although this aspect did not come out directly in the FGDs.

- Market information: the literature reflects lack of market information as a key barrier for women to access markets. Information pertaining to the prevailing prices and the type and quality of goods demanded by the market was difficult for women to access. The cost of obtaining information was seen to be a barrier. From the FGDs it was apparent that lack of information on the market in Masvingo was a barrier for women to sell their vegetables. Without this information the women were stuck selling their produce in the local market which was flooded with similar produce. Without information, the women in the gardens were producing low quality vegetables such as the Jam variety of tomato which was not attractive to the urban market at all. Market information was therefore reflected as a key issue both in the literature and the FGDs.
- Livestock ownership: Because livestock contributes to productivity, it was noted in the literature that lack of ownership is a barrier to women's participation in the market. Without livestock, women farmers experience a delay in land preparation waiting for neighbours with livestock to provide draught power. In the FGDs the issue of livestock ownership arose when women reflected that they could not access cow dung to fertilise their gardens because the cattle belong to males in the household and they make decisions about the use of cow dung preferring to fertilise the main field

where the family staple food comes from. In the FGDs the issue of draught power from livestock was not directly explored because in the garden they do not usually need draught power as land preparation is done by hand due to the small size of the plots for each member. In the literature, ownership of livestock was connected to likelihood of accessing credit. This aspect was not directly reflected in the FGDs in Chirumanzu. However it appears that lack of livestock ownership does affect women in the Chirumanzu project, and it can be inferred that female headed households with no cows are likely to face productivity delays as reflected in the literature.

- Access to labour: In the literature, women farmers were shown to have less access to labour which affected their productivity and ability to engage with markets. In the FGDs with women in Chirumanzu, the reflection was that women work more and longer hours than men. The labour demand was high because women had to work in the main field, do all the household chores and work in the garden as well. In the garden, the labour demanded under market production was higher than before the project since the women had to use organic fertility methods that involved labour in collecting biomass and digging fertility trenches. Males in the household were said to be disinterested in assisting women with chores because socially it was unacceptable and they would be laughed at by their peers. Also many men were said to regard working in the garden as women's work therefore did not contribute labour although this was said to be changing for some men due to the income coming from the market access project.
- Credit and financial services: The literature review showed that smallholder women farmers face problems in accessing credit and financial services due to illiteracy, lack of collateral, inaccessibility of the services among other issues. In the FGDs the issue of accessing credit was only brought out by the women when they were reflecting on recommendations on how the project can be improved. They noted that they did not have any sources to obtain credit and therefore would face challenges in expanding production.
- Transport and equipment: The issue of transport was raised in the literature as a barrier to women farmers because of cost and lack of availability in rural locations. The women in the Chirumanzu reported facing similar challenges with the cost of transport before the project and even within the project, the transport costs remain high and constitute a barrier to market participation. Lack of transport availability meant delays in arriving at the market which has implications in terms of the volumes of sales and possibly the prices that the women would obtain on a given market day.
- Land: Access to land was highlighted as an issue in the literature, the women in the FGDs did not raise it as a barrier. This was likely due to the fact that the project under focus in Chirumanzu was implemented in group gardens, as opposed to focusing on the situations of individual women. As a group accessing land for production from the local leaders did not appear to be a challenge.
- Technology: Aspects of technology as a barrier to market access were raised in the literature in terms of mobile telephones and access to technology for production. In terms of mobile technology to communicate with the market, the women in the FGD did not seem to have an issue.

Ownerships of mobile phones in Chirumanzu is increasing. Technology for production however was reflected as an issue under the recommendations, where women requested for a method of transporting water for irrigation directly into the garden by some form of irrigation technology. In the current situation they have to head load buckets of water often for long distances thereby impacting on their production.

In addition to the issues raised in the literature, women in the FGDs also noted issues of mobility as a constraint to market access even under the market access project. Social norms do not encourage women to travel far away from their locality without their husbands or a male chaperone. Such women are accused of being prostitutes or loose women. This has impacted negatively on women's participation in the CICs, where they face the possibility of being delayed in Masvingo and cannot travel back home the same day.

4.4.8 Summary of findings: does the Oxfam project address the issues faced by women in accessing markets?

The table below presents a summary of the issues faced by Chirumanzu women in accessing markets and how the Oxfam project has tried to address these. The issues are both those originally existing prior to the project such as lack of information on where the market is located within the urban centre, and also issues that have emerged because of the project such as inability to meet the market demand by women farmers.

Table 7: Summary of findings on how the Oxfam project addresses issues faced by women in accessing markets

Issues Faced by Women in the Chirumanzu project	Response by Oxfam Project
Selling only to local markets, lack of knowledge of urban markets	Engaged in market surveys, and facilitated linkages between farmers and both formal and informal markets.
Transport to urban markets expensive for individual farmers	Women farmers encouraged to sell their produce collectively, and therefore transport costs incurred by group rather than by individual but still expensive
Selling in villages, many hours spent walking looking for customers	A more secure market through linkages to formal and informal markets
Frequent excursions to various community selling points by all the members of the garden thereby taking away productive time	Selling is done by the selected CIC committee members leaving other garden members to continue with production
Individual selling meant low prices and uncertainty on income	Collective production in order to achieve scale and negotiating power for better prices
Poor quality vegetables grown from poor seed sources	Market accepted quality of vegetables earning more income by fetching a higher price in the market, although there are still challenges accessing high quality seed due to local unavailability in the rural area and cost
Social norms restricting women's mobility to urban centres	Project tried at its later stage to engage the entire household in meetings in order to inform them of the project so that male members are supportive, but not many tangible results yet
Women overburdened by household duties, little free time and opportunity to engage in market activities.	Through the income being earned by women, the male members of the household are increasing their labour contribution to the garden work, in addition to providing tools like scotch carts and wheel barrows
Inability to honour delivery agreements of vegetables to buyers in the city	Project has not addressed production constraints related to water availability and frost.

An analysis of whether the Oxfam project actually addresses the constraints of women farmers in accessing markets in presented in Chapter Five, the conclusions and recommendations chapter.

4.5. An update on the project in 2012

During a review of the project in February of 2012, the project officer for the project presented a summary of the production and income of the garden groups after which an interview was conducted in order to get more insight into the presented details. This information was useful in getting a picture of how well the

garden groups were performing given that they had undergone three phases of selling and were into the fourth phase since the inception of the project. The information provided during the review meeting showed that, by February 2012 (six months after the FGDs were conducted with CIC members for this study), the following had been achieved:

- Production of at least four high value crops per CIC per phase (each phase lasts approximately four months)
- Facilitation of the linkage process to high value markets
- Facilitation of CIC monthly meetings
- Weekly monitoring visits for each participating garden
- Mainstreaming gender, HIV and AIDS issues

Table 8: First Phase (Jan – May 2011): Volumes sold to different formal and informal markets

Vegetables	Quantities produced and sold	Incomes in USD
Tomato	23 273.8kg	16 257.26
Cabbage	1 913 heads	1 605.80
Carrot	575kg	383.50
Butternut	760kg	629.00
Green Pepper	1 511.9kg	874.60
Onion	3 982kg	252.00
Total		20 002.16

Source: Oxfam, 2012

Table 9: Second phase (June – September 2011): Volumes produced and sold to different formal and informal markets

Vegetable	Volume sold	Income in USD
Tomato	21 732.3kg	10 043
Cabbage	502 heads	492
Carrots	1 619.9kg	680
Butternut	35 276.3kg	17 138
Green Pepper	15kg	9
Lettuce	144 heads	83
Total		11 307

Source: Oxfam, 2012

In addition to the information presented in the table above, the officer noted that over 90 percent of leadership positions in the garden and CIC committees were occupied by women, which has increased their decision making opportunities. Between the first and second phases the project had also tried to share information with the households of the women involved in the garden and this was said to have reduced the incidents of conflict over CIC members going to the urban market because male partners and other household members now understood the project.

From the tables it is apparent that from the first to the second phases there was a decline in the production and income of tomatoes, in the second phase in addition to a decline in production, the farmers received a lower price for their tomatoes. There was also a decline in the production of cabbages and green pepper. There was an increase in the production of carrots while onions and lettuce did not bring in much income. In the first phase, the reasons for success appear to be that the gardens were provided with seed, chemicals and were assisted to engage with the markets.

In the second phase, there was a decline in the production of tomatoes, cabbages and green pepper due to frost damage between the 25th of June 2011 and the end of August 2011. These weather conditions affected the crop performance and significantly reduced the yields and the income. Another factor causing the decline in production was said to be the unavailability of garden seeds and chemicals in the local area. In the second phase farmers were asked to procure their own seed and chemicals, hence the lack of

availability in the local area affected them, because unlike the project staff they were not able to source seed from further away due to transport constraints.

Additional information on the project progress was received from interviewing the project manager. He indicated that the buyers of the women's produce in Masvingo had indicated that the vegetables supplied by the women in the project are of high quality. However there concerns with regards to maintaining constant and consistent supply, because sometimes the produce was delivered late or was not delivered at all.

4.6. Chapter Summary

The chapter was focusing on the findings of the case study answering questions two and three of the research on the issues rural smallholder women farmers in Chirumanzu faced in accessing markets and how the Oxfam project helped address these. The chapter gave details of the background to the market access project using the baseline report conducted by Oxfam, and describes the market access model for the project which revolves around the CICs. The findings from the FGDs are given on a before and after basis, that is, before the implementation of project for the women farmers in accessing markets and after the intervention by Oxfam. The chapter ends with the issues that women farmers still face as part of the Oxfam project.

CHAPTER FIVE: CONCLUSIONS

5.1. Introduction

This chapter gives the conclusions of the study by revisiting the three research questions that the study aimed to answer and considering how these have been answered. Section 5.2 looks at the three questions in the study, how these have been answered and gives a conclusion on each. After this, section 5.3 focusing on women's agency, has been added in order to show the initiatives that are underway to address some of the issues raised in this study. The section is based on information gathered for the GEM initiative in June 2012. The chapter ends with recommendations for the improvement of the market access project and similar projects.

5.2 Conclusions to the research questions

5.2.1 From the literature, what are the issues that rural smallholder women farmers face in accessing agriculture markets?

This section aims at addressing the research questions, giving details about how each question was answered in terms of research design and methodology. It then highlights the findings in response to each of the sections. Thereafter recommendations are given in order to improve the project.

In order to answer this question, a literature review was considered the best research design. The literature review was selected because through a search of the literature from different sources, it would be possible to learn about the current thinking on market access for rural smallholder women farmers and explore the link with sustainable development. Through the literature review it was hoped that issues specific to female smallholder farmers would be found and highlighted. The literature review would also provide information on why agriculture markets are important for smallholder farmers.

A literature search was conducted, in peer-reviewed online journals, organisational websites, Oxfam publications and various books. Assistance was sought from the Stellenbosch university library. Most of the information found in the literature search mainly pertained to smallholder farmers in general. Frantic effort had to be made using specific search terms to identify literature that pertained specifically to women smallholder farmers. Some examples of the search terms included 'women, credit and market access' and 'women, labour and market access'. Some of the specific search terms had been derived from Oxfam reports and a preliminary reading of the literature during the proposal stage of the study. The process of searching for the literature was iterative in that other issues emerged from reading through on one issue leading to a further literature search. Literature on market access issues in Zimbabwe was difficult to find, hence much of the literature referred to is based on global and other areas of African studies.

The literature revealed that markets have a role in the growth of rural economies by connecting them to the national and global economies, thus bringing more money into the rural economy. Markets also had a role in facilitating access to income and increasing farmers' productivity. Through the literature, market power was shown to be in the hands of a few players who have resources, such as middlemen, and also the changes in the supply chain that have resulted in integration of national and regional markets was noted as being an issue that smallholder farmers face. Through the literature, rural women farmers were seen to be important because their work is often missing in statistics thereby creating an information gap. Smallholder women farmers were also shown to have little voice to influence agricultural policy.

The specific issues faced by smallholder rural women farmers were organised thematically. These were women's lack of access to market information, limited access to extension services, limited livestock ownership by women, female farmer households having limited labour, lack of or limited access to technology, credit and financial services, difficulties in accessing transport and equipment as well as land.

The limitations of this research design were that it required a lot of time to exhaust all the possible sources of information and therefore some studies may have been overlooked, and that some relevant studies may not be available online (for example, NGO project reports).

5.2.2 What are the issues that rural smallholder women farmers in Chirumanzu face in accessing markets?

In order to answer this question, the ethnographic case study approach was selected. It was deemed an appropriate research design because it allowed for an in-depth examination of the issues of market access in a given case. The methodology used to collect the data was focus group discussions with additional information sought from key informant interviews and document reviews. The case selected was an Oxfam market access project for rural women in five wards of Chirumanzu district. The case was selected because I could easily access the information as an employee of Oxfam and because the market access project was in its pilot phase therefore my findings would be useful to the project.

The limitation of this approach was that it was easy to assume that the reader would have a similar understanding of the market access project as had a lot of background information. To mitigate this, I relied on my supervisor to point out information gaps. Another issue was that during the duration of the study changes were happening in the project to address gender through the GEM initiative. This involved undertaking an analysis seeking information on women's agency (quite similar to this research project) and then making adjustments to the project. This was challenging in that the researcher had to confine myself only to information about what had actually transpired in the project and not planned activities to address some of the issues.

The case study revealed that women in the Chirumanzu market access project face issues similar to those raised in the literature which showed women were limited in terms of access to extension services, access to market information, livestock ownership, access to labour, access to credit and financial services as well as access to transport and equipment. The exception was the issue of land which did not appear to be a problem for the women in Chirumanzu. Women in Chirumanzu also faced issues with social and cultural constraints that restrained their decision making and mobility, which did not show up in the literature I reviewed.

5.2.3. How has the project addressed the market access issues faced by rural smallholder women farmers in Chirumanzu?

Because this question is connected to question two on the market access issues faced by women in Chirumanzu, the data collection was conducted simultaneously in the FGDs. The FGDs gave information on the functioning of the market access project detailing issues of the CICs, their experiences in engaging the market, the issues they face accessing the markets facilitated by the project and their recommendations to improve the project. The findings were that, although the Oxfam project largely addresses the issues of accessing market information and accessing extension services which is linked to supporting production for the market, the women in the project continue to face challenges that the project is not directly addressing. These are:

- transport costs which remain very high even though the women have bulked up their produce for transportation
- socio-cultural issues that restrict women's mobility and ability to participate in markets producing enough vegetables to meet market obligations, which jeopardises relations with buyers, this was due to water shortages and other production restrictions like small plots
- information challenges still exist
- women continue to have a huge burden of labour, the project has simply added onto the work women do
- transacting in the informal market is challenging for the women because of their physical strength that makes them uncomfortable dealing with rowdy youths and aggressive customers
- productivity challenges due to shortages of water and lack of an irrigation technology to relieve the labour burden of head loading. This reduces productivity and affects market supply.

In collecting the data during the FGDs the risk that the participants would exaggerate the challenges that they face in order to receive more support from Oxfam was present. However the presence of the officers who work daily with the farmers helped in triangulating the information provided although this is not perfect as not all information can be triangulated. The FGDs were held with CIC committee members who

represented at least four gardens for each CIC. One FGD was attended by only four people, which robbed the interview of the diversity of opinions from the other members.

5.3. Investigating women's agency in the market access project

5.3.1 Introduction

As noted in the introduction, this section on women's agency shows some of the developments that occurred during the course of this study that address some of the market access issues raised by smallholder rural women farmers. During the course of my research, one of my assignments as the Gender Coordinator under the GEM project was to investigate how the project can increase women's agency in the market access project. The information in this section is about women's experiences participating in the market access project and the issues that the women feel can be changed in order for them to develop agency and really benefit from the project. From the Oxfam perspective, agency means that the women go beyond benefiting from just the increased income to developing skills and capabilities that they can use in other aspects of their lives and that enable them to transform gender norms. This exercise was undertaken as an action learning initiative to inform a set of tools that can then be shared widely to promote women's agency in market access projects. I found it useful to include the information here because it helped to triangulate the information that I had already collected from the literature and my FGDs on women's issues in market access. This was appropriate because the information from the GEM learning task was only gathered from women participating in the market access project. More importantly, this information is put here in order to show that some initiatives are underway to address issues raised in this study. The aim of the learning task was to investigate what factors would enhance women's agency in the market access project, and in a way was a default recognition that giving women access to markets is not adequate, something more had to be done to support them to fully benefit. This exercise was conducted in a three step process as follows:

- Gathering evidence on women's current work in households and the tensions and trade-offs with the current market opportunity. This involved reviewing baseline and other documents on the household economy, identifying any data gaps and ways of collecting missing data and then producing a visual aid of the results from the information gathering.
- Identifying the area in the household where women felt they needed to negotiate in order to achieve economic leadership in the context of the market opportunity presented in the project.
- Identifying the factors that enable women's agency in the household and enhance the gendered and adapted market map to incorporate the household system and the key factors and services that promote women's agency.

In order to achieve the three steps, I organized FGDs in June 2012 that were attended by women and men in the Chirumanzu market access project. In order to get comprehensive information I elected to hold two FGDs with one of the participating gardens, Bgwanya garden, because the members included: ordinary smallholder women farmers in the garden who hold no leadership positions, male members of the garden, the garden committee members responsible for running the garden's affairs and the garden's CIC

representatives who have experience marketing the garden's produce as part of the CIC. The FGDs were conducted with the assistance of the project officer, who works directly with the gardens in Chirumanzu and who assisted in mobilizing garden members for the FGD, introducing the exercise, explaining the time line (I to 2 hours) and taking notes during the discussions. As someone who works with the gardens daily she was able to provide prompts for some of the questions. Prior to the FGDs the project officer had received an induction on the objectives of the information gathering exercise and had been taken through the FGD guide. Because the officer has been through many similar FGDs (including the ones for my thesis in 2011) the induction process was done within a day. The FGDs were conducted on the 20th of June 2012, at the site of Bgwanya garden with a total of 28 members, 15 in one FGD and 13 in the other.

5.3.2. Findings of the FGDs

In order to guide the discussion a set of questions was formulated according to the requirements of the learning task with questions focusing on the aforementioned step: understanding women's work in the household and identifying factors that enable women's agency. In order to gather information on women's work, an overview of the seasonal cropping calendar was undertaken. At the advice of the monitoring and evaluation department the cropping calendar was considered best to give a good indication of the work that women do throughout all the seasons in contribution to the household economy. After the seasonal cropping calendar a set of questions focusing on how the market opportunity has affected women's workload in the household, time and labour as well as areas where they feel they can negotiate was administered.

5.3.3. Seasonal Cropping Calendar

The FGD found that in terms of the agricultural tasks, women and men both performed most of them throughout the year including land preparation, planting, and harvesting. However, women do more work, as certain tasks like weeding appeared to be predominantly done by them. Prior to the market access project, the garden production was also predominantly done by women although this is beginning to change.

Men appear to have more opportunities for livelihood activities such as building, thatching and brick production as casual labour, for which they get income. But women also assist in this work by collecting the thatch and collecting the water for brick production without necessarily being considered as having undertaken the work. These activities typically earn more money than the activities undertaken by women. Women's livelihood activities such as selling seasonal fruit like mangoes and guavas is tedious, involves walking to the local business centres and earns little income for them. In the focus group discussions, the women reflected the most about providing school fees for the children as motivation for undertaking other livelihood activities and causal work.

In terms of labour, women contribute to the household labour in the main field and the garden; however they contribute additional labour to household chores such as fetching water, firewood, cooking cleaning and washing. Fetching water was particularly an issue in the FGD because of the change in the weather pattern, where the decreased rainfall meant that by May water sources are depleted and women have to walk long distances to wash, fetch water and take the livestock with them. Typically women noted having to dig deep into the dry river bed to access water. This is a challenge in garden production as well; the number of garden plots cultivated in reduced in order to maximize the water available. Women head carry the water for watering long distances. The amount of time spent working on the household chores by women has an implication on their participation in the market access project.

From the calendar it was apparent that in addition to the huge labour contribution made by women, they also participate in other social networks including the burial society, church meetings and volunteer as village health workers, homes based care workers and participate in other committees.

5.3.4. Areas where women feel they can negotiate in order to gain agency

i. Productive work and care work: Labour contribution in the fields, garden and cattle herding: Women do not see some of the reproductive and productive work as 'work', for instance, in the FGD, working in the garden was seen as an extension of the reproductive work of providing food for the family because the women needed the vegetables from the garden in order to prepare meals.

Although some men in the focus groups have started to assume more household chores such as fetching water and firewood, more can be done to relieve this duty from women. Men are best suited to assume these roles because they are able to harness the ox onto the oxcart and go to fetch water from long distances in bulk, and when they are herding cattle in the bush they are well placed to collect firewood as well.

ii. Access to resources: women's ownership of big livestock like cattle. Livestock is an important part of the rural community, men control the products from livestock, women's ownership of livestock would enable them to access cow dung for fertilising their gardens and to control the income from sales to pay school fees and other household decisions.

iii. Attitudes and beliefs: women's mobility and participation in markets. Initially the work in the garden was viewed as women's work and an extension of household duties. Surplus produce was mostly sold in the village, given away or dried; there was no travel beyond the local area to sell vegetables. Very few men were involved in garden work. However at the start of the market access project, where women were able to produce and sell to urban markets, the men were not happy with them travelling to the urban area to sell their vegetables in the new product, this is seen as a duty best performed by men. This is especially the case when women have to sleep

over in the urban area because they have failed to sell all their produce. The patriarchal nature of society also makes it difficult for women to make decisions in the household and limits their ability to participate in certain activities. A shift in attitudes and beliefs about women's work would enable more men to work in the gardens and assist women with labour, as well as to support their mobility and activities at the market place.

5.3.5. List of issues that enable women's agency/negotiating power

- **Increase in income**: This was said to increase women's negotiating power because they are contributing a key resource to the household. The women in the discussion groups noted that when they started to realise income from market gardening, their male partners started to consult them when making decisions on male earned income, something that never used to happen much. In addition women earning income has increased the numbers of men willing to participate in labour intensive land preparation activities in the gardens, and willing to lend their tools like wheel barrows, scotch carts and willing to give cow-dung (cattle manure) for fertilising the garden because the benefit is now apparent.

- Information sharing by the project staff which has started to mobilise the whole household for consultation and updating meetings, has made a difference to women's ability to negotiate their participation in the market. This is because the male partners are now aware of every stage of the project and they realise how their support in providing labour or equipment can help. Perhaps the fact that Oxfam takes time to meet with the household and explain the project lends more legitimacy to women's new roles in the market access project.

- The acquisition of new skills by women in the market gardening project that promotes better quality crops, the cultivation of new crops, adoption of new organic and low cost fertility and pest management methods, enables them to increase their confidence and participation, with some of them indicating that they have adopted these new skills in their main agricultural work apart from the new opportunity.

- Consulting male partners on what to do with the money earned from the sale of vegetables, and setting aside a little money for the male partner to spend on alcohol. This was said to increase the understanding between male and female partners and allowed men to be more supportive of the new market opportunity.

- Being part of a group garden where other women are also producing and selling, increases women's ability to negotiate and participate because male partners can see that other women are involved and also the women themselves challenge each other to be more productive.

- Increased ownership of assets especially livestock like cattle, which would enable women to be seen as economic players in their households and communities and increase their decision making ability since particular importance is attached to cattle

- Access to credit to start projects that are not dependent too much on agriculture and will not be affected by changes in weather, such as rearing poultry. The women noted that they do not have anywhere to borrow money from, their internal savings and lending schemes are inadequate to generate the amounts of credit required (the women noted contributing about a dollar each month to a common pot from which members could borrow at an interest).

- Being a single parent or a widow seems to increase women's ability to participate in the new market gardening opportunity because there is no one restricting their mobility and they are able to use the income from the sales in the way they think is best such as purchasing livestock. Married women have to negotiate with their male partners and cannot always act in the way that they think is best.

5.3.6. Conclusion

The exercise detailed above served to highlight factors that would enable women in the market access project gain agency and participate more effectively in engaging with the market. The information will be used to tailor the market access project to respond to the gender needs of participating women in recognition that simply connecting women with urban markets is not adequate but more has to be done for the market participation to contribute to sustainable development for the women and their households.

5.4. Recommendations

Given the above findings from the literature review and the case study, it is clear that rural smallholder women farmers require other matters to be addressed in addition to facilitating direct market access, to allow them to fully benefit from market access projects. These issues need to be addressed both government, private sector and NGOs like Oxfam. The following recommendations are given towards the improvement of the Oxfam project in response to the issues raised in the FGDs, as well as other market access interventions more generally. The issues of socio-cultural restrictions and transport costs are highlighted first since these were highlighted in the FGDs as challenges. Issues of strengthening producer organisations, engaging in contract farming, facilitating access to credit and mitigating the impacts of climate change are then included as they are likely to enhance the project's objective of facilitating market access for farmers.

Some of these recommendations are echoed by *The Rural Poverty Report 2010* (IFAD, 2010) which made me feel that many of the recommendations I came up with were relevant to a broader audience than just the Oxfam project.

- Gender analysis. It is crucial for market interventions to recognise that men and women participate differently in agriculture markets as a result of structural socio-economic issues like access to credit, extension services, ownership of land and livestock as time and labour constraints (IFAD, 2010). I found the approach offered by GEM to be a sound methodology for analysing the gendered aspects of a potential project and I recommend that other projects use a method like this before launching market access projects.

  The IFAD report notes that there can be changes in gender roles when market opportunities arise. In the case of Chirumanzu this is true in that the women reported an increase in men who want to contribute labour in the gardens now that the women are earning some income from them, whereas previously gardens were regarded as women's domain.

  By understanding how new opportunities and risks in agriculture value chains are gendered, market access projects like the Oxfam one can promote gender equality by supporting women to gain access. Challenges noted in the FGDs on socio-cultural constraints that restrict women's mobility to markets, decision making and that leave a huge burden of labour on them can be addressed if projects are transformative in their approach. A gender analysis can be informative on how to assist women to participate better for instance women's labour burden can be reduced, through targeting other household members, especially men to assist by providing labour which may mean engaging men in programmes that aim to influence attitudes and beliefs about women's work and women's economic empowerment. Although the Oxfam project in Chirumanzu has recognised the importance of engaging men and is currently trying to do so, the recommendations is that more can be done if the project documents its successes or failures in this area for sharing and replication with other similar projects both within and outside of Oxfam.

- Infrastructure. Investment in infrastructure, especially in roads, is key in facilitating market access for smallholder rural farmers. The report notes that good infrastructure is associated with better functioning markets. Rural communities that have well-functioning infrastructure are more likely to escape poverty. Having good rural-urban linkages through improved infrastructure is likely to facilitate new market opportunities and decrease transportation costs. Improved infrastructure is also linked to other benefits such as easier access to health services, education and financial services and other social service.

  The high cost of transport was noted as a challenge in the discussions with women in the project. In Chirumanzu the high cost of transport is both a factor of the distance from the urban areas as well as the poor condition of the roads. Although business and civil society groups can invest in infrastructure, the large burden to do so is with governments. NGOs like Oxfam can assist by

engaging in advocacy, linking rural smallholder farming communities like Chirumanzu with government duty bearers, in order to advocate for improvement in infrastructure. This is a role that Oxfam can play in the Chirumanzu market access project in order to reduce the transportation costs for farmers, which were noted as an issue that women smallholder farmers are facing.

- Rural producer organisations. Whether formally registered or not, producer organisations have a marketing benefit for smallholder rural farmers by assisting them in reducing transaction costs and risks associated with engaging the market (IFAD 2010). Through farmer organisations, farmers can bulk up their produce, engage in larger transactions, and experience lower transportation costs. Through producer organisations, favourable relationships with buyers are more likely to occur, which can provide production support services to farmers. Accessing financial services may be made easier if farmers are operating as an organisation rather than as individuals. Of key importance is that producer organisations increase the market power of farmers to negotiate better prices and payment terms for both their produce and inputs. Those farmers who are not entrepreneurial in character and would be unable to engage in the market as individuals benefit from participating in producer organisations.

  Oxfam has already made some progress in supporting the development of a form of producer organisation for the women in the Chirumanzu project through the CICs. The CIC committees play an important function in the marketing of produce and help the female participants bypass many of the specific issues which hamper them from participating in markets. These include lack of time to travel to market and sell given their heavy burden of family care duties, low literacy levels, lack of access to information, socio-cultural norms which make it difficult for them to leave home etc. It is therefore recommended that this kind of model by used by other organisations which aim to facilitate market access.

  Further support to make the different CIC groups function as organisations and begin to accrue benefits such as access to credit for members is required. The report gives a warning about the sustainability of producer organisations beyond the support of NGOs and governments, with many being unable to continue after the support is withdrawn. This is an issue that Oxfam will need to address, and possibly can consider further training in issues around running such an organisation.

- Credit and Financial services: Access to credit can assist smallholder rural framers to participate in markets. Credit can enable farmers to access inputs and is a source of capital for production and expansion.

The Chirumanzu market access project does not directly link farmers to credit facilities, however, the project can potentially assist farmers by doing so. At the national level, structural issues such as national policies to promote access to credit and financing are necessary to create a supportive environment for women's economic participation. Special women specific credit windows or programmes that require little documentation and collateral would enable women smallholder farmers to access credit and financing. In the private sector, micro-finance institutions must be encouraged to decentralise their operations in order to accommodate rural communities. Models such as the Grameen bank model, that encourage women to borrow as groups should be encouraged in order to promote accountability. Oxfam's role may be to advocate to both government and private sector to avail credit facilities to smallholder rural farmers.

- Climate change mitigation: The issue of water availability and adverse weather conditions was reported as a challenge by the women smallholder farmers in the Chirumanzu project. In order to address these challenges both national and local level interventions are required. The recommendation is that at the national level investing in irrigation and broader climate change adaptation and mitigation in order to assist smallholder farmers is crucial. Oxfam's role in this may be to advocate for the development of such policies, showing the challenges that farmers in the Chirumanzu project face as evidence. At the local level Oxfam should address water access issues, possibly through technology such as drilling boreholes and wells, and address other weather related constraints such as heat, frost possibly through offering farmers insurance or facilitating access to better weather information and contingency planning, as well as methods of farming which are more resilient to climate. Mitigating against climate change is an issue which will affect all smallholder farmers in the future, so it is crucial that NGOs, scientists and policymakers invest time and money in these kinds of interventions.

- Contract farming. The IFAD report recommends that there are benefits for smallholder farmers in engaging in contract farming with large agri-business firms such as processors and exporters. For the farmers the benefit is a guaranteed market and less volatility in prices, which can be pre-determined in the contract. Potentially smallholder farmers can benefit from services provided by the agri-business such as access to credit, equipment, and other technical production support. This in turn may increase the productivity of farmers.

The Oxfam project has facilitated access to urban markets such as supermarkets, hotels and restaurants. Linkages to agri-business firms may prove to be beneficial to the farmers in Chirumanzu. The role that Oxfam can play is to engage potential firms, and share information on the farmer groups in Chirumanzu as well as give advice to the farmers on negotiating favourable contractual agreements.

Although not specifically highlighted in the *Rural Poverty Report* as the other issues mentioned above, the issue of water availability and adverse weather conditions was reported as a challenge by the women smallholder farmers in the Chirumanzu project. In order to address these challenges both national and local level interventions are required. The recommendation is that at the national level investing in irrigation and broader climate change adaptation and mitigation in order to assist smallholder farmers is crucial. Oxfam's role in this may be to advocate for the development of such policies, showing the challenges that farmers in the Chirumanzu project face as evidence. At the local level Oxfam and other similar projects promoting market access, should address water access issues as a priority, possibly through technology such as drilling boreholes and wells, and address other weather related constraints such as heat, frost possibly through offering farmers insurance or facilitating access to better weather information and contingency planning, as well as methods of farming which are more resilient to climate.

5.5. Areas for further research

The study focused on the issues that rural smallholder women farmers face in accessing markets. The Oxfam project in Chirumanzu was taken as a case study. In order to improve the effectiveness of the Oxfam project and to share best practices to other organisations that engage in market access issues there is opportunity for further study. The recommendation is that Oxfam should repeat the study in its other operational areas in the country to ascertain whether the same market access issues arise and why. Given that gender dimensions vary across locations, new issues may arise and provide more opportunities for learning and reinforcing project responses to women's market access issues. There is also opportunity for Oxfam to assess the effectiveness of the GEM approach through studies to see if it is effective in addressing the issues raised above in the Chirumanzu market access project. Information from the assessment would assist other organisations engaging in market access projects.

Another area for further research is the participation of rural farmers in niche markets. This would involve investigating the role of new market opportunities in introducing new crops that they have not traditionally cultivated by farmers and how this affects food security. In the Oxfam project the women were introduced to the cultivation crops such as butternut and green pepper, which they had not traditionally cultivated. Further study would be useful in finding out how such new crops affect the food security and crop production patterns beyond the market opportunity.

Given the female dominated nature of the project so far, another area of further study is the investigation of male-female dynamics as the project proceeds, with possible increases in income for the farmers.

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APPENDIX A

Oxfam focus group discussion guide

Focus Group Discussion Guide

Role of Facilitator

- The role of the facilitator in leading the focus groups:
- Set the scene, explaining the purpose of the focus group;
- Introduce participants to the topics for discussion;
- Keep the group on time and focussed on the topics;
- Encourage each participant to speak equally.
- Call on participants that are not contributing as much to the discussion.
- Summarise discussions from time to time to check appropriate understanding of participants' comments.
- Ensure that all the key issues are addressed
- Allow 10-20 minutes for each discussion topic.
- Use your judgment to determine if the topic is providing valuable data and need to adjust the amount of time spent on that particular topic.
- Suggest to participants to speak up when they have difference of opinion, rather than agreeing with everyone else's opinions and values.
- Ensure that a note taker is recording all discussions so the facilitator is freed up to give all their attention to the group.

Length of focus group discussion
The focus group should last between 1 to 1.5. hours

Location of focus group discussion
If possible use a location for the focus group where:
Participants will be free from interruptions
Participants will be able to see each other e.g U shaped seating arrangements work best
The facilities are comfortable

Materials needed:
Materials likely to be require to run a focus group session include:
Notepads and pens or pencils
Flip chart and markers
Watch or clock
Focus group questions guide

Number and Type of participants
The group should be between 8-12. This is a manageable number for a discussion. Invite participants that are representative of different socio-economic groups and household types in the community e.g. single, divorced, married and elderly women. The group should be between 8-12 people. This is a manageable number for a discussion.

(Adapted from Oxfam)

APPENDIX B

Moderator Guide for focus group discussions

Introduction

The aim of the focus group discussions is to answer the following questions around women participating in the Chirumanzu market access project:

1. **WHAT ARE THE ISSUES THAT WOMEN FACE IN ACCESSING MARKETS?**
2. **WHAT MARKET ACCESS ISSUES DO THE WOMEN IN THE OXFAM PROJECT FACE?**
3. **HOW DOES THE PROJECT ADDRESS THESE ISSUES?**
4. **WHAT RECOMMENDATIONS CAN BE MADE?**

Description of the programme and setting:

1. What is the program all about? Please describe how it works/ mumazwi enyu chirongwa ichi ndecheyi, nditsanangururei kuti chinofamba sei?
2. Who initiated the project and how?/ Mucharangarira kuti akauya nechirongwa ichi ndiani? Chakatanga sei? Sekuona kwenyu chii chakaita kuti chirongwa chivepo?
3. What are the specific project activities? Please describe them/ zvii zvamunoita muchirongwa?

Capturing the historical perspective:

1. Before the project how were women accessing markets? And where were these markets located? What was the challenge of these markets? *Chirongwa chisati chatanga imi semadzimai nyaya dzekutengesa dzaifamba sei? Maitengesa zvirimwa zvipi? Maitengesa zvakawanda sei? Maitengesera kupi? Chii chaikutadzisai kuita zvamava kuita ikozvino zvekutengesa ne CIC?*
2. In the historical context what influenced the state of affairs – that is what was the root of lack of access to markets – (Prompts: colonial planning, economic downturn, withdrawal of state marketing support) *Sekuona kwenyu ndezvipi zvinhu zvinoita kuti kuwana raramo kuburikidza nekutengesa kumarket kunetse? Zvikonzero zvacho ndezvipi? Zvingava zvemagariro edu kana kuti zveeconomy.*

Description of the social and economic environment:

1. What are the common patterns in division of labour in Chirumanzu – who does what work at the household and economic levels? *Vanhukadzi vanowanza kuita mabasa akaita sei? Ko vanababa? Mabasa aya ane chekuita here maererano nekugonesa kana kutadzisa kuenda kunotengesa?* (prompts: What are the Labour, mobility, transport, finance, decision making issues?)

2. What are the livelihoods options in the area – how do people in Chirumanzu make money? *Vanhu vanowanza kuwana raramo muzvinhu zvakaitasei? – kurima here? Kutengesa?*

3. What are the livelihoods options for women – are these any different from those of men and how? *Vanhukadzi vanowanza kurarama nemabasa api? Zvinhu zvinozivikanwa kuti zvinoitisa mari ndezvipi?*

4. What are the constraints to participating fully in sustainable livelihoods for the community? And for women specifically – (prompts: road network, access to market information, isolation from the town). *Zvinhu zvinotadzisa vanhu vekuno kuwana raramo inovafadza ndezvipi? – chii chamungati chinoita kuti rarmo iite nyore kuwana.*

5. What are the social and cultural issues that may impact on women's economic activities (prompts: burden of care for those living with HIV, girls dropping out of school for lack of fees, low education levels , early marriages). *Ndezvipi zviri mutiska nemagariro edu wzvinoita kuti nyaya dzekutengesa dzisavenyore kumadzimai?*

Describing the current / prevailing situation:

3. Who is participating in the project – profile of women: FHH/widowed etc. *Muchirongwa munevanhu vakaitasei?*

4. What is the function of the CIC? *Pa CIC panoitwa basa rei? Ndivananaani vanotungamira zvepaCIC? Vanosarudzwa naani uye sei?*

5. What are thoughts/ comments on the performance of the CIC? *Munoti chii pamusana pekubatanidzwa kwezvirimwa CIC?*

6. How does the marketing process work? *Kutengesa kwezvirima zvenyu kunofamba sei?*

7. Comment on the sales you have made so far, that is, your enagagement with the players in the market chain. *Mungatichii maererano ne experience yenyu yekutengesa kwamakaita?*

8. What problems do women face in marketing and market access? *Sekuona kwenyu nyaya dzekutengesa kumadzimai dzinezvinetswa zvipi?*

9. Do men and women face the same challenges in accessing markets? *Mungati vanhukadzi vanezvinetswa zvakafanana nezvevanhurume here maererano nenyaya dzekutengesa?*

10. Have you learnt any new skills in the project? *Panezvamakadzidziswa here nechirongwa maererano nekutengesa (marketing) zvamakanga musingasiiti?*

11. What are the benefits of the project for you as women? How have your lives changed? *Pane shanduko here muupenyu henyu nokuda kwechirongwa?*

12. What are men's perspectives on the project? (what have they said, are they encouraging, do they want to join?). *Ko vanhurume, vangave vanababa vanochiona sei chirongwa ichi ? Vanombotaura kuti chii maererano nacho? Sezvo makambobata mari yechirongwa ichi chii chakaitika?*

13. What are the challenges of the project? *Zvamungati zvakaoma maererano nechirongwa ?*

14. Has the project addressed the challenges in accessing markets? *Sekuona kwenyu chorongwa ichi chinogutsa zvido zvenyu here panyaya dzekutengesa zvirimwa zvenyu?*

Recommendations for the improvement of the project

1. What could be done both by the project and broadly within the social environment to improve the project? *Ndezvipi zvimwe zvingaitwa nechirongwa kuti munyatsoti chakasangana nezvichemo zvedu maererano nenyaya yekuwana market yekutengesa zvirimwa zvenyu?*

2. Any other comments? *Pane zvimwe zvamungada kutaura here maererano nechirongwa?*

APPENDIX C

Date of Collection: 4 August 2011

Chirumanzu

Mutenderende Township CIC

Participants: 10 women, 4 men

1. Who initiated the project and how?/ Mucharangarira kuti akauya nechirongwa ichi ndiani? Chakatanga sei? Sekuona kwenyu chii chakaita kuti chirongwa chivepo?

Mutenderende CIC: 10 women and 4 men	Mawire CIC: 6 women and 1 man	Mhende CIC : 3 women (treasure, committee members)and 1 man (chairperson)	Siyahokwe CIC : 9 women, 1 man (chairperson of CIC)	Charandura CIC: 7 CIC members all women
It started because we are poor, we had no money for fees, before the project money was hard to find We used to grow tomatoes and leaf vegetables, but we had no market for it We didn't know where to sell and how to do it We used to engage in barter trade , exchanging produce for cooking oil or soap There were middle men with whom women would trade their produce. One of the men in the group added that they had always know that	We wanted knowledge we didn't have knowledge We used to waste produce, throw away because we had nowhere to sell We did not where or how to sell We were already producing but the program helped us to know what a market is and all the procedures to sell We used to sell locally or barter with other goods – like for money for the grinding	We had no market, we used to sell at the garden to whoever wanted vegetables We did not know anything about alternatives of where to sell We had no financial capacity to set up a proper market at the small business center Garden income was never able to send our children to school We were not organised to sell (even though we were in the same	Used to produce many tomatoes, but because many women also had them so the market was limited We used to dry the vegetables We had nowhere to sell , the business center market was too small Transport to the urban market is too expensive for an individual seller We did not know how to sell the produce	Used to sell a little but mostly gave away the produce for lack of a market Also used to dry the leaf vegetables for consumption in the dry season. Didn't have any information on selling in urban markets They were not allowed to sell at the business center, no vendors are allowed

they could get more for their produce elsewhere and used to advise the women to do so , but there was no means to support them to actually go to the urban market.	mill of sugar, soap We used to spend hours walking through the villages hoping to make a sale, with a basket of tomatoes on our heads it was difficult	garden) No knowledge of alternative markets We did not know the production methods to bring quality produce like building soil fertility.		

Who is participating in the project – profile of women: FHH/widowed etc/ Muchirongwa munevanhu vakaitasei?

Mutenderende CIC	Maware CIC	Mhende CIC	Siyahokwe CIC	Charandura CIC
The gardens were already in existence, with mostly women participating, the membership is usually passed from mother to daughters and daughters in law The men feel that its a woman's role to work in the garden (because the vegetables produced are for household consumption) One of the men reflected that it is difficult for men to work in the garden because women are	Mostly women, men are few although some come to work in the garden since the project begun (they can see the benefit). The man in the group mentioned that before we knew they could earn money from participating in the market we used to say it is women's business , so now we come and maybe we shall even take over from the women	There is a mixture of members but there are mostly women, although in two of the gardens belonging to the CIC men initiated the gardens (before the project) although now more women work in them There are more women because of household food requirements – they need the vegetables Men don't care much about the food welfare of the household so	More women than men work in the garden, sometimes the members are old widows and widowers so their children and grandchildren come to work Most women carry the burden for household food production and working in the garden provides them with vegetables Some more informed men come to work in the garden with their wives though, especially if there	Women dominate the garden work because they are the ones that cook and they know the costs of food and therefore they have to grow their pen Men expect women to provide for the food needs of the household Men spend more time at the beer drinking venues although some also engage in contract labour so cannot therefore work in the

used to working in their own way – they make fun of each other and gossip, which is not easy for a man to adjust to Men spend more time drinking beer so they don't have time to come to the garden One of the men reflected that if each household had its own garden then men would likely contribute more labour to the gardening than they currently do, but it is difficult for men to work in groups and among groups of women in the gardens as they are currently configured.		coming to the garden is not a priority for them Few men understand that all work can be done by both men and women – there is no men's work and women's work	is income Men make a living in other ways so sometimes they don't see the necessity for coming to the garden	garden