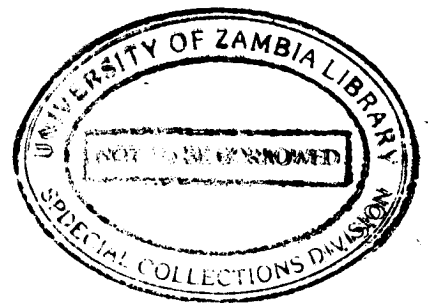


**AN ASSESSMENT OF THE SMALL-HOLDER ENTERPRISE GROUP (SHEG)
PROGRAMME: A CASE STUDY OF KAFUE DISTRICT**

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A Thesis Presented to the Department of Agriculture Economics and Extension Education of the
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By



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LIST OF ABBREVIATIONS

CLUSA:	-	The Co-operative League of the United States of America
CSO:	-	Central Statistics Office (Zambia)
GRZ:	-	Government Republic of Zambia
MACO:	-	Ministry of Agriculture and Co-operatives
MAFF:	-	Ministry of Agriculture Food & Fisheries
NGO:	-	Non Governmental Organisation
SHEG:	-	Small-Holder Enterprise Group Programme
SHEMP:	-	Smallholder Enterprise and Marketing Programme (SHEMP).
SPSS:	-	Statistical Package for Social Sciences

ABSTRACT

AN ASSESSMENT OF THE SMALL-HOLDER ENTERPRISE GROUP (SHEG) PROGRAMME: A CASE STUDY OF KAFUE DISTRICT

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University of Zambia, 2005

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This study was an assessment of the Small-holder Enterprise Group (SHEG) Programme in Kafue district. Kafue is peripherally located to the south of Lusaka district in Central Province about 45 kilometres. The district receives adequate rainfall, but sometimes experiences dry spells as has been the case in the past few years when drought conditions significantly reduced crop yields. The main occupation is farming and that maize is the main food crop.

In order to come up with information on this assessment, the study was guided by one major objective being; to investigate if participation of the small-scale farmers in the programme had significantly addressed their input acquisition, productivity and market accessibility problems as perceived by beneficiaries. In obtaining information to answer this major objective, the following specific objectives were used: Firstly, it aimed at investigate if farmer groups had been linked to the various lenders of inputs by the programme. Secondly it also aimed at assessing the perception of the beneficiaries on their productivity in relation with the sustainable technologies they had adopted. Finally, investigated on whether farmer groups were are able to access the market and market information for their produce through the programme.

However, due to a gap in knowledge as to whether SHEG had addressed the problems of the Small-Scale farmers or not from the beneficiaries' point of view? It was, therefore, the principle requirement of this project to give a more critical assessment of the beneficiaries' perception in establishing the efficacy of the SHEG in mitigating their problems; more specifically on input acquisition, market accessibility and with greater emphasis on their productivity (Yield).

The main findings were that, participants' perceived the programme as having positively addressed their input acquisition problem. This was shown by 89.4% of the respondents who admitted having received help through the programme in terms of accessing the inputs from the various lenders. Secondly, sustainable technologies increased productivity of the beneficiaries as it was perceived to have accounted for 80.6% of the increase in productivity besides other factors. Lastly, the farmers' access to market and market information had improved tremendously due to participation in the programme. For instance, the programme had scored overwhelming results in terms of addressing the marketing problems of farmers as 96.5% of the captured respondents had a perception that, it was easy to access the market and market information after having joined the programme.

These findings would be of great help to the government as well as NGOs involved in Agriculture (CLUSA inclusive) in coming up with tailored interventions in the agriculture sector, that would address the current Small-Scale farmers' problems as sound future investment programmes would be embarked on in order to ease the suffering of the small holder resource poor on an informed basis. In addition, the findings would serve as an instrument to strengthen the capacity of CLUSA in matters such as research for lobby and advocacy purposes for farmers from policy makers (Government) and other NGOs.

Based on these findings and conclusions, it was recommended that, the government through the extension officers should investigate alternatives for the supply of seed and other inputs for groups perhaps in collaboration with private sector traders and that, they should also encourage group members in making initial contacts with service organisations. Secondly, farmers should be encouraged to continue using sustainable technologies in order to further improve their general productivity. Extension officers should be able to also give 100% of their attention to supervision and training of farmer groups. Lastly, consideration of a project to introduce and support the use of community radio which should specifically air agriculture related programmes is key to successful growth of the agriculture sector in this area. This type of communication could be very useful for farmer groups to communicate and share experiences and knowledge with each other. Furthermore, Market day arrangements should be further encouraged and perhaps they have to occur frequently so that farmers' easily sell their produce without being exploited by the bogus buyers as they will have full to partial full control of the market than as individual sellers.

Chapter I

INTRODUCTION

1.1 Introduction and Background

Most of Zambia's Small-Scale farmers are located in rural areas and engage primarily in subsistence Agriculture. Their basic concern is production of food for self sustenance. To increase food production and incomes of the poorer people is the fundamental objective of government policy. And as such, it may be suggested that, there would be no more straight forward way of raising incomes of Small-Scale farmers than imparting them with the most needed information (Agri-business) in an attempt to promote self sufficiency as well as alleviating poverty through well coordinated Small-holder Enterprise Groups (SHEG).

The liberalization and privatisation policies that were embarked upon; at the beginning of the third republic in the early 1990s, presented a new front of challenges to the activities of farmers. For instance, government credit programmes and marketing boards were dismantled causing a terrific effect on input and output sectors. Distribution systems for agricultural inputs remain incomplete up to now, agricultural extension services are fragmentary, and marketing systems fail to reach all rural dwellers. Small and medium entrepreneurs who are the logical candidates for the interface between markets and the rural households are constrained by lack of knowledge, experience, financing, market information and business confidence. Thus, it became increasingly difficult for farmers to source for inputs and as well as market their little produce. The change in policy meant that, farmers had to fill the voids left by government parastatals especially in order not to be in a desolate predicament_(USAID/Zambia FY 2004-2010 Country Strategic Plan).

It is against this background that, it became increasingly important by most organizations to reorient the farmers into a viable concept such as Small-holder Enterprise (SHEG) in order to absorb and mitigate the sharply felt shocks of privatisation (Zambia SHEG-CLUSA 1996). And as such the Cooperative League of the United States of America (CLUSA), which is a Non Governmental Organisation (NGO); had to acknowledge the fact that, they are many other players in the field trying to improve the livelihood of the small holder resource poor. Based on this understanding and a realization that, each player (farmers inclusive) has different competences; that, if harnessed and pooled together could contribute to meeting

the diverse needs and aspirations of the rural community; CLUSA was compelled to embark on a Programme called Rural Group Business which is a Smallholder Enterprise and Marketing Programme (SHEMP). This is an Agriculture support initiative of the Republic of Zambia through the Ministry of Agriculture Food and Fisheries (MAFF) now called Ministry of Agriculture and Cooperatives (MACO).

In the same vein, in an effort to respond to these issues that had arisen due to drastic change in policy, USAID/Zambia's Country Strategic Plan for the 1998 - 2003 period aimed at "increasing rural incomes of selected groups" as a key strategic objective. Accordingly, the activities supported by the Economic Growth Strategic Objective Team are aimed at attaining significant improvements in the incomes of selected rural communities. Activities arise from rural family identification of problems and opportunities. They enhance women's contribution to rural economic growth and encourage government food security and rural finance policies that promote private initiative (USAID/Zambia Agriculture & private Sector development).

However, the fundamental objective of SHEG was to: "Continue to help participating farmer groups to improve rural incomes and quality of life by helping small-scale farmers form their own, democratically self-managed, financially viable and sustainable group businesses; that, will help them access affordable inputs, improve farming practices, diversify their operations, market their crops and develop long-term market linkages to foster both domestic and export sales" (Zambia SHEG-CLUSA 1996). Thus, this programme was designed to empower smallholder farmers to participate gainfully in the market economy. In other words, it was a fully business packed programme; intended to make Small-Scale farmers understand that, farming is really such a profitable enterprise.

In order to achieve this, an intensive, community based training approach to build production, business, financial and organizational skills among the members of the farmer-owned groups; CLUSA trained a local network of facilitators who then provided training to farmer-group businesses. It further provided technical assistance and training services to assist with the development of a network of self-managed, grower businesses and micro-businesses in targeted rural areas of Zambia. Improved farming techniques as well as diversification into high value crops were important components of the strategy. In addition, CLUSA promoted democratic governance and good business practices by training farmer association members in those practices and helping them implement them at the grassroots level. This all was well intended to improve productivity and income base of the farmers'.

This SHEG therefore, gave rise to several questions such as:

- Has this SHEG benefited farmers? If so in which way?
- Have farmers been impacted with the organisational, management and training skills necessary to continue the programme after its completion?
- Have sustainable technologies (Conservation Farming) improved productivity of farmers?
- Have farmer groups been linked to private lenders of inputs?
- Has this SHEG lead to increased market accessibility by farmers?

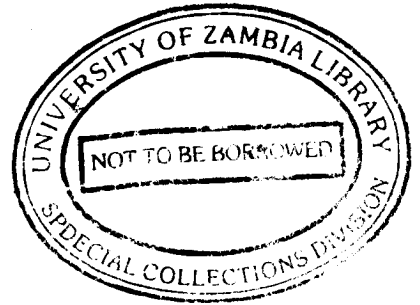
It was therefore, the principle interest of this research area to specifically look at how the SHEG has been performing in mitigating the Small-Scale farmers' problems in Kafue district (Chikupi) in order to; address as well as answer some of these general questions and many other specific questions.

1.2 Statement of the Problem

Rural small-scale farmers appeared to have increasingly been beset by (Input and Produce) marketing problems despite their indisputably significant contribution to Zambia's food security which is estimated at about 70%. This was attributed to the introduction of the liberalisation policy between 1991 to 2001 period (Farming Systems and Social Science Division, 2000). Although the Agriculture sector had improved dramatically since the beginning of the reforms; for instance, maize production increased by 92.5 percent in 2002/2003 as compared to 2001/2002 Agriculture season (Mid year Economic Review 2003), vast changes were still needed to see widespread benefits. The private sector had not filled the entire gap left by the withdrawal of government. Distribution systems for agricultural inputs remained incomplete, agricultural extension services were fragmentary and marketing systems failed to reach all rural dwellers. Small and medium entrepreneurs who are the logical candidates for the interface between markets and the rural households were constrained by lack of knowledge, experience, financing, market information and business confidence (USAID/Zambia FY 2004-2010 Country Strategic Plan).

Due to the transition from a socialist to a market economy, small-scale farmers, previously served by a government-sponsored, highly subsidized cooperative system, had been severed from their usual sources of inputs and markets. Hence, CLUSA; started implementing a SHEG which was a Smallholder Enterprise and Marketing Programme (SHEMP) in order to mitigate the farmers' problems. However, there was a gap in knowledge as to whether SHEG had addressed the problems of the Small-Scale farmers or not from the beneficiaries' point of view? It was, therefore, the principle requirement of this

project to give a more coherent and critical assessment of the beneficiaries perception in establishing the efficacy of the SHEG in mitigating their problems; more specifically on input acquisition, market accessibility and with greater emphasis on their productivity (Yield).



1.3 STUDY OBJECTIVES

1.3.1 General Objective

To investigate if participation in the SHEG Programme had significantly addressed input acquisition, productivity, and market accessibility problems as perceived by the beneficiaries

1.3.2 Specific Objectives

In obtaining information for this major objective, the proposed research applied research tools and techniques which generated data for coming up with information to the following specific objectives:

- To investigate if farmer groups have been linked to the various lenders of inputs by the programme.
- To assess the perception of the beneficiaries on their productivity in relation with the sustainable technologies (e.g. Conservation farming, crop diversification, better and intensive farming practices) they have adopted.
- To investigate if farmer groups are able to access the market and market information for their produce through the programme.

1.4 Rationale of the Study

Food security has been the goal of Zambia's post independence governments. Addressing the difficulties of Small-Scale farmers' income base was one way of working towards the attainment of this goal by the government and other organisations such as CLUSA in particular.

Rural Small-Scale Agriculture still remains the most viable avenue for incomes growth and development in that, it does not only contribute towards the nation's food security but, it also serves as a source of employment and income for rural households. And as such this study was aimed to have a thorough look

into the benefits of the programme to some selected members in participating farmer groups. Therefore, the findings of this study would be of great help to the government as well as NGOs involved in Agriculture (CLUSA inclusive) in coming up with tailored interventions in the Agriculture sector, that would address the current Small-Scale farmers' problems. Consequently sound future investment programmes would be embarked on in order to ease the suffering of the small holder resource poor on an informed basis. In addition, the findings would serve as an instrument to strengthen the capacity of CLUSA in matters such as research for lobby and advocacy purposes for farmers from policy makers (Government) and other NGOs. And finally, suggested appropriate remedial measures in order for farmers to operate efficiently and increase their profitability.

1.5 Organisation of the Thesis

This thesis was organised in accordance with the relevant five chapters. Firstly, it gives a historical background about how the SHEG programme came into being following the liberalisation reforms in the first chapter. Then it details on the fundamental objectives and activities of the programme. In the same vein, it points out the gap in knowledge on how the programme has performed from the beneficiaries' point of view. Furthermore, it provides its overall objective as well as the more specific objectives in trying to answer the general and more specific questions on the performance of the SHEG programme.

In order to come up with critical conclusions, it also points to other findings by other researchers which provided a yardstick for referencing in the second chapter. This was also important in finding out the flows or weaknesses that were inherent in their research methods and procedure. In the third chapter, it presents the research methods and procedure which were used to collect data for the purpose of analysis. Thus, it detailed on the study area, sampling design, data collection, entry and analysis. Lastly, this chapter also presents the quality control measures and the limitations of the study.

The fourth chapter gives the Presentation and interpretation of the findings of the survey. This highlights issues on demographic features and then further presents the findings in accordance with the research objectives while also referring to the previous findings of other researchers. And lastly, chapter five presents the conclusions and recommendations based on the research findings in accordance with the research objectives. References are also part of this chapter in order to fully and duly acknowledge the authors quoted in this study. Appendices and the research programme together with the proposed research budget have been attached.

Chapter II

LITERATURE REVIEW:

2.1 Introduction

This chapter provides a more detailed and critical review of the literature directly bearing on the proposed research. It was imperative that literature reviewed on previous research be critically analysed in order to find the strengths and the flows/weaknesses that were inherent in their methods and procedures. And as such the following comprises research results with an initiation of a general overview of a farmer group.

A farmer group is a grouping of farmers' who have decided to put their competences, skills and sometimes finances together, and share a willingness to attain the same goals. In the same vein, Farmers' Associations can cover a wide range of entities such as: Cooperatives, Rural Associations, Farmer Banks, Women Associations, Saving Associations and so on. According to the International Federation of Agricultural Producers (1995), an ideal association should be a place of free expression, a place of democracy, and should be managed by the farmers themselves and act as a focal point for the expression of farmers' needs and wishes. While group arrangements provide an organised basis for handling many of the problems farmers face in that, they allow the measure of involvement through participation, and also provide a vehicle for collective negotiation of credit, input supplies and delivery of marketable surpluses (World Bank: 1975).

2.2 Input Acquisition/Private Lenders

Jost et al, in their study of "Enhancing Sustainable Agriculture through Farmer Groups" found out that, "the farmer group approach can help in the empowerment of farmers. While improving the efficiency with which extension, research, and other institutions can interact with farmers, the group format also potentially empowers farmers by harnessing the help of such institutions in identifying system-based responses to local needs. Empowerment of farmers also occurs through collective action in marketing of products (i.e., particularly niche marketing)".

Irving (1989) in his study of "The Financing of Small Businesses", points to various reasons why small entrepreneurs have difficulties in accessing inputs from private lenders. He established that, Credit is usually most effectively administered by special, autonomous government institutions, with the extension

service discharging the essential functions of assessing the farmers' capability of using credit effectively and ensuring that it is actually employed for the purpose specified.

2.3 Increasing Productivity of Small-Scale Farmers

To initiate with, Dexcel extension services manager Penno (2002) in his quest of understanding the factors that contribute to the productivity of dairy centre of excellence found out that "One key way of improving productivity on farms is to have a strong group of rural professionals. They make such a huge impact on the decisions dairy farmers make. "We see our role as managing, packaging and disseminating the information these people will need to best support their dairy farmer clients. This should help standardize the advice given and improve its quality. "If everyone has access to the same information, then any debate that results will be more productive, and will ultimately benefit the farmers".

2.4 Market/Market Information Accessibility

The Food Security Research Project (2003), based on improving the transfer of Agriculture market information in Zambia, found that, "Small-Scale farmers have enormous problems in pricing their produce". The report indicates that "even when farmers have a good idea of the cost they incur in the production process; they still have problems negotiating for a good price with the traders (Buyers) as the traders determine the price at which the farmers sale their produce.

Mweetwa (2004) in trying to understand the Role of Rural Small-Scale Farmer Groups in Produce Marketing concluded that, "farmer organisations (be they farmers' associations or cooperatives) are important element in enhancing the marketing activities of Small-Scale farmers". Furthermore, he stressed out that, "membership to farmer groups' results in pooled efforts that confer certain strengths among the farmer and ease with which farmers can be reached in order to effect certain interventions in their favour (e.g. credit and input supply)". In the same vain he deduced that, "organised farmers' are also able to strengthen their bargaining position by acting as local monopoly during sale of produce, or as a monopsony during input procurement". He further observed that, "in the absence of organised groupings, small-scale farmers do not have supply control, access to information, and availability of financial resources to have significant market power".

Chapter III

RESEARCH METHODS AND PROCEDURES

3.1 Introduction

This chapter highlights the research methods and procedure that was used to come up with the information to answer the major as well as specific objectives. To initiate with, it describes the unique characteristics of the study area. Then, it details on the sampling design and data collection/Entry procedures that were used to generate the information that was used in the analysis. Furthermore, it points out the quality control measures that were used to ascertain the quality of the data. Lastly, it gives information on the limitations of the study.

3.2 Study Area

The study was undertaken in Kafue district. Chikupi area was purposively selected to reflect the different but representative social economic benefits of the SHEG Programme on the farmers. Kafue is peripherally located to the South of Lusaka and is about 45 kilometres. The district receives adequate rainfall, but sometimes experiences dry spells as has been the case in the past few years when drought conditions significantly reduced crop yields in the area (GRZ, 1991; GRZ 1995). Crop production and fishing were the main activities in the district. However, maize was the main food and cash crop in the area and its production had been expanding despite some droughts in recent years (GRZ, 2001).

3.3 Sampling Design

The research respondents were drawn from small-scale farmers in Chikupi area of Kafue district who participated in the SHEG Programme. This area comprised of six farmer groups of 18 members each. The size of the farmer groups in membership terms was 108, and as such a projected sample of 14 from each respective farmer group was randomly picked and interviewed. This meant that, a household was taken as sampling unit of a participant farmer. The final sample consisted of 85 respondents. This sample size was expected to give a comprehensive and complete picture of the performance of the SHEG Programme in this selected area.

3.4 Data Collection

The study was undertaken using a number of approaches, tools and techniques so as to obtain a valid picture on the performance of the SHEG Programme in the area. The data which was collected consisted of primary and secondary data through the use of a guided structured questionnaire. This then entailed eliciting responses to standardized questions from a high response rate than self-administered questionnaire in a situation where respondents were illiterate. The questionnaire contained closed and open ended questions. This tool helped in obtaining information such as; age, sex, education level, farming methods being used, problems faced by farmers if any, market accessibility, input acquisition etc and the general perception of the farmers on the programme performance.

Personal in-depth interviews were employed parallel with the structured questionnaire in order to extract detailed information with key informants of the groups (e.g. Lead Contact farmers, Animators, Group chairpersons, Depot Executive members, etc). The key informants provided secondary data on the general economic problems the farmer groups' faced, trend records of yields and loan repayment per individual farmer. The strength of this tool was that, ambiguous questions were clarified on the spot.

3.5 Data Entry and Analysis

All questionnaires were assigned numeric codes. Data was entered and analyzed critically using a computer programme called Statistical Package for Social Sciences (SPSS). This statistical package was selected because of its diversity in handling both parametric and non-parametric statistical analysis. Excel was also the other tool that was used to generate information on pie and bar charts respectively. Descriptive statistics were then used to analyse the information that was collected.

3.6 Quality Control

Two measures were undertaken to ascertain the quality of the data as presented below.

3.6.1 Pre-testing

The questionnaire was pre-tested at Mungu village in Kafue district to see how the farmers responded to the questions. This was also used to see how well the questions were flowing and being understood by the farmers in order to refine them in the event that it was perceived right. This was to reduce the possibility of misinterpretation in order to better the best of the results.

3.6.2 Data Cleaning

All the questionnaires were checked to ensure that all responses were correctly coded. Close and particular attention was paid to open-ended questions. After data entry, responses with numeric values that did not fit into the data set were checked for possible coding and data entry errors.

3.7 Limitations of the Study

Generalise-ability of the findings was limited. This is consistent with the fact that the study only focused on the farmer groups in Kafue (Chikupi area) district which was amongst the many districts in which the programme (SHEG) was being implemented country wide. Furthermore, poor funding constrained the project from exploiting many other issues that were pertinent to the making of conclusive and exhaustive recommendations on the important research area. Due to a tight time frame and lack of incidentals, a limited number of respondents were reached which to some extent may have indirectly impaired the generalise-ability and Significancy of the research findings.

Despite the limitations, the information obtained should provide an indication of the performance of the SHEG programme in the area. However, there is room for more encompassing and large scale studies to obtain a more accurate, valid and comprehensive picture of what is obtaining on the ground.

Chapter IV

PRESENTATION OF THE FINDINGS AND INTERPRETATION

4.1 Introduction

The research was guided by three specific objectives which were linked as follows:

Firstly, it aimed at investigate if farmer groups had been linked to the various lenders of inputs by the programme. Secondly it also aimed at assessing the perception of the beneficiaries on their productivity in relation with the sustainable technologies (e.g. Conservation farming, crop diversification, better and intensive farming practices) they had adopted. Finally, investigated on whether farmer groups were are able to access the market and market information for their produce through the programme.

Therefore, this chapter presents the findings of the study that was conducted under the following assumptions.

- Farmers had access to the inputs following their participation in the CLUSA project activities.
- Sustainable technologies learnt had a positive effect on productivity of the farmers engaged.
- The project also enabled farmers have easier access to the markets and market information thereby increasing to their productivity.

This section therefore, aims to provide an understanding in order to establish if beneficiaries were linked to the private input lenders. It further highlights sustainable technologies that were learnt through the programme and their perceived impact on the productivity of the programme participants. Finally, it also details the extent to which farmers are accessing the market and market information for their farm produce.

4.2 Social Demographic Features

The research respondents were drawn from small-scale farmers in Chikupi area of Kafue district participating in the SHEG Programme. This area comprised of six farmer groups of 15-20 members. Both male and female respondents were picked at random. The final sample therefore, consisted of 54 females and 31 males. Therefore, the sample consisted of the combination of respondents following behind:

Table 1: Sample Composition of the Respondents by Group

	Number	Percent
Chinsungwe	13	15.3%
Kabweza	14	16.5%
Mwachingwala	15	17.6%
Twabile	14	16.5%
Twachelwa	14	16.5%
Magwama	15	17.6%
Total	85	100.0%

Source: Own Survey Data-2005

4.3 Age Distribution

Table 2: shows the percentage distribution by age of the respondents which ranged from 16 to above 37 years amongst females and from 19 to above 37 years amongst males. The majority of males were in the range of 31-36 years where as majority of females ranged from 19-24 years. Female respondents in various age and farmer groups composed of 63.5% as compared to 36.5% male respondents.

Table 2: Percent Distribution of Respondents by Age and Sex

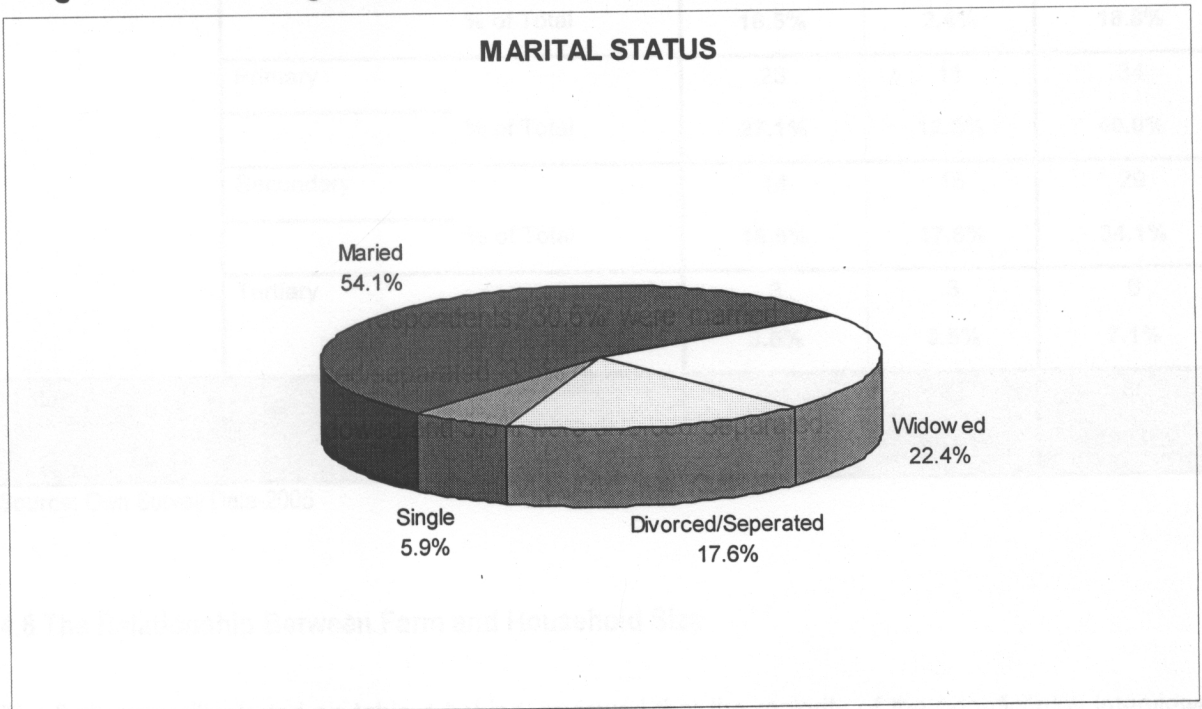
		Sex of respondent		Total
		Female	Male	
Age of Respondent	16-18	2	0	2
	% of Total	2.4%	.0%	2.4%
	19-24	19	5	24
	% of Total	22.4%	5.9%	28.2%
	25-30	13	6	19
	% of Total	15.3%	7.1%	22.4%
	31-36	8	11	19
% of Total	9.4%	12.9%	22.4%	
37 and above	12	9	21	
% of Total	14.1%	10.6%	24.7%	
Total		54	31	85
	% of Total	63.5%	36.5%	100.0%

Source: Own Survey Data-2005

4.4 Marital Status

The following figure depicts that; the majority of the respondents captured in the sample were married (54.1%). Amongst the female respondents, 30.6% were married, 2.4% were single, and 16.5% were widowed whilst 14.1% divorced/separated. 3.5% of the male respondents were found to be single, 23.5% were married, 5.9% were widowed and 3.5% were divorced/Separated.

Figure 1: Percentage Distribution of Marital Status



Source: Own Survey Data-2005

4.5 The Relationship Between Level of Education and Sex

Table 3 below depicts that, from the study it was found that, the majority of all the respondents had attained primary education 40.0%. This figure consisted of 27.1% female and 12.9% male respondents respectively. The other category of 34.1% had by the time of the study obtained secondary education. This consisted of 16.5% female and 17.6% male. What was important to note in this study was that, only 7.1% of the respondents had been found to have acquired tertiary education. This comprised of 3.5% as a composition of both the female and male respondents respectively. Lastly, 18.8% had not obtained any kind of formal education. Of these 16.5% were female and 2.4% were male.

Table 3: The Relationship Between Level of Education and Sex of Respondent

		Sex of respondent		Total
		Female	Male	
Level of Education of respondent	None	14	2	16
	% of Total	16.5%	2.4%	18.8%
	Primary	23	11	34
	% of Total	27.1%	12.9%	40.0%
	Secondary	14	15	29
% of Total	16.5%	17.6%	34.1%	
	Tertiary	3	3	6
	% of Total	3.5%	3.5%	7.1%
Total		54	31	85
% of Total		63.5%	36.5%	100.0%

Source: Own Survey Data-2005

4.6 The Relationship Between Farm and Household Size

The findings as illustrated on table 4 behind, reviewed that the majority of the beneficiaries interviewed, had a farm size of 4-7 Lima constituting 37.6%. In the same vain, 47.1% represented a composition of 4-6 household size as being the majority of the respondents. It was also found that, 30.6% was the highest representation of the beneficiaries comprising of 4-6 household size and 4-7 Lima of total farm size. The smallest household size ranged from 1-3 signifying 24.7% of the respondents and 0-3 Lima as the smallest size of total farm size 4.7%.

Table 4: The Relationship Between Total Farm Size in Lima and Household Size

		Household size				Total		
		1-3	4-6	7-9	10-12			
Total farm size in lima of respondent	0-3		4	0	0	0	4	
		% of Total	4.7%	.0%	.0%	.0%	4.7%	
	4-7		6	26	0	0	32	
		% of Total	7.1%	30.6%	.0%	.0%	37.6%	
	8-11		7	11	10	0	28	
		% of Total	8.2%	12.9%	11.8%	.0%	32.9%	
	12-15		4	3	2	2	11	
		% of Total	4.7%	3.5%	2.4%	2.4%	12.9%	
	16 and above		0	0	6	4	10	
		% of Total	.0%	.0%	7.1%	4.7%	11.8%	
	Total			21	40	18	6	85
			% of Total	24.7%	47.1%	21.2%	7.1%	100.0%

Source: Own Survey Data-2005

4.7 Linkage of Farmer Groups To Input Lenders

The first objective was to investigate if farmer groups have been linked to the various lenders of inputs by the programme. Descriptive statistics were used to get an indication of the input sources, linkages established and general effectiveness of the programme. A chi square was used to determine the strength of the association between the help farmers were receiving in input acquisition and the effectiveness of the programme in providing such a service to them.

4.7.1 Source of Input Lenders

Table 5 shows that, all the interviewed beneficiaries' sourced inputs from various sources of private lenders. CLUSA was the major source of input, amongst the various private lenders of inputs representing 77.6%. The majority of the farmers sourced inputs from CLUSA (77.6%). Other farmers were said accessed inputs from other sources such as friends and relatives comprising of the 10.6% as second to CLUSA. This then was reflected in the number of respondents who admitted having sourced

for inputs from other sources. Thirdly 9.4% of the respondents said they sourced inputs from the government while 2.4%, sourced inputs from other private lenders.

Table 5: Sources of Inputs

Sources	Number	Percent
CLUSA	66	77.6%
Government	8	9.4%
Private lenders	2	2.4%
Other	9	10.6%
Total	85	100.0%

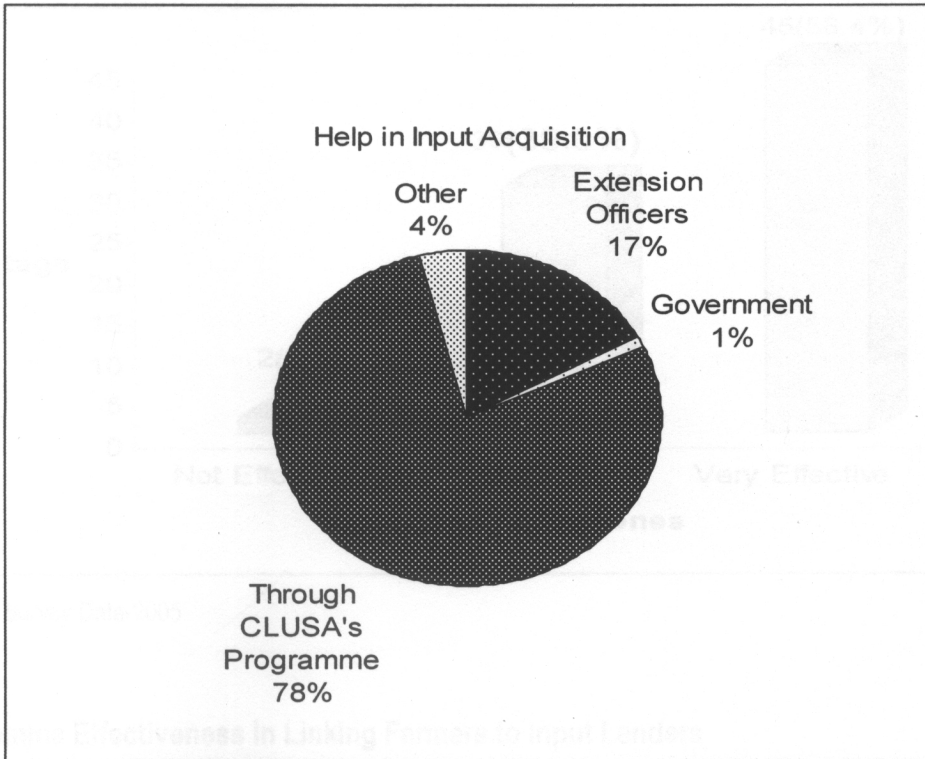
Source: Own Survey Data-2005

4.7.2 Help in Input Acquisition

The information in Table 5 above indicates that farmers had been sourcing inputs from various lenders. It then became of paramount importance that, it be known if they were receiving in form of help to source for these inputs. From figure 2 behind, it was therefore; found that, the majority of the captured respondents were receiving help in accessing the inputs i.e. 90.59% as compared to only 9.41% who said they did not. Reasons for not receiving any help however varied amongst them. For instance, some said they did not repay the loan they received in the previous agricultural season consequently not qualifying for the new loan as stated in the loan agreement. Others said they were not just too sure why they were being left out while some said the depot Executive had special preference for certain farmers to help.

However, much of the help was found to be received from CLUSA 77.9%. Extension officers were also found to be key people in providing help to farmers and were signified by 16.9% as distribution of the total help. The government and other sources were also not left out in the provision of this service with 1.3% and 3.9% respectively.

Figure 2: Help in Accessing Inputs

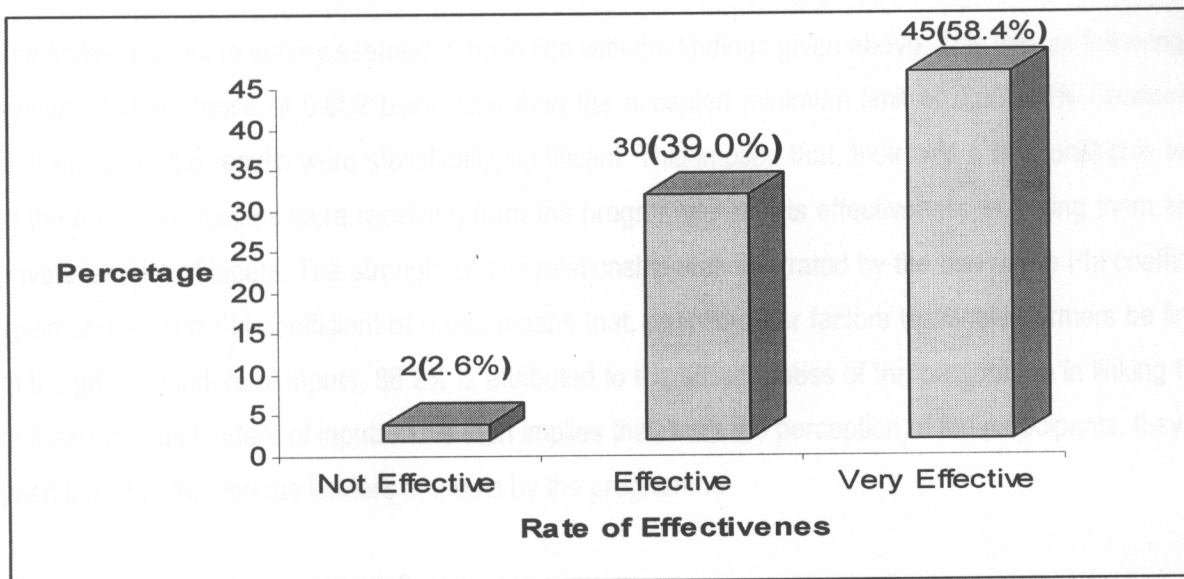


Source: Own Survey Data-2005

4.7.3 Programme 'Effectiveness' to Credit Linkages

The beneficiaries' perception as from the earlier presented findings above (Figure 2) have so far shown that, CLUSA was their major source of help in terms of helping the programme participants in accessing inputs. However, there was still a vacuum in terms of how effective the SHEG programme has been in its deliberation of its activities. And as such, figure 3 following behind gives more light on effectiveness of the programme in terms of helping farmers to access inputs from the various lenders of inputs CLUSA inclusive. From the 77 respondents that said they were receiving help in terms of input acquisition, they rated the effectiveness of the programme as follows. 2.6% said that the programme was not effective as compared to 39.0% who said that the programme was just effective in linking them to the private lenders of inputs. However, the majority of the respondents (58.4%) had a perception that, the programme was in fact very effective in terms of linking them to the various lenders of inputs.

Figure 3: Effectiveness of the Programme on Credit Linkages



Source: Own Survey Data-2005

4.7.4 Programme Effectiveness in Linking Farmers to Input Lenders

The overall interest in the initial specific objective of the study was to investigate if farmer groups have been linked to the various input lenders by the programme. Table 6 behind was used to come up with information that establishes whether the help farmers were receiving from the programme was due to its effectiveness. It was found that, the majority of the respondents (89.4%) accepted that they were receiving necessary help in accessing the inputs and that the programme was effective in linking them to the private inputs lenders. On the hand 1.2% said they programme was not effective in linking them to input lenders. A chi square was conducted to show the association between effectiveness of the programme in linking farmers to input lenders and the help farmers were receiving. A phi coefficient was also used to show the level of contribution of the programme to linking farmers to input lenders besides other factors.

Individuals gain help in accessing inputs in various ways either through a deliberate effort of their own or from institutions that come to their rescue in times of need. The findings from the previous studies of Hunter, (1996) and others have indicated that, Credit is usually most effectively administered by special, autonomous government and private institutions, with the extension service discharging the essential functions of assessing the farmers' capability of using credit effectively and ensuring that it is actually employed for the purpose specified and that farmer groups have registered an overwhelming loan

repayment through their cooperative apex bodies that have been providing and sourcing inputs for them.

The findings from the survey seemed to be in line with the findings given above. This was so following the evaluated significance of 0.002 being less than the accepted minimum limit of 0.05 (95% Confidence) justifying that, the results were statistically significant. This implied that, there was a relationship in terms of the help beneficiaries were receiving from the programme and its effectiveness in linking them to the private lenders of inputs. The strength of this relationship was illustrated by the use of the Phi coefficient given above. The Phi coefficient of 0.862 means that, despite other factors that make farmers be linked to the private lenders of inputs, 86.2% is attributed to the effectiveness of the programme in linking them to these various lenders of inputs. This then implies that, from the perception of the participants, they had been linked to the various lenders of inputs by the programme.

Table 6: Programme Effectiveness in Linking Farmers to Input Lenders

		Help in accessing inputs		Total
		Yes	No	
Effectiveness of the programme in linking to input lenders	Yes	76	1	77
	% Total	89.4%	1.2%	90.6%
	No	1	7	8
	% Total	1.2%	8.2%	9.4%
Total		77	8	85
		90.6%	9.4%	100.0%

Chi-square (X²): 63.161; N=85; df=1 P=0.002; Phi=0.862

Source: Own Survey Data-2005

4.8 Sustainable Technologies

To address the second objective, descriptive statistics was used on technologies learnt and adopted, the reasons for adopting, and the perceived effect of technology on productivity of farmers. A chi square was used to test the Significance of the association between sustainable technology adopted and the perceived increase in productivity.

4.8.1 Technologies Learnt

Table 7 gives information on the various sustainable technologies that farmers had learnt from the programme. The majority of the respondents 38.8% said they learnt all sustainable technologies where as a small proportion of 10.6% said they only learnt conservation farming and crop diversification. Conservation farming and crop rotation was following second from the majority of the respondents representing 21.2% as sustainable technologies learnt from the programme by the beneficiaries. It was also found that, 16.5% were of the view that they only learnt conservation farming while 12.9%, said they had only learnt crop rotation.

Table 7: Sustainable Technologies Learnt from the Programme

Sustainable Technology	Number	Percent
Conservation farming	14	16.5%
Crop rotation	11	12.9%
Conservation and crop diversification	9	10.6%
Conservation and crop rotation	18	21.2%
All of the above	33	38.8%
Total	85	100.0%

Source: Own Survey Data-2005

4.8.2 Technologies Learnt and adopted

Learning in Africa is highly valued not only for the mental, physical and emotional satisfaction that is obtained from it, but, also from the potential benefits that may be accrued to them in the long run. Thus it is highly unlikely that farmers will learn and engage themselves in practices that are perceived as potential danger to their future. This then has a bearing on the technology that is adopted by each respective farmer. And as such table 8 depicts that, farmers learnt the sustainable technologies following behind.

However, the decision to adopt a technology is entirely in most cases arrived at after some intensive discussions and consultations between the partners involved. Amongst the various technologies that were taught through the programme; mutual decisions were reached by both partners to adopt a technology according to their economic, social and comparative advantage. Furthermore, all the 85 respondents adopted one or a combination of the technologies that were learnt. It was found that, 48.2% adopted conservation farming, while 25.9% adopted both conservation and crop rotation farming practices. 16.5% said that they had adopted conservation farming and crop diversification. Only 9.4% reported that, they had adopted crop rotation.

Table 8: Sustainable Technologies Learnt and Adopted Farmers

Adopted technology	Number	Percent
Conservation farming	41	48.2%
Crop rotation	8	9.4%
Conservation Farming and crop diversification	14	16.4%
Conservation Farming and crop rotation	22	25.9%
Total	85	100.0%

Source: Own Survey Data-2005

4.8.3 Reasons for Adoption the technology

The selection and adoption of the sustainable technology is rarely done arbitrarily as there is usually a reason behind the replacement of the current methods of production that are perceived to be unproductive. Most farmers were found to have adopted a particular type of technology having been convinced that change was inevitable in the event that yield would increase.

And as such Table 9 behind shows that, the majority of the captured respondents i.e. 74.1% adopted the technology on grounds that their yield level would definitely increase. Of those that adopted the technology due to it being cost effective comprised of 10.6% with the same proportion applying to those that adopted it on grounds that, it was easy to implement. The rest of the respondents said they had adopted the technology due to personal interest.

Table 9: Reasons for Adopting the Sustainable Technologies by Farmers

Reasons for adopting	Number	Percent
Easy to implement	9	10.6%
Relatively cheap	9	10.6%
Personal interest	4	4.7
High yield	63	74.1%
Total	85	100.0%

Source: Own Survey Data-2005

4.8.4 Effect of Technology on the Productivity

From table 10 below, it was found that, the majority of the farmers who adopted sustainable technologies had a perception that, their productivity increased due to the various sustainable technologies that they adopted 95.3%. However, out of the total number of respondents, it was also found that, only 4.7% did not relate productivity to any technology learnt from the programme. Of the 95.3% of those that attributed their increase in productivity due to adoption of the sustainable technology, 45.9% was due to conservation farming only as the most commonly used technology. In the same vain, 25.9% was due to conservation farming and crop rotation while 15.3%, was due to conservation farming. Finally perceived increase in yield due to crop diversification and crop rotation comprised of 8.2%.

Table 10: Effect of Sustainable Technology Adopted on Yield

		Technology adopted by farmer				Total
		Conservation Farming	Crop rotation	Conservation and crop diversification	Conservation farming and crop rotation	
Improved Yield due to technology	Yes % of Total	39 45.9%	7 8.2%	13 15.3%	22 25.9%	81 95.3%
	No % of Total	2 2.4%	1 1.2%	1 1.2%	0 0.0%	4 4.7%
Total		41 48.2%	8 9.4%	14 16.5%	22 25.9%	85 100%

Source: Own Survey Data-2005

4.8.5 The Relationship Between Yield Increase and Technology Adopted.

The information in a table below is a summary that gives a more broad understanding of the productivity of farmer groups. The results from this Table show that, a higher proportion, i.e. 92.9% of the respondents considered participation in the programme and technology learnt as key to improvement in their productivity (yield level) as opposed to 7.1% who disagreed with this assertion.

However, for these results to be statistically significant, the evaluated significance value should be less than the proposed accepted limit of 0.05 in this study. In this case; the significance value of 0.000 implies that, the observed result is statistically significant. Therefore, ones perception of sustainable technology does affect productivity positively.

The findings of John (1984) were that, "The more intensive sustainable technologies become, the higher the yield". The findings from this survey were similar to these findings by John as the results were statistically significant because the evaluated significance of a chi-square test conducted of 0.000 was less than the anticipated limit of 0.05. This meant that, a significant relationship between the technology adopted and the perceived productivity of the respective farmer did infact exist. The Phi coefficient of 0.806 which was also calculated means that, of all the factors that, account to increase in productivity of the small scale farmers, sustainable technology adopted as a participant accounts for 80.6% of that increase. The perceived increase in productivity arises from the rationale that, introduction of efficient and intensive use of the factors and type of production method side by side with innovative ideas are essential to meeting goals and improving productivity of the farmer groups.

Table 11: The Relationship Between Yield Increase and Technology Adopted.

		Have you adopted any technology as a participant		Total
		Yes	No	
From personal point of view, has this increased your productivity	Yes	79	0	79
	% of Total	92.9%	0.0%	92.9%
	No	2	4	6
	% of Total	2.4%	4.7%	7.1%
Total		81	4	85
		95.3%	4.7%	100.0%

Chi-square (X²): 55.267; N=85; df=1; P=0.000; Phi=0.806

Source: Own Survey Data-2005

4.9 Market and Market Information Accessibility

The third objective which was centred on investigating if farmer groups were able to access the market and market information for their produce through the programme.

Descriptive statistics was the method used to address this objective on the following issues: the market and the market information, problems associated with individual farmers in marketing their produce as well as marketing problems at group level.

4.9.1 Source of Market information

Having addressed issues relating to access to inputs and implementation of the inputs into the sustainable technologies adopted it was important to investigate whether the farmers had sufficient market information in order for them to efficiently and effectively market their produce.

Table 12 below depicts the various sources from which beneficiaries of the programme were receiving market information from. It was found from this study that the major source of market information for the farmers was from CLUSA which comprised of 29.4%. Mass media was found to be second major source of market information with 27.1% followed by the extension officers with 24.7%. Other farmers and the markets were found to be the least sources of market information with 11.8% and 7.1% respectively.

Table 12: Sources of Market Information

Source of information	Number	Percentage
Market	6	7.1%
Mass Media	23	27.1%
Extension officers	21	24.1%
Other farmers	10	11.8%
CLUSA	25	29.4%
Total	85	100.0%

Source: Own Survey Data-2005

4.9.2 Place of Sell of Agricultural produce

Reasons behind were a farmer decides to go and sell his/her produce varies considerably due to so many factors that most affect the profitability of the business. Some of these reasons are related to the access of market information as earlier given above. However, whatever the reason, the majority of the respondents (65.9%) said that, they sell their produce to the depot giving an indication that the programme has provided a ready market for the farmers. Periodic sales of about 12.9% were said to have been done by some respondents to the local markets while 10.6% of the respondents said that, they sell their produce during the market day and another 10.6% said they sell most of their produce in Lusaka city. The market day is also one of the efforts of the programme that had been embarked on for the farmers to have a ready market where various buyers were invited through the SHEG apex bodies to come and buy from the farmers.

Table 13: Place of Sell of Most of the Produce

Place of sell	Number	Percent
Local markets	11	12.9%
During the market day	9	10.6%
Depot	56	65.9%
Lusaka city markets	9	10.6%
Total	85	100.0%

Source: Own Survey Data-2005

4.9.3 Easiness of Accessibility of the Market

Ease of market accessibility was another factor that was considered. Table 14 presented data on the rate of easiness of accessing the market from the various sources given in Table 12 earlier. In the quest of trying to establish the extent to which farmer groups are able to access the market for their ready produce from the sustainable technologies they had adopted, it was found that, the majority of them 55.3% had a perception that it was easy to access the market followed by 41.2% who were of the view that, it was actually very easy to access the market information. On the contrary, only 3.5% said it was not easy for them as beneficiaries of the programme to access the market.

Table 14: The Easiness of Accessing the Market

Rate of easiness	Number	Percent
Not easy	3	3.5%
Easy	47	55.3%
Very easy	35	41.2%
Total	85	100.0%

Source: Own Survey Data-2005

4.9.4 Market Information from the Various Sources

In order for farmers to easily have access to the market, they do rely on the various sources of market information that are available to them. Table 12 earlier did provide such sources of market information, but the question that farmers always poses is that how easy is it to have access to this information. From this survey, it was established that, the majority of the respondents had a view that it was easy to access information from CLUSA 20.0% as opposed from the other sources. Furthermore, from those that perceived it to be very easy for them to access market information from mass media had a proportion of 16.5 % as being the majority in this category. Finally, a higher proportion (2.4%) of those that said it was not easy to access the market information had a view that extension officers were not easily accessible.

Table 15: The Relationship Between Sources of Market Information and the Easiness of Accessing the Market Information

		The easiness of accessing the market information			Total
		Not easy	Easy	Very easy	
Source of the Market Information	Market	0	4	2	6
	% of Total	.0%	4.7%	2.4%	7.1%
	Mass media	1	8	14	23
	% of Total	1.2%	9.4%	16.5%	27.1%
	Extension officers	2	8	11	21
	% of Total	2.4%	9.4%	12.9%	24.7%
Other farmers	0	10	0	10	
% of Total	.0%	11.8%	.0%	11.8%	
CLUSA	0	17	8	25	
% of Total	.0%	20.0%	9.4%	29.4%	
Total		3	47	35	85
	% of Total	3.5%	55.3%	41.2%	100.0%

Source: Own Survey Data-2005

4.9.5 Problems of Marketing Agriculture Produce

Table 16 shows that, only 14.1% of the respondents said had problems in marketing their Agriculture produce while 85.9% said they did not have any problems in marketing their produce. Secondly, 50.0% of the respondents said that, the major problem they faced was that of low prices while 25.0%, faced problems with regard to, cost of transportation to the market. On the other hand, 16.7% comprised of those that faced problems in marketing their produce due to high cost associated to not having adequate skills in marketing. Finally, it was also found out that only 8.3% had problems to do with lack of stable market. On group comparison not much discrepancy was seen from these results. This was also affirmed by the use of a chi-square test as presented by the results below. The Significance value of 0.526 was greater than the accepted lower limit in this study of 0.05 implying that that was no significant correlation between main problems faced in marketing and farmer group affiliated to.

Table 16: Relationship Between Farmer Group and Problems Faced in Marketing

		The Main problems that are faced in marketing the produce					Total	Percentage
		Lack of stable market	Cost of Transport	Low prices	Inadequate negotiation skills			
Farmer group Affiliated to	Chinsungwe	1	0	1	0	2	16.7%	
	Kabweza	0	1	2	0	3	25.0%	
	Mwachingwala	0	1	1	0	2	16.7%	
	Twabile	0	0	1	1	2	16.7%	
	Twachelwa	0	1	0	0	1	8.3%	
	Magwama	0	0	1	1	2	16.7%	
Total		1	3	6	2	12	14.1% (12/85)	
Percentage		8.3%	25.0%	50.0%	16.7%	14.1%	100%	

Chi-square (X²): 14.000^a; N=85; df=15; P=0.526

Source: Own Survey Data-2005

4.9.6 Market Accessibility and Place of Sell

Various markets and market information exist for the farmers, but the question that farmers have relates to the easiness of accessing it. The majority of the respondents (96.5%) agreed to having it easy to

access market information. Furthermore, the major place of sell of most of the produce was found to be the depot (65.9%). In the same vein of those who sell most of the produce to the depot 64.7% said it was also easy to access market information from this source. A chi-square test was done to establish the relationship between accessibility and location of produce sell.

Firstly, the previous findings by Penno (2002) were that, "If everyone has access to the same information, then any debate that results will be more productive and ultimately benefit the farmers. Prior research also by Mwenya (2004) indicated that, "In the absence of organised groupings, small-scale farmers do not have supply control, access to information and the market, and availability of financial resources to have significant market power". The $X^2=8.095$, with $df=3$, and $P=0.044$ results as presented in the table below seemed to agree with this assertion as following the significance value of 0.044 being less than 0.05. This implied that, there was a significant relationship between place of sell and the easiness of accessing the market due to participation in the programme. The Phi coefficient of 0.309 implies that, participation in the programme accounted for 30.9% in terms of it being easy to access the market (information) from the place of sell of most of the produce. This then indicated the level of relationship between place of sell and easiness to access the market due to participation. It can then be deduced from these results that, participants were able access the market (information) for their produce through the programme.

Table 17: Relationship Between Market Accessibility and Place of Sell

		Easiness to access the Market		Total
		Yes	No	
Place of sell of most produce	Local markets	9	2	11
	% of Total	10.6%	2.4%	12.9%
	During the market day	9	0	9
	% of Total	10.6%	.0%	10.6%
Depot		55	1	56
	% of Total	64.7%	1.2%	65.9%
Lusaka city		9	0	9
	% of Total	10.6%	.0%	10.6%
Total		82	3	85
% of Total		96.5%	3.5%	100.0%

Chi-square (X²): 8.095; N=85; df=3; P=0.044; Phi=0.309

Source: Own Survey Data-2005

Chapter V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusions based on the survey findings and interpretation. Recommendations were made based on the conclusions of the findings. It is also worth noting here that, the conclusions and recommendations were presented in accordance with the research specific objectives in order to answer the general objective.

5.2 Linkage to Various Input Lenders

The overall interest in the initial specific objective of the study was to investigate if farmer groups have been linked to the various input lenders by the programme. The findings in this study were that, participation of the farmers in the programme resulted in pooled efforts that conferred certain strengths among them. This included the ease with which farmers' could be reached in order to, effect certain interventions in their favour, such as; credit and input supply. It is from this arrangement that, participants' perceived the programme as having positively addressed their input acquisition problem as indicated by this study. This is shown by the 89.4% of the respondents who admitted having received help through the programme in terms of accessing the inputs from the various lenders. Furthermore, the chi-square value which showed a significant association between the help farmers were receiving and the effectiveness of the programme in linking them to the input lenders. However, it was established that, the major source of inputs was actually from CLUSA.

5.3 Sustainable Technologies Adopted

In the second objective, the study aimed at assessing whether productivity of the participants had increased due to sustainable technologies that were adopted. From the findings of this study, it was established that, sustainable technology increased productivity of the beneficiaries as it was perceived to have accounted for 80.6% of the increase in productivity besides other factors. Furthermore, 92.9% of the respondents were of the view that, their yield had increased due to the sustainable technology that they

had learnt and further adopted. And as such, participation in the programme was necessary as farmers were of the view that they received adequate help in form of technologies that they learnt and adopted which triggered yield to increase positively.

5.4 Market Accessibility

Lastly, there was need in this study to investigate if farmer groups are able to access the market and market information for their produce from the sustainable technology they had adopted through the programme.

The findings from this study indicated that, the farmers' access to market and market information had improved tremendously due to participation in the programme. For instance, the programme had scored overwhelming results in terms of addressing the marketing problems of farmers as 96.5% of the captured respondents had a perception that, it was easy and very easy to access the market and market information after having joined the programme as opposed to 3.4% who said it was not easy. This could be attributed to the SHEGs/Producer groups that provided a platform to a wide range of smallholder producers to access the market for their produce that could not be accessed individually. For example these SHEGs through their apex bodies are able to access the input-output markets jointly to take advantage of the economies of scale and hence reducing the transaction costs for farmers'. This is mostly done during the market days that have been arranged. Furthermore, the majority of the respondents (65.9%) admitted selling their produce to the depot which is an indication that, the programme had provided a ready market for the farmers. It suffices to say and conclude that, these findings do agree with the assertion of Mweetwa and Penno. Hence, the programme enabled the farmers' to access the market and market information.

Finally, it can be concluded that, the participation of the Small-Scale farmers in the SHEG Programme had significantly addressed their input acquisition, productivity and market accessibility problems as perceived by the farmers'. It is also important to note at this point that, farmers are coming from a highly disorganised background and that, the programme has managed to inculcate joint input-output marketing as well better and intensive farming practices that have been strongly encouraged among the farmer groups.

5.5 Recommendations and the Expected Future Direction

Based on the above conclusions, some suggestions for action are presented below. These recommendations are related to; Use of sustainable technologies, linkage development, information dissemination, and credit provision and are intended to build on the strong group base which already exists.

5.5.1 Linkage development

SHEG programme has been very successful at developing linkages between groups and service providers. The area that needs more attention is. The gap that was found from this study in relation to linkage development between farmers and the lenders of inputs is that, farmers mostly entirely relied on inputs from CLUSA than any other source. However, due to the termination of the programme in 2005, farmers may not receive inputs through the programme. It is therefore, recommended that, the government through the extension officers should investigate alternatives for the supply of seed and other inputs for groups perhaps in collaboration with private sector traders. They should also encourage group members in making initial contacts with service organisations.

5.5.2 Sustainable Technologies

So far the perceived general over view of the programme participant has shown that, their has been marked change in the general productivity of the farmers in the positive direction. However, farmers should be encouraged to continue practicing such innovative ideas in order to further improve their general productivity. Hence, Extension officers should be able to give 100% of their attention to supervision and reinforcement training to farmer groups.

5.5.3 Market and market Information Accessibility

Much if not all the training in various issues were emanating from the programme staff. However, if the farmer groups are to be sustainable, there is need to use group members to assist in training other groups whenever possible i.e. market research, conflict resolution within groups, food preservation and other such skills which already exist among group members.

The findings of this study were that, farmers' were receiving much of the market information from CLUSA. Furthermore, the information that was aired on mass media did not have much to do with the problems that farmers felt needed urgent attention. And as such consideration of a project to introduce and support the use of community radio which should specifically air Agriculture related programmes is key to successful growth of the Agriculture sector in this area. This type of communication could be very useful for farmer groups to communicate and share experiences and knowledge with each other. Market day arrangements should be further encouraged and perhaps they have to occur frequently so that farmers' easily sell their produce without being exploited by the bogus buyers as they will have full to partial full control of the market than as individual sellers.

These recommendations would build on the strength of groups as forums for knowledge and information sharing on farming and marketing related issues. These suggestions also would help develop inter-group linkages and therefore facilitate increased occurrence of market day meetings to widen the base for farmers to profitably sale their produce. This of course will drastically avoid issues of farmers being exploited by bogus buyers from urban areas. Furthermore, transport costs will be drastically reduced for the farmers and as such they will not transfer the burden to the consumers.

5.5.4 Credit Provision

The following are suggestions based on management of the Depot credit scheme following the fact that the majority of the respondents were accessing the inputs from CLUSA which has of late been terminated. These suggestions may not be possible without other changes in the loan conditions. However, they are worth exploring.

If the credit scheme remains as a responsibility for the Depot, partially or wholly; then the challenge is not to change the loan conditions, but to help groups find viable means which will allow for successful repayment. For instance farmers to pay in advance in-kind for the next farming season when they have a bumper harvest. Alternatively, the depot should strictly ensure that, the loans or seed packs as it were, only be give to farmers that have prepared a stipulated standard area for farming under the recommended farming practice.

It is also further recommended that, the farmer groups be institutionalize within the government system following the termination of the programme so that the efforts of the farmers that have already shown

significant results in terms of improving the general living welfare will further be sustained. In the same vein, train groups in designing bankable proposals to financial institutions so that they can be able to source for inputs without stretching the extension workers which is to the detriment of the extension function.

Based on these findings, it is further recommended that, more extensive, elaborate and encompassing large scale in-depth studies should be embarked on in order to bring out issues that will reflect the current realities on the ground. This is due to the fact that, this study had earlier mentioned limitations which inhibited it from exploiting them. Also an ex-post evaluation is recommended to determine the sustainability of the programme.

Finally, the benefits, however, are worth the investment of these recommendations as they will continue contributing to the equitable development in Chikupi for years and hopefully, generations to come.

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APPENDICES

Appendix 1: Survey Questionnaire

TOPIC: AN ASSESSMENT OF THE BENEFICIARIES PERCEPTION OF THE SMALL-HOLDER ENTERPRISE GROUP (SHEG) PROGRAMME BENEFITS.

AGE 500: RESEARCH QUESTIONNAIRE

SECTION A: DEMOGRAPHIC DETAILS

1. Farmer group affiliated to: _____
2. Sex: Female [] Male []
3. Age: [_____] years
4. Household size [_____] members
5. Marital status:
 i) Single [] ii) Married [] iii) Widowed [] iv) Divorced/Separated []
6. Level of Education.
 i) None [] ii) Primary [] iii) Secondary [] iv) Tertiary []
7. Total farm size in lima [_____]

SECTION B: EFFECTIVENESS OF FARMER GROUPS IN MARKET ACCESSIBILITY

8. Production, Consumption and sales data for last years Agricultural season

Crops Produced	Area Allocated In Lima	Total Production Per Crop	Consumption Per Crop (Kg)	Sales Per Crop (Kg)

9. When do you start selling your produce?

i) Soon after harvest [] ii) First three months after harvest []

iii) Later than four months []

10. Where do you sell most of your produce?

i) Local markets [] ii) During market day [] iii) Depot [] iv) Lusaka city []

v) Other [] _____

11. To whom do you sell?

i) Local buyers [] ii) Urban wholesalers [] iii) Food processors [] iv)

Government [] v) Depot [] v) Other [] _____

12. What type of buyer do you prefer to sell your produce?

i) Local buyers [] ii) Urban wholesalers [] iii) Food processors []

iv) Government [] v) Depot vi) Other [] _____

13. Why do you prefer these buyers?

i) They offer better prices [] ii) Prompt payment [] iii) They buy in bulk []

iv) Other [] _____

14. How do you arrive at the price with your buyers?

i) Based on my cost [] ii) Based on the buyer []

iii) Based on the prices of other sellers [] iv) Other [] _____

15. Do you often negotiate with buyers in setting price?

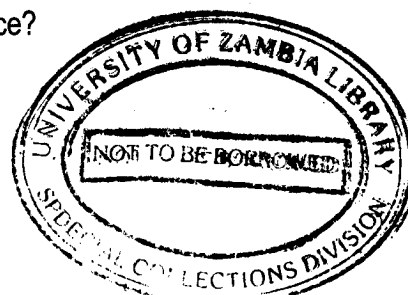
i) Yes [] ii) No []

16. If yes, who has a greater say on the price?

i) Seller [] ii) Buyer []

17. Do you have any problems in marketing you produce?

i) Yes [] ii) No []



18. If yes, what are your main problems that you face in marketing your produce?
 i) Lack of stable market [] Cost of transport [] iii) Low prices []
 iv) Inadequate negotiation skills [] v) Other [] _____
19. What is the source of your market information?
 i) Market [] ii) Mass Media [] iii) Extension Officers [] iv) Other Farmers []
 v) Buyers [] vi) None []
20. How easy is it to access this information?
 i) Not easy [] ii) Easy [] iii) Very easy [] iv) Other [] _____
21. In your own view do you think you are now accessing the market much easier than before joining the group?
 i) Yes [] ii) No []
22. If not why? _____

SECTION C: THE EXTENT TO WHICH THE FARMER GROUPS ARE ABLE TO ACCESS INPUTS FROM PRIVATE LENDERS

23. In what form are your production inputs?
 i) Cash [] ii) Credit [] iii) Cash and credit [] iv) Other [] _____
24. If credit is one of the choices in **Q.23**, what inputs are in this form?
 i) Money [] ii) Seed [] iii) Fertilizer [] iv) Pesticide [] v) Seed packs []
 vi) Other [] _____
25. Where do you source these inputs?
 i) Money _____ ii) Seed _____
 iii) Fertilizer _____ iv) Pesticide _____
 v) Seed Packs _____ vi) Other _____
26. Are you helped in accessing these inputs?
 i) Yes [] ii) No []
27. If yes to **Q.26**, who helps you in accessing these inputs?
 i) Extension officers [] ii) Government [] iii) Through CLUSA's Programme []
 iv) Other [] _____
28. Do you think this programme has been effective in linking you to the private lenders of inputs?
 i) Yes [] ii) No [] **Go to Q.30**

29. If yes, how do you rate this effectiveness of the programme in linking you to private lenders?
 i) Not effective [] ii) Effective [] iii) Very effective []
30. Give reasons why? _____

SECTION D: IMPACT OF SUSTAINABLE TECHNOLOGIES ON THE PRODUCTIVITY (YIELD) OF THE FARMER GROUPS

31. What sustainable technologies have you learnt from this programme?
 i) Conservation farming [] ii) Crop Diversification [] iii) Crop rotation []
 iv) Other [] _____
32. Have you adopted any technology as a participant?
 i) Yes [] ii) No []
33. Which one have you adopted?
 i) Conservation farming [] ii) Crop Diversification [] iii) Crop rotation []
 iv) Other [] _____ v) None [] **Go to Q.36**
34. Why have you adopted this technology?
 i) Easy to implement [] ii) Relatively cheap [] iii) Personal interest []
 iv) Other [] _____
35. From your own point of view, has this sustainable technology improved your productivity?
 i).Yes [] ii). No []
36. If yes how do you rate this increase in productivity
 i) Twice than before [] ii) Thrice than before [] iii) Not sure []
 iv) Other [] _____
37. If none, why haven't you adopted?
 i) Not easy to implement [] ii) Too expensive [] iii) Lack of interest []
 iv) Other [] _____
38. In general has your participation in this programme increased your yield level?
 1) Yes [] ii) No []

Thank you for your time. Is there anything that you may want to know or ask that you feel CLUSA or the government should do in order to help you improve your welfare in general

Appendix 2: Research Programme

Phase 1

1.0 Proposal Development and Writing

TIME	ACTIVITY
January-February 2005	Proposal writing
May 2005	Submission of the draft research proposal to the supervisor
May 2005	Submission of the final research proposal to the Head of Department.
May 2005	Construction of research tools (Questionnaire)

Phase II.

2.0 Field Work

TIME FRAME	ACTIVITY
May-June 2005	<ul style="list-style-type: none"> ➤ Communication to the relevant authorities (The Cooperative League of the United States of America and Field Leaders in Chikupi).
July-August (2005)	<p>Data collection</p> <ul style="list-style-type: none"> ➤ Organising meeting with the depot committee ➤ Testing and administering of the research tools
October 2005	<ul style="list-style-type: none"> ➤ Data entry ➤ Data cleaning ➤ Data analysis
October-November 2005	<p>Report writing</p> <ul style="list-style-type: none"> ➤ Submission of the first draft to the supervisor.
December 2005	<p>Submission</p> <ul style="list-style-type: none"> ➤ Submission of the final report to CLUSA the supervisor and the school at large

Appendix 3: Proposed Budget

A). STATIONARY

➤ 2 A4 Reams of paper @ K25,000.00 each	K50,000.00
➤ 5 pencils @ K5,00.00 each	K2500.00
➤ 5 pens @ K1000.00 each	K5000.00
➤ Photocopying @ K200.00 per copy	K100,000.00

SUBTOTAL: K157, 500.00

B). FIELD WORK COSTS

Transport costs @ K20, 000.00 for two trips	K40, 000.00
Meal allowance K25, 000.00 for 14days	K350, 000.00
Lodging K45, 000.00 for 14days	K630, 000.00

SUBTOTAL: K1, 020, 000.00

DATA ENTRY/ANALYSIS

A). SECRETARIAL SERVICES

Typing services	K150, 000.00
Binding facilities 3 reports @ K20, 000.00 each	K 60,000.00

SUBTOTAL: K210, 000.00

B). CONTINGENCY and INCIDENTALS

K150, 000.00

GRAND TOTAL: K1, 537, 5000.00

JUSTIFICATION FOR THE COST

The figure was a reflection of the minimal cost to enable the study to be undertaken efficiently and effectively.