An Assessment of Zambia National Farmers Union Lima Credit Scheme

BY

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An Assessment of Zambia National Farmers Union Lima Credit Scheme

A Research Report presented to the Department of Agricultural Economics and Extension Education of the University of Zambia

By

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In Partial Fulfilment of the Requirements of the Degree of Bachelor Of Agricultural Sciences

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DEDICATION

"To my fallen Hero, Mummy your hard work has paid off, I will always Love you. I wish you were here to see this day, sleep tight."
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>CSO</td>
<td>Central Statistics Office</td>
</tr>
<tr>
<td>CSP</td>
<td>Core support Program</td>
</tr>
<tr>
<td>CGS</td>
<td>Credit Guarantee System</td>
</tr>
<tr>
<td>DFE</td>
<td>District Farmers Association</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>FISP</td>
<td>Farmers Input Support Program</td>
</tr>
<tr>
<td>FRA</td>
<td>Food Reserve Agency</td>
</tr>
<tr>
<td>IC</td>
<td>Information Centres</td>
</tr>
<tr>
<td>MSEs</td>
<td>Micro and Small Enterprises</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organisations</td>
</tr>
<tr>
<td>SCC</td>
<td>Swedish Cooperative Centre</td>
</tr>
<tr>
<td>SNDP</td>
<td>Sixth National Development Plan</td>
</tr>
<tr>
<td>SPSS</td>
<td>Special Package for Social Scientists</td>
</tr>
<tr>
<td>ZANACO</td>
<td>Zambia National Commercial Bank</td>
</tr>
<tr>
<td>ZNFU</td>
<td>Zambia National Farmers Union</td>
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Zambia’s market for agricultural finance is challenged, from the farmers’ perspective, credit is scarce and expensive and heavily skewed towards the larger, corporate sector. Banks on the other hand, are reluctant to lend without very high collateral coverage and a high risk premium. The LIMA credit scheme recognises the importance to bridge the gap between agricultural finance and small scale farmers. This scheme originated from a need of credit services expressed by ZNFU members. The LIMA scheme was developed in-house by the ZNFU in close consultation with its commercial financial partner Zambia National Cooperative Company PLC and other private sector stakeholders. The main objective of the study is to assess the model being applied by ZNFU to facilitate access to credit to smallholders farmers in Zambia and analyse the benefits that are accruing to the small-holder farmers. The study was conducted in Chongwe. It used a Semi-structured questionnaire on randomly sampled LIMA beneficiaries. The data was analysed using Special Package for Social Scientists. The survey results revealed that beneficiaries of the LIMA Scheme showed an improvement in income generated from farming activities. There was also significant increase in the number of farmers that are currently on the LIMA program (from 250-4026). The research also revealed that this package is achieving its set objectives which is to provide small-scale farmers with agricultural services based on group Savings and Loans approach linked to the commercial sector. The assessment highly recommends that the program should be more transparent as the farmers knew little about the whole program. For the scheme to continue targeting more farmers it should include more farmers needs such as herbicides, and farming implements and extension services.
The Agricultural sector is one of the key priority sector of economic growth. This is due to its duo role of providing food security and income levels both for the farmers and the nation at large. Population in Zambia was at 14,222,233 in 2013 while poverty levels reached 61% in rural areas and 53% in urban areas. With such high figures the country faces the need to reduce the household poverty levels (CSO, 2013). Many developing countries have devised poverty reduction strategies to reduce the crisis in rural areas. These strategies have however failed to target hunger specifically. Policy makers have long assumed that if income levels rose and economies grew, the benefits would trickle down to the hungry, this however has not been the case, at least not for many African countries, Zambia included (Mundi, 2014). Small scale farmers have always played dominant role in agricultural productivity in Zambia, their productivity and growth are hindered by a number of factors and one of them is limited access to credit facilities (Oruonye and Musa, 2012). It is vital to understand that farm credit is an important factor in improving agricultural productivity and strengthening rural economy in most developing countries. Majority of poor farmers have continued to face limited access to financial services, and where these services are made available, they are often at very high cost. Small scale farmers have been considered as high risks to lend credit or loans to by financing institutions.

Therefore ZNFU has devised a programme that assists farmers to obtain credit, this programme is known as LIMA CREDIT Scheme. The objective is to provide small-scale farmers with agricultural credit services based on Group Savings and Loans. It’s a model to provide inputs and services required by farmers to mainly produce a cash crop or to keep livestock. It was first piloted during the 2008/09 season with a total of 250 farmers, an intervention under the Zambian-Finnish Development co-operation in rural development under a joint financing arrangement with the Embassy of Sweden and the SCC in consultation with ZANACO. First funding was USD600 million which provided credit loans for 250 farmers, it recorded a 100% loan recovery which has continued till the reported farming season of 2011/2012. Farmers that have benefited have increased to 4026 across the country (ZNFU, 2013).

The invention acknowledges that small scale farmers have always played dominant role in agricultural productivity in Zambia, their productivity and growth are hindered by a number of factors and one of them which is limited access to credit facilities. For agricultural practice
to be meaningful, one of the enabling factors is addressed by availability of adequate credit to finance agricultural production which has remained one of the fundamental problems that hamper production, productivity and related agribusiness investments in rural communities and farm households. The LIMA Scheme recognizes this problem and is expected to grow in demand from the current 4026 farmers to addressing agricultural financial need of small scale farmers across the country (ZNFU, 2013). Therefore an assessment will be carried out to determine how the scheme is facilitating credit to farmers and the benefits accruing to them.

1.1 Problem Statement

The Lima Credit scheme was set up as a recognition from ZNFU to help its members to obtain credit, but as to how the LIMA scheme been working for the past two years has not yet been documented. The view of the beneficiaries has not been taken into account, as this programme was an initiative by top management and not the beneficiaries.

1.2 Objectives

1.2.1 General Objective

To assess the LIMA credit scheme applied by ZNFU to facilitate access to credit to smallholders farmers in Chongwe.

1.2.2 Specific Objectives

- To obtain the view of farmers on performance in terms of service delivery.
- To determine if the credit has any potential impact in increasing incomes of the credit users and sustainability of the scheme.

1.3 Rationale

Commercial Banks and other financial service providers are reluctant to lend to the agricultural sector without very high collateral coverage and a high risk premium. Yet, 61% of the Zambian population of 13 million resides in rural areas, where 85% of them are engaged in the agricultural sector. There are about 1.4 million Zambian farming households and an estimated 2.4 million Zambian small-scale farmers. Agriculture is a source of livelihood for over 70% of the Zambian population. Poverty levels/index is highest in the rural areas (78 percent) and urban (53 percent) which has resulted in a high rural to urban migration rate. Another justification for the LIMA Scheme is that, although Zambia is endowed with huge agricultural potential, it remains underutilized. It is estimated that only 14
percent of the arable land and 6 percent of irrigation potential are currently utilized. There is need to actualize this potential for the benefit of the Zambian people. All these constraints and challenges to small-scale farming build a case and justification for the LIMA scheme intervention. The scheme would also contribute towards the realization of the agricultural sectors goal contained in the SNDP, which seeks to improve food security; improve farm incomes; create employment opportunities; and reduce poverty levels in Zambia. This assessment is intended to offer insights, lessons learned and analyses that will be directly relevant for academic purposes and policy makers to design programs that directly aim at improving the livelihood of end beneficiaries in this case farmers. This study will then sought to empirically investigate the LIMA Credit Scheme.
CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter shall be divided into three parts, the first part shall define the key words. The second part shall discuss research findings done in Zambia. The third component shall discuss research carried out in other countries.

2.1 Definition

A Credit Scheme is any scheme under which guarantees are provided to investments according to certain conditions of duration, amount, nature of transaction, the type or size of the enterprise such as MSEs which often lack the kind of collateral required by banks. There are four main types of guarantees: (1) individual guarantees that provide partial coverage on the underlying principal loan amount with both borrower and lender clearly identified; (2) a guarantee directed at an investment facility is normally employed when a developing economy already has functional capital markets in place, and medium to long term placements of investment funds need to be generated; (3) portfolio guarantees in which lending to a specified priority development sector is supported by providing a partial guarantee for a number of loans (one lender, many borrowers); (4) portable guarantees where one specific and identified borrower is given access to a guarantee and can then compare competing loan terms and offers from various lenders. However, this type of guarantee has the disadvantage of relatively high transaction costs for borrowers and lenders when dealing with new applications (FAO, 2012).

"Credit" means any loan, overdraft facility or other kind of credit provided by a credit provider to and for the use of a person, or to and for the use of another person for whom a person acts as guarantor. For credit involving leasing or hire purchase a person acquiring motor vehicles, equipment or vessels financed by a credit provider by way of leasing or hire-purchase is deemed to be provided with credit by the credit provider to the extent of the value of those goods, any amount overdue under the lease or hire-purchase agreement is deemed to be an amount in default under the person's account with the credit provider, and all related terms and expressions are to be construed accordingly (Act, Cap 387 Zambia Laws).

"Socioeconomics" may refer broadly to the use of economics in the study of society or contemporary practice considers behavioural interactions of individuals and groups through social capital and social markets and formation of social norms. It has also been defined as a
discipline studying the reciprocal relationship between economics science on the one hand and social philosophy, ethics and human dignity on the other hand, towards social reconstruction and improvement (Begg, 2007).

"Financing models" is the task of building an abstract representation of a real world financial situation, which is used to design the performance of a financial asset or portfolio of a business, project, or any other investment. It is about translating a set of hypotheses about the behaviour of markets or agents into numerical predictions (Social Economics, 2011)

2.2 Review of the Empirical Research carried out in Zambia

Lungu (2007) carried out a research on impact of sources of credit on rural households in Chongwe, farmers had to put themselves in a group of five to eight which would meet to learn the Grameen rules (an institution that was giving loans to farmers at that time). In these groups farmers would meet every week to discuss the progress of the loans acquired. This model of financing provided surety to the lender as it showed farmers commitment. Although Grameen did not invent the threat of termination as an incentive to fulfil contracts, it did popularize its combination with a second design element: default by one group member leads to loss of access for all members. He found that joint liability may lead to the domino effects in which borrows who would have repaid the loan choose to instead of defaulting because they would lose access anyway due to the default of others. Also, joint liability may not cut costs but rather only shift them from lenders to borrowers (Nyirenda, 2007).

2.3 Review of the Empirical Research carried out in Zambia

Most studies have focused efforts on ways of extending institutional credit schemes to small farmers and rural micro-entrepreneurs, typically aiming to provide credit to finance agricultural inputs and other micro-enterprise investments needs. Adams and Von Pischke (1992) report a number of assumptions behind the move to establish targeted credit schemes. Some of the assumptions include: the target group is too poor to adopt new technologies without loans and is also too poor to save, operators of small farms are thought to be very much in need of training and technical assistance in order to progress, informal finance plays little or no positive developmental role and that most of the target groups have 'credit needs' that commercial bankers refuse to fulfil for reasons that are neither commercial nor economic and that many of the small borrowers have good chances of improving their status and to obtain conventional bank loans (Adam and Pischika, 1992)
It was observed by Mohamed that differing models of association that already exist may be alternatives to contract farming, in addition to other options such as cooperatives (or other forms of association), joint ventures or associations between organised small-scale producers and firms in the value chain working on an equal footing, and organised production aimed at the local market in order to finance farmers with the required credit (Mohamed, 2007). Available literature on South Africa suggests that farmers are credit constrained resulting in poor performance. Small farmers usually face challenges such as cumbersome procedures when applying for credit and collateral problems. Despite the development and adoption of models for managing default risk in credit portfolios, lending to agriculture has generally been lower than other real sectors in South Africa. By the year 2010, banks’ largest concentration of credit exposure was still to the private household sector while that to the agricultural sector was among those at the bottom (Chisasa, 2010).

A study by Osabuohien based on the assessment of the role of agricultural Credit Guarantee scheme showed that for such a scheme to work it needs a long-run relationship between the government and the agricultural sector and the policy makers should take proper cognizance of the fact that putting fund in place cannot on its own enhance development, one of the limitations was to find out the impacts of this scheme on the beneficiaries in terms of accessibility to the scheme which this project will look at (Osabuohien, 2000). Contrary to Osabuohien expectation, the negative coefficient of membership of cooperatives indicates that non-co-operators have probability of accessing credit. It is likely that co-operative societies have not made the desired impact in the study area and as such account for the posture of the result. It was also discovered that non co-operators have increased probability of accessing credit (Anyiro and Oriaku, 2001). The most common form of collateral required by the institutions is land and marketed produce. Hence the higher the value of collateral required, the higher the amount of credit that will be applied for by the farmer. That is farmers who can offer higher values of collateral will go for higher amounts of loans as compared to those who can’t. This case is more true for the cooperatives societies where the amount of loan disbursed is equated to the value of the marketed produce. Hence the more they produce for the market, the more credit they can get from the cooperatives. The farmers increased inequality where farmers at low levels of production who are constrained by lack of financial resources do not get the financial means to enable them raise their production above current levels (Atieno 2005).
A key finding in a research in Ghana found that those farmers who are likely to suffer most from credit problems are the poor, the rural and low educated farmers. This has strong implications on the depth of outreach of credit facilities to the farmers. Any programme or message intended to influence farmers access to formal credit should target these groups of people that contribute immensely to the development of the economy and to increase the level of awareness among small-scale farmers on credit campaign on the media such as the radio and television stations. Finally, to sustain and improve production efficiency and food security in Ghana, the poor smallholder farmers under the existing credit constraint conditions require an improvement of access to credit facilities and other resources (Abunyewah, 1999). In Nigeria it was observed that the largest portion of bank credit went to the miscellaneous sector which has many components and continues to increase with consumer credit made available by the banks. The mean credit to the agriculture sector was 3 percent during this period. International trade received 2 percent. The productive sector of the economy (mining 9 percent manufacturing 19 percent and agriculture 3 percent) received accumulative total credit of 31 percent. Showing that the banks were not interested in lending to the productive sectors, especially agriculture. This is evident in banks preference for short term, low risk credits as found in the component of the miscellaneous group. Since autonomy to allocate by choice and price came, agricultural credits have dwindled. A further comparison with the other sector reveals further that other sectors generally are more funded, especially mining from the banking system credits (Adetiloye, 2006).

Jansson and Weaner found that if NGOs want to give loans they want to acquire authority and licenses to collect deposits, but they not want to put up with the costs and restrictions imposed by regulations. Effective regulations are useless unless the superintendence have the authority and capacity to supervise and enforce, which represents a major challenge. When regulation is enforced, it must strengthen the microfinance movement and should not impede its development with rigid rules or with narrow definitions of microfinance institutions need to be governed under specific regulations and not directly by the classic banking laws (Jansson and Weaner, 1997). On the other hand Schmalbruch in 2003 found that a Safety net programs enhance the resilience of vulnerable communities to survive shocks. Food based safety nets such as school feeding, food for work and mother child health care programs directly contribute to fighting hunger and enhancing households food security. They protect and build longer term human and productive assets. In reality given that access to food constitutes the very core of poverty reduction, and in many crises food aid is an integral part of establishing
food security, both are essential for ensuring linkages between short term humanitarian and long term development goals (Schmalbruch, 2003).

In India a credit scheme called Kisan Credit Card Scheme (KCC) was introduced in 1998-99 to enable the farmers to purchase agricultural inputs such as seeds, fertilisers, pesticides, etc. It was developed to ensure that all eligible farmers were provided with hassle free and timely credit for their agricultural operation. This scheme is still in operation throughout the country and is implemented by Commercial Banks, Coop. Banks. The scheme has facilitated in augmenting credit flow for agricultural activities. The scope of the KCC has been broad-based to include term credit and consumption needs. All farmers including Small farmers, Marginal farmers, Share croppers, oral lessee and tenant farmers are eligible to be covered under the scheme. The card holders are covered under Personal Accident Insurance Scheme (PAIS) against accidental death/permanent disability. It therefore shows the success of one such scheme implemented in a risky production sector (Adekunle,, 2009)

2.4 Conceptual Framework

In this research, we shall adopt the Chamber and Conway (1992) definition of a livelihood as comprising "capabilities, assets and activities required to make a living and to cope with and recover from shocks and stresses" (Krantz 2001,6). The framework illustrated in Figure 1.0 below shows the relationship of increase in agricultural credit, in our case LIMA scheme credit and increase in livelihood. Poverty in the rural areas has reached 61%, if this scheme provides finance to these farmers, farmers would be expected to increase their farming productivity since their constraint of credit would be removed. This would lead to increase in farmers income and improved livelihood, which can be seen in improved living standards.
Figure 1.0 Conceptual framework

Increase in agricultural credit - LIMA Credit Scheme

Increase in farmers productivity - Higher yields of cash crop production.

Increase in farmers income - Amount of money obtained from farming activities

Increase in farmers livelihood - Better living conditions eg health and education

Source: Author's link between agricultural credit and livelihood (2014)
CHAPTER THREE: METHODOLOGY

3.0 Introduction

This section presents details on the method used to carry out the research. It gives details on the approach, study site, method used to collect data and analyse. It also gives information on the limits of the study.

3.1 Approach

A cross section research approach will be used, which will involve collection of data and analysing the data. Data will be collected through individual interviews using both guided and unguided questionnaires. The research will be both quantitative and qualitative study and it will involve interactions and consultative process with the beneficiaries and the implementing partners.

3.2 Study Sites

The study will be conducted in Chongwe and Lusaka districts, targeting the smallholder farmers on the LIMA Credit Scheme in Chongwe and implementers in Lusaka.

3.3 Data Collection

Primary data was collected through Semi-Structured interviews which was used to obtain information from individuals and groups. It contained a series of broad questions to guide the conversation, but allowing for new questions to arise as a result of the discussion. This was useful in enabling the mission to gain an in-depth understanding of qualitative issues relating to the LIMA scheme. Focus Group Discussions (FGD) were used particularly with farmer beneficiaries. Secondary data was also used to review the past performance, background on the credit scheme and verify the findings.

3.4 Data Processing and Analysis

The data collected was analysed using SPSS. The analysis was mainly consisting of frequencies, percentages and cross tabulation where possible. Descriptive statistics and other relevant frequency distributions were run to analyze the socio-demographic characteristics of the respondents. As indicated by the objectives of the study, the main aim of this review is to ascertain if there significant differences between the beneficiaries before the credit scheme and after the credit scheme in terms of parameters like follow up visits from the institutions
officers in the area, if there's an increase in the amount of credit obtained from the beneficiaries and wide spread of the credit scheme to other non ZNFU farmers.

3.5 Study Limitations

The study has its limitation in that it did not make use of a control group (non LIMA Scheme) which would have helped to delineate the contributions of other factors of performance other than those of the LIMA Scheme. Thus caution must be taken in interpreting the result in change of livelihood of the beneficiaries on the LIMA Credit Scheme.
CHAPTER FOUR: FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents findings and discussion. It will first give information of the district, the LIMA program in the district and the Financing approach used. Findings will then be discussed.

4.1.0 District Information

The study was carried out in Chongwe district which is located to the Eastern part, about 45 Kilometres from Lusaka city, Zambia's capital. Chongwe district was chosen because the major occupational activity in the area is small scale farming. The majority of the people are dependent on farming for their livelihood. Chongwe district offered a better location for the study to be conducted successfully with regards to the fact that the research was faced with resource and time constraint.

4.1.1 Implementation History

The LIMA scheme was first piloted during the 2008/09 season. A total of 200 farmers from 2 DFAs with 600 hectares benefited from the LIMA to the tune of ZMK 600 million. The loans from ZANACO were fully repaid. The scheme has since grown to the current seasons levels of 25 DFA, 4026 farmers and a loan exposure of ZMK18 billion.

4.1.2 Financing Approach

The scheme targets farmers who are members of ZNFU and are able to produce for the market and practice farming for a business or have potential to do so. The program targets farmers, organizing themselves into groups of 10-20 farmers located in the same area. The groups are formed based on mutual trust, reputation and commodity focus up to a maximum of 5ha/farmer. Hectare packages contain seed that the farmer wishes to grow and fertilizer. The 10-20 farmers formation of a mutual group constitutes the 1st selection level for admission into the LIMA scheme. Here a farmer undergoes a peer vetting process and only those farmers that are cleared qualify for the next level of assessment at the IC level. The IC clears and forwards the list of qualifying farmers to the DFA for onward transmission to ZNFU headquarters for consolidation. ZNFU then applies for a credit facility from ZANACO on basis of the consolidated demand for inputs as represented by respective DFA's/IC's. Each DFA opens an account with ZANACO local branch where the 50% cash collateral from the member farmers is deposited. Payment of the cash collateral constitutes a critical stage in the
selection process since only those that can raise the deposit can receive an input loan. ZNFU tenders for input supplies based on preferences expressed by farmers through their respective DFA's.

4.2.0 Demographic Characteristics

4.2.1 Age distribution of Respondents

Table 1.0 below shows the age of respondent. The majority of the respondents (24%) in the survey were in the age group 25-29. The age group 30-34 of the respondents were 16%, the third majority ranged from 35-39 and 45-49 at 12%. The age group 20-24, 40-44 and 60-64 all had a percentage of 8. The least majority in the survey (4%) were 70-74. The age distribution was due to the programme not being discriminative in the selection of its members. members voluntarily participated in this research and in the programme. The large majority can be said to be enthusiastic about new technology and research, therefore likely to be a part of any innovation that shows benefits. The least majority can be said to be rigid to change and take a longer time to adapt to a new innovation, hence the least members

Table 1.0 Age Distribution of Respondents

<table>
<thead>
<tr>
<th>Age group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>25-29</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>30-34</td>
<td>4</td>
<td>16</td>
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<td>35-39</td>
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<td>40-44</td>
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<td>8</td>
</tr>
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<td>45-49</td>
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<td>12</td>
</tr>
<tr>
<td>55-59</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>60-64</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>70-74</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 25 100

Source: Own Survey Data (2014)
4.2.2 Marital Status of the Respondents

Figure 2.0 below shows the marital status of the respondents. The majority of the respondents (44%) were married, 28% were divorced, 20% were single and the least group were widowed having 8%. The research found that the majority obtained the credit, literature has it that its more likely that a couple will work as a team to achieve a goal which in this case is the repayment of the loan.

Figure 2.0 Marital Status of the Respondents

![Pie chart showing marital status](image)

Source: Own Survey Data (2014)
4.2.3 Educational Level of Respondents

Figure 3.0 below shows the highest level of education of the respondents. Approximately 60% of the respondents attained secondary school while 20% only reached primary level. 12% attained tertiary level and 8% did not obtain any education. From literature, level of education is known to affect one's ability to accept change in farming practise and risk adverseness. The research findings showed correlation between level of education and participating in the Lima programme, this is shown by the large majority having attend secondary level of education.

**Figure 3.0 Educational level of Respondents**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>primary</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>secondary</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>tertiary</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: Own Survey Data (2014)
4.3 The View of the Respondents on the Service Delivery

Figure 4.0 shows how the respondents view the scheme based on the service delivery. Forty-eight percent (48%) viewed the scheme as beneficial, 32% viewed the scheme as efficient while 20% think it needs improvement. Another innovation by ZNFU is it helps farmers to sale their produce through their information system, where farmers with mobile phones can access different prices of their produce for different buyers and select a buy nearest to them offering their best prices, farmers can also negotiate the price of their produce on.

From the research findings the farmers that think the program needs more improvement, recommended that the program should have more extension services such as more field trips, and farm visits. This will enable farmers during field trips to acquire knowledge on how other farmers are using other techniques, and how best they can apply them to improve their production. Farm visits will enable facilitators to understand problems that individual farmers are facing and acquire better knowledge about the farmer.

Figure 4.0 View of the scheme respondents

Source: Own Survey Data (2014)
4.4 Potential Impact on Increasing Incomes of credit uses.

The figure below shows the comparison of the LIMA packages that the farmers started with and what they are getting now. Approximately 91% of the respondents obtained one ha package, 4% obtained 2ha package, 3% obtained 3ha package and 1% obtained above 3ha package. All members obtained training before obtaining the LIMA package, this was to improve the farming practices of the farmers, even after obtaining the package extension officers still visited the farmers to check on the progress of the farmers. This boosted confidence of the farmers that they were part of the organization and that they really wanted them to increase their production. Operational procedures were obtained for all members before obtaining the package, these include becoming a member of ZNFU, and paper processing with the bank. The current LIMA package obtained by farmers has improved, we can see that 20% of the farmers are now getting 1ha package as compared to the 91% farmers were getting in the first year of the LIMA, 36% obtained 2ha package as compared to the 4% that were obtaining this package size, 24% obtained 3ha packages compared to 3% in the first year and 20% obtained above 3 as compared to the 1% obtaining this package.

Figure 5.0 Comparison of the First Lima Package with the Current Package

![Bar chart showing comparison of first and current package sizes]

Source: Own Survey Data (2014)
Figure 6.0: Comparison of the first Lima Package with the current Package

From the graph we can see a downward slope represented by the blue line, it indicates the first LIMA package obtained and a more favourable slope in the red line representing the current LIMA package.

Figure 7.0 Comparison of Income

Source: Own Survey Data (2014)
The figure shows how farmers would rate their income from farming activities before and after obtaining the credit scheme. We notice that before the scheme 68% of the farmers obtained below K2000, 20% obtained K2000-K4000 and the minority (12%) obtained above K4000 from their farming activities. A follow up question was asked on how their would rate their income now, 16% of them still obtained below K2000, 36% obtained K2000-K4000 and 48% obtained K4000. From the above demonstration we notice that there's a percentage difference in the income obtained by the farmers who obtained:

- K2000, there's a percentage difference of 52%
- K2000-K4000, there's a percentage difference of 16%
- Above k4000, there's a percentage difference of 36%

Below is a box showing farmers that have benefited from the LIMA Credit scheme, it also contains views from the farmers.

**Box 1 Changes in farmers LIMA package**

Mr. Lafranco Lungu from Nybombwe IC aged 56 is married with 5 children, and has been on the LIMA Scheme for three years. He started with one pack of maize and is currently obtaining 5 packages of the LIMA, he uses it to grow soya beans and maize. Before the LIMA program he was a soldier and he is now a full time farmer. He views the LIMA scheme very helpful which has improved his livelihood.

Mr Ackim Choonga from Namonogo IC is aged 61 and married with 9 children. He has been with ZNFU for Five years. He started with 1 LIMA package of maize and is currently doing 5 hectares. Other activities he does is gardening and produces sorghum. He is very happy with the improvement that the scheme has brought in this life and recommends that the LIMA includes other farming inputs such as tractors and herbicides.

Source: Own Survey data (2014)

Assuming other factors remain constant, we see a correlation between increase in LIMA package and increase in income. We can therefore attribute the change in income of the farmer to the LIMA scheme. Literature shows a positive correlation between increase in income and improvement in livelihood, therefore the scheme has potential to increase livelihood through increased income.
4.5.0 Sustainability of the Scheme

The figures below show evidence that indeed the scheme has demand among its members as can be seen from the first year package and current year package. 89% of the farmers obtained 1 package across the 4 DFEs, Twikatane DFE had farmers that obtained more than 1 package this can be attributed to the education level of the farmers in this area, as this area had the highest percent of the farmers that had attend secondary education. Over the past four years of the scheme existence, there has been a growing number of farmers increasing their Lima package from average one to average three.

If the demand for LIMA credit is to remain high and to grow the scheme must be beneficial to the farmers. At present, the success of the LIMA Credit Scheme is hinged on the heavily subsidized FRA market. The ready market and good prices has catalyzed maize growing which combined with favourable weather conditions has resulted in three bumper harvests consecutively. For as long as FRA is able to buy up all the maize produced by farmers, the LIMA option will remain attractive to farmers. To sustain and grow the demand for the scheme various options and actions need to be considered such as; addressing all the farm needs which includes herbicides, and sprayers. They also need farm implements as the size of their fields grow and may also need loans to facilitate storage and marketing.

Figure 8.0 First Package obtained

![Bar Chart]

Source: Own Survey Data (2014)
According to the findings 3 out of 4 IC farmers only obtained 1 LIMA package with an exception of Twikatane where some farmers obtained 2 and 3 packages.

Figure 8.0 Current Package obtained

Source: Own Survey Data (2014)
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the conclusion and recommendations about the research findings. The policy makers may find the recommendations presents in this chapter useful in involving the performance of the scheme.

5.1 Conclusions

From the findings of this research the Lima Scheme is playing an important role in bridging the agricultural credit gap among its members.

- Almost half (48%) of the farmers viewed the scheme as beneficial, 32% viewed it as efficient while 20% think it needs improvement.
- The farmers also viewed the scheme in terms of service delivery as efficient as farmers were trained on farming methods and book keeping before obtaining the loan.
- From the views of the farmers the program can improve by facilitating more extension services such as more field trips, and farm visits. This will enable farmers during field trips to acquire knowledge on how other farmers are using other techniques, and how best they can apply them to improve their production.
- The program has potential impact on increasing income, approximately 16% of the farmers are still obtaining K2000 while we saw an increase of 84% obtaining above K2000 from farming activities.

The benefits accruing to the members are therefore undeniable from the above findings. The scheme is achieving its objectives which is to provide small-scale farmers with agricultural credit services based on GSL approach linked to the commercial sectors. The goal of this research has been met as an assessment of the LIMA Credit Scheme applied by ZNFU to facilitate access to credit to small-holders farmers was undertaken.
5.2 Recommendations

From the research findings, recommendations are that;

i. This program should be diversified to include other segments of farmers need such as herbicides, and farming implements and even oxen.

ii. Farmers complained about the transparency of the program, and therefore recommend that they should be given more details as they only know that they receive packages from ZNFU.

iii. Despite the new innovation of finding a buyer other than FRA using mobile phones, this puts most farmers to a disadvantage, not all farmers are privileged with mobile phones and know how to obtain information on prices available, a broader method to obtain market prices should be used.

iv. ZNFU should enhance collaboration with government extension services (the DACOs and camp/managers) and ensure that farmers benefit from the research and extension services provided by government, and there is effective disseminate of information to the smallholder farmers.

v. From the success of the model being used more schemes should be devised in this way for end beneficiaries to obtain credit.
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APPENDIX

Household Survey Questionnaire
Questionnaire code
Date

DEMOGRAPHICS

Q1. What is the name of the information Centre?

Q2. Number of farmers in the IC?

Q3. Sex of the farmer
1. Male
2. Female

Q3. Age of the farmers
1. 20-24 years
2. 25-29 years
3. 30-34 years
4. 35-39 years
5. 40-44 years
6. 45-49 years
7. 50-54 years
8. 55-above years

Q4. What is your marital status
1. Single
2. Married
3. Divorced
4. Widowed
5. Separated

Q5. What is the number of people in the household?

Q6. What is the highest education level?
1. primary
2. secondary
3. tertiary
4. none

Q7. How many years have you been a member of ZNFU?

Q8. When did you start participating in the lima?
1. 2013
2. 2012
3. 2011
4. before 2011

Q9. What was your first lima starting package?
1. 1
2. 2
3. 3
4. above 3

Q10. Was there any form of training before obtaining the lima package?
1. Yes
2. No

Q11. Was there follow up visit from ZNFU officer's before repayment of the loan?
1. Yes
2. No

Q12. Where there any operational procedures before obtaining the package?
1. Yes
2. No

Q13. What is your lima package now?
1. 1
2. 2
3. 3
4. above 3
Q14. What is the view on the Lima programme. Specify

Q15. Do you have other credit sources?
1. yes
2. no

Q16. if yes, specify