

**SOCIO-ECONOMIC IMPACT OF AGRICULTURAL AND AGRO-PROCESSING CO -  
OPERATIVES ON FOOD SECURITY AND INCOMES IN LIMPOPO PROVINCE,  
SOUTH AFRICA**

**BY**

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**SEPTEMBER 2016**

## **DECLARATION**

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.....

Maanda Dagada

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## Abbreviations and acronyms

<b>ABSA</b>	-	Amalgamated Bank of South Africa
<b>DBSA</b>	-	Development Bank of South Africa
<b>CBO</b>	-	Community Based Organisation
<b>Coop</b>	-	Co-operative
<b>CRP</b>	-	Co-operative Resuscitation Programme
<b>DAFF</b>	-	Department of Agriculture, Forestry and Fisheries
<b>DEDET</b>	-	Department of Economic Development, Environment and Tourism
<b>DESA</b>	-	United Nations Department of Economic and Social Affairs
<b>DTI</b>	-	Department of Trade and Industry
<b>FAO</b>	-	Food and Agricultural Organisation
<b>FGD</b>	-	Focused Group Discussion
<b>GGP</b>	-	Geographical Gross Product
<b>ICA</b>	-	International Co-operative Alliance
<b>IDP</b>	-	Integrated Development Plan
<b>IOF</b>	-	Investor-oriented firm
<b>LADEP</b>	-	Limpopo Agricultural Development Programme
<b>LDA</b>	-	Limpopo Department of Agriculture
<b>LED</b>	-	Local Economic Development
<b>LIBSA</b>	-	Limpopo Business Support Agency
<b>LimDev</b>	-	Limpopo Development Agency
<b>NCASA</b>	-	National Co-operatives Association of South Africa
<b>NGC</b>	-	New Generation Co-operative
<b>NGO</b>	-	Non Governmental Organisation
<b>NPO</b>	-	Non-profit Organisation
<b>NTK</b>	-	Noord Transvaal Koperasie
<b>PDA</b>	-	Provincial Departments of Agriculture
<b>RAAKS</b>	-	Rapid Acquired Agricultural Knowledge Systems

<b>SEDA</b>	-	Small Enterprise Development Agency
<b>SMME</b>	-	Small, Medium and Micro Enterprise
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>UN</b>	-	United Nations
<b>USA</b>	-	United States of America

**Key Words:**

- Cooperatives
- Food Security
- Socio-economic
- Agro-processing
- Agriculture
- Market
- Operator
- Produce
- Profit
- Income
- Co-operative development models

## **Table of Contents**

DECLARATION .....	i
ACNOWLEDGEMENTS .....	ii
ABBREVIATIONS AND ACRONYMS .....	iv
KEY WORDS .....	vi
TABLE OF CONTENTS .....	vii
LIST OF TABLES .....	xiv
LIST OF FIGURES .....	xvi

## **CHAPTER 1**

### **INTRODUCTION**

1.1 Introduction .....	1
1.2 Background .....	1
1.3 Co-Operative Concept .....	2
1.4 The Research Problem .....	6
1.5 Objectives .....	6
1.5.1 Primary Objective .....	6
1.5.2 Secondary Objective .....	7
1.5.3 Research Questions .....	7
1.6 Hypothesis .....	7
1.7 Literature Review .....	8
1.8 Research Methodology .....	8
1.8.1 Research Design .....	8
1.8.2 Instrumentation .....	8
1.8.3 Data Collection .....	9
1.8.4 Outputs from the Study .....	9
1.8.5 Types of Data Required .....	10
1.8.5.1 Secondary and Time Series Data .....	10
1.8.5.2 Primary Data .....	10



1.9	Area of Study .....	11
1.10	Limitations .....	12
1.11	Definition of Concepts .....	12
1.12	Significance of The Study .....	13

## **CHAPTER 2**

### **LITERATURE REVIEW**

2.1	Introduction.....	14
2.2	The Co-operative Concept.....	15
2.3	Socio-Economic Diversity.....	16
2.4	Co-operatives and Development.....	17
2.5	Formation of Co-Operatives.....	18
2.6	Co-operative Model.....	19
2.7	Co-operative Principles.....	20
2.8	Principles of New Generation Co-Operatives.....	23
2.8.1	Delivery Rights.....	23
2.8.2	Closed Membership.....	25
2.8.3	Higher Level of Initial Equity Investment.....	25
2.8.4	Transferability and the opportunity for Appreciation or Depreciation in the Value of Delivery Rights.....	26
2.9	Marketing Co-operatives.....	28
2.10	Agricultural Co-operatives.....	30
2.11	Processing Co-operatives.....	30
2.12	Financial Access.....	31
2.13	Management And Administration.....	31
2.13.1	Planning.....	31
2.13.2	Organising.....	31
2.13.3	Directing.....	31
2.13.4	Staffing.....	32
2.13.5	Controlling.....	32

2.14	Co-operative and Non-Co-operative Agribusiness Sector.....	32
2.15	Effect of Agricultural Co-operatives On Net Income.....	34
2.16	Conclusion.....	35

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

3.1	INTRODUCTION.....	36
3.2	RESEARCH METHODOLOGY .....	36
3.2.1	Quantitative Research Approach .....	36
3.2.2	Qualitative Research Approach .....	36
3.2.3	Multiple Method Research .....	38
3.2.4	Research Methodology Adopted for this Study.....	39
3.3	RESEARCH DESIGN .....	40
3.3.1	Target Population .....	40
3.3.2	Sampling Strategy .....	40
3.3.3	Data collection Instruments .....	41
3.3.4	Data Analysis .....	41
3.4	Triangulation Approach .....	41
3.4.1	Data Triangulation .....	42
3.4.2	Investigator Triangulation .....	42
3.4.3	Time Triangulation .....	42
3.4.4	Space Triangulation .....	42
3.4.5	Theoretical Triangulation .....	43
3.4.6	Methodological Triangulation .....	43
3.4.7	Analysis Triangulation .....	43
3.5	Pilot Study .....	43
3.6	Case Study .....	44
3.7	Validity and Reliability .....	44
3.8	Ethical Considerations .....	45
3.8.1	Ensuring participants have given informed consent .....	45

3.8.2	Ensuring no harm comes to participants .....	45
3.8.3	Ensuring Confidentiality and anonymity .....	45
3.8.4	Ensuring that permission is obtained .....	45
3.9	Conclusion .....	45

## **CHAPTER 4**

### **THE ESTABLISHMENT OF THE CO-OPERATIVE MOVEMENT IN SOUTH AFRICA**

#### **ABSTRACT**

4.1	Introduction.....	46
4.2	Importance of Co-operatives.....	47
4.2.1	Economic Empowerment.....	48
4.2.2	Nation Building.....	50
4.2.3	Social Harmony.....	50
4.2.4	Promotion of Democracy.....	51
4.2.5	Food Security.....	51
4.3	Historical Background of Co-operatives in South Africa & Limpopo Province .....	52
4.3.1	Global Origin .....	52
4.3.2	Local Origin .....	52
4.3.2.1	Agricultural Co-operatives (1892 To 1990) .....	53
4.3.2.2	Financial Co-operatives (1981to 1994) .....	54
4.3.2.3	Consumer Co-operatives (1948 To 1980) .....	54
4.3.2.4	Worker Co-operatives (1984 To 1990) .....	55
4.3.2.5	Social Service Co-operatives .....	55
4.4	The Development of Co-operatives in South Africa’s Provinces Including Limpopo .....	55
4.5	Factors That Contribute To Development of Co-operatives	56
4.6	Indigenous Co-operatives.....	58
4,7	Modern Co-operatives Development In South Africa .....	58
4.8	Conclusion.....	60

## **CHAPTER 5**

### **SITUATIONAL ANALYSIS OF CO-OPERATIVE DEVELOPMENT IN LIMPOPO PROVINCE OF SOUTH AFRICA**

#### **ABSTRACT**

5.1	Introduction.....	63
5.2	Study Area .....	64
5.3	Research Methodology .....	65
5.3.1	Research Design .....	64
5.3.2	Sampling Technique .....	65
5.4	Results and Discussion .....	66
5.4.1	Profile of Co-operatives in Limpopo Province .....	66
5.4.2	Problems and Constraints.....	75
5.4.3	Management and Business Skills .....	76
5.4.4	Cash-Flow .....	76
5.4.5	Lack of Adequate Inputs and Access to Market .....	77
5.4	Conclusion.....	77

## **CHAPTER 6**

### **OPERATOR CHARACTERIZATION AND ACQUISITION OF SOLD ITEMS FOR TSHAKHUMA AND KHUMBE MARKETS OF LIMPOPO PROVINCE, SOUTH AFRICA**

#### **ABSTRACT**

6.1	Introduction.....	80
6.2	Research Methodology.....	80
6.2.1	Description of Study Area.....	80
6.2.2	Sampling Frame and Sampling Procedure.....	81

6.2.3	Data Collection and Analysis.....	82
6.3	Results.....	83
6.3.1	Characterization of Market Operators.....	83
6.3.1.1	Personal Characteristics.....	83
6.3.1.2	Socio-Economic Characteristics.....	92
6.3.2	Types and Acquisition of Produce Sold in the Study Markets.....	93
6.3.2.1	Niche Procedure.....	93
6.3.2.2	Acquisition of Produce Sold in the Markets.....	94
6.4	Conclusion.....	94

## **CHAPTER 7**

### **FACTORS INFLUENCING FRUIT PROFITABILITY AT TSHAKHUMA AND KHUMBE MARKETS LIMPOPO PROVINCE, SOUTH AFRICA**

#### **ABSTRACT**

7.1	Introduction.....	97
7.2	Research Methodology .....	98
7.2.1	Description of Study Area .....	98
7.2.2	Sampling Frame and Sampling Procedure .....	99
7.2.3	Data Collection and Analysis .....	101
7.3	Results .....	102
7.3.1	Types and Sources of Produce Sold in the Study Markets .....	102
7.3.1.1	Types of Produce Sold in the Study Markets .....	102
7.3.1.2	Sources of Fruits Sold in the Markets .....	102
7.3.2	Factors Influencing Profitability of Fruits Sold at the Markets .....	104
7.3.2.1	Socio-Economic Characteristics of Market Operators .....	104
7.4	Conclusion .....	113

## **CHAPTER 8**

### **CREATING THE SUSTAINABLE CO-OPERATIVE DEVELOPMENT MODEL FOR SMALLHOLDER FARMERS**

#### **ABSTRACT**

8.1	Introduction.....	116
8.2	Methodology.....	116
8.3	Findings .....	117
8.3.1	Problem Analysis .....	117
8.3.2	Objective Analysis .....	120
8.4	Analysis of Findings .....	123
8.5	Sustainable Co-operative Model .....	125
8.6	The Model .....	125
8.6.1	Farmers Mobilizations.....	126
8.6.2	Development of Sustainable Model .....	127
8.6.3	Development of Marketing Strategy.....	129
8.6.4	Marketing Model .....	132
8.6.4.1	Co-operatives .....	134
8.6.5	Business Sustainability .....	135
8.7	Conclusion.....	136

## **CHAPTER 9**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **ABSTRACT**

9.1	Introduction.....	138
9.2	Findings from the Study .....	139
9.2.1	The Literature Review .....	139
9.2.2	The Establishment of the Co-operative Movement in South Africa .....	139
9.2.3	Situational Analysis of Co-operative Development in Limpopo Province of South	

Africa .....	140
9.2.4 Operator Characterization and Acquisition of Sold Items for Tshakhuma and Khumbe Markets of Limpopo Province, South Africa .....	141
9.2.5 Factors Influencing Fruit Profitability at Tshakhuma and Khumbe Markets, Limpopo Province, South Africa .....	141
9.2.6 Creating the Sustainable Co-operative Development Model for Smallholder Farmers .....	142
9.3 Recommendations.....	142
REFERENCES .....	146
ANNEXURE 1: CO-OPERATIVES QUESTIONNAIRE.....	171
ENGLISH VERSION: ABSTRACT.....	190
AFRIKAANS WEERGAWE: ABSTRACT.....	188

**LIST OF TABLES**

Table 2.1: Comparison of co-operatives and companies by functions.....	27
Table 2.2: Significant of the differences in co-operative and non-co-operative means.....	33
Table 2.3: Groundnut net annual income for agricultural co-operative members and non-members.....	35
Table 5.1 Profile of Co-operatives in Limpopo Province .....	66
Table 5.2 Operational Status .....	66
Table 5.3 Membership Number .....	67
Table 5.4 Registration process of co-operatives .....	68
Table 5.5 Registration process of co-operatives.....	68
Table 5.6 Business Plan .....	69
Table 5.7 Co-operatives Capacity .....	69
Table 5.8 Affiliation to other Organizations .....	70
Table 5.9 Role players .....	71
Table 5.10 Assets Value .....	73
Table 5.11 Turnover .....	74
Table 5.12 Problems and constrains .....	75

Table 6,1 Distribution of respondents in the Khumbe and Tshakhuma markets according to sex of heads of household, 2003 (N=91). .....	84
Table 6.2 Distribution of respondents in the Khumbe and Tshakhuma markets according to age, 2003 (N=91).....	85
Table 6.3 Distribution of market operators in the Khumbe and Tshakhuma markets according to level of education, 2003 (N=91). .....	87
Table 7.1: Sources of major fruits sold at Tshakhuma and Khumbe Markets and their level of importance based on rating by market operators .....	103
Table 7.2: Distribution of respondents in the Khumbe and Tshakhuma Markets according to sex of heads of households .....	105
Table 7.3: Distribution of respondents in the Khumbe and Tshakhuma Markets according to age .....	106
Table 7.4: Distribution of market operators in the Khumbe and Tshakhuma Markets according to level of Education .....	108
Table 7.5: Regression coefficients of business linked determinants of fruit profits in the Tshakhuma and Khumbe Markets .....	111
Table 7.6: Correlations among business linked variables determining fruit profits at the Tshakhuma and Khumbe Markets .....	112



## LIST OF FIGURES

Figure 5.1 Limpopo Province map which shows it's five District Municipalities.....	64
Figure 6.1 Map of the study area showing the location of the Tshakhuma Market in the Makhado Municipality and the Khumbe Market in the Thulamela Municipality in Vhembe District .....	81
Figure 6.2 Frequency distribution of market operators at Tshakhuma and Khumbe markets according to their marital status, 2003 (N=91) .....	90
Figure 7.1 Map of the study area showing the location of the Tshakhuma Market in the Makhado Municipality and the Khumbe Market in the Thulamela Municipality in the Vhembe District (LDA, 2014) .....	99
Figure 8.1: Problem Tree. ....	118
Figure 8.2: Objective Tree. ....	122
Figure 8.3: A map showing proposed projects sites .....	127
Figure 8.4: Enterprise Sustainability Model (Source: LADEP, Limpopo Provincial Department of Agriculture 2004) .....	128
Figure 8.5: Smallholders Marketing Model (Source: LADEP, Limpopo Provincial Department of Agriculture 2004) .....	131

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

This chapter gives the foundation of the study and presents the background, research problem, objectives, area of study and the format that the thesis followed. The study was necessitated by the rate in which agricultural cooperatives were established and collapses at the same rate. This was seen as having negative impact on food security of people in Limpopo Province whose livelihood is dependent on farming. The most user-friendly form of business and association has been Agricultural Cooperatives. Limpopo Province where the study was based constitutes 90 percent “non-urban” and, the population is heavily dependent on small-scale agriculture for the essential food supply. The province is one of the poorest of the nine provinces and, it contains some of the highest unemployment at 38.4 percent by end of second quarter 2014 (StatsSA, 2014) and the lowest net incomes estimated at 3.8 percent (Aardt and Coetzee, 2010). These problems are more severe in the rural areas. The main economic industries are agriculture and mining. Mining contributes more than 27% of the local economy (Young, 2013). Although the official unemployment rate for Limpopo Province is 35,6%, the prospects for jobs are unfavorable (StatsSA, 2006). The population number is around 5 million people (Stats SA, 2007) with a density of 42 people per square kilometer.

### **1.2 Background**

Notwithstanding the assured importance of agriculture to rural populations in Limpopo Province, food crop production is poor and livestock numbers are low. Land is a resource which is very important for the poor people in the rural communities. Valid land tenure helps to ensure both food security and constant supply of agricultural produce to the local market (Meinzen-Dick, Kameri-Mbote, and Markelova, 2009). Communal system of land tenure gives poor incentive to improve crop production (Barrows and Roth, 1990). In addition, cash for inputs is often not obtainable and markets for cash crops (mainly fruit and vegetables) are underdeveloped and sometimes under pressure because of local surpluses and competition from the commercial farming sector. Thus, small scale agriculture faces serious problems and

mostly fails to reach its potential for providing a regular and ample supply of food and reliable source of cash to rural families (Toenniessen, Adesina, and DeVries, 2008).

The Limpopo Province is poorly documented with little information available beyond basic census data. There is little knowledge about socio-economic impact of agricultural and agro-processing cooperatives in the Limpopo Province. According to Provincial Decision-Making Enabling Project (PROVIDE) Limpopo Province agricultural sector is a vibrant and income generating sector. Roughly 2.7% of the Limpopo Province value added gross domestic product comes through agricultural sector and 1.1% of the population in the same province is working within the sector. Macro-economic research is therefore needed in order to explore potential challenges and prospects (2009).

There have been numerous attempts to establish cooperatives (mainly agriculture) in rural areas of South Africa, but they were formed as a direct result of projects and interventions supported by the old system. Because these cooperatives were formed around the old exclusive definition of a farmer, they were neither representative nor legitimate. The viability of such organizations has not been demonstrated. It is clear that many of these organizations collapsed when external assistance was withdrawn. There is doubt as to the appropriateness of models in rural societies that are characterized by lack of formal education, poor business and financial skills, and greater disparity in income and production level.

In Limpopo Province for example, attempts to organize farms into cooperative production units have not been entirely successful. As much as it is true that cooperatives have the ability to provide inputs and market linkages, the successes have been relatively few.

### **1.3 Cooperative concept**

Cooperatives are primarily businesses, but they ensure economic fairness through availing equal access to markets and services among its membership. The fact that the owners of these organisations are the main consumers, their decisions balances between return on investment and community interests

The following are examples of the definition of cooperative: **David Barton (1989:01)**: “A cooperative is a user-owned and user-controlled business that distributes benefits on the basis of use. More specifically, it is distinguished from other businesses by three concepts or principles: First, the user-owner principle. Persons who own and finance the cooperative are those that use it. Second, the user-control principle. Control of the cooperative is by those who use the cooperative. Third, the user-benefits principle. Benefits of the cooperative are distributed to its users on the basis of their use”.

**Cooperative Act (91/1981) – South Africa**: A cooperative refers to an autonomous association of individuals, who voluntarily come together to meet their similar economic and social needs through a business which is owned and controlled jointly and democratically.

**International Cooperative Alliance (ICA)**: A cooperative is an autonomous association of persons united voluntarily to meet their common economic social and cultural needs and aspirations through a joint owned and democratically controlled enterprise.

The above definitions agree that cooperatives are businesses that are voluntarily and jointly owned and democratically controlled. They also agree that cooperatives benefit the users.

Barton (1989) outlines three principles in cooperatives that are related to business decision-making. First, people who use cooperatives are those that owns and fund them. Second, only owners maintain control because they are the ones that use those cooperatives. Third, those user-owners receive distributed benefits from the cooperative. These are the three principles that make cooperatives different from all other types of business.

According to Schwettmann (1995:04) “a cooperative society is an association of person who have voluntarily joined together to achieve a common end through the formation of a democratically controlled organisation, making equitable contributions to the capital required and accepting a fair share of the risks and benefits of the undertaking, in which the members actively participate”.

The definition by Schwettmann went to an extent of covering less formal associations, which are based on the same democratic principles and pursue common economic goal. On the

other hand, this definition shows the differences between cooperatives and other businesses, including social non-governmental organization (NGOs.)

In most industrialized countries (Hoyt 1989:84) cooperatives have taken their place as a significant or, in some cases, major component of the market economy as they are important in all phases of the food production cycle in centrally planned economies. They are more dominant in agricultural production and retailing than their market economy peers. For example, the cooperative banks of Europe and Japan are among the leading financial institutions globally. Consumer cooperatives dominate the food retailing in many European countries. Because of their important position in agriculture, cooperatives can play a significant role in farming policy. Cooperatives may negotiate with the government in establishing what the general farm policy should be and have responsibility for implementing aspects of it.

Successful cooperatives provide many positive benefits for the country as well as the individual members. They mobilize resources internally and provide services not otherwise available. Most important cooperatives potentially build human resources. Although there are other motivations for cooperative activity, it is accepted that the primary motivation for people to participate in a cooperative is to improve their well-being (usually in-come). Rational persons would not voluntarily engage in activities that would be expected to leave them less well off. According to Hoyt (1989:81) cooperation is a self-help method to attack the extreme condition of poverty.

The reason for co-operatives popularity among farmers, for example, is simple: through cooperatives farmers are able to combine their buying power and conduct business activities they could not independently perform as efficiently under normal circumstances. There is always common economic objective that encourages farmers to form cooperatives, thus enabling them to benefit from acquiring inputs, services and market linkages.

Major economic and social changes are occurring in the rural communities of the Limpopo Province, and these changes need to be managed to ensure that the well-being of the co-operatives is steadily improved. South African Government and donors facilitate sustainable rural development even in the sector of co-operative movement. However, unless there is adequate information on the existing situation (i.e. resources, performance and trends), it is

difficult to prioritise interventions and programmes. In much of the Limpopo Province, the base situation is largely unknown except for some broad macro statistics and the census data. Micro-level information for co-operatives is limited, so identifying constraints and opportunities is difficult. The province is experiencing an increased in economic growth and the population use of electricity light increases from 62.9 in 2001 to 80.0 in 2006 (StatsSA 2007).

This study therefore targets to address the paucity of data and information by researching selected, representative co-operatives, with a focus on the socio-economic impact of co-operatives on the rural communities of Limpopo Province. The agricultural sector dominates the economy of Limpopo Province. According to Thamaga-Chitja, et al (2011), agricultural cooperatives are built on the principle of cooperation the humanity of the community which are broadly supported as a optimistic strength for shared effort in smallholder agriculture development. Nonetheless, because many studies proved that co-operatives were not doing well in South Africa, an investigation needed to be conducted. As subsistence farming enterprises are pre-eminent, the development of smallholder agricultural production is key in reducing poverty by securing food security and increasing peoples' income. The sector is still characterised by a heavy reliance on elementary technology and a low level of mechanisation of agricultural operations. The generation and dissemination of agricultural technologies that increase productivity and improve household incomes through product value adding and enhancing agricultural productivity, are therefore crucial in regional agricultural development (URT, 2001).

The private sector is increasingly participating in technology dissemination to farmers. Farmers now have expanded opportunities to acquire technologies from sources other than the public sector (Farrington, 1994). There is a multiplicity of agricultural service providers: government, private sector, co-operative enterprises and smallholder farmers. The Institute for Dairy Technology (IDT) for example, provides training of workers and emerging dairy farmers, holistic dairy information services, financial analysis and evaluation, which includes new projects, strategic planning and the compilation of business plans (Du Preeze, 2011). However, the extent to which this mix of co-operatives and smallholder farmers offers greater opportunities for farmers' access to and uptake of agricultural farm input, farm tillage, marketing and access to finance, is yet to be proved.

#### **1.4 The research problem**

Food security is central to the policy of the new democratic government in South Africa (Perret, 2007:7). An estimated 70 percent of rural populations are classed as poor with most of them still locked into poverty and subsistence farming. However, there is a growing realization and acceptance that agricultural and processing co-operatives can be both productive and efficient at alleviating poverty through a poverty alleviation strategy. Most smallholder farmers have established co-operatives to help themselves. Co-operatives' policies and strategies are currently being put in place to redress past neglect of smallholder farmers in Limpopo Province. The Limpopo Provincial government is revitalization some of these co-operatives. The former Premier, Ngoako Ramathlodi, launched a co-operative model in which a few selected co-operatives were funded as a pilot study (Limpopo Provincial Government, 2004). However, these plans could only be effective if they are backed with adequate and timely information on the socio-economic impact of co-operatives on food security and incomes.

The available natural resources and economic profile of the co-operatives sector is not known. The potential of these co-operatives to use available resources is also unknown. There is little or no documentation on the socio-economic impact of co-operatives in Limpopo Province. This study therefore aims to provide empirical evidence on socio economic impact of co-operatives in Limpopo Province, which will enhance policy making and planning as well as suggesting appropriate interventions in the sector.

The rural community is dependent on rural institutions for a livelihood. Agricultural and processing co-operatives are central to the supply of farm inputs, farm tillage, marketing, product value adding and provision of much needed finance. However, their sustainability beyond the period they have government funding is questionable. This thesis will make an evaluation of the socio-economic impact of co-operatives on rural food security and incomes.

## **1.5 Objectives**

### **1.5.1 Primary objective**

The primary objective of this study was to examine the socio-economic impact of agricultural and processing co-operatives in the Limpopo Province.

### **1.5.2 Secondary objectives**

The secondary objectives of this study were to:

- Conduct the situational analysis on cooperatives in Limpopo Province.
- Review the establishment of cooperative in South Africa
- Investigate operator characterization and acquisition of agricultural commodities sold in Informal Cooperative Markets Limpopo Province
- Investigate the factors influencing fruit profitability in Informal Cooperative Markets in Limpopo Province
- Assess elements which are ideal for creating the Sustainable Cooperative Development Model for smallholders.
- Make recommendations to support policy formation and implementation on co-operatives

### **1.5.3 Research Questions**

In order to collect data to achieve the above-mentioned objectives, the study investigated the following research questions:

- What is the current situation of cooperatives in Limpopo Province?
- How cooperatives established and evolve in South Africa?
- What are the operator characterization and acquisition of agricultural commodities sold in Informal Cooperative Markets Limpopo Province?
- What are the factors influencing fruit profitability in Informal Cooperative Markets Limpopo Province?
- What are ideal elements necessary for creating the sustainable cooperative development model for smallholders?
- What recommendations can be made to support policy formation and implementation of co-operatives?



## **1.6 Hypotheses**

The following hypotheses were tested:

- Cooperatives in Limpopo Province are not viable.
- Cooperatives are well established in South Africa
- Operator characterization and acquisition of agricultural commodities sold in Informal
- Cooperative Markets play a role in the sustainability of cooperative
- There are factors influencing fruit profitability in Informal Cooperative Markets
- It is possible to create sustainable cooperative development model for smallholders.

## **1.7 Literature Review**

A thorough review of relevant literature was done and will be presented under chapter 2 of literature review. Literature was obtained from scientific journals, the Internet, Municipalities, Provincial and National Departments of Health, Non-governmental Organizations (NGOs), the registrar of co-operatives and other relevant agencies. This enabled an understanding and appreciation of relevant work done in Limpopo Province and other areas, thereby sharpening the focus and methodology of the research process.

## **1.8 Research Methodology**

A thorough research methodology is presented in chapter 3. Research designs, data collection instrument and types of data collected were discussed.

### **1.8.1 Research design**

An applied descriptive study employing both quantitative and qualitative research techniques was used. It was found necessary not only to quantify the socio-economic variables, but also to find explanations of behaviour pertaining to co-operative operations and related constraints. Qualitative techniques were directed towards understanding the meaning of co-operative operations from the members' point of view. There was also recognition that people do not construct meaning in vacuum, but within the socio-cultural environment in which they operate (FAO, 2001).

### **1.8.2 Instrumentation**

A structured questionnaire was administered. A questionnaire for co-operatives was designed to collect the qualitative data and covered socio-economic variables such as gender, education, occupation, household, farm assets and land ownership. There were also questions on production, processing and marketing. The questionnaire was pre-tested and adjusted before the actual survey was undertaken. A focus group discussion interview guide and several key informants interview schedules were also developed for the qualitative data.

Another process was gathering and reviewing reports and documents available at village, ward, division and district levels, and interviewing key individuals or organisations (e.g. extension staff, professionals, SMMEs, individual farmers and farmers' group leaders). This enabled documentation of the economic indicators, stakeholders, time series data and projection of socio economic characteristics of co-operatives in Limpopo Province. In-depth discussions with extension staff; non-governmental organisations (NGOs), entrepreneurs and farmers' groups such as farmers' co-operatives were also undertaken.

### **1.8.3 Data Collection**

Structured questionnaires were used for qualitative data, with focus group discussions and key informant interviews used to collect it. Another qualitative technique was key informant interviews. These were individual interviews of persons considered to be knowledgeable and resourceful regarding the socio-economic situation of participant co-operatives. They were selected from relevant government departments such as Agriculture, Finance and Economic Development and SMME Agency. In addition data from Statistics South Africa was also used as quantitative data.

Socio-economic issues at community level were studied using both qualitative and quantitative fieldwork approaches. Qualitative interviews with key informants and smallholder farmers and SMME groups were used to examine different experiences of co-operatives and communities in articulating their socio-economic and technology needs, as well as addressing relevant authorities or development agents. Focused Group Discussion (FGD) was used to source group experience from selected cooperatives. Emphasis in the analysis was placed on social differentiation, gender and character of small-scale farmers.

#### **1.8.4 Outputs from the study**

The study will contribute to ongoing policy development on co-operatives in South Africa. The main output will be a report describing the socio-economic impact of co-operatives in Limpopo Province. The report will illustrate available natural resources, activities, and the economic situation and also make recommendations. During the study, a series of socio-economic indicators were developed to compare districts in terms of prosperity and their lack of co-operatives.

#### **1.8.5 Types of data required**

The types of data generated from each village participant were:

- Estimates of population by age and sex
- Infrastructure developmental information (including number and quality of roads, telecommunication services)
- Role and current initiatives of other stakeholders (including business, government departments and faith based organisations)
- Economic status of co-operatives

##### **1.8.5.1 Secondary and time-series data**

Secondary and time-series data were collected from the following sources:

- Statistics south Africa
- Relevant provincial departments such as Agriculture, Finance, Health and Welfare, Forestry and Environment, and Education
- District and municipal departments;
- Other Government agencies and parastatals
- Private sector organisations and organized labour
- Traditional (tribal) authorities
- Faith-based and civic organisations, NGOs and CBOs
- Research organisations
- University and public libraries
- The Internet
- Office of the co-operative registrar

### **1.8.5.2 Primary data**

Primary data were collected using a combination of research methods, namely:

- Structured interviews using structured questionnaires
- Focused Group Discussions (FGD) - with selected co-operatives
- Field observation

## **1.9 Area of study**

Limpopo Province was selected for the study because it is one of the poorest of the nine provinces, with an estimated 77 percent of the entire population living lower than the poverty line. It is also predominantly rural. At R2 297, the per capita GGP (Gross Geographic Product) of Limpopo Province is the lowest in South Africa. This GGP is about one third of the national average (R6 498) and one fifth of South Africa's richest province, Gauteng (R11 647) (Limpopo Government: 2003).

Limpopo Province has the highest unemployment rate in South Africa, estimated at 45.9% in 1999, and being 12% higher than the national average (BDSA, 2000). The labour market comprises about 43% of the population, which is the second lowest in South Africa. This is relatively low when compared to the national participation average of 57.3%. Income distribution is also skewed, with a large proportion of the population living on low levels of income. Some 56% of the population in the province earned less than R6 500 per annum, compared with 30% for South Africa in 1994 (DBSA, 2000).

Limpopo has more people in rural areas compared to the other provinces, with these areas characterized by chronic poverty. Given that few industries exist in the province, it is unlikely that these people would ever be employed. In fact factories have relocated from Limpopo to other provinces, and many people have lost their jobs. This thesis will purposefully focus on the four districts in Limpopo Province: Vhembe, Mopani, Sekhukhune and Waterberg. Capricorn was left out because the cooperatives where government special projects.

Limpopo Province is characterized by two worlds: prosperous white commercial farmers and larger percent of black farmers and laborers. Economically, rural people are very poor, with low salaries, poor drinking, cooking and washing facilities, and generally low standards of living in most households (Vermaak, 2001).

It is important for this study to focus on Limpopo Province because the Development Bank of Southern Africa (DBSA) indicated in 1995 that the province is the poorest in South Africa, with personal per capita income being only 27 percent of the South African average. In Limpopo, however, the agricultural sector's share of employment in 1995 was 30%, making it the largest employer, and giving it a comparative advantage in the province.

‘The economy of Limpopo Province also has the lowest labour absorption capacity nationally, resulting in the highest unemployment rate in South Africa and the largest number of males absent from employment’ (DBSA, 1995: 15). Many people are unemployed and are mainly depend on their agricultural activities for survival. The employed are mainly in low paying jobs.

According to International Labour Organisation (2015), cooperatives have a confirmed record of generating and sustaining employment and they are estimated to provide at least 250 million jobs today. This is an indication that cooperatives have the potential of addressing the challenges of unemployment

### **1.10 Limitations**

The main limitation in this study was lack of financial resources to cover a larger study area.

### **1.11 Definition of concepts**

- (a) Co-operative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations, through a jointly owned and democratically controlled enterprise (International Organisation of Industrial and Service Cooperatives, 2005).
- (b) European Commission defined Small, micro and medium-sized enterprises (SMMEs as independent enterprises that have fewer than 250 employees and an annual turnover not exceeding €40 / £25 million which is equivalent of R444 or a balance-sheet total not exceeding €27 /£17 million which is equivalent to R302 (European Commission, 1996).
- (c) Entrepreneurship according to Bob Reiss (2000) is the acknowledgment and quest of opportunity without regard to the resources controlled, with assurance that there will be success.

- (d) Smallholder farmers in this study are farmers who have relatively small farms of any size less than 50 hectares.
- (e) Commercial farmers are the owners of farms, which are run as a professional business and by the owners or employed managers and are have necessary resources and consume substantial inputs such as fertilizers as well as pesticides.
- (f) Rural areas are all non-urban and former homelands.
- (g) Food security can be defined as the "state in which all persons obtain a nutritionally adequate, culturally acceptable diet at all times through local non-emergency sources."

### **1.12 Significance of the study**

The impact of agricultural and agro-processing cooperatives in the farming and livelihood of the people in Limpopo Province will depend in the functionality and sustainability of cooperatives. It is important that investigation be conducted on the factors which influence profitability and market accessibility by the farmers through their cooperatives. Farming inputs and other production costs are serious challenges that farmers face on daily basis hence majority of farmers opted to establish cooperatives to increase their bargaining power.

Studying the characteristics of the cooperatives operators in striving to find an ideal cooperative model is of high importance. Chapter 2 will present the review of the cooperative development and movement. The structure of the thesis is as follows:

Chapter 1: Introduction

Chapter 2: Literature Review of Cooperative Development

Chapter 3: Research Methodology

Chapter 4: Establishment of Cooperatives in South Africa

Chapter 5: Situational Analysis of Cooperatives in Limpopo Province

Chapter 6: Operator Characterization and acquisition of sold items for Tshakhuma and Khumbe Markets of Limpopo Province, South Africa

Chapter 7: Factors Influencing Fruit Profitability at Tshakhuma and Khumbe Markets, Limpopo Province, South Africa

Chapter 8: Creating the sustainable Cooperative Development Model for Smallholder Farmers

Chapter 9: Conclusion and Recommendations

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of related literature centering on the concept of cooperative operations which include their profitability and market accessibility. The Director of FAO, while addressing the Non-Governmental Organisation (NGO) forum for the food summit in November 1996, emphasized that today “everyone recognizes that governments alone cannot solve the problem of food security and if we are to make any progress we need the energy and expertise that resides in civil society” (FAO, 2004). Irrespective of many failures and shortcomings, co-operatives are important in developing a resilient social wealth in rural communities, which is viewed as a favorable platform for food security, and sustainable development needed to generate income. The United Nations (UN) estimated in 1994 that the livelihood of three billion people—approximately half of the world’s population—was secured through co-operative enterprises (NCASA, 2003). Also, NCASA stated that in some African countries co-operatives have become the second largest employer after the state. In Italy alone, the co-operative movement has employed about five million people (Lotti, Mensing, Valenti & Hamilton, 2006.).

The co-operative enterprise plays a major role in food production. Records show that in 1993 to 1994, 180 million people were members of 330 000 agricultural co-operatives in 47 countries (DESA, 1999). Also, in developing countries co-operative membership is high. For example, in Ivory Coast 827 000 small farmers are members, in Nicaragua 78% of maize and 59% of beans are marketed by co-operatives. Commodities like beans, cotton and soya beans are also co-operatively marketed. New agricultural co-operatives in the Czech Republic, in 1994 operated on 47% of cultivated land and were responsible for 67% of national agricultural production (DESA, 1999).

Co-operatives have the ability to contribute to the poverty reduction and can mobilize extensive participation which in turn can lead to cost reduction, improve earnings and improve the feasibility of business undertakings (Philip, 2003). Governments in different countries are promoting the establishment of co-operatives. In China, for example, in the

early 1980s the government promoted and permitted various forms of co-operatives and as a result there were 1.4 million of them in 1996 (Huang, Bolin, Xu and Chen, 2003).

## **2.2 The co-operative concept**

There is a co-operative dilemma (Briscoe, 1971a,b) caused by lack of agreement on how co-operative should be defined. There is no universally accepted co-operative definition (Frederick, 1997). Various scholars have defined co-operatives in many different ways. Barton (1989) defined co-operative as a user-owned and user-controlled business that distributes benefits according to the use of the cooperative. Barton (1989) also indicated three concepts distinguishing the co-operative from other types of business. These concepts are also referred to as the contemporary co-operative principles.

### **a. The user-owner principle**

A co-operative is owned by those who use it. In simple terms, it is appropriate to say those who use it own it.

### **b. The user-control principle**

People who use it or who are members should control the co-operative.

### **c. The user-benefit principle**

People who use the particular co-operative should share the benefits on the basis of their use. The more one uses the services of the co-operative, the more he or she gets as benefits.

Although principles overlap and are inter-related, they are all equally important. In other words, none of the three principles can be compromised. If a co-operative ignores one of these principles, it does not fully represent a co-operative.

According RSA (1981) co-operatives are autonomous organisations of individuals, which come together voluntarily to meet their common economic and social needs through business which are owned jointly and democratically controlled.



A co-operative can also be defined autonomous organisations of individuals coming together voluntarily to meet their common economic, social and cultural needs and ambitions through enterprises which are jointly owned and controlled democratically (ICA, 2009).

All these authors agree that co-operatives are enterprises that are voluntarily and jointly owned, democratically controlled and that they benefit those who use them.

As established by Barton (1989) there are three principles that manifested themselves in the issues of decision-making in co-operatives. First, users are owners and financiers. Second, owners carry out control. Third, these user-owners receive distributed benefits from the co-operative. Co-operatives are distinguished from all other forms of business because of these three principles.

Schwettmann (1995) defined a co-operative as an association of individuals who come together for a common goal, through organization which is owned and controlled by them, making equitable contributions to the investment required and accepting a equal share of the risks and benefits of the undertaking in which the members actively participate. Schwettmann's (1995) definition also included groups and associations that are informal and unregistered, as long as they are based on the democratic principles and focus on the the similar objective. However, it further distinguished co-operatives from other social organisations such as non-profit organisation (NPOs). The wide scope of co-operative definition is evidence of the socio-economic diversity which manifests in different levels of co-operative development.

### **2.3 Socio-economic Diversity**

Socio-economic factors also include the diversity in which farms are owned and used, as well as the utilization of resource endowments (Mwalukasa et al 2002). These authors further indicated that the logical components incorporate work, family unit estimate, assorted qualities in asset and dependence on off-farm employment. In addition to these elements are age groups and gender orientation in farm activities, reliance of farming than other sources and discrepancies between farmers in access to land.

In most industrialized countries co-operatives have taken their place as a significant or, in some cases, major component of the market economy, as they are important in all phases of the food production cycle in centrally planned economies (Hoyt, 1989). Hoyt also stated that the co-operative banks of Europe and Japan are amongst the largest financial institutions in the world. Consumer co-operatives are dominant in food retailing in many European countries (Euro Coop, 2010).

Although there are other motivations for co-operative activity, it is accepted that the primary motivation for people to participate in a co-operative, is to improve their well-being (usually income). Rational persons would not voluntarily engage in activities that would be expected to leave them less well off. According to Hoyt (1989) cooperation is a self-help method to attack the extreme conditions of poverty. For this reason, co-operatives play a major role in development initiatives in different countries. Co-operatives and development are usually considered in the same agenda, especially in developing countries.

#### **2.4 Co-operatives and Development**

According to Technoserve (1991) co-operatives are institutions that are run by members and a board of directors, who are elected to set policies. In Australia co-operatives are playing a vital role in the agricultural sector (O'Connor and Thompson, 2001). Co-operatives are playing a substantial role in processing and marketing operations in the meat, sugar, cotton, rice, egg, dairy, tobacco and horticulture industries.

Other co-operatives are focusing on farm inputs supply. Other authors categorize producer co-operatives with non-profit organizations (NPO). An example, as stated by Zusman (1988) - are Moshavim and Kibbutzim in Israel, as well as specialised agricultural co-operatives in Egypt, which were also referred to by Rochim and Grossman (1987).

Clodius and Mueller (1961) suggested that co-operatives are business enterprises and should be taken as such. Bateman (1976) and Murray (1983) clearly indicated that co-operatives have seldom been explored empirically in a wider context. Much research has focused on matters central to co-operatives, such as member and non-member attitudes (Gasson, 1976; Le Vay, 1975). Oustapassidis (2000) indicated that co-operatives operate on both requisite and marketing sides, in a much wider context, and their activities should be viewed broadly in relation to investor-owned firms (IOFs).

Stakeholders, according to Young (1996), are not only inside the organization but it include other people outside the cooperative that are expecting work from the co-operative, such as suppliers, contractors, consultants and possibly government departments or agencies. Due to their significant role managers are key stakeholders as well as customers, sponsors and finance department.

Co-operatives currently tend to turn into businesses that are just owned by farmers (Torgerson, 1983). Torgerson further indicated that in recent years, some co-operatives have taken on business characteristics, which are not features of co-operatives.

Zeuli, Freshwater, Markley and Barkley (undated) maintained that as due to the fact that direct assistance for rural development and agriculture had dropped the potential for co-operatives to play a more important and straight role in rural economic development rises.

As quoted in Zeuli et. al. (undated), Stafford (1990) showed that co-operatives are oriented to solving local problems by organizing local people into steady organisations, and have an clear mission to keep funding, distribution of benefits, responsibility and accountability in local users' hands. This indicates that it is very important to consider co-operatives in speeding up development, even in rural areas. There is also evidence that many people could not have started their businesses had they not been organized as a co-operative (Bhuyan, Leistritz and Cobia, 1998). Also, Ziewacz (1994) stated that co-operatives “aggregate people, resources, and capital into economic units that overcome the historic barriers to development”. It is not surprising to find that people of different classes and background, all over the globe, are forming co-operatives in a variety of ways to suit their economic or social needs.

## **2.5 Formation of co-operatives**

Many co-operatives came into existence because groups of farmers wanted to increase their bargaining power relative to businesses that supply their inputs or have marketed their produce. One of the main reasons why co-operatives exist is that the groups still enjoy the bargaining power they have accumulated together, and also the privilege conferred by the government (O'Connor and Thompson, 2001). The reason for co-operatives' popularity among farmers, for example, is simple: through co-operatives farmers can pool their financial resources and carry out business activities they could not independently perform as efficiently

(Hoyt, 1989). Farmers have substantial financial motivations to join together and form co-operatives that operate at cost, thus enabling them to enjoy greater profits from obtaining inputs, from getting services, and from marketing outputs.

In his undated chapter Cotterill (undated) indicated that many people started to get interested in co-operatives because of tax policy and distinctive finance methods such as revolving funds and the related issues of equity provision and recovery (Erdman and Larsen, 1965; Dahl and Dobson, 1976; Cobia et.al., 1982; Beierlein and Schrader, 1978; Royer, 1983). Some of these benefits that co-operatives are enjoying are being limited by certain principles in the co-operative movement, especially by the traditional co-operative model. However, such principles are being mitigated by the emergence of New Generation Co-operative model.

## **2.6 Co-operative Model**

The business model of traditional co-operatives has been shown to have shortcomings. These shortcomings relate to the way co-operatives treat their capital resources as common property. These co-operatives obtain their equity capital from their members through retention of profits (Frederick, 1997). Paramount contributions to the wealth base of the business are made by long participating patrons and those who supply more tons of agricultural products. The problem is that such members receive similar voting power.

The way in which these co-operatives are governed and controlled is also problematic. Directors of the board are strictly co-operative members only and in many cases lack the necessary management business skills. In order to mitigate these shortcomings and many others, a modified co-operative model was developed in the USA, California in 1990 (Good, 2003) and other developed countries. This new model is called New Generation Co-operative (NGC). This relatively new type of co-operative uses primarily the value added processing of agricultural commodities (Hackman, 2002). Co-operatives using this model do not treat their capital as common property. Members hold a number of shares proportional to their delivery rights, and contribute their full share of equity capital either when a share issue is made or by buying shares from other members at market rates (O'Connor and Thompson, 2001). Members, who can contribute more, get more reward through dividends or a premium on the price of produce that they have supplied. New Generation Co-operatives keep their business

small and concentrate on minimizing the problems of governance and control. However, they maintain a one-member-one-vote system for electing their directors.

It is clear that the extended sustainability of a co-operative can be determined by the handling of equity capital. In order to retain its members, a co-operative should avoid tension regarding capital contribution, and sustaining competitive business capital resources should be managed efficiently by raising capital and investing it (O'Connor and Thompson, 2001). NGCs' differ from traditional co-operatives mainly in that they have a limited or closed membership, with members having specified delivery rights based upon the number of shares held (Waner, undated). Cropp (1996) stated that incomes are distributed among members on the basis of shares.

Co-operative theory should bring a solution to analysing co-operatives establishment and development (Cotterill, undated). Haley and Schall (1979) indicated that Individually Operated Firms (IOFs) maximize the wealth of current shareholders by maximizing the net present value of the company's stock. As for co-operatives, some theorists believe that a co-operative should not seek to maximize profit - rather they should only act as a set of coalitions that make decisions through a complex political process akin to a legislature (Vataliano, 1985). This state of mind or perception is confirmed through some principles of traditional co-operatives.

## **2.7 Co-operative Principles**

Co-operatives, like any other business, have principles defining their operations. However co-operative principles are entrusted directly in the hands of the user (Frederick, Crooks, Dunn, Kennedy and Wadsworth, 2002). However, there are some management issues that are unique to co-operatives (Frederick et al., 2002). Management need to understand clearly the principles of co-operatives, their structures and operations. The first principles of co-operatives were established in 1844 by the Rochdale Co-operative Society.

These principles were universally accepted and adopted by other co-operatives. The Rochdale co-operative principles, as referred to by Roy (1976), Bakken (1954; 1963) and Robotka (1947) in Cootterill (undated) are:

- a) open membership to all regardless of sex, race, politics or religious creed
- b) one vote per member
- c) any capital required should be provided by members and should earn limited rate of return
- d) any net margins should be returned to members in proportion to patronage
- e) co-operatives should allocate some funds for education in the principles and techniques of cooperation
- f) market prices should always be charged
- g) no credit given or asked for
- h) products should be accurately formulated and labeled
- i) full weight and measure of products should be given when supplied
- j) management should be under the control of elected officers and committees
- k) accounting reports of financial health should be presented frequently to members

These principles have been modified over time and the International Co-operative Alliance (ICA), which is the collective international voice of co-operatives, has developed seven principles of co-operatives from the Rochdale principles. These principles distinguish co-operatives from other corporate businesses. However, co-operatives may be diverging from some of these principles. These principles are still commonly known as the Rochdale principles and distinguish co-operatives from other forms of businesses. The ICA amended the principles in 1995, and they are as follows:

a) Voluntary and open membership

Co-operatives are voluntary organisations which are open to all persons irrespective of gender, and without social, racial, political or religious discrimination.

b) Democratic member control

They are democratic organisations and are controlled by their members, who are expected to participate in policy and decision making. Members all have equal voting rights.

c) Member economic participation

In a co-operative, members contribute equitably to the capital of their co-operative. They take part of their capital as common property of the co-operative. Members may receive limited compensation for capital subscribes as a common membership (Karlyle, 2005:03). Surpluses

can be used for either of the following purposes: developing the co-operative by setting up reserves, part of which at least would be indivisible (O'Connor and Thompson, 2001); benefiting members in proportion to their transactions with the co-operative and supporting other activities approved by the members.

d) Autonomy and independence

Co-operatives are autonomous, support themselves and are controlled by their members. They may enter into agreements with external organisations such as government or donor bodies, but they ensure democratic control by members and maintain their co-operative autonomy in the process.

e) Education, training and information

Co-operatives are expected to provide education and training to their members, representatives, managers and employees, so that they can contribute effectively towards development of their co-operative. They should also inform the public about the nature and benefits of cooperation.

f) Cooperation amongst co-operatives

In order to serve its members effectively and strengthen itself, a co-operative should work through local, national, regional and international structures with similar interests.

g) Concern for community

Co-operatives work for the sustainable development of their communities through policies developed and approved by their members.

O'Connor and Thompson (2001) further attempted to draw a line between co-operative business and non-co-operative business (see Table 1, below).

Schaars (1951) - as referred to in Cotterill - established six other practices for agricultural co-operatives, which are:

- a) Members of the business should provide equity capital in proportion to patronage
- b) All business transactions should be at market prices

- c) The business should strive for operational efficiency
- d) The business should grow through horizontal and vertical integration
- e) The business should control or own its marketing facilities
- f) The business should remain neutral on political, religious and racial issues

## **2.8 Principles of New Generation Co-operatives**

The principles of new generation co-operatives are to some extent similar to those of traditional co-operatives. Modifications were, however, made through the introduction of three principles which distinguish them from traditional co-operatives. These principles are:

- (a) Delivery Rights
- (b) Closed Membership
- (c) Higher Level of Initial Equity Investment
- (d) Transferability and the Opportunity for Appreciation or Depreciation in the Value of Delivery Rights

These principles can be briefly summarized as follows:

### **2.8.1 Delivery Rights**

In NGC, equity shares assign membership to producers and also allocate delivery rights and obligations. NGC membership entitles farmers to a guaranteed market for a portion of their production, a share of the earnings generated by the co-operatives' processing operations, and any change in the value of the tradable shares (Harris, Stefanson and Fulton, 1996)

The farmer can buy delivery rights which obligate him to deliver a certain number of tons every year to the processing co-operative. The same arrangements can be done for a livestock processing co-operative - a farmer can purchase the delivery rights to supply a co-operative with 50 cattle a year. These delivery rights make sure that members provide up-front equity capital to the NGC, which is proportional to their level of use of the co-operative. Each member gets a share of patronage refunds that the co-operative generates. This distribution is only done according to the level in which the farmer or member has used the service of the co-operative.



Essentially, delivery rights shares act as a two-way contract between the producer-members and the co-operative. They obligate producer-members to deliver agreed products each year to the co-operative, and in turn they obligate the co-operative to accept delivery of the product as stated in the agreement and not otherwise (Bielik, 2002).

In this way the producers have a market guarantee and the co-operative is assured of an unbroken and reliable supply of their source of raw input. The producer should all the times fulfill his commitment to the co-operative; otherwise if he fails to produce the agreed amount of commodity, he should purchase the due volume of commodity and supply it to the co-operative. Failing to make an arrangement will lead to the co-operative purchasing on his behalf and then charging the producer.

The total quantity of delivery rights shares that the co-operative makes available to producers depends on the processing capacity of the co-operative's operations. These determine the total quantity of delivery rights that the co-operative will sell to its members.

This can be illustrated by a co-operative which wants to process 900 000 tons of tomatoes annually. That particular co-operative may decide to sell 900 000 shares (delivery rights). Once all 900 000 shares are sold, the co-operative closes its membership.

The price of each delivery right share is typically determined by dividing the total amount of equity capital that the co-operative requires to finance the business, by the processing capacity of the co-operative's facilities per annum (Bielik, 2002). This means that if a co-operative needs R12 000 000 worth of equity capital and 900 000 tons of tomato per year, the formula to calculate the share price will be:

$$\text{Delivery Right (share)} = \frac{\text{Equity Capital}}{\text{Processing capacity}} \quad \text{which is } \frac{12\,000\,000}{900\,000} = 13,33$$

This means that, for this particular co-operative, the one delivery unit will cost R13.33.

The democratic control remains un-tampered with, and because of this, the shares that allocate delivery rights are separate from membership shares. Each individual producer holds only one membership share, even if he holds more than one delivery rights share. Each

member has one voting right irrespective of how many shares he possesses. In other words the one-member-one-vote principle is retained in the NGC.

### **2.8.2 Closed Membership**

In the NGC membership is not continuously open. Once all the delivery rights are sold, the membership is closed. New members can only join when and if a member or members want(s) to sell all or some delivery rights. New members can buy those rights and become members. In other words, membership numbers can change, decreasing or increasing, but the volume of primary input delivered to the co-operative does not change.

### **2.8.3 Higher Level of Initial Equity Investment**

The NGC can rise up to 30–50% of the total investment in it through selling the delivery rights (Harris, Stefanson and Fulton, 1996). This is something the traditional co-operative cannot do through its method of collecting a membership fee. In order for the producer to participate in the processing co-operative, he/she should buy delivery rights. In some cases, the co-operative can set a minimum number of delivery rights needed to become a member. Members with an investment seem to become more dedicated to the activities of the NGC, mainly because of their financial involvement (Bielik, 2002).

Unlike traditional co-operatives, the NGC is therefore in a position, at the end of the financial year, to return a greater portion of its patronage refunds in cash to its members, rather than retain them in the co-operative business as additional equity financing (Bielik, 2002). In other words, since the members invest a significant amount of capital up-front during the selling of delivery rights, most of the net earnings generated are returned to members and not used as equity financing for the business. If the NGC decides to expand its operational capacity, it does not collect more money from its members. Instead, it issues more additional delivery rights shares, which when taken up, provide enough equity capital for its expansion.

### **2.8.4 Transferability and the Opportunity for Appreciation or Depreciation in the Value of Delivery Rights**

Members of the NGC can decide to sell all or some of their shares to other people, either members or non-members. The price of the share to be sold is negotiated between the seller

and the buyer. The seller may decide to sell it at a higher price than he/she paid for it. In this way the shares have appreciated in value and the seller makes some profit. The price of the shares will therefore fluctuate according to the current performance and earning potential of the particular new generation co-operative (Bielik, 2002). If the co-operative is not doing well, the shares can be sold at a lower price. In this way, the seller loses some capital because of the depreciation of the value of his or her shares.

Table 2.1: Comparison of co-operatives and companies by functions.

Source: O'Connor and Thompson (2001)

Function	Co-operative	Company
<b>Control</b>	Voting on a one-vote-per member basis	Voting in proportion to common stock holding
Distribution of earnings	In proportion to patronage earnings, if distributed to members excluded from corporate taxable income	In proportion to stock holdings. Earnings included in corporate taxable income
Retention of earnings	Most earnings allocated to individual patrons. Earnings not allocated to individual patrons are included in corporate taxable income.	Earnings not allocated to individual owners. Dividends paid out to shareholders based on profit or company performance for the year
Equity	No mechanism for individual equity appreciation	Owners share in equity appreciation through market
Board membership	Directors from similar backgrounds and relatively homogenous	Directors from diverse range of backgrounds with special skills
Shareholders	Generally close to the board	Generally remote, although large shareholders are showing increasing willingness to influence boards
Effectiveness of board	Measures of effectiveness and appointment of appropriate individuals seen as more difficult	Generally easier for the board to take action and improve its performance by appointing the appropriate person
Performance measurement	Difficult to measure	Easier to measure

Table 2.1 (above) confirms that there are differences between the functioning of co-operatives and other types of businesses. However, this may differ from one type of a co-operative to another.

There are different types of co-operatives, which can be formed to fulfill the needs of members. Some of those types include: marketing co-operatives, agricultural co-operatives, processing co-operatives, housing co-operatives, consumer co-operatives. Co-operatives differ from investor-oriented firms (IOFs) in that owners, directors, suppliers, customers and investors - identified by Cockerill and Pickering (1984) as distinct groups of stakeholders - are often one and the same individuals in co-operatives (Hind, 1999). It is also believed that depending on the hat they are wearing, they may embrace diverse and conflicting goals from within the objectives.

## **2.9 Marketing co-operatives**

Marketing for small-scale farmers is a challenge mainly because of economics of scale, poor market infrastructure and distances from the potential market institutions. Makhura et al. (2003) identified potential solutions that include overcoming infrastructure backlogs, improving market information, institutional reform (such as promoting a land rental market), supporting small-scale food processing and value adding, and encouraging closer links between small-scale and established commercial farmers. There are two common types of marketing co-operatives: bargaining and processing (Cotterill, undated). Cotterill indicated that bargaining co-operatives negotiate with processors to establish contract terms for agricultural produce on behalf of their members. Processing co-operatives on the other hand buy raw products from their members, process them and then sell the processed products to retailers and wholesalers. Value added co-operatives are a type of co-operative designed to add value to agricultural commodities through additional processing (Hofstrand, 1999).

Recently, several agricultural and marketing co-operatives have changed their governance structure (Hendrikse and Veerman, 2001). Some changed to conventional, profit maximising firms by means of issuing some form of outside equity capital. Zwanenberg et al. (1992) referred to the views of Kerry (1987), Avonmore (1988), Waterford (1988) and Goldenvale (1992), that there are some marketing co-operatives that stopped treating their members in a uniform way (Hendrikse and Veerman, 2001). Cook (1995) also reported the emergence of new generation co-operatives. Many farmers justify the formation of marketing co-operatives, as a way of farmers' protecting themselves from exploitation by larger marketing institutions, monopsonistic private wholesalers and private processing companies (Tennbakk, 1995).

In addition, Tennbakk (1995) indicated that farmers who are also members of the same organisation, own these types of institutions and that many marketing co-operatives are subsidised by government. Tennbakk also stated that beyond the belief that co-operatives ensure better terms and greater security, there is no clear reason why government should be interested in the formation of agricultural co-operatives. However, it is a fact that co-operatives have the potential to improve overall market performance (Tennbakk, 1995). Co-operatives receive government support mainly because they have effects on competition and their potential to improve economic coordination (Staatz, 1998). Underlying the attempt to identify what factors contribute to success and failure in co-operative development, is an on-going debate over the proper relationship between each country's government and its co-operatives. Experience throughout the world (Hoyt, 1989) has shown that government policies can impede or enhance independent co-operative development. The debate centres on the need to preserve the autonomy and democratic control of the co-operative by its members, whilst recognizing the co-operative's needs. Co-operatives need to receive management and financial support from government and to operate in a favourable legislative environment.

The government of Limpopo Province in South Africa promotes the principle of co-operatives because of important role co-operatives can play to create jobs, alleviate poverty and contribute to economic development (Van der Walt, 2003:104) through providing infrastructure needs to improve technologies, and encourages the adoption of new products and processes. The government has a tradition of educating members of the co-operatives, leadership and staff in both the principles of co-operatives and sound business practices. Successful co-operatives provide many positive benefits for the country, as well as individual members. They mobilise resources internally and provide services not otherwise available. Most important co-operatives potentially build human resources Hoyt, (1989). However, Helmberger (1964) has some reservation about restricted membership co-operatives, which he believes can give rise to market results that may be undesirable for people who are not actually members of the co-operatives.

## **2.10 Agricultural co-operatives**

Hind (1999) indicated that at least 6.3 million individuals across the United Kingdom – based on data from the Registry of Friendly Society (1998) - are members of retail, wholesale or agricultural and fisheries trading co-operative societies, with special emphasis on the importance of agricultural co-operatives. Hind (1999) also reported that the Plunket Foundation (1998) showed that over 240 000 agricultural co-operatives' memberships were held during 1996. There are about 20 000 co-operative enterprises in the European Union agri-food industry, with over 12 million members processing and marketing over 60% of agricultural products (Hind, 1999). However, Hind (1999) stated that although the statistics indicated that co-operatives play an important part in the United Kingdom agri-food chain, the nature of their role is not well defined.

Abdelrahma and Smith (1996) indicated that agriculture is one of the most important occupations all over the world. They further maintained that in 1993, the Food and Agricultural Organisation (FAO) revealed that in 1992, 46% of the world's population depended on agriculture for a livelihood.

Co-operatives are a widespread phenomenon in both developed and developing countries. They are more dominant in agricultural production and retailing than their market economy peers (Hoyt, 1989). Hoyt also indicated that because of their importance in agriculture, co-operatives can play a significant role in farming policy. Abdelrahma and Smith (1996) also suggested that through co-operatives, farmers receive the advantages of group activities.

## **2.11 Processing Co-operatives**

Processing co-operatives started show their existence with the emergence of New Generation Co-operatives. New Generation Co-operatives add value to raw product through secondary processing (Saskatchewan Saskatchewan, 1999:1). This helps the farmers to minimize wastage. Through processing co-operatives farmers manage to participate in the whole value chain of their products enhancing their income in the process.

## **2.12 Financial Access**

Access to credit also allows co-operative farmers to increase their planted area more than non-co-operative members (Technoserve, 1991). In areas where there are no co-operatives, financially rich people dominate the livelihoods of less fortunate individuals due to the scarcity of financial resources (Abdelrahman and Smith, 1996). Co-operative finance theory is not relevant in these areas (Moore and Fenwick, 1978).

## **2.13 Management and administration**

The most important aspect in a co-operative is governance. Management has an important role to play. Co-operative management is defined as the process of pursuing co-operative objectives by using the resources available to the organisation, including people, capital, and facilities (Cobia, 1989). Success or failure of a co-operative depends on whether there is management or mismanagement. There are four basic management functions (Beierlein and Lee, 1978.; Roy, 1976). These functions were categorized by Cobia (1989) as planning, organizing, directing, staffing and controlling.

### **2.13.1 Planning**

Planning is the most important management function, because without knowledge of goals and direction there is no point of reference for organizing, staffing, and motivating staff members. Planning should not be confused with a plan. Planning is a continuous process and not an activity that becomes complete when the plan document has been produced.

### **2.13.2 Organising**

Human and capital resources are organized through this function. It is important for managers to always match capital and human resources with work necessary to accomplish the co-operative's objectives. This will result in work being divided between individual employees who can carry out the task effectively.

### **2.13.3 Directing**

Workers' efforts need to be directed to the strategic objectives of the co-operative. The result of this is that the employees will keep the objectives of the co-operative in their minds.



#### **2.13.4 Staffing**

The management is expected to recruit, hire and induct new staff. In order to get maximum production, staff needs to be trained in their job related skill.

#### **2.13.5 Controlling**

This includes evaluation of the service to see if the objectives of the co-operative are being met. The management should establish acceptable levels of performance and then measure the performance of individual employees, the department and/or the entire business. Lastly, it should compare the control and evaluation, which are important in measuring the performance of individual employees based on standards set by management.

### **2.14 Co-operative and non-co-operative Agribusiness Sector**

There is a perception that co-operatives are managed and controlled as non-co-operative companies in the same sector. Thirkell (1989) as referred to by Hind (1994) ,indicated that co-operatives are perceived as being managed without the same level of business efficiency as other non-co-operative business structures in the same sectors. This is mainly because they pay low remuneration, packages are not progressive, are run by unskilled committees and political socialists. This perception was echoed by Harper (1992), who was also quoted by Hind (1984) as stating that co-operatives have a bad track record just about everywhere.

Hind (1984) referred to two important factors, which Pickard (1970) stated were the main source for suggesting that co-operatives were an inherently inefficient way to run a business. These factors are the problems facing the co-operative sector with regard to capital sourcing and retention. Stewart (1993), who was also quoted by Hind (1994), stated that a business cannot run smoothly and successfully if its customers or suppliers are actively involved in running it, as this will trigger too much conflict of interest.

Hind (1994) took 31 co-operatives and 82 non co-operative businesses and determined the standard deviations, means and t test of difference in means of selected performance indicators. He used the following performance indicators: sales turnover; return on assets; sales capital; debtor ratio days; creditor ratio days; stock turnover; capital gearing; quick ration and plimsoil ration. He discovered that the only performance indicators for which there

are significant differences in means for the two business form at the 90% confidence level and are stock turnover and debtor ratios.

To determine the significant of the differences in co-operative and non-co-operative means, Hind used mean, standard deviation and t test of performance indicators as shown in the Table 2.2 (below):

**Table 2.2: Significant of the differences in co-operative and non-co-operative means (Source: Hind, 1994)**

Performance indicators	Sales turnover	Return on assets	Sales capital	Debtor ratio days	Creditor ratio days	Stock turnover	Capital gearing	Quick ratios	Plimsoi l ration
<b>Coop: X</b>	4268	2.54	0.05	56.06	38.67	230.48	36.14	0.98	0.90
N=31: Sx	(7981)	(5.52)	(501.27)	(69.58)	(27.13)	(613.84)	(42.69)	(0.42)	(0.60)
		)							
No Coop: X	4304	2.54	29.39	39.10	32.20	45.71	52.26	1.26	0.70
N=82: Sy	(16164)	(14.52)	(134.71)	(22.72)	(22.89)	(146.96)	(65.40)	(1.67)	(0.64)
		)							
T-Statistics	-0.01	-0.0025	-0.48	1.83	1.27	2.35	-1.22	-0.93	1.52

Table 2.2 shows that the only significant difference is with debtor ratio days at 90% confidence level and on stock turnover at 95% confidence level. Hind (1994) also used regression analysis to determine if there are significant relationships between the performance indicators and business form, using dummy variables for business form. In his analysis he included a sales turnover coefficient to determine whether scale of operation is also a significant independent variable. To determine all these, the following linear multiple regressions were used:  $PI = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$

- Where PI = Performance Indicators
- X1** = Business form dummy variable  
Coop form = 1      Non co-op form = 0
- X2** = Sales turnover
- X3** = Business form dummy <sup>x</sup> Sales turnover

Hind's (1994) study was, however, restricted to co-operative and non-co-operative companies, and excluded the majority of co-operatives which are registered as societies.

### 2.15 Effect of agricultural co-operatives on net income

In order to determine the effect of the presence of agricultural co-operatives on net income per mechanism of groundnut produced, Abdelrahman and Smith (1996) compared net income of co-operative members and net income of non-co-operative members. Twenty farmers from each of eight villages were randomly selected, ten co-operative members and ten non co-operative members. They were interviewed and the following equation was used to determine net income:  $NI = TR - TC$

Where **NI** = groundnut net income per unit area

**TR** = total revenue per unit area

**TC** = total cost per unit area (includes land preparation, seeds, fertiliser, pesticides and harvest cost)

**Table 2.3: Groundnut net annual income for agricultural co-operative members and non-members (Source: Abdelrahman and Smith, 1996)**

Groundnut net income in Ls per Ha	Co-op membership		
	Yes (N=80)	No (N=80)	Total
0 – 4,999	36.25	97.50	66.88
5,000 – 9,999	38.73	02.50	20.62
10,000 – 14,999	21.25	00.00	10.62
15,000 – 19,999	03.75	00.00	01.88
Total	100.00	100.00	100.00

Ls = Sudanese pounds

Chi-square = 67.92

Probability = 0.0001

The comparison between agricultural co-operative members and non-members done by Abdelrahman and Smith (1996) showed a significant difference, because the chi-square statistical test for the model was significant at the 0.0001 level.

## **2.16 Conclusion**

Establishing co-operatives in developing countries takes different shapes and forms. This is mainly because of different socio-economic circumstances and the different roles they play in these countries. These co-operatives are however, formed under similar co-operative principles which were launched in Rochdale in 1944. The sets of socio-economic conditions present challenges and shortcomings of cooperatives in developing countries.

The main limitations of the co-operatives are the open and voluntarily membership. This prevents the co-operative to operate as a business due to lack of commitment by voluntary members. To close the loophole a new school of thought developed a concept of “New Generation of Co-operatives” with a practice to presents patriots with delivery rights and indirectly profits to the members.

The next chapter will focus on the research designs and methodology focusing on a summarized review of research methods namely (quantitative research, qualitative research, multiple research), research method adopted in this study, research design, sampling strategy, data collection instrument, data analysis, triangulation approach, pilot study, validity and reliability and ethical consideration.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter is focusing on the research designs and methodology focusing on a summarised review of research methods quantitative, qualitative and multiple research. Research method adopted in this study, research design, sampling strategy, data collection instrument, data analysis, triangulation approach, pilot study, validity and reliability and ethical consideration will also be outlined.

#### **3.2 Research methodology**

There three research approaches available are the quantitative approach, qualitative approach and the multiple research approach.

##### **3.2.1 Quantitative Research Approach**

Quantitative research approach as (Akinwunmi (2009) supported by Creswell (2003) put it, is an enquiry into a social or human problem based on testing a theory made up of variables, measured with numbers and analysed using statistical procedures in order to determine whether the predictive generalizations of the theory hold true. Collectively Akinwunmi, (2009); Creswell, (2003; 1994) further explain on the methods to indicate the advantage of studying populations through a sample. Thus inference to the population could then be made from a sample using time-series data, trends and other statistical data. Creswell, (2003) indicated the following: (a) That the method assumes that reality exist and can be measured objectively and independent of the researcher; (b) that the existence of reality can only be determined within situations and without interference by the investigator; (c) that the method is not influenced by the values of the investigator; and (d) that the methods uses empirical form of reasoning.

##### **3.2.2 Qualitative Research Approach**

Myburgh and Poggenpoel (2007) described the purpose of qualitative research as way to obtain understanding and knowledge about a specific phenomenon in which there is little or no knowledge available. Akinwunmi, (2009) and Cresswell, (2003) on the other hand

indicated that qualitative research is an enquiry process of comprehending a social or human problem/phenomenon which is based on building a complex holistic picture formed with words as well as reporting detailed views of informants and conducted in a natural setting. This is the method that empowers the participants to be at the centre of the study to develop meaning of the precepts, concepts and variables to be measured.

Scholars such as Akinwunmi (2009), Bogdan and Biklen (2007), Mertens (2003), Creswell (2003) and, Locke et al (2000), perceive qualitative research as an approach that can be characterised as follows: (a) the investigator becomes part of the environment where the participants are at the centre of the investigation; (b) the investigator as part of the research influences the study through his or her values which will be intertwined with the environment and the researcher's experience of the participants; (c) the methods empowers the investigator and the participants to value their environment and surroundings, images information, behaviours and way of doing things; (d) the concept and knowledge generated is to a large extent inductive, developing from the interaction of the investigator, participants and the environment; (e) data, information and knowledge that is generated helps to explain phenomenon; and (f) Assumptions, precepts, concepts and theories are framed in the context of the environment as the investigator learns together with participants.

Myburgh and Poggenpoel (2007) According to Basic assumptions about qualitative research include the following: (a) It is naturalistic; the research takes place in the natural setting of the participants; (b) The researcher is in a position of humbleness, that is "not knowing" while the participants are knowledgeable about the phenomenon; (c) The researcher enters the field of research without any preconceived ideas. The researcher utilises "bracketing"- putting aside any preconceived ideas and "intuiting"- focusing on the specific phenomenon that is being investigated; (d) Purposive sampling or judgmental sampling is utilised by the researcher. Information rich participants are included in the research; (e) Language is utilised as the major vehicle of research; (f) There are multiple realities in the field of research based on the participants lived experiences, perceptions and views; (g) The researcher continues till data-saturation is achieved, that is, no new information is obtained; (h) The researcher is the research instrument. The researcher obtains data by observing, experiencing and conversing; (i) The research is contextual, a specific phenomenon is explored and described, the

researcher makes no attempt to generalise findings to other contexts and the researcher provides a dense description of the whole research process

### **3.2.3 Multiple Method Research**

Multiple research strategies are becoming researchers' choices of method due to the fact that methodological pluralism provides better quality data than a single approach (Creswell & Garrett, 2008). Akinwunmi (2009) referred to this method as "integrating" to mean adding together, "synthesis" for amalgamation, and "multi-method" for more than one method in one. In the main the method combines the quantitative and qualitative approaches in one study (Akinwunmi, 2009, Tashakkori and Teddlie 1998). According to Ngulube and Ngulube (2014) mixed methods research is touted as a third methodological movement is increasingly becoming a popular approach in several fields as a result of the promise it holds to providing a better and balanced investigation of research problems in context

Multiple Method Research according to Ngulube and Ngulube (2014) may assist scholars to address exploratory context-specific questions they face through qualitative methods and generate a theory that may be tested and confirmed using quantitative methods. The collective understanding of several authors (Akinwunmi, 2009, Onwuegbuzie & Leech 2006; Johnson and Onwuegbuzie 2004; Creswell 2003; Mertens 2003 and Lincoln & Guba 1985) is that the approach is more suitable in studies that enable the collection of both quantitative and qualitative data. The collected data, in its nature would demand variables in their nature to explain sophisticated systematic problems and or a phenomenon. Numerous sources (Creswell 2002, Tashakkori & Tedlie 1998, Jick 1983) identify the genesis of mixed methods in the study of psychology.

In this study both quantitative and qualitative research methods will be used. Quantitative data will mainly be the primary data collected through administration of questionnaires from agricultural cooperatives. Qualitative data will be collected from industry key informants and market operators on matters that have an impact on marketing and profitability. The approach will point to the ob4rjective tree of the enterprise. The methods will then guide the sustainable cooperative model which will be able to guide cooperative patrons to a more sustainable cooperative business. As argued by Creswell (2003 and 1994), Berg (2001), Locke et al (2000) and Bogdan and Biklen (2007); the basis of selecting a research method

for a research project has to do with the objectives of the study. The aim of the study is to examine the socio-economic impact of agricultural and processing co-operatives in the Limpopo Province.

### **3.2.4 Research Methodology adopted for this study**

The mixed methods research method was chosen for this study mainly because of its flexibility to combine the attributes of both quantitative and qualitative methods (Akinwunmi, 2009; Creswell and Plano Clark 2007). This was influenced chiefly by what Ngulube and Ngulube (2014) indicated that the use of mono-methods may limit the ability of scholars to gain a full insight of the research situation under investigation. The multi-methods procedures are progressively being applied in order to enlarge the choice of and expand the investigator's understanding from the phenomenon (Sandelowski 2000). For mixed methods approaches to succeed in developing a bigger and clearer picture of the problem it may require more than one investigator and a multi-pronged strategy to be implemented.

In order to achieve the objective of this study and address the problem statement different context and used of the multiple method were applied. (Akinwunmi, 2009; Collins et al., 2006; Onwuegbuzie and Leech, 2006; Sandelowski 2000 & 1995; Tashakorri & Tedlie; Caracelli and Greene, 1993; Swanson 1992 and Greene, Caracelli and Graham, 1989) indicated the following as context and uses under which mixed methods should be used: (a) triangulation - looking for merging and validation of results from different techniques that investigate the same problem; (b) complementarity – pursuing expansion, design, enrichment and interpretation of the results from one technique with results from a different technique; (c) initiation – determining ambiguities and incongruities that guide the re-designing of the research hypothesis; (d) development – employing the findings from one technique to enlighten the other approach; and (e) expansion – looking for a broadened study by using diverse approaches for different investigations. All the five uses of mixed methods without exception apply to the current study.



### **3.3 Research design**

De Vaus (2006) indicated that “the research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data”. Creswell and Plano Clark 2007 as cited by Akinwunmi (2009) indicated that research designs are techniques for collecting, analysing, interpreting and reporting data in research investigations. Research designs are critical in guiding the investigator about the methods interpretive logic to employ during the study (Nesamvuni, 2014).

Central to decisions on the research design is the fact that each study can be used to develop a general conclusion on the same challenge though in a different geographic area (Akinwunmi, 2009, Egbu, 2007 and Yin 1989).

#### **3.3.1 Target Population**

The study targeted the farmers who have grouped themselves into cooperatives. These are members of the cooperatives from the selected districts. Also targeted are key informants such as market operators, government officials responsible for cooperative development.

#### **3.3.2 Sampling Strategy**

Purposive sampling was chosen for this study using non-probability techniques to set up a study sample. Nesamvuni (2014) cited Ted Palys (undated) where indicated that purposive sampling is almost the same with qualitative research and Laerd (undated) expands on purposive sampling in that “purposive sampling represents a group of different non-probability sampling techniques and it also known as selective or subjective sampling.

It relies on the judgment of the researcher when it comes to selecting the units (for example. people, cases/organisations, events, pieces of data) that are to be studied Nesamvuni (2014).

Unlike the various sampling techniques the goal of purposive sampling is not to randomly select units from a population to create a sample with the intention of making generalizations (i.e., statistical inferences) from that sample to the population of interest but to focus on particular characteristics of a population that are of interest, which will best enable the researcher to answer their research questions” (Laerd dissertation, undated).

The study focused on cooperatives in Vhembe, Mopani, Waterberg and Sekhukhune leaving Capricorn cooperatives out since they were government special projects established under strict controlled criteria not necessarily following cooperative act. Criteria were used to identify co-operatives that were used for the study are:

- Agricultural and agro-processing co-operatives
- Still operational
- Registered

### **3.3.3 Data Collection Instruments**

This research study will be based on both primary and secondary data. Primary data will be collected using a questionnaire developed. Secondary data will collect mainly from Department of Economic Development, Environment and Tourism which is responsible for cooperative development, Department of Agriculture responsible for agricultural cooperatives, Statistics South Africa, and other relevant literature. The questionnaire was constructed on gender, experience, level of education and marketing channels (Annexure 1).

### **3.3.4 Data Analysis**

Quantitative data will be captured and analysed statistically using the Statistical Package for Social Science (SPSS). SPSS will be used to generate simple frequency tables for variables of interest. Descriptive analysis techniques will also be used in the study to capture the perceptions of respondents mainly the qualitative data.

### **3.4 Triangulation Approach**

Burns and Grove (2001) as cited by Ziyani et al (2004) define triangulation as the collection of data from multiple sources maintaining the same foci wherein the purpose of using multiple methods in a study design is to counteract the limitations and biases that stem from using a single method Beitmayer, Ayres and Knafl (1998), and by doing so the reliability of findings get increased (Duffy 1993). According to (Smith 1975; Easterby-Smith et al 2002; Flick 2004; Downward & Mearman 2005 and Akinwunmi, 2009) also cited by Nesamvuni (2014) triangulation is a terminology used in navigation and surveying where three reference points are taken as a minimum to locate an object. It is inherent in mixed methods approached in the sense of complementarity of data to have better insight of the problem (Akinwunmi, 2009; Morse 1991; Creswell, Plano Clark et al 2003; Creswell & Plano Clark

2007). According to (Akinwunmi, 2009; Denzin 1970 & 1978; Jick 1983; Modell 2005 and Aghaunor et al 2006) the main reason for the usage of triangulation approach is that it gives superior validity and reliability than a single methodological approach. Easterby-Smith et al., (2002); Ryan et al., (2002); Ziyani et al (2003) outlined triangulation approaches which can be categorised into seven types discussed below:

### **3.4.1 Data Triangulation**

Data triangulation is a process in which data for studies is collected over different time frames or from different sources (Akinwunmi, 2009). It involves the collection of data from multiple sources with the intent to obtain diverse views of the studied phenomenon with the purpose of enhancing the validity (Cohen & Manion 1997; De Vos 1998). Downward and Mearman (2005) gives an example where survey data could be combined with time series data to give a researcher an understanding of different triangulated times about the whole time period. Another combination could be that of a survey and interview data.

### **3.4.2 Investigator Triangulation,**

This type of triangulation is a study where different people collect data on the same situation and the results are then compared (Akinwunmi, 2009). According to Streubert and Carpenter (1999), as cited by Ziyani et al (2004) is a process whereby two or more investigators with diverse research training backgrounds examine the same phenomenon. This could be one of the advantages of a multi-disciplinary study team as it offers the prospect for investigators to study the same situation and to compare, develop and refine themes using perceptions gained from different viewpoints (Nesamvuni, 2014).

### **3.4.3 Time Triangulation**

According to Ziyani et al (2014) Time Triangulation is applied to both cross sectional and longitudinal studies wherein cross sectional data is collected with time-related processes from different groups at one point in time, while longitudinal studies collect data from the same group at different points in time sequence (Cohen and Manion, 1997).

### **3.4.4 Space Triangulation**

Cohen and Manion (1997) as cited by Ziyani (2007) maintained that this type of triangulation assist in trying to overcome the limitations of studies conducted within one culture or

subculture since not all the behavioural sciences are culture bound, they are sub-culture-bound according to.

### **3.4.5 Theoretical Triangulation**

Modell (2005) as cited by Nesamvuni (2014) explains theoretical triangulation as a process whereby models are borrowed from one discipline and be used to explain circumstances in another discipline. Cohen and Manion (1997) as cited by Ziyani (2004) also stated that it draws upon alternative or competing theories in preference to utilising one viewpoint only. In this way the investigator interpretations are enlightened by more than one theoretical insight (Modell 2005).

### **3.4.6 Methodological Triangulation**

Nesamvuni (2014) indicated that different methods used at different levels are used in data collection to maximise the amount and quality of data being collected. Kimchi et al (1991) defines Methodological Triangulation as the use of two or more research methods in a single study and the difference can be at the level of design or data collection (Ziyani et al (2004). Many authors demonstrated how the techniques can be used in different disciplines and situations (Todd, 1979; Tashakkori Teddlie, 1998; Elliot Williams, 2002; Creswell Plano Clark, 2007). In this study two both quantitative and qualitative research methods will be used coupled with statistical data and views of key informants.

### **3.4.7 Analysis Triangulation**

Ziyani et al (2004) stated that this triangulation is a situation whereby two or more analysis techniques are used for the same data set, and from the three principal levels identified by Cohen and Manion (1997) which are, the individual level, the interactive level, and the level of collectivises.

## **3.5 Pilot Study**

The data collection instrument was piloted using few selected agricultural cooperatives before it was administered to the bigger population. Based on the answers which were acquired from the pilot, the instrument was adjusted. Questions were simplified to avoid ambiguity.

### **3.6 Case Study**

The case study method was used for the purpose of this study reporting on marketing and characterisation of market operators in two informal markets. The purpose was determining the upstream activities from production by cooperatives and their impact on the food security to how they generate income, through informal markets. Two informal markets namely Tshakhuma and Khumbe were taken as case study to show that farmers in agricultural cooperatives do the production of fresh produce such as fruits and vegetables and sell them in the informal markets. The case studies therefore concentrated in the operator characterisation and acquisition of sold items and also factors influencing profitability.

### **3.7 Validity and Reliability**

In order to increase the degree of validity and reliability, triangulation as described in section 3.4 was applied. Nesamvuni (2014) maintained that validity is the degree to which a measure does what is intended to and furthermore outlined different types of validity as follows: (a) face validity which is the extent to which a test is subjectively viewed as covering the concept it purports to measure. It refers to the transparency or relevance of a test as they appear to test participants; (b) Content validity on the other hand refers to the extent to which a measure represents all facets of a given social construct; (c) Construct validity the degree to which a test measures what it claims, or purports, to be measuring and lastly (d) criterion validity is a measure of how well one variable or set of variables predicts an outcome based on information from other variables.

Nesamvuni (2014) further stated that reliability is the dependability of a measurement instrument that is the extent to which the instrument yields the same results on repeated trials. These also can be subjected to number of different types of reliabilities tests which include retest reliability through administering instrument at different times, equivalent reliability through use of different but equivalent instruments, split half reliability where by the instrument split in half to cover different set of questions and internal reliability which is also called internal consistency.

The data collection instrument was piloted to increase the degree of reliability and ensure that the information collected address the problem statement of this study. Secondary data from Statistic South Africa was also used to ensure reliability on the quantitative data.

### **3.8 Ethical Considerations**

The following ethical considerations were taken into consideration:

- The researcher did not force the respondents to answer any questions
- Researchers always sought a consent of the respondent before conducting an interview
- All information given by respondents was considered to be confidential
- Outcomes of the study would be made available to the public and interested parties upon request

#### **3.8.1 Ensuring participants have given informed consent**

The participants were given full explanation about what the study is all about. They were given consent form which they signed and agreed to participate in the study.

#### **3.8.2 Ensuring no harm comes to participants**

To ensure privacy for the participants their personal information will be protected. They will be accorded an opportunity to ask questions and to obtain a copy of the results should they so wish.

#### **3.8.3 Ensuring confidentiality and anonymity**

Throughout the study the participants' rights had been protected and will remain that way even after the study.

#### **3.8.4 Ensuring that permission is obtained**

Study participants will be given the right to participate voluntarily, to refrain from answering any question they feel not comfortable to answer or to withdraw anytime from participating and will not be forced.

### **3.9 Conclusion**

This chapter presented the research methods and designs. The research designs and data collection techniques will ensure that the information collected be valid and reliable. The next chapter presents the establishment of cooperative movement in South Africa.

## **CHAPTER 4**

### **THE ESTABLISHMENT OF THE CO-OPERATIVE MOVEMENT IN SOUTH AFRICA**

#### **Abstract**

Co-operative development in South Africa is a history on its own. It unfolds alongside the development of township and community stokvels. These stokvels were established in different forms such as women clubs, burial society and tshisevhesevhe. Township people resorted in co-operative arrangements due to various factors that are related to bargaining power. Most of them were earning below the living wage and to afford some basic items they had to pull together the resources. In the commercial world they were forming co-operatives to also increase the bargain power to buy inputs and market together. Co-operative development in South Africa developed along two economic level which are commercial and SMME. White owned farms were successful and growing mainly because they were run commercially and were receiving government support. Co-operatives in townships were more of social clubs with no formal management structures in space.

## **4.1 Introduction**

This chapter focuses in the establishment of cooperatives in South Africa, different forms it took and evolution until the developed of the current Act of Cooperatives. There is no doubt that the issue of co-operative development is an important one all over the world due to the potential of such movements to change the lives of their members and the larger community. South Africa is no different and co-operatives might have even more significance here due to the unique nature of the South African society and the position of the country as the largest economic power in the continent.

## **4.2 Importance of Co-operatives**

Economists have stuck to their declaration that human beings have several wants and needs but are constrained by limited means to satisfy their wants and cater to their needs. The reality behind this tenet is that we live in a society full if inequality where the majority of the world's populace are poor and wealth rests in the hands of a small minority. Despite impressive positive economic growth, Africa continues to face a number of challenges including persistent food insecurity (Okem, 2015). Governments usually try their best to help reduce poverty but their efforts can only benefit a small percentage due to resource constraints. People therefore attempt to solve their problems and ease their hardships through communal efforts and voluntary associations. One such effort, co-operatives, has borne more fruits worldwide due to its unique approach to community empowerment. Okem (2015) however indicated that cooperatives provide individuals, opportunity to harness the power of collective action. Co-operative policies of different countries contribute to the development of co-operatives as viable business enterprises and autonomous democratic organizations (Muthuma, 2012). Another reason, as indicated by Markelova et al., (2009); Menzani & Zamagni, (2010) who were also cited by Okem (2015) was that transactions cost was particularly high for small survivalist cooperatives thus necessitating for collective action. Ozdemir (2005) as cited by Mbanza and Thamaga-Chitja (2014) stated that agricultural cooperatives help farmers in various social and economic developments guided by cooperative principles including an equitable sharing of benefits. , farmers are able to increase farmer's income, food availability, food security and reduce household poverty through the agricultural cooperatives (Abdu-Raheem and Worth, 2011). Mbanza and Thamaga-Chitja (2014) further cited Hendriks and Lyne (2009) saying that the development of small scale agriculture offers diversity of food at household level and alleviates hunger and



malnutrition by increasing household food consumption and creates economic opportunities for vulnerable people especially those who do subsistence farming. There are many reasons why co-operatives are important in any society and Limpopo province is no different with prevailing data showing that the co-operative movement has improved the quality of life within the province. Some of these advantages as articulated by different authors are:

#### **4.2.1 Economic empowerment**

Co-operatives allow people to pool together their scant resources and diverse skills to pursue a common social economical objective in the hope that doing so will increase their incomes and better their lives. Okem (2015) maintain that since the emergence of modern cooperatives they have been instrumental in uplifting the socio-economic conditions of people around the world. Co-operatives are formed for different purposes but the underlying and unifying reason is empowerment. Some co-operatives are formed to enable savings and to offer low interest and flexible loans to their members to pursue business interest. This circumvents the traditional financial constraint whereby poor people are usually unbanked and thus can't access credit from mainstream banks. Since co-operatives are formed voluntarily by members for the purpose of bettering their lives, the rules that govern their operations are made to accommodate the unique position of their members. The rules are therefore not as stringent as in banks and the kind of collateral, if any, is usually flexible and of a nature that poor individuals can get. In addition, most co-operatives of this nature employ a system of member guarantee where members guarantee each other in loan acquisition negating the need for collateral.

Some of the economic benefits include:

- (a) Getting loans to start businesses in different fields depending on an individual's competence and preference. In some cases, OSK Koöperatiewe Bank Beperk and Ditsobotla Primary Savings and Credit Co-operative Bank being good examples, cooperatives usually grow to become large financial institutions offering several products to their members.
- (b) More loans to expand businesses once they become viable for expansion and this helps in employment creation for the community.
- (c) Provide a saving avenue to poor individuals who are not targeted by mainstream banks and those who feel that products offered by banks are discriminatory

towards their situations. In addition, co-operatives structure their savings plan in such a way as to encourage constant savings and this enables people accumulate some capital to invest in business and other empowerment activities like education or vocational training.

- (d) Most co-operatives especially in provinces like Limpopo are formed by people whose main activities are agriculture and co-operatives offer two main advantages. First, profitability of agricultural products was highly dependent on the kind of fertilizers and quality of the seeds. In addition, the farming methods affect yield and determine the kind of output available for sale. Co-operatives allow farmers to negotiate collectively for cheaper and better inputs and collectively invest in better farming methods (Strickland, 2013). The result was increased yield and through reduced costs, they are able to maximize profits and improve their collective welfare. Secondly, the quantity of a product being marketed and the position of the marketer highly affects the price at which those products will be sold. Co-operatives market products together and are therefore able to sell their products at a higher price and reach a wider consumer base.
- (e) Most farmers and producers of raw materials earn low profits due to their inability to add more value to their products. To break the perpetual vicious cycle of poverty, co-operatives enable members to collectively add value to their products and thus earn better prices for them and unlock new markets. For instance, dairy farmers can form a co-operative to process their milk into various dairy products like butter, processed milk, ghee and yoghurt and sell these products locally, nationally and abroad.
- (f) Infrastructure development and facility creations are one of the many economy empowerment co-operatives offers. In some line of trade, co-owned facilities offers numerous benefits to those members. For instance, people engaged in animal husbandry can use their co-operatives to build slaughter houses and meat processing factories to facilitate local trade and processing of meat for foreign export.
- (g) Co-operatives allow a society to solve some of its issues by using their co-operatives to build necessary social amenities and in the provision of basic needs. For instance, many co-operatives investing affordable houses for their members and provide a solution to housing problems owing to low government investment

in the sector. Without this combined effort, most of these rural people would not own decent houses and would continue to languish in shanties and slums.

#### **4.2.2 Nation Building**

A nation is built by people who are continuously active in business, work and other revenue generating activities like agriculture. Behind a robust economy is a robust financial system that allows entrepreneurs to get capital to invest and for businesses to expand their operations. However, growth is usually impaired due to discriminatory practices which favors the minority and shuts out the majority poor regardless of their skill or knowledge. In South Africa poverty is primarily an element which affect mostly the previously disadvantaged people (Dlamini, 2001). In addition, most people in areas like the Limpopo province of South Africa possess certain factors of production like land and Ssemakula and Mutimba (2011) indicated that by empowering farmers in terms of knowledge and innovations it can lead to better production. This is where co-operatives come in and allow for better utilization of factors of production and facilitate training of members to improve their production and marketing methods. The end result is increased earnings for the people, government and society in general. Co-operatives become a channel for the people to help each other achieve their economical ambitions and change every facet of their lives. Abdu-Raheem and Worth, (2011) as cited by Mbanza and Thamaga-Chitja (2014) stated that through the agricultural cooperatives, farmers are able to increase farmer's income, food availability, food security and reduce household poverty. Mbanza and Thamaga-Chitja (2014) again cited, Mavimbela et al. (2010) who suggested that agricultural cooperatives are an important tool for improved household welfare as the members normally work together towards poverty reduction

#### **4.2.3 Social harmony**

There are many factors that lead to social instability, disharmony among the people and increased social evils like crime. Aronson (2010) supported this when he indicated that along with political and economic instability comes an increase in crime and disorder. The main cause of poverty is lack of education (Hickman, 2015), meaning that poor people are likely to suffer from lack of educational opportunities and therefore lack the necessary qualifications to get good jobs. Poor people are also desperate and are likely to ignore social morals as they attempt to survive in a world which is uncaring for those without means. The result is threefold at the least and a brief mention of these factors would highlight just how important

co-operatives are in any society. First, youth with low education and few job opportunities are likely to engage in crime in order to survive or to vent out their frustrations. Secondly, poor people usually result to desperate measures like prostitution in order to earn a daily bread. Lastly, people burdened by poverty are likely to engage in substance abuse in order to forget their problems. The co-operative movement as explained above provides a society with a means to financially empower themselves through job creation or better utilization of their assets (Lazenby, 2010). An empowered society is likely to avoid the above social evils and maintain a society that is peaceful moral and free of a drug menace and low HIV prevalence. Villarreal (2012) also supported this notion when indicating that cooperatives hold a key to feeding the world. Philippe Cousteau, a film maker and journalist, introduces a new twist to this debate by claiming that co-operatives hold the key to world's problems especially environmental ones and in a speech delivered during a global co-operatives' convention in Mexico, he asserts that the values necessary to form a co-operative are the same value which would make the world a better place if applied in the business and political sector (Murray, 2011).

#### **4.2.4 Promotion of democracy**

Most co-operatives are formed on a basis of voluntary collaboration between members and these institutions are run by democratically elected officials using democratically enacted rules and regulations. This fosters a spirit of mutual respect between members and establishes model of democracy which is easily translated to other leadership scenarios. The cooperative movement, may be reasonably considered the world's largest democratic social movement (Kaswan, 2012). Therefore the practice of democracy within co-operatives which are spread across South Africa fosters a national spirit of democracy which leads to a demand for fair, transparent and democratic political elections. The overall effect is a society which is sensitive to the needs of its people and that understands that the will of the people must always come first.

#### **4.2.5 Food Security**

Food demand is expected to increase anywhere between 59 to 98 percent by 2050 (Elferink and Schierhorn, 2016). This is particularly worrying since developing countries already produce less than they require and the problem is likely to be exacerbated with the increase in population. Agriculture in rural setting, like the Limpopo province, is performing under par

and it's expected that more co-operatives can bring the necessary changes. This will lead to more funds for production, modernization of farming methods, better marketing and value addition efforts.

Only when the Limpopo population is able to adequately utilize its arable land will it be able to unlock its huge economical potential and take its people into a bright future.

### **4.3 Historical background of co-operatives in South Africa & Limpopo Province**

#### **4.3.1 Global Origin**

Globally, the cooperative movement started in the year 1844 during the industrial revolution in the United Kingdom (Ortmann and King, 2007), when the introduction of machines in factories put a lot of crafts people out of work. The majority of people flocked into the cities with their families to work for more hours for lower wages due to lack of unions. With no time to buy the basic necessities, factory owners capitalized on the situation and established grocery shops next to the factories. The little wages earned by the majority workers ended up in the coffers of the factory owners. Kachru (2011) indicated that this led to 28 factory owners starting their own shops to obtain basic necessities. Germany followed with the establishment of credit banks that spread into UK, Europe, Japan and the United States (Philip, 2003). Many other countries also followed and South Africa introduced its first legislation in this regard only in 1942 (Otto, 2015).

#### **4.3.2 Local Origin**

In the year 1902 during the Anglo Boer War in the former Boer Republic of the Free State and Transvaal, agriculture came to a standstill when houses and buildings were deliberately destroyed and livestock killed as part of the British earth policy against the Boer Guerilla Forces (Wessels, 2011). However, economic reconstruction had to take place despite lack of development capital. The little that the farmers could produce ended up direct to the nearest general dealer who would also fix the prices and end up supplying the farmers with groceries, clothing and farming requisites. This compelled Farmers to unite and focus on input supplies and joint marketing of production (Philip, 2003), thus the formation of Agricultural Co-operatives in South Africa.

#### **4.3.2.1 Agricultural Co-operatives (1892 to 1990)**

Gala (2013) indicated that in 1892 white farmers organized themselves into agricultural cooperatives which marketed produce and procured inputs such as seeds, fertiliser and livestock. The establishments of these institutions were associated with the rise of Afrikaner nationalist movement in the colonized coastal regions of South Africa where Murray (2014) in his review of Lindie Koorts book, *DF Malan and the Rise of Afrikaner Nationalism* indicated that policies were developed which unfolded racial segregations.

Co-operation then took three basic forms over time with the development of white agriculture in the country. The first was the supply co-operative, which organizes the inputs of seeds, fertilizer and livestock, second the processing co-operative, which turns into higher value product for human or animal consumption, thirdly the marketing co-operative, which organizes the distribution and sale of produce as outlined in the report on the National Agricultural Cooperatives Indaba (DAFF, 2012)

The co-operative movement among the whites was further strengthened by the development of the 1937 Agricultural Marketing Act, which led to establishment of a much freer economic and entrepreneurial environment with major reductions in government interventions in domestic production, marketing and trade (OECD, 2006). White co-operatives were given the supply and marketing monopolies, privileges and grants from government as indicated by FAO (1995) that until the 1960s, the incentives given to white farmers in terms of assistance in acquiring and enlarging landholdings favoured an expansive mode of agricultural production in which land, machinery and labour inputs were largely complementary.

In the years 1970 to 1980, black agricultural co-operatives were promoted and were incorporated in the homelands as part of the apartheid grand economic plans, however, they were weak, isolated and enjoyed little state support (DTI, 2012). In 1980 to 1990 subsidies and state protection were gradually abolished and exposed white agricultural co-operatives to challenges of globalization (Satgar, 2011). The result were what Chittenden *et al*, (1996) also cited by Abdulsaleh and Worthington (2013) called coping mechanism by formal external sources represented by financial intermediaries such as banks, financial institutions and securities markets.

#### **4.3.2.2 Financial Co-operatives (1981 to 1994)**

Stokvels and burial societies emerged in the 19th century as a response to realities of industrial capitalism. Community, political leaders, religious leaders and women mainly initiated these co-operatives. Stokvel schemes ranged from savings and credit to bulk buying schemes. Burial societies for funeral insurance are being established to ensure a dignified and affordable burial service for the members and dependents. They are most organized and stable in the stokvel tradition system. It is estimated that over 6 million people currently belong to burial societies where an estimated R6 billion is invested every year (Bester et al, 2005).

In 1981 Savings and Credit Co-operatives (SACCOs) were established under the Cape Credit Union League (DTI, 2012). The Savings and Credit Co-operatives League was formed and initiated by the Catholic Church in 1993. The league represented about 30 SACCOs and more than 20 000 individual members. The Financial Service Co-operatives (FSCs) or Village Bank was formed in North West Province in 1994 (van Schalkwyk, 2012). According to DTI (2012) two institutions were then created FINASOL (USAID) and FSA (Department of Social Development) to support FSCs. Currently there is no specific legislation governing financial co-operatives. Both SACCOs and FSCs operate through the exemptions from the Bank Act of 1990 (Satgar, 2003).

#### **4.3.2.3 Consumer Co-operatives (1948 to 1980)**

The Afrikaaner Nationalist Movement co-ordinated Afrikaner consumer buying power to increase Afrikaaner control of commercial life and established consumer Co-operatives in 1940. Former Premier of KZN Province Sibusiso Ndebele stated that by the year 1948 there were about 275 white consumer co-operatives but many of them failed and converted into private companies (KZN Government, 2007). In the years 1970 to 1980, the number of white small traders began to dwindle as the big chain store increased their consolidation and market power (DTI, 2012). The black communities have attempted to construct consumer-type co-operatives such as buying clubs, through a stokvels system, which enable communities to buy goods in bulk and at wholesale prices (DEDEA, 2008).

#### **4.3.2.4 Worker Co-operatives (1984 to 1990)**

In the first wave workers Co-operatives were developed to facilitate funding for start-ups as a response to retrenchments and increasing unemployment (Tshabalala, 2013). Unions supplied administrative skills, conflict resolution, finance, access to trade union markets and business skills. While there were successes, many failed due to the following reasons: hostile political and economic environment, lack of enterprise skills and enterprise orientation, lack of clear defined relationship with Trade Unions.

Lastly Employee Share Ownership Schemes through government Social Plans Programme can also be used as a process to initiate worker co-operative (Rizzo and Carbot, 2006). To date there are more than 249 workers co-ops excluding agriculture registered with NDA. It is estimated that Employee Share Ownership Schemes are the growing type of co-operatives found in many sectors of the economy employing more than 10 000 worker-members. (Rizzo and Carbot, 2006)

#### **4.3.2.5 Social Service Co-operatives**

These are new co-operatives in the social sectors generated by the democratic government policies. They include among others, Housing Co-operatives for housing needs, Health Co-operatives for home based health care owned by workers and clinics co-operatively owned by community, and Day-care centres co-operatively owned by parents and workers.

### **4.4 The development of co-operatives in South Africa's provinces including Limpopo**

The spirit of co-operatives in South Africa traces its root to the early twentieth century when white farmers managing farms found it necessary to organize in order to reduce their input costs as one of the ways of reducing cost or increasing production (Zyl et al, 2000). In addition, the need to reach a wider market and have stronger bargaining power is also attributed to the emergence of co-operatives. Traditional methods were also proving to be costly and ineffective if they were to compete with other nations for lucrative foreign markets. Co-operatives enabled them to pool together their resources and therefore provide a large pool of finance through which they could solve some of these problems.

The colonial government saw an opportunity to assist the agricultural community in the bid to unite and enacted laws which favored the creation of more co-operatives and the



consolidation of smaller ones to pool together resources. While co-operatives began in South Africa to cater to the welfare of farmers, other sectors soon realized the many benefits offered by co-operative movements and they too followed suit (Satgar, 2007). With government support and the results of co-operative based ventures, the co-operative movement was born in South Africa and has seen uninterrupted growth over several decades. This has not only occurred in South Africa's major provinces but has also been experienced in those traditionally marginalized provinces like the Limpopo.

The Limpopo province is found in the Northern part of the country and is characterized by a largely rural (Mafokane and Grey, 2007) and agricultural setting. Limpopo province has several characteristics that make it unique from other provinces and others that give it similar characteristics to the rest. Most importantly, the province has the largest population of blacks population which was 99.2% in 2007 (Mears and Blaauw, 2010) vis a vis other races and this might have contributed to late development of cooperative in the province.

Nonetheless, it was inevitable that the province will adopt the same co-operative spirit due to its agricultural dependent population and the high volatility of small scale farming. Recent times have seen an accelerated growth of co-operatives in Limpopo as farming takes a more modern approach and good productive methods and prudent marketing makes agriculture a viable economic activity. In addition, the government has brought together various stakeholders to create a workable policy that will see the promotion of co-operative development, strengthening of existing ones and enlarging the field to encompass all areas of economic activities.

#### **4.5 Factors that contribute to development of co-operatives**

It has already been identified on the above sections that co-operatives across South Africa with the Limpopo province being the focus of this chapter have continued to grow tremendously buoyed by modernity and sound governmental policies. However, it might be necessary to carry out an in-depth analysis of factors which encourage growth of co-operatives in the Limpopo province of South Africa.

Historical background; history gathered from developed areas like Europe have demonstrated the power of co-operatives to change society and empower impoverished people. Crabtree

(1993) said that our view of history shapes the way we view the present, and therefore it dictates what answers we offer for existing problems. This therefore means history acts as a foundation on which young societies and regions like the Limpopo can base their efforts and mould such societies in the line of successful societies across the globe. While successful co-operatives in those countries had to chart new ways of operating, present and emerging co-operatives just have to borrow from this rich history and adapt it to their local scenario. Co-operatives in the Limpopo region can also learn from bigger co-operatives in more progressive regions in South Africa and replicate the success being enjoyed by them.

Improvement in the level of education creates a pool of professionals within the community setting who can be elected to run successful co-operatives. In addition, education leads to better judgment and highlights to the people what is important and what needs to be left behind. Education will open up the minds of individuals and foster increased cooperation as a corner stone for collective empowerment. Rowan (2014) put it better when indicates that education helps to develop perspective on the world around and pushes one to think both creatively and conceptually about many different subjects. Education is therefore one of the key pillars of social change and co-operative development is just a consequence of this change. This is supported by what Nelson Mandela stated when he said that education is the most powerful weapon which can be used to change the world (Van der Rheede, 2015). Education comes in many forms and is not only that which is taught in schools and training institutions. According to Manuh (1998) in his chapter 'women in Africa's development', he singles out conferences by women as vital rally points due to the knowledge their impact on the participants. This increased women participation in co-operative groups' formation might allude to why there is an increased growth in co-operative movements in the larger Limpopo province. In addition, co-operatives have partnered with the University of Limpopo to provide various training to co-operative leaders and other members.

Government policies; the government has always strived to boost co-operative development through enactment of laws that aid in co-operative formation, development and sustainability. These policies try to streamline the sector, give better guidelines, simplify the process of formation, broaden the scope of co-operatives and support their expansion and mergers among other things. (UN, 2008).

Resource endowment and practices of the people; most people are likely to form co-operatives depending on their communal activities and subject to those resources available to them. For instance, a community like Limpopo province with huge arable lands is likely to see creation of several agricultural co-operatives as most residents engage in agriculture. These co-operatives will be geared towards enhancing production and collective marketing to get better profits for the sale of their products. This will be possible because many farmers have adopted integrated farming practices, which represent a step or several steps towards sustainability (Pretty, 2008). This development might also be as a result of a necessity to create effective access to various services which arise in the normal course of agri-business.

#### **4.6 Indigenous co-operatives**

Indigenous co-operatives, mentioned earlier in this chapter, were established mostly through mutual agreement, and in most cases chapter work and legal measures were not involved. Committees were formed informally to oversee the running of the administration, and to ensure the turn for helping other members was adhered to. Historically, there is no evidence that there were disputes and conflicts in these initiatives.

In South Africa, black workers in urban areas and townships who were experiencing economic hardships, decided to form groups which contributed money and buy basic essentials. These groups made it easier for them to achieve what might be difficult or impossible for an individual. The groups were commonly known as stokvel. Although stokvel does not necessarily fit in the definition of a modern co-operative, the objectives and principles are similar. With nearly 50% of black adults in South Africa investing approximately R12 billion in stokvels and burial societies annually, marketers should not only recognise the importance of these saving schemes, but also support them with appropriate products and services (Varsity online, 2007).

#### **4.7 Modern co-operatives development in South Africa**

As already indicated, the then South African state assisted in setting up white agricultural commercial farmer co-operatives. In the case of black emerging farmers, they were formed either by a government official or a Non-Profit Organization (NPO). In either case, farmers were not included in the process or informed about how the co-operatives were formed. That is why a sense of ownership was never developed (Dawson, 2002).

According to the National Co-operative Association of South Africa, modern co-operatives first emerged in South Africa in the 1890s. In most cases they were established in a very informal manner where workers formed what were termed clubs. These clubs are still being formed as before, while on the other hand people are now also establishing modern co-operatives. In those years the principle was not different from that of Rochdale workers, where people supplemented their salaries with after-work activities such as sewing, cobbling and other art crafts.

Formal co-operatives in South Africa started after the Anglo-Boer war in 1902 (Ximiya, 2004) to provide commercial farmers with collective buying, marketing and organisational power (CompCom, 2005). Although the co-operative movement started slowly, it gathered momentum and produced many of the farming and general businesses in existence today. Gradually co-operatives started to form amongst commercial farmers. Members of these co-operatives started to buy inputs together, do packaging together, produce and store them together, and even market them together. Evidence of one of these co-operatives is the Houer Co-operative in Letsitele at Tzaneen Municipality (Development Technology, 2009), where even today people are still working together. At an even slower rate, black people started to form co-operatives, especially agricultural credit and housing co-operatives.

On its website the Small Enterprise Development Agency showed that in the 1800s, white Afrikaner farmers organised themselves to form co-operatives. These helped them to market their products, and supply for their own inputs items such as seeds, fertilisers and livestock (SEDA, 2010). Many successful white commercial farmers emerged from their different co-operatives and this benefited from their involvement. Those co-operatives managed to give birth to successful farming businesses and even today the farms are contributing strongly to South Africa's economy. Noord Transvaal Koporasie (NTK) is one example of such co-operatives, which were supported by the state and was highly successful. These co-operatives were further strengthened with the establishment of the Land Bank in 1912 and the passing of the Co-operative Act legislation in 1922 (SEDA, 2010).

Ximiya (2004) indicated that black subsistence farmers were required to apply for special ministerial permission whenever they wanted to establish a co-operative. This was mainly

because it was seen as a means to organise people. Having to wait for ministerial permission had prevented black co-operatives from growing and multiplying in black communities.

Although black co-operatives got support through the apartheid government's homelands plan during the 1970s, they did not get the same state support as white agricultural co-operatives did. They continued to be disorganised and functioned on a very small scale. The first black consumer co-operatives emerged in 1970s in the Western Cape and KwaZulu-Natal (Ximiya, 2004). Gradually, state support and subsidies for commercial farmers was withdrawn, and this resulted in many white run agricultural co-operatives being converted into private companies. Today, previously popular co-operatives such as NTK, Clover, ABSA and Stellenbosch Wines are private companies.

The National Department of Agriculture started to promote the establishment of co-operatives amongst emerging black farmers during the 1990s, but with little success. A number of co-operatives were formed under the facilitation of Department of Agriculture, nationally and provincially. In 2002 a decision was by the cabinet to transfer responsibility for development of co-operatives from the Department of Agriculture (DOA) to the Department of Trade and Industry (DTI).

#### **4.8 Conclusion**

The objective of this chapter was to track the way in which co-operatives originate in South Africa and how co-operatives formation was used as a way to enhance livelihood. Co-operatives in South Africa developed along two parallel timelines. White commercial farmers who received extensively the government support. These types of co-operatives grew fast and assisted the farmers to produce more and market more inside and outside the country. Farmers used their co-operatives to increase their bargaining power. On the other hand the black smallholder farmers emerged as a means of survival mainly those who were in Townships and hostels. White farmer's co-operatives are good example of functional co-operatives and what a co-operative can do to improve farming activities, food security and income. These farmers expanded their production and increased their market. Out of this initiative we have seen the emergence of Houer co-operative in Letsitele Town of Tzaneen Municipality, Noordelike Transvaal Koporasie (NTK) and Clover co-operatives The NTK and Clover have been converted into companies and are amongst big companies in South

Africa. The next chapter will discuss the operator characterization and acquisition of sold items for the two case studied informal markets, Tshakhuma and Khumbe to showcase on how cooperatives in South Africa market their agricultural produce.

## **CHAPTER 5**

### **SITUATIONAL ANALYSIS OF COOPERATIVE DEVELOPMENT IN LIMPOPO PROVINCE OF SOUTH AFRICA**

#### **Abstract**

This chapter focuses on the situational analysis of cooperatives in the Limpopo Province of South Africa. A study was conducted through investigating the situational analysis of the Agricultural and Agro-processing Cooperatives in Limpopo Province. The study was an attempt to identify the underlying factors that influence the sustainability of agricultural and agro-processing cooperatives as well as their impact on the food security and income generation. In ensuring achievement of this objective primary data were collected through empirical research. The empirical research was conducted to determine the situation of Agricultural and Agro-processing in the Province. Only 35 percent of the cooperatives are operational with a variety of problems. In profiling the cooperatives the study found that majority of the cooperatives: 74 percent of coops had more than five years of existence, 42 percent with up to 50 members, 48 percent with business plans, 42 percent with asset values of less than 20 000 and 52 percent with turnover of between 200 001 to 500 000 rands. There is no doubt that cooperatives are major participants in the provincial economy and they can be used as the pillars to reinforce the farming activities to get into the mainstream of the economy. However, a better cooperative model needs to be developed which can address factors which are responsible for the downfall of these registered cooperatives.

## 5.1 Introduction

In this chapter the data collected on cooperatives and analyzed will be presented in tables with discussion on each table. The information which was collected include time in business, ownership, membership, operational status, educational level, income, infrastructure profile such as water, electricity, phone and buildings. Unsatisfactory performance of cooperative sector in its contribution to the provincial economy of Limpopo Province is raising serious concerns as it threatens to cripple the mainstay of the economy. A comprehensive study of the sector was undertaken to provide a comprehensive understanding of the potential of the sector, as well as the strategic issues requiring attention.

There have been numerous attempts to establish cooperatives (mainly agriculture) in rural areas of South Africa, but they were formed as a direct result of projects and interventions supported by the old system. Because these cooperatives were formed around the old exclusive definition of a farmer, they were neither representative nor legitimate. The viability of such organizations has not been demonstrated. It is clear that many of these organizations collapsed when external assistance was withdrawn. There is doubt as to the appropriateness of models in rural societies that are characterized by lack of formal education, poor business and financial skills, and greater disparity in income and production level.

Governments in different countries are promoting the establishment of co-operatives. In China, for example, in the early 1980s the government promoted and permitted various forms of co-operatives, in which by 1996 numbered 1.4 million (Huang, Bolin, Xu and Chen, 2003). The new agricultural co-operatives in the Czech Republic, in 1994 operated on 47% of cultivated land and were responsible for 67% of national agricultural production. Co-operatives hold out significant potential to contribute to the reduction of poverty and are better able to mobilize wide participation and can reduce costs, enhance incomes and improve the viability of business activities (Philip, 2003).

There have been numerous attempts to establish co-operatives (mainly agriculture) in rural areas of South Africa, but they were formed as a direct result of projects and interventions supported by the then homeland government. Because these co-operatives were formed around the old exclusive definition of a farmer, they were neither representative nor legitimate. Majority of them never had co-operative registration certificate. Also they were not operating under the principles of co-operatives as outlined by the South African Co-



operative Act. The viability of such organisations has not been demonstrated, and it is clear that many of them collapsed when external assistance was withdrawn.

In Limpopo Province for example, attempts to organize farms into cooperative production units have not been entirely successful. Although cooperatives have the potential to supply farm inputs and market produce, both important to agricultural development, there has been relatively few successes.

## 5.2 Study Area



Figure 5.1: Limpopo Province Map which shows its five District Municipalities

The study of Cooperative Development was conducted in Limpopo Province of South Africa. The Province was selected due to the fact that it is predominantly rural and people's main livelihood depends mostly on Agriculture. The Limpopo Province covers the area that lies northern most in South Africa, just South of Zimbabwe. The Limpopo Province was part of the old Transvaal and includes many old homelands like Venda, Gazankulu and Lebowa (South African History Online, 2013). The Province which is one of the South Africa's richest Agricultural Regions covers 123 454 square kilometer and has an access of 5.6 million people of which in 2002 the economically active population was estimated at 1.4 million. (South Africa Business Guidebook, 2004).

## **5.3 Research Methodology**

### **5.3.1 Research Design**

Myers, (2009) who was also cited by Thomas (2010) indicated that the research method is a strategy of enquiry, which moves from the underlying assumptions to research design, and data collection. A structured questionnaire was designed with both qualitative and quantitative questions some of which were closed questions while others were open ended. The researcher used purposive sampling to select 4 of 5 District Municipalities in Limpopo Province namely Vhembe, Mopani, Sekhukhune and Waterberg. Capricorn District was purposefully left out because the cooperatives were special Premier projects initiated by government over controlled conditions and as such couldn't be compared with others in the four district. Respondents were requested to complete the questionnaires. The responses were analyzed and discussed to give insight on the socio-economic situation of the cooperative in Limpopo Province.

### **5.3.2 Sampling Technique**

Purposive sampling was employed for this study where in four of five districts in Limpopo Province were selected. The exclusion of the fifth district which is Capricorn was mainly due to the nature of the cooperatives which were established as government priority and special projects and as such cooperative principles were not followed. Four districts namely, Vhembe, Mopani, Sekhukhune and Waterberg were purposely selected for this study. All cooperatives in these four districts which were found registered and operational were considered. Total number of cooperatives which were used in this study were 31 and they were all interviewed.

## 5.4 Result and Discussion

### 5.4.1 Profile of Co-operatives in Limpopo Province

Table 5.1: Years in Business for Agricultural Co-operatives in the Limpopo Province

Years of existence	Frequency	Percentage
Less than 2 years	4	12.9
2 – 3 years	0	0
3 – 5 years	4	12.9
More than 5 years	23	74.2
Total	31	100

Table 1 shows the status of cooperatives in terms of the years in which they were in existence. It is clear that cooperatives in Limpopo Province have been sustained beyond 5 years. More than 74% have been in business for 5 years and more. This is an indication that patrons value these institutions and utilize them for their businesses hence they are still in existence. To confirm this value that farmers put on cooperatives, records show that as early as 1993 to 1994, 180 million people were members of 330 000 agricultural co-operatives in 47 countries (DESA, 1999). Already in the early 1980s the Chinese government promoted and permitted various forms of co-operatives and as a result there were 1.4 million of them in 1996 (Huang, Bolin, Xu and Chen, 2003). All these and the fact that co-operatives play a vital role in the agricultural sector (O'Connor and Thompson, 2001) make these institutions sustained and exists for a long time.

Table 5.2: Operational Status

Operational Status	Frequency	Percentage
Operational	11	35
Not Operational	20	65
Total	31	100

Although in Table 1 the indication was that cooperative has been in existence for a long time, Table 2 presents the operational status of those cooperatives. Surprisingly 65% of those cooperatives were found to be non-operational. There might be many factors contribution to this state in which cooperatives are finding themselves. The worrying factor is that if majority

of cooperatives are not operational, it means farmers are still facing harsh conditions of market access, inputs supply and transport due to lack of enough bargaining power. Some of the elements that makes cooperatives not to be functional are the board that lacks the prerequisite knowledge to run the organization and are likely to make bad decisions which will lead to loses not only for the organization but for its members too (Carter et al, 2009). According to Van der Walt (2003) this has not only led to failure by existing co-operatives but have a seen a large part of creation effort amount to nothing and most co-operatives are not operational in the Limpopo area. However, some cooperative remain operational because through them farmers are able to pool their financial resources and carry out business activities they could not independently perform as efficiently (Hoyt, 1989).

Table 5.3: Membership Number

Membership No.	Frequency	Percentage
0 - 50	13	42
51 - 200	9	29
201 - 400	5	16.1
401 - 600	2	6.5
601 - 800	1	3.2
801 - 1000	1	3.2
Total	31	100

Table 3 presents the range of membership numbers per cooperative. The table shows that 42 percent of cooperatives have 50 or less members affiliated to each. This means that in terms of management, cooperative memberships are relatively small. However, there is a concern that there are cooperative that have more than 50 members wherein 29% has up to 200 members and 16% has up to 400. This poses a threat and risk in terms of manageability and sustainability of such cooperatives which have such big number. However, on the other side it might a positive move in that it shows that many farmers are participating in cooperative development. One of the main reasons why co-operatives exist with big numbers of farmers is that the groups still enjoy the bargaining power they have accumulated together, and also the privilege conferred by the government (O'Connor and Thompson, 2001). Cotterill (undated) indicated that many people started to get interested in co-operatives because of taxation and unique finance methods such as revolving funds and the related issues of equity

allocation and redemption (Erdman and Larsen, 1965; Dahl and Dobson, 1976; Cobia et.al., 1982; Beierlein and Schrader, 1978; Royer, 1983). This is might be the main reason why more than 6% have between 600 and 100 members affiliated to one cooperative.

Table 5.4: Registration process of co-operatives

Registration Status	Frequency	Percentage
Registered	31	100
Not Registered	0	0
Total	31	100

One encouraging factor is that farmers find it very important to get their cooperatives registered entities as 100% of all cooperatives were found to be registered as indicated in Table 4. This might be assisting them to be in trade with other stakeholders such as financial institutions, market and other input suppliers. The fact that all cooperatives were found to have registered it shows that farmers wanted to run their farming activities as businesses. The cooperatives are only able to register if they comply with cooperative act of South Africa which embraces the Rochdale co-operative principles, as referred to by Roy (1976), Bakken (1954; 1963) and Robotka (1947) in Cootterill (undated).

Table 5.5: Registration process of co-operatives

Cooperative Principles	Frequency	Percentage
Follow cooperative principles	31	100
Do not follow cooperative principles	0	0
Total	31	100

In addition to have all cooperatives registered, Table 5 shows that 100% of cooperatives were also found to have followed cooperative principles when establishing cooperatives and running them. This will mean that if cooperatives are failing at least it is not because of not following the cooperative principles as set out by the Act. Since there are cooperatives which were found not operational, it means there are other elements which are responsible for this downfall. Registered cooperatives are able to run their cooperatives as business entities and follow practices for agricultural co-operatives which Schaars (1951) indicated that through such practices members of the business should provide equity capital in proportion to

patronage, all business transactions should be at market prices, business should strive for operational efficiency, business should grow through horizontal and vertical integration, business should control or own its marketing facilities and should remain neutral on political, religious and racial issues.

Table 5.6: Business Plan

Business Plan	Frequency	Percentage
Have Business Plan	15	48
No Business Plan	16	52
Total	31	100

Business plan is the heartbeat of any business and without it, the business losses direction. At least with a business plan a cooperative can be able to source funds from funders. Business plan can assist the cooperative to know what to produce and were to market such produce. Table 6 shows the percentages of the cooperatives having business plan and those without. It is of great concern that 52% of the interviewed cooperatives were not having business plans. This means that they were running without a plan and as such this might be one of reasons that majority of the cooperatives were recorded as non-operational. Success or failure of a cooperative depends on whether the cooperative was management or mismanagement. According to the basics functions of management (Beierlein and Lee, 1978.; Roy, 1976) which were categorised by Cobia (1989) as planning, organising, directing, staffing and controlling. Business plan is a product of planning and is important for the survival and sustainability of a cooperative.

Table 5.7: Co-operatives Capacity

Capacity	Frequency	Percentage
Low	8	26
Medium	12	39
High	10	35
Total	31	100

In terms of capacity to run cooperatives Table 7 indicated that 26 and 39 percent were found to be low and medium. Only 35% was found to be having high capacity, meaning that they

could operate and manage cooperatives in a sustainable manner. The biggest challenge in terms of cooperative capacity is the way in which these co-operatives are governed and controlled which tend to be problematic. Cooperatives, because of their principle of democratic control they are controlled by their members, who are expected to participate in policy and decision making with equal voting rights even those with no business acumen. Directors of the board are strictly co-operative members only and in many cases lack the necessary management business skills. This compromises the capacity of the cooperative and its sustainability because co-operative management which is define as the process of pursuing co-operative objectives by using the resources available to the organisation, including people, capital, and facilities (Cobia, 1989) is of high importance. It is for that reason that several agricultural and marketing co-operatives have changed their governance structure (Hendrikse and Veerman, 2001) to enable them to build capacity especially within the management structure.

Table 5.8: Affiliation to other Organizations

Affiliation to other Organisations	Frequency	Percentage
Yes	7	23
No	24	77
Total	31	100

It is important for the institutions like cooperative, to affiliate to apex organization such as tertiary cooperatives or other organization of interest such as government institutions, Non-Profit Organisations and private institutions. This assist cooperatives to further bargain for further market such as export and processing as well as funding for other operations. As indicated in Table 8 majority of cooperatives in Limpopo Province (77%) were not affiliated to any organization.

Although Stewart (1993), who was cited by Hind (1994), stated that a business cannot run smoothly and successfully if its customers or suppliers are actively involved in running it, as this will trigger too much conflict of interest, it is important to note that some stakeholders enhances the cooperative business. In China, for example, in the early 1980s the government

promoted and permitted various forms of co-operatives and as a result there were 1.4 million of them in 1996 (Huang, Bolin, Xu and Chen, 2003).

Young (1996) also stated that stakeholders are not only inside the organization however, it include many external people expecting work from the co-operative, for example suppliers, contractors, consultants and possibly government departments or agencies. It is difficult for farmers to penetrate the monopoly of market fraternity individually and by working together as co-operatives can give them enough bargaining power and solve the economics of scale challenge. This can possibly be done by establishing a tertiary co-operatives or an apex organization.

Each business has set of key stakeholders including owners or investors, employees, who work for the business in some capacity, such as in labour or management, customers who use the business as a supplies or services needed in their households or businesses or as outlet for the product they produce and other stakeholders (such as creditors and suppliers) who have vital interest in the business.

Table 5.9: Role-players

Private	Government	Members	Directors
➤ Financing & training	➤ Financing ➤ Training	➤ Major clients ➤ Contribute funds	➤ Managing the coop ➤ Give guidance
➤ Sell goods to cooperatives	➤ Motivate farmers ➤ Subsidize	➤ Assist board members	➤ Administration ➤ Encouraging members
➤ Buy from the coop	➤ Make new policies	➤ Assist in checking stock	➤ Organize everything
➤ Supply agric inputs	➤ Empower blacks		
➤ Processing products from the cooperative			



Table 9 shows the role-players and their roles in Limpopo Province. Role-players indicated in these tables are private institutions, government, members, and directors. Cooperatives in Limpopo Province indicated the roles of role-players as follows:

a) Private institutions

Private institutions are role-players because some of them like Kruger National Park do buy products from cooperatives. Some of them do offer skill training and to some extent finance certain cooperatives. Other cooperatives stated that they buy their inputs from private institutions like NTK. There are other private institutions that process products from cooperatives.

b) Government

All cooperatives indicated that they expect the government to fund their initiatives or subsidise them. They also indicated that government should help cooperatives by giving trainings and come up with user-friendly policies.

c) Members

There are three common roles of members mentioned equally by interviewed cooperatives in Limpopo Province. Such roles include contributing membership fee; buying products from cooperatives and assisting board members in operational issues such as checking stock.

d) Directors

The main task or role of directors as mentioned by interviewed cooperatives is to manage and administrate the cooperative. It is also their duty to guide and encourage members of the cooperative.

Table 5.10: Assets Value

Assets Value	Frequency	Percentage
0 – 20 000	13	42
20 001 – 100 000	5	16
100 001 – 200 000	4	13
200 001 – 400 000	4	13
400 001 – 600 000	0	0
600 001 – 800 000	1	3
800 001 – 1000 000	0	0
1000 001 – 2000 000	3	10
2000 001 +	1	3
Total	31	100

Cooperatives in Limpopo Province as indicated in Table 10 were found to be running on a very low asset base. At least 42% were had asset value which was below 20 000 with only 3% having over R2 million. This is a picture of the kind of infrastructure they are also owning. It is difficult for the cooperative to run without all necessary infrastructure and equipments. There are necessary equipments such as tractors, transport vehicle and grading. In a case where cooperatives run without these and other necessary assets, they fail to achieve what other non-cooperative businesses are achieving. Thirkell (1989) cited by Hind (1994) ,indicated that co-operatives are perceived as being managed without the same level of business efficiency as other non-co-operative business structures in the same sectors. Lack of necessary assets defeats what Lazenby (2010) indicated that co-operative movement provides a society with a means to financially empower themselves through better utilization of their assets. Having 42% of cooperative indicting that their assets value is below R20 000 is a serious concern and might be playing a role in the non-functionality of cooperatives and even collapses.

Table 5.11: Turnover

Turnover	Frequency	Percentage
0 – 50 000	7	23
50 001 – 200 000	8	26
200 001 – 500 000	16	52
Total	31	100

One important aspect of a business is to increase turnover. Table 11 shows that 52% of interviewed cooperatives are making turnover of between 200 001 and 500 000 rands. This is an indication that through cooperatives farmers are able to increase their turnover. Only few (23%) recorded as being making R50 000 or less. Considering that in some African countries co-operatives have become the second largest employer after the state (NCASA, 2003), it is important for cooperatives to increase their turnover. In Italy alone for example, the co-operative movement has employed about five million people (Lotti, Mensing, Valenti & Hamilton, 2006.). These institutions also contribute to the reduction of poverty and are better able to mobilize wide participation and can reduce costs, enhance incomes and improve the viability of business activities (Philip, 2003). Although there are other motivations for co-operative activity, one main primary motivation for people to participate in a co-operative, is to improve their well-being (usually income) as Hoyt (1989) indicated that cooperation is a self-help method to attack the extreme conditions of poverty, therefore rational persons would not voluntarily engage in activities that would be expected to leave them less well off. It is therefore very important for a cooperative to have the capacity to increase its turnover in order to achieve its objective. This can also be possible if cooperatives can have access to credit to allow its farmers to increase their planted area (Technoserve, 1991). Failing to have good turnover, rich people dominate the livelihoods of less fortunate individuals due to the scarcity of financial resources (Abdelrahman and Smith, 1996).

## 5.4.2 Problems and constraints

Table 5.12: The major problems faced by co-operatives

Problem	Seriousness			
	Not serious at all	Not Serious	Serious	Very serious
Cash-flow			8%	92%
Lack of Management			8%	84%
Lack of Business Skills	8%		17%	83%
Staff problems			36%	64%
Involvement of members	4%	8%	26	63%
Lack of support from members				100%
Lack of support from the government		6%	3%	91%
Lack of adequate inputs			18%	82%

It is evident from the survey that establishing and registering a cooperative is not difficult. However, there are many factors that contribute to the malfunctioning of cooperatives. Such factors are also major influence to the present situation of cooperatives in Limpopo Province. Some of these factors as indicated in Table 12 are lack of management and business skills, cash flow, lack of support from members, lack of support from the government, lack of adequate inputs and market. Thirkell (1989) as referred to by Hind (1994) ,indicated that co-operatives are perceived as being managed without the same level of business efficiency as other non-co-operative business structures in the same sectors mainly because they pay low remuneration, have packages that are not progressive, run by unskilled committees and politicians. This is confirmed by 84% cooperatives which indicated that they view lack of management as a very serious factor while 93% and 83% indicated cash flow problem and lack of business skills respectively as very serious too. Hind (1984) cited Pickard (1970) who referred to capital sourcing and retention, as the main source for co-operatives' inefficient way to run a business.

There is doubt as to the appropriateness of co-operative models in rural societies that are characterized by lack of formal education, poor business and financial skills, and a greater disparity in income and production level (Selvavinayagam, 1995). The higher percentages on

lack of management is an indication that badly managed co-operatives end up failing and act as a deterrent to those people who had an intent to join or form their own co-operatives. There are many reasons why co-operatives fail but mostly the reasons behind such catastrophic collapse is incompetence and mismanagement of funds. A co-operative board that lacks the prerequisite knowledge to run the organization is likely to make bad decisions which will lead to losses not only for the organization but for its members too (Carter et al, 2009). Electing co-operative leaders without considering their integrity leads to misappropriation of funds which in turn leads to the collapse of the co-operative. This creates fear in the minds of the potential patrons and leads to reluctance in joining co-operatives.

#### **5.4.3 Management and business skills**

It is clear that without proper training, cooperatives cannot function well even if they can get capital to develop their businesses. The fact that most of the cooperative members attended school up to the level of primary education, various trainings are needed to equip them with important skills such as financial management, bookkeeping, conflict resolution and leadership as well as cooperative principles. Even though the majority of interviewed cooperatives indicated that they were told about the principles of cooperative, it seems as if they still need training on how cooperative should operate since most of them are doing the opposite.

#### **5.4.4 Cash-flow**

There are many cooperatives in Limpopo Province that have trainings of some sort and they also have proper building infrastructures, but they are not making any progress in their businesses because they do not have funds to buy stock or to market their products. As a result many of them are presently stagnant and all those big buildings are closed and they are deteriorating. These of course are a waste of resources and should be reversed as soon as possible.

#### **5.4.5 Lack of adequate inputs and access to market**

Limpopo Province is characterized by plenty of citrus and tropical fruits. Large percent of cooperatives in these districts are cultivating those fruits. They are in large extent suffering

from lack of inputs and access to market. It will be better for them if for example an agro-food processing industry to make fruit juice, jam and peanut butter can be established in Thohoyandou area for Vhembe District and another agro-food processing to make fruit juice and jam at Bolobedu for Mopani District. Table 12 shows that the above problems that are faced by cooperatives are all rated very serious. The percentage problems rated very serious, ranges between 63% to 100%. This is an indication that cooperatives have got many serious problems.

## **5.5 Conclusion**

This chapter was focusing on situation analysis of the agricultural cooperatives in Limpopo Province. The main focus was on the number of years in which the cooperative was in business, operational status, number of members affiliated, assets and turnover.

It seems that the cooperatives sector is in poor state. The majority of the cooperatives are non-operational and the ones that are still in operation experience various problems. Cooperative development initiative was well received by farmers in Limpopo Province. There are 31 cooperatives which were interviewed during this study, but very few are still operational and most of them are struggling to survive.

There is no doubt that cooperatives are major participants in the provincial economy and they can be used as the pillars to reinforce the farming activities to get into the mainstream of the economy. However, a better cooperative model needs to be developed which can address factors which are responsible for the downfall of these registered cooperatives. Some of the factors may be easy to address such development of business plan and skills development. In cases where challenges range from poor infrastructure market access and transport logistics, more funding will be needed and that is where government comes in as well as private investors.

Most of the challenges that cooperatives in Limpopo Provinces are facing can be addressed by the introduction of New Generation Cooperatives which can bring in principles such as delivery rights, closed membership, higher level of initial equity investment as well as transferability and the Opportunity for appreciation or depreciation in the value of delivery rights. Through delivery rights equity shares assign membership to producers and also allocate delivery rights and obligations which guarantee farmers of market for a portion of

their production. In this way farmers will be in the position to increase their income and improve their turnover. The democratic control remains un-tampered with, and because of this, the shares that allocate delivery rights are separate from membership shares however it may improve the commitment of the members to the cooperative thus in turn improve the management of the cooperative.

The open and voluntary membership principle of traditional cooperatives also had a bearing on the capacity of cooperatives since members come in and out as they like making the membership unstable. Some of those who acquired skills over time may leave the cooperative and new uncommitted ones come in. The New Generation Cooperative comes in with closed membership. Once all the delivery rights are sold the membership is closed and new members can only join through buying delivery rights of those who are leaving. In other words, membership numbers can change, decreasing or increasing, but the volume of primary input delivered to the co-operative does not change. Commitment remains high mainly because members have bought shares and would like to see them maintaining or improving their value.

White farmers co-operatives are good examples of functional co-operatives and what a co-operative can do to improve farming activities, food security and income. These farmers expanded their production and increased their market. It is however, true that increased subsistence production has the potential to improve the food security of poor households in both rural and urban areas by increasing food supply, and by reducing dependence on purchasing food in a context of high food price inflation, but the efficiency of marketing and distribution systems, household purchasing patterns, ability to produce own food (Baiphethi and Jacobs, 2009). Development of better models such as the New Generation Model will lead to income improvement, food security, resourced cooperatives with both immovable and movable assets as well as better cooperative management.

## CHAPTER 6

### OPERATOR CHARACTERIZATION AND ACQUISITION OF SOLD ITEMS FOR TSHAKHUMA AND KHUMBE MARKETS OF LIMPOPO PROVINCE, SOUTH AFRICA

#### Abstract

The purpose of the study was to characterize operators of the Tshakhuma and Khumbe markets and to investigate the items sold and sources from which they were acquired. Some 91 operators were interviewed, 67 from Tshakhuma and 24 from Khumbe Market. Majority (91.2%) of operators was female and 77% of them were 21 to 60 years old. Some 22% of the operators had no schooling, 25.3% had primary, 44% had secondary and 8.8% had tertiary education. Operator incomes were low as evident from budget spending on basic necessities only. Half (49.5%) of operators were married, 31.9% were single, 3.3% were divorced while 15.4% were widowed. Agricultural produce constituted the main items sold in the markets, and those were mostly fruits, vegetables and field crops. Fruits were acquired from commercial farmers while vegetables and field crops were from own households and local smallholder farmers belonging to local agricultural cooperatives.

**Key words:** Market, operator, smallholder farmer, Tshakhuma, Khumbe<sup>1</sup>

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## **6.1 Introduction**

Small-scale farmers have grouped themselves into cooperatives to assist themselves to market their produce together. Operators of Tshakhuma and Khumbe are farmers who produce together as primary cooperatives and market together in these two formal markets. This chapter therefore focuses on characterization and acquisition of items sold. This was done by investigation their demography as well as produce they sell and how they acquire them. Though agriculture has been identified as one of the three pillars of economic development in Limpopo Province, small-scale emerging farmers have great challenges in participating in product markets (Nesamvuni *et al.*, 2003). These farmers have limited technical expertise and only a partial understanding of market requirements. This situation was exacerbated by the fact that the small-scale farmers did not benefit from the agricultural policies of the past regime. As a result, the small-scale farmers in South Africa still have to manage basic farming issues while their large scale commercial counterparts focus on issues of improving competitiveness (Makhura and Mokoena, 2003). Increased contribution of the small-scale farmers to items sold in agricultural markets is an indication of improvement in their farming production. The relative contributions of small-scale and large commercial farmers on items sold in agricultural markets is therefore of interest. The purpose of the study was to characterize operators of the Tshakhuma and Khumbe markets and to investigate the items sold in the two markets and sources from which they were acquired, i.e. whether they were bought from small-scale emerging or large-scale commercial farmers.

## **6.2 Research methodology**

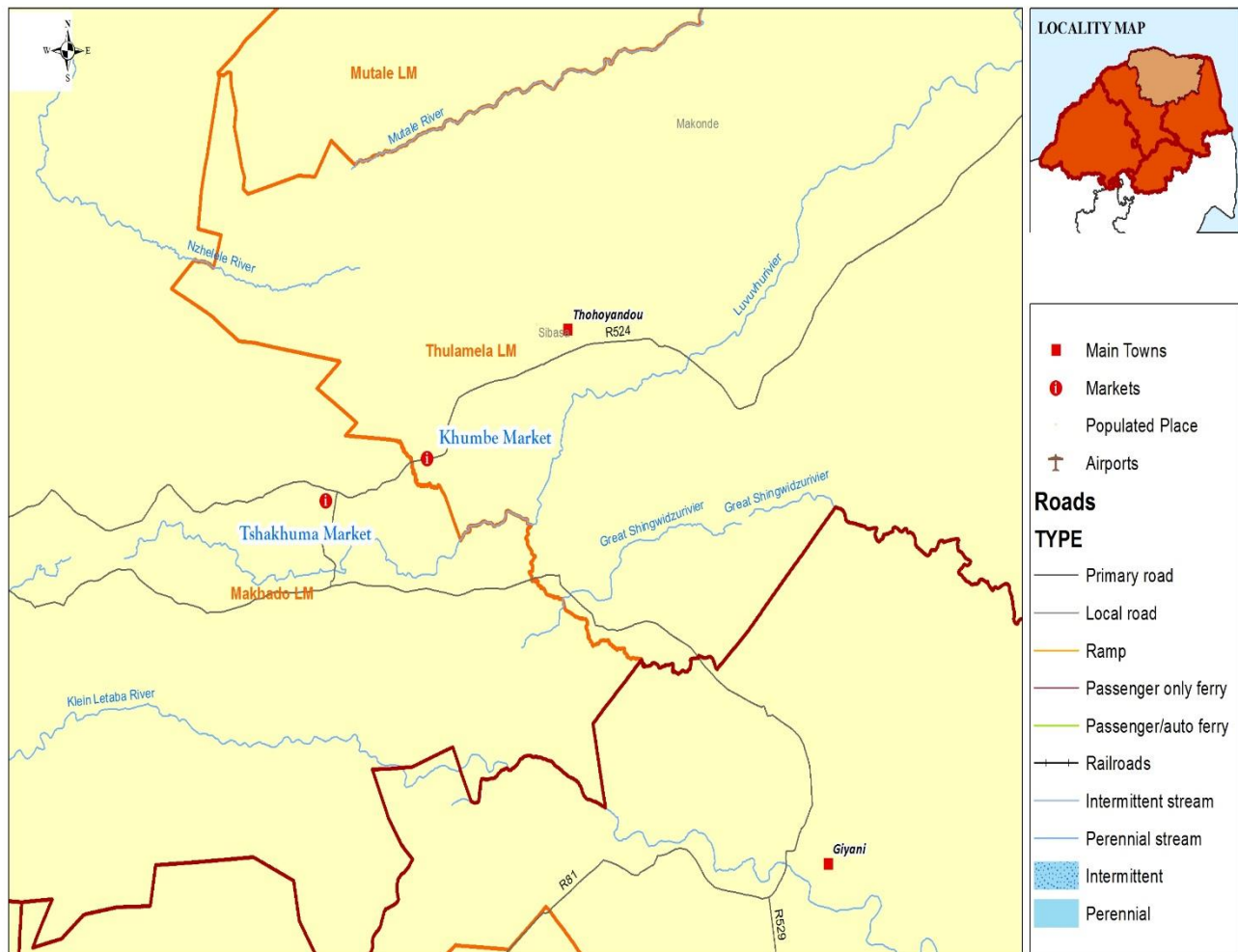
### **6.2.1 Description of study area**

The study was conducted in the Limpopo Province of South Africa and was focused on the Vhembe District Municipality of the province. The specific target of the study was the Tshikhuma Market in Makhado and the Khumbe Market in Thulamela Local Municipality (Figure 1).

# LIMPOPO PROVINCE - VHEMBE DISTRICT MUNICIPALITY



DEPARTMENT OF AGRICULTURE  
Limpopo Province



**Figure 6.1** Map of the study area showing the location of the Tshakhuma Market in the Makhado Municipality and the Khumbe Market in the Thulamela Municipality in Vhembe District

The Tshakhuma Market is located closer to the commercial Levubu farms and would be expected to acquire more selling items from the commercial farms. The Khumbe Market on the other hand is located deep in a rural settlement and would likely acquire selling items from surrounding households and small-scale emerging farmers.

## 6.2.2 Sampling frame and sampling procedure

The importance of a sampling frame in scientific research was shown by Welman et al. (2005) who revealed that it is impossible to properly judge the representativeness of the

obtained sample unless a sampling frame is borne in mind. A representative sample is a requirement for subsequent research results to be credible and trustworthy (Leedy and Ormrod, 2010). Multistage sampling was conducted as described by Leedy and Ormrod (2010) and involved (1) primary area selection of municipalities (both district and local municipalities), (2) location selection of agricultural markets and (3) respondent selection of stakeholders sampled for interviews.

For primary area selection of municipalities, the sampling frame was composed of the five district municipalities of the Limpopo Province, namely: Vhembe, Capricorn, Mopani, Sekhukhune and Waterberg District Municipality and the Vhembe District was purposively sampled for its accessibility to the researcher. At a local municipality level, four municipalities of the selected Vhembe District comprised the sampling frame, namely: Thulamela, Makhado, Musina and Mutale Local Municipality. The Thulamela Municipality was also purposively sampled for its accessibility to the researcher as he resided in this municipality while the Makhado Municipality was purposively included for being a large producer of sub-tropical fruits and most vegetables.

As for location selection, the sampling frame was comprised of numerous agricultural markets of various sizes (with or without accommodation infrastructure). The Tshakhuma Market was purposively sampled for its location near a major commercial farming area (Levubu farms) while the Khumbe Market was selected for its location in the midst of small-scale emerging farmers. The sampling frame for market operators comprised of 600 members for Tshakhuma and 200 for Khumbe Market. Some 67 market operators were randomly sampled for Tshikhuma while 24 were randomly selected for the Khumbe Market.

### **6.2.3 Data collection and analysis**

Primary data was collected from the sampled respondents through interviews which were conducted by trained enumerators using a structured questionnaire. The questionnaire contained both open- and closed-ended questions which included socio-economic variables such as gender, age, education, marital status and household sizes of respondents. The closed-ended questions collected quantitative data while the open-ended questions recorded qualitative data (Leedy and Ormrod, 2010). Qualitative techniques were directed towards improved understanding of the market operators as influenced by their socio-cultural

environment (FAO, 2001). This research method that combines the collection and analysis of quantitative data with that of qualitative data is referred to as a mixed study (Hurmerinta-Peltomaki and Nummela, 2006). The questionnaire was complemented by an interview guide for a focus group and interview schedules for several key informants, and these collected qualitative data. Secondary data was collected by studying relevant documents, reports and other literature.

The data collected were analysed using a Statistical Package for Social Sciences (SPSS). Basic Statistics were computed to determine frequencies of each variable.

## **6.3 Results**

### **6.3.1 Characterization of market operators**

The characterization of role players in any development process is key for success of the development initiatives. Resources such as land, capital and technology are important but not sufficient for development to be realized as they should be organized and operated, and these require the human element (Steyn, 1988). Analysis of the characteristics of human beings as participants in a development process is therefore essential for successful community development (Crouch and Camala, 1981). For this study, analysis of the characteristics of the market operators was necessary as this influenced performance in their market job, and this was categorized into personal and socio-economic characteristics. The personal characteristics prioritized for the study were sex, age, education, marital status and sizes of household while the socio-economic characteristics were occupational status and household income and expenditure.

#### **6.3.1.1 Personal characteristics**

##### **(a) Sex**

Of the 91 market operators selected for the study (67 from Tshakhuma and 24 from Khumbe Market), about one in ten (8.8%) were males and nine in ten (91.2%) female. All male market operators were found at Khumbe Market, a situation that suggested that some small-scale farmers who were mostly male could have also served as operators. Market operators at the Tshakhuma Market mostly bought produce from large commercial Levubu farmers who are focused in their farming business and could not possibly have served as operators; hence the

farmers were all female. This suggests that the job of market operation in the study area was largely regarded a responsibility for women.

Heads of household are important decision makers in their families and therefore have a huge influence in community development. Respondents (market operators) were therefore requested to reveal the gender of their heads of household. Half (50.5%) of the respondents stated that their households were headed by males (Table 1) while 49.5% were female headed. Female heads of household were single, divorced, widowed or separated and hence also assumed functions that could be the responsibility of husbands.

Table 6.1 Distribution of respondents in the Khumbe and Tshakhuma markets according to sex of heads of household, 2003 ( N=91).

Name of the market	Sex of head of household				Total no of Households	
	Male		Female		N	%
	N	%	N	%		
Tshakhuma	32	47.8	35	52.2	67	100
Khumbe	14	58.3	10	41.7	24	100
Total	46	50.5	45	49.5	91	100

As shown in Table 1, a little less than half (47.8%) of the households for Tshakhuma Market operators were male headed compared to three in five (58.3%) households for Khumbe Market operators. Subsequently, a little more than half (52.2%) of the heads of household for Tshakhuma Market operators were reportedly female while two in five (41.7%) heads of household for Khumbe Market operators were said to be female. The higher reported number of male heads of household by Khumbe Market operators could have been influenced by the fact that all male respondents were from this market and those were probably heads of household themselves and this then increased the number of male heads of households. The higher number of reported female heads of household by Tshakhuma Market operators could have resulted from the fact that all respondents from this market were female.

(b) Age

According to Smith and Zopf, (1970) as cited by Bembridge *et al.* (1982), the age of an individual is one of the most important factors which determine the way he or she thinks and behaves. The types of decisions made by elderly people and their ways of behaving tend to be different from those of their younger counterparts.

Table 6.2 Distribution of respondents in the Khumbe and Tshakhuma markets according to age, 2003 ( N=91 ).

Age category (years)	Tshakhuma Market		Khumbe Market		Combined	
	N	%	N	%	N	%
0-18	1	1.5	0	0.0	1	1.1
19-20	1	1.5	1	4.2	2	2.2
21-30	11	16.4	5	20.8	16	17.6
31-40	17	25.4	3	12.5	20	22.0
41-50	19	28.4	1	4.2	20	22.0
51-60	12	17.9	2	8.3	14	15.4
61+	6	9.0	12	50.0	18	19.8
Total	67	100.0	24	100.0	91	100.0

Some 1.1% of the respondents were at most 18years old (Table 2) and this would at best be completing their secondary education. The young people in this category were only recorded at the Tshakhuma Market, and this could be because a larger number of respondents were sampled at this market (Table 2). Considering the fact that the respondents were market operators, the results suggest that this category of the respondents would not be attending school or could be attending and performing market operation responsibilities in the afternoon when they return from school. For the young people to be abandoning secondary education to be working at the markets would be bad for the community in the area under study as they would be missing out on acquiring the education which they will require for their future. For those who could be attending school, the market job after school would be consuming the time for studying and would result in poor school achievement.

Some 2.2% of the respondents were in the age group of 19 to 20 years old, and this comprised of 1.5% for Tshakhuma and 4.2% for Khumbe Market. This category of respondents would at best be doing tertiary education and the fact that they were market operators in the study area suggests that they may not be at educational institutions any more, or if they are, they would likely not perform well as the precious study time is lost to market activities.

The fact that 17.6% of the respondents (16.4% from Tshakhuma and 20.8% for Khumbe Market) were in the age group of 21-30 reveals that youth in the study area do participate in agriculture at the marketing level of the value chain. Also, one in five (22.0%) of the respondents were aged 31-40 years old, and this confirmed participation of youthful members of the study community in the marketing of agricultural produce. The respondents in this age category comprised one in four (25.4%) at the Tshakhuma and one in eight (12.5%) at the Khumbe Market.

The same number (22.0%) of respondents was in the middle ages of 41-50 years old with more (28.4%) based at the Tshakhuma and few (4.2%) at the Khumbe Market. Relatively fewer (15.4%) respondents were in their elderly ages of 51-60 years old comprised of 17.9% based at Tshakhuma and 8.3% at the Khumbe Market. One in five (19.8%) of the respondents were over 60 years (9.0% at Tshakhuma and 50.0% at Khumbe Market) and this would include those in pension. Bembridge, (1982), argue that, although increasing age in years may have an impairing effect on the physical ability of participants; several research studies in recent years have indicated little or no mental deterioration at least up to sixty years of age. Since marketing and its management is considered primarily to be a mental process, it is assumed that at least up to the age of sixty, managerial ability will not be seriously impaired. Health issue aside, it can be concluded that approximately 70% of the respondents in the two markets is having the necessary physical capacity to carry out their operation effectively.

As revealed in Table 2, the respondents were distributed in a wide range of age groups from children of school going age through youth, the middle aged and the elderly, including those that could be pensioners. This result suggests that agriculture is an important economic activity in the study area, and this supports the identification of the sector as a major pillar of the economy of Limpopo Province (OTP, 2009).

(c) Education

The degree of human development is highly influenced by their level of education. While it may not be the only element determining the extent of human development, education is recognized as having a critical role to play since it is a key that unlocks human potential which is necessary for development. According to Lundahl (1979) as cited by Steyn (1988), education is one of the important agencies of acculturation and renewal for the members of the society as a whole. It is generally accepted that education is the cornerstone of the comprehensive human resources approach to development.

Human behaviour sometimes needs to be altered and education plays a vital role for such change to be successful. Ndegwe *et al*, (1985) expressed the fundamental significance of education development as a basic need in its own right, a way of meeting other basic needs, and an activity that sustains and accelerates overall development. According to Olaiton (1984) and Tompson (1981) more years of schooling are associated with higher adoption rates than are fewer years of schooling. It was therefore necessary for this study to investigate the educational status of the respondents from the two markets (Table 3) as this would influence their performance in the agricultural trade sector and subsequently their level of development.

Table 6.3 Distribution of market operators in the Khumbe and Tshakhuma markets according to level of education, 2003 ( N=91 ).

Level of education	Tshakhuma Market		Khumbe Market		Combined	
	N	%	N	%	N	%
No schooling	15	22.4	5	20.8	20	22.0
Grade 1-3	2	3.0	0	0.0	2	2.2
Grade 4-5	8	11.9	3	12.5	11	12.1
Grade 6-7	7	10.4	3	12.5	10	11.0
Grade 8-9	5	7.5	4	16.7	9	9.9
Grade 10-11	14	20.9	4	16.7	18	19.8
Grade 12	9	13.4	4	16.7	13	14.3
Diploma	7	10.4	1	4.2	8	8.8
Total	67	100.0	24	100.0	91	100.0



About one in five (22.0%) of the market operators had no schooling, and this comprised of 22.4% from the Tshakhuma and 20.8% from the Khumbe Market. This category of market operators would have very little if any literacy at all. As a result of being generally illiterate, these market operators would not easily be reached by development and other information sent through the print media. The lack of access to print media information could create a dearth of development and other important information for this category of market operators and this would indeed influence their level of development.

In addition to influence on literacy status, the lack of schooling for 22.0% of the market operators would also negatively affect their level of numeracy. The low level of numeracy for the market operators would have serious negative effects in their business as they need know the prices of different packs of the agricultural produce they sell, receive money from buyers and often give back some change. These tasks require not only literacy skills (for reading out prices where written and the money) but also basic numeracy skills for calculating the money for buying the produce from farmers, amount of change to be given back to buyers and the total income and profit made. The market operators who reported to have had no schooling must have gained the basic numeracy skills through some other means; else they could be having other people to assist them.

Some 2.2% of the market operators (3.0% in Tshakhuma and none in Khumbe Market) reportedly passed grades 1-3, some 12.1% (11.9% in Tshakhuma and 12.5% in Khumbe Market) passed grades 4-5 while 11.0% (10.4% in Tshakhuma and 12.5% in Khumbe Market) passed grades 6-7 (Table 3). These categories of market operators comprised primary school education and the operators probably had none to low literacy and numeracy skills with those who attained higher grades (grades 4-5 and 6-7) possibly having achieved basic levels of these skills. The market operators with none to low levels of literacy and numeracy skills would probably struggle to access written information and to perform correct counting and calculations of money while those with the basic skills would be relatively better.

One in ten (9.9%) of the market operators (7.5% in Tshakhuma and 16.7% in Khumbe Market) revealed that they had passed grades 8-9 which are the entry grades to secondary school education. Two in ten (19.8%) of the operators (20.9% in Tshakhuma and 16.7% in

Khumbe) reported having passed grades 10-11, the middle grades of secondary school education. These market operators would be expected to have acquired sufficient levels of competence in literacy and numeracy to correctly perform their job, more so for the operators who passed the middle grades of secondary education.

Some 14.3% of the market operators (13.4% in Tshakhuma and 16.7% in Khumbe Market) indicated that they had passed Grade 12. The operators who passed Grade 12 would have acquired more than sufficient education to proceed to college or university for higher education. The involvement of these people in the operation of the markets in the study area suggests that the markets used high levels of literacy and numeracy skills, in addition to other competences the operators might have acquired as part of their education. The market operators with Grade 12 could therefore be expected to be performing well in their market responsibilities.

As shown in Table 3, some 8.8% of the market operators (10.4% in Tshakhuma and 4.2% in Khumbe Market) had completed diplomas. These market operators acquired high levels of competencies in their fields of study and could be under-utilized by working as market operators. The market job for this category of operators could have been taken as interim responsibilities while they search for preferred jobs aligned to their diploma qualifications. Some of these market operators might even be performing the market job as complementary while also involved in some other jobs where their competencies are fully utilized.

It is interesting to note that the Tshakhuma Market had more diploma holders (10.4%) as market operators than the Khumbe Market (4.2%). Tshakhuma Area used to host two Colleges of Education, the Tshisimani and the Ramaano Mmbulaheni College of Education. The two colleges were closed down as part of the restructuring of the education system in the country which resulted in merging of some institutions. The majority of the diploma holders who are operators at the Tshakhuma Market could be qualified teachers trained in these institutions. Some of the operators could be employed teachers doing the market job part-time while some could still be looking for employment.

(d) Marital status

Marital status plays a major role in agriculture, especially in rural areas where certain duties are assigned only to men while others are assigned to women (Tshenkeng, 1985). As stated by Tshenkeng (1985), duties assigned to men include major cultivation practices while women are reportedly assigned duties such as cooking, fetching water, collecting firewood, crop weeding and marketing of farm produce. The marital status of person is therefore important as it reveals whether he/she has a spouse to help perform the tasks normally assigned to the opposite gender. It was a result of this importance of marital status that this study included it in the investigation (Figure 2).

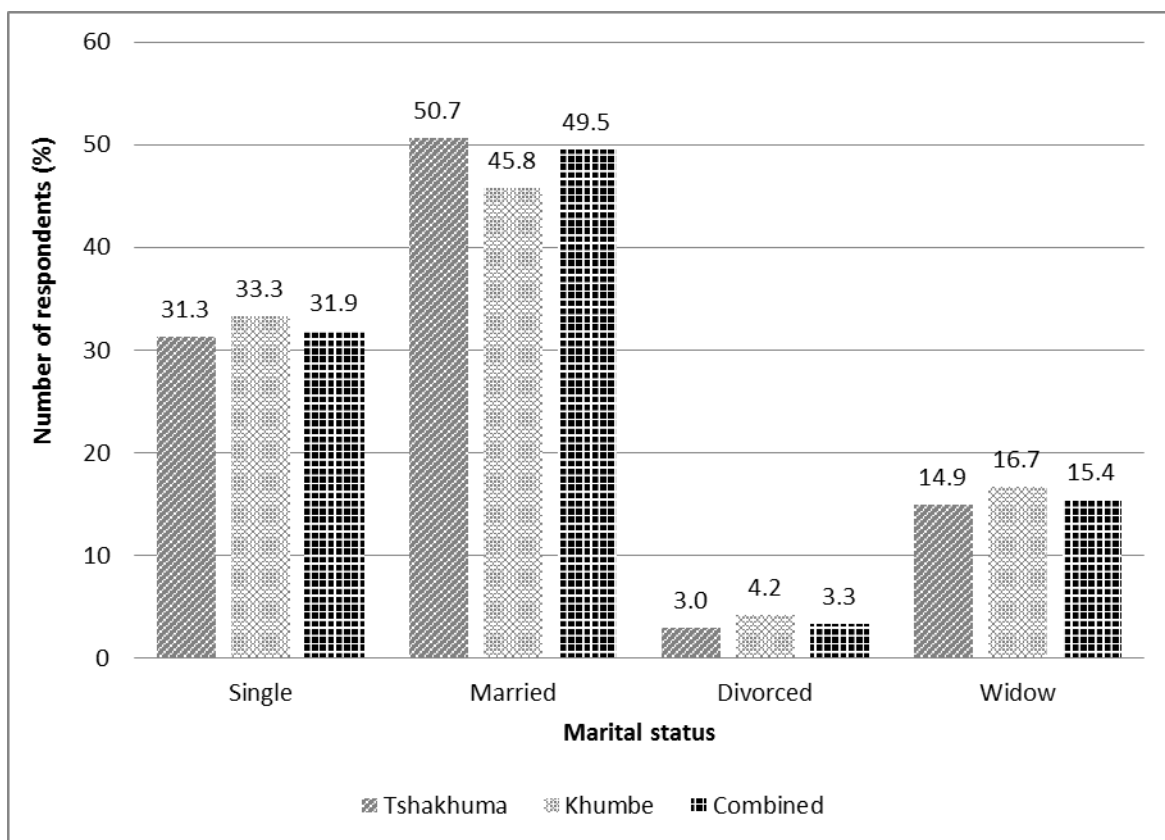


Figure 6.2 : Frequency distribution of market operators at Tshakhuma and Khumbe markets according to their marital status, 2003 (N=91)

About three in ten (31.9%) of the market operators in the study area were single with almost the same number of operators at the Tshakhuma (31.3%) and Khumbe (33.3%) markets (Figure 2). Considering Tshenkeng (1985) assertion that certain duties are assigned only to men in rural areas while others are assigned to women, single market operators probably had

to perform both duties to survive or they might have to hire other people to perform the duties they could not perform.

Half (49.5%) of the market operators were married, suggesting that as couples they could perform all the tasks and would not have to hire other people to have both male and female assigned tasks performed. Some 50.7% of the married market operators were based at the Tshakhuma Market while 45.8% were at the Khumbe Market. The number of market operators that were reportedly married constituted the majority of the respondents in each of the two study market, and this was a good result as the married market operators would be more likely to be successful as they would have their spouses to complement them.

Some 3.3% of the market operators (3% at Tshakhuma and 4.2% at Khumbe Market) were reportedly divorced while 15.4% (14.9% at Tshakhuma and 16.7% at Khumbe Market) were widowed. The divorce rate was probably low at 3% and this suggested relatively stable communities. The number of widowed respondents was rather high at 15.4%, and this could be assumed to reveal a rather high death rate in the study area. The high death rate could be a result of high incidence of disease infections with HIV / AIDS related diseases probably playing a major role. Both the divorced and widowed market operators would have to perform both men and women assigned tasks in order to survive or they would have to hire other people to perform the duties that used to be assigned to their spouses.

The overall results revealed that half (49.5%) of the market operators in the study area were married, suggesting they had spouses to perform complementary tasks to succeed in their business. Typical of a rural set up, some of the spouses of married market operators might be employed away from the study area and could therefore be staying away and probably commuting on a weekly, monthly or even quarterly (once in three month) basis. The number of couples staying together and complementing each other regularly could therefore actually be less than the 49.5%. The number of market operators who were not married comprised the other half (50.5%) comprised of those who were single (31.9%), divorced (3.3%) and widowed (15.4%). These would probably hire other people to perform tasks that could otherwise be fulfilled by their spouses.

(e) Household size

Many factors act together to determine the size of a household, and those include access to information on family planning services, family income, maternal and child health care, women's status in society, level of education, religious and cultural factors. In rural subsistence economy, household size is an important as it may strongly influence the productivity of the family and hence its income level. Although larger households would have advantage of providing more labour, they also cause great financial burdens which affect the family's ability to finance development initiatives (Williams, 1986). Rural areas are characterized by occurrence of extended families that tend to make the households rather larger. The extended family, according to Goodman and Marx (1978), consists of several nuclear families united by parent-child relationships and living together either in the same house or in a compound. The market operators in the area under study reported large families of an average of 6 members (Tshakhuma) and 7 members (Khumbe Market). These families are characterized by more dependence as expected and was therefore a constraint to development.

### **6.3.1.2 Socio-economic characteristics**

(a) Occupational status

The occupational status of rural people plays an important role in development, be it in agricultural or non-agricultural sectors. It is because of lack of employment in rural areas that people, particularly heads of household migrate to urban areas. This exodus of people from rural to urban areas as stated by Tshankeng (1985) cannot be regarded a solution to the problem of rural unemployment.

The findings in this study revealed all market operators in the two markets to be self-employed as they were full-time working at the markets. At Khumbe Market some operators were full-time working on their farms while their household members sell the produce at the market. Women of Khumbe market also shared a considerable amount of time in peak season on the farms.

The discussions held with committee members and other members at the markets revealed that the level of unemployment in the study areas was high and this necessitated increased promotion of agricultural production in the study area.

#### (b) Household income and expenditure

According to Burger (1983) as cited by Steyn (1988), it is always difficult to judge how accurate respondents are in answering questions probing their household budgets. The same problem was experienced by the current study when probing respondents on the amount of income they received. Instead of asking the market operators to reveal their household incomes, it was rather easier to ask about the items they spent their money on and the amount they spent.

The household expenditure provided some idea on the household incomes. The market operators did not keep records of their expenditure and therefore it was not possible to have very good estimates of household incomes. Lack of knowledge on budgeting was the main reason behind the inability to give reliable information on expenditure. Focused group discussion revealed that households spent a high percentage of their incomes on basic necessities and low on luxury needs such as self-development. It was evident that the majority of households were in the subsistence standard of living.

### **6.3.2 Types and acquisition of produce sold in the study markets**

Apart from their personal and socio-economic characteristics, the performance of market operators is also influenced by the types of produce they sell and the sources from which they obtain these produce. Resultantly, the study provided for a focused investigation of the produce sold in the Tshakhuma and Khumbe markets and the sources from which the market operators obtained the produce.

#### **6.3.2.1 Niche produce**

The niche produce sold in the two markets under study included fruits such as mangoes, bananas, avocados, oranges, pawpaws, tangerines, pineapples and litchis, vegetables such as tomatoes, cabbage and onions, and field crops such as maize and groundnuts. These were also the niche produce of households and small holder farmers in the study area. There was a potential to encourage smallholder farmers to produce high value crops such as herbs and spices in the irrigation schemes.

### **6.3.2.2 Acquisition of produce sold in the markets**

The cost of acquisition of the produce has an influence on the market price of the produce and therefore on the extent to which the produce is bought from the market operators. The cost of acquisition is influenced by such factors as the source from which the produce is acquired and the distance of such source from the markets under study. The study revealed that different sources were used to acquire various types of produce such as fruits, vegetables and field crops.

Fruits sold in the markets under study were predominantly sourced from commercial farmers. The commercially produced fruits were mainly purchased at the Levubu farms and Barota government estate. These were mainly improved varieties of the bananas (20%), oranges (15%), and tangerine (17%) and to limited extent litchis (10%). Some of the fruits were indigenous varieties produced under low input conditions at the households and on small farms of the market operators, and those included papaws, mangoes and avocados.

As opposed to fruit, more vegetables were sourced from local households and smallholder farmers. There seemed to be less competition between local small holder and commercial farmers as far as vegetable sales to market operators was concerned, perhaps with the exception of onions and tomatoes where there was some competition. Tomatoes were predominantly commercially produced (80% of the produce) and were transported by hawkers to the markets such as those under study.

As far as field crops were concerned, the study showed sugarcane, maize and groundnuts to be predominantly produced by households in the study area and sold in the two markets under investigation. Less quantity of these field crops were sourced from the commercial farmers.

## **6.4 Conclusion**

The market operators were mostly (91.2%) female and four in five (77%) of them were within an economically active age range of 21 to 60 years. Some 22% of the operators had no schooling, 25.3% had primary while 44% had secondary education. Only 8.8% of the operators had tertiary education. Unemployment was reportedly high in the study area and operators were mostly full time in the market job. Household incomes were low as evident

from budget spending on basic necessities only. Half (49.5%) of the operators were married, 31.9% were single, 3.3% were divorced while 15.4% were widowed. Agricultural produce constituted the main items sold in the markets, and those were mostly fruits, vegetables and field crops. The fruits were mostly acquired from commercial farmers while vegetables and field crops were from own households and local small holder farmers belonging to local agricultural cooperative.



## CHAPTER 7

### FACTORS INFLUENCING FRUIT PROFITABILITY AT TSHAKHUMA AND KHUMBE MARKETS, LIMPOPO PROVINCE, SOUTH AFRICA

#### Abstract

The purpose of the study was to investigate the factors influencing profitability of fruits sold at Tshakhuma and Khumbe Markets in Limpopo Province of South Africa. Some 91 market operators were interviewed, 67 from Tshakhuma and 24 from Khumbe Market. Fruit profitability was influenced by: (1) method of acquisition of the fruits by market operators (own production vs other sources); (2) expenditure on fruit acquisition (increased spending resulted in loss of profit); (3) fruit storage (increased storage resulted in loss of profit), and (4) use of the cooperative approach (associated with increased profit). Socio-economic characteristics of market operators also influenced profitability of sold fruits. The characteristics for market operators were described in terms of: (a) gender, where majority of operators (91.2%) were women, (b) age with 80%  $\leq$  60 years old and (c) household size that were mostly large (6-7 persons) and provided for family labour. Low levels of education necessitate training for increased fruit profitability.

**Keywords:** market, operator, produce, profit, Tshakhuma, Khumbe, Vhembe District, Limpopo Province, South Africa

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## 7.1 Introduction

This chapter is focusing on the factors that influence the fruit profitability in the two informal markets which are Tshakhuma and Khumbe. One of the important elements of cooperative is its sustainability. Factors that affect cooperative sustainability include availability of produce and their market. Farmers organize themselves into cooperatives amongst others to enhance their income and improve food security and for these to happen cooperatives need to sustainably manage to sell their produce and make profit. Present trade, marketing and institutional policies in South Africa make limited provision for unique interests of emerging smallholder farmers. Furthermore, the current institutions involved in promoting market access are not well co-ordinated. Constraints to market access can be addressed through a combination of public intervention and private sector involvement. Kwaw (2006) stated that on the local market, small-scale income generation projects continue to face tough competition with established chain stores selling similar products to those that are the main focus of community projects. In the same article Kwaw pointed to the fact that efforts to reach the local market with their products are hampered by the better quality of product, competitive pricing, and better packaging of chain stores.

Lyne (1996) and Matungul et al (2001) as cited by Ortmann & King (2007) indicated that Small-scale farmers in South Africa, as in other developing countries, have limited access to factors of production, credit and information; and markets are often constrained by inadequate property rights and high transaction costs. This further illustrates the difficulties that farmers have in accessing market for their products. It is however, true that

increased subsistence production has the potential to improve the food security of poor households in both rural and urban areas by increasing food supply, and by reducing dependence on purchasing food in a context of high food price inflation, but the efficiency of marketing and distribution systems, household purchasing patterns, ability to produce own food (Baiphethi and Jacobs, 2009)

It cannot be disputed that the participation of small farmers in markets is, therefore, important for pro-poor rural development at the same time access to attractive markets is also often the spur for increased production and the adoption of new technologies (van der Heijden and Vink, 2013). As much as farmers can have capacity to increase their production, the fact

remains rural poor people feels that one reason they cannot improve their living standards is that they face difficulties in accessing markets” (IFAD, 2003,; van der Heijden and Vink, 2013). As Mwale et al (2012) puts it, Markets need products in bulk which the community project members may not be able to meet.

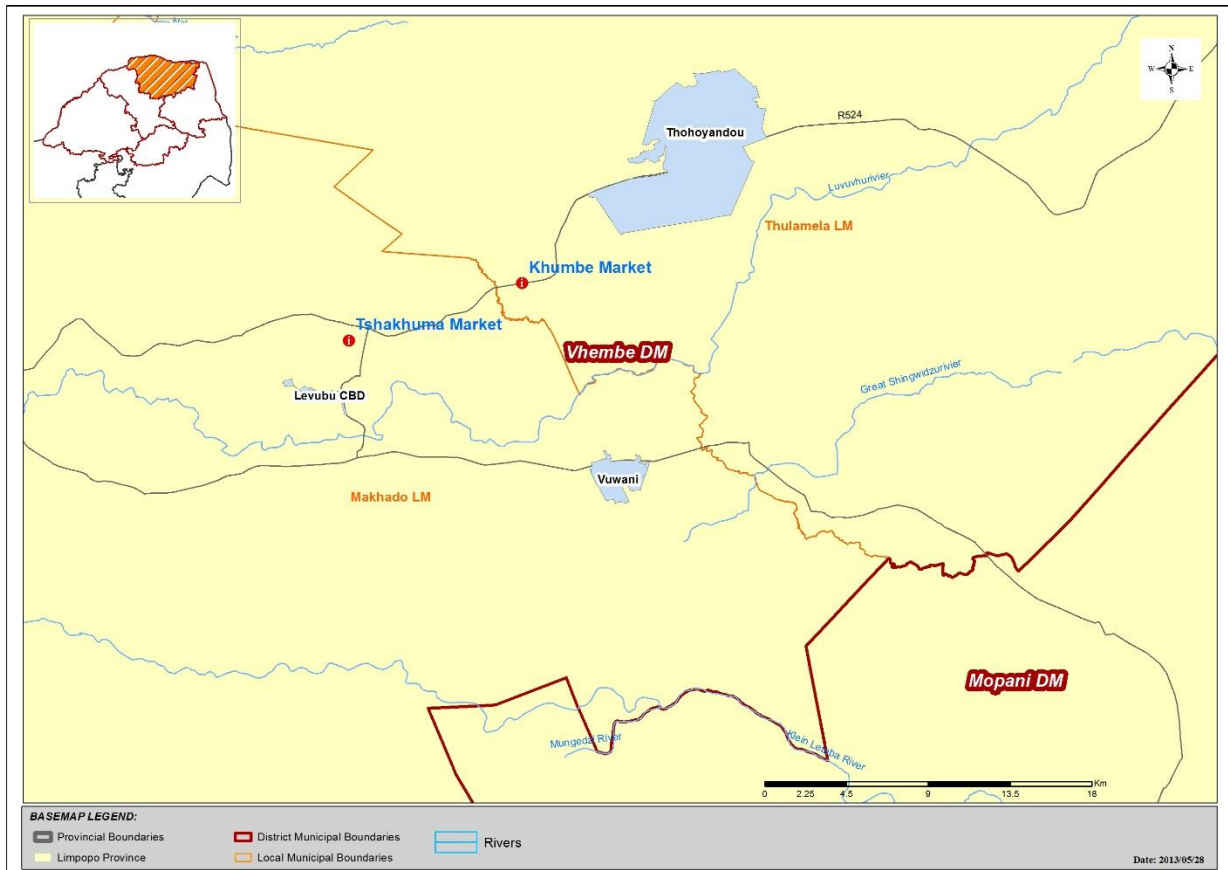
Makhura and Mokoena (2003) identified potential solutions that include overcoming infrastructure backlogs, improving market information, institutional reform (such as promoting a land rental market) and supporting smallholder food processing and value adding. Most of these market are informal and “there has been an apparent renewed interest in informal markets and it is increasingly being recognised that informal markets are important indicators of the political and economic health of a society” (Vermaak, 2014:1185). Emerging markets such as Tshakhuma and Khumbe Market in Limpopo Province provide farmers with an important opportunity to sell their produce. Continued operation of these markets depends on the profitability of the produce sold. This study was conducted to investigate (1) the types and sources of produce sold in the markets under study and (2) factors influencing the profitability of the produce and possible correlations among them. The investigation was aimed at providing useful information to guide investment decisions on marketing of the produce.

## **7.2 Research methodology**

### **7.2.1 Description of study area**

The study was conducted in the Limpopo Province of South Africa and was focused on the Vhembe District Municipality of the province. The Limpopo Province constitutes the northern part of South Africa forming borders with Botswana in the north-west, Zimbabwe in the north and through the Kruger National Park forms border with Mozambique in the east. Within South Africa, the province forms border with Mpumalanga Province in the south-east, Gauteng in the south and the North-West Province in the south-west (Office of the Premier [OTP], 2009).

In order to gain a comprehensive understanding of the market challenges, the study provided a specific focus on the Tshakhuma Market in Makhado and the Khumbe Market in Thulamela Local Municipality (Figure 1).



**Figure 7.1 Map of the study area showing the location of the Tshakhuma Market in the Makhado Municipality and the Khumbe Market in the Thulamela Municipality in Vhembe District (LDA, 2014)**

The Tshakhuma Market is located closer to the commercial Levubu farms and would therefore be expected to acquire produce for selling from not only the surrounding smallholder farmers, but also the nearby commercial farmers. The Khumbe Market is located deep in a rural settlement and would likely acquire produce for selling from surrounding households and small-scale emerging farmers.

### **7.2.2 Sampling frame and sampling procedure**

A sampling frame was described by Lohr (2010) as a list, map, or other specification of sampling units in the population from which a sample may be selected. The importance of a sampling frame in scientific research was shown by Welman, Kruger and Mitchell (2005) who indicated that it is impossible to properly judge the representativeness of the obtained sample unless a sampling frame is borne in mind. A representative sample is a requirement for the research results to be credible and trustworthy (Leedy & Ormrod, 2010). Although

sample representativeness is necessary, there are instances where less representative purposive samples are valuable.

Multistage sampling was conducted as described by Leedy and Ormrod (2010) and involved (1) primary area selection of municipalities (both district and local municipalities), (2) location selection of agricultural markets and (3) respondent selection of stakeholders sampled for interviews. In accordance with the guidelines by Leedy and Ormrod (2010), the sampling for this study included representative random sampling and less representative purposive sampling.

For primary area selection of municipalities, the sampling frame was composed of the five district municipalities of the Limpopo Province, namely: Vhembe, Capricorn, Mopani, Sekhukhune and Waterberg District Municipality, and the Vhembe District was purposively sampled for its accessibility to the researcher. At a local municipality level, four municipalities of the selected Vhembe District comprised the sampling frame, namely: Thulamela, Makhado, Musina and Mutale Local Municipality. The Thulamela Municipality was also purposively sampled for its accessibility to the researcher as he resided in the municipality while the Makhado Municipality was purposively included for being a large producer of sub-tropical fruits.

As for location selection, the sampling frame was comprised of numerous agricultural markets of various sizes (with or without shelter infrastructure). The Tshakhuma Market was purposively sampled for its location near a major commercial farming area (Levubu farms) while the Khumbe Market was selected for its location in the midst of small-scale emerging farmers. The Tshakhuma Market would address market challenges of both the surrounding smallholder and the nearby commercial farmers while the Khumbe Market would mainly address challenges of the surrounding smallholder farmers.

As indicated for a related study by Dagada, Nesamvuni, Van Rooyen and Tshikolomo (2013), the sampling frame for market operators comprised of 600 members for Tshakhuma and 200 for Khumbe Market. Some 67 market operators were randomly sampled for Tshakhuma while 24 were randomly selected for the Khumbe Market.

### **7.2.3 Data collection and analysis**

Primary data was collected from the sampled respondents through interviews which were conducted by trained enumerators using a structured questionnaire. The questionnaire contained both open- and closed-ended questions which included issues of market challenges and the strategies used by farmers to address the challenges. The closed-ended questions collected quantitative data while the open-ended questions recorded qualitative data (Leedy & Ormrod, 2010).

The inclusion of open-ended questions that recorded qualitative data was to enable respondents to speak for themselves, voice the constraints they faced, articulate their own accounts of what their routines were and how they satisfied their needs (Tshikolomo, Nesamvuni, Stroebel, & Walker, 2012). As was stated by the Food and Agriculture Organization of the United Nations [FAO] (2001), qualitative techniques were directed towards improved understanding of the market challenges experienced by the farmers as influenced by their socio-cultural environment. This research method that combines the collection and analysis of quantitative data with that of qualitative data is referred to as a mixed study (Hurmerinta-Peltomaki & Nummela, 2006). The questionnaire was complemented by an interview guide for a focus group and interview schedules for several key informants, and these collected qualitative data.

Some primary data was also collected through observations. The data collected through observation was mainly that of types of fruits sold at the two markets and types of fruits produced through own production by the households of market operators. Secondary data was collected by studying relevant documents, reports and other literature.

Data collected was analyzed using a Statistical Package for Social Sciences version 11(SPSS). Correlation and regression coefficients of different variables were computed to establish their influence on profitability of produce sold in the study markets. Quantitative data was objectively interpreted while qualitative data was subjectively interpreted.

### **7.3 Results**

In accordance with the purpose of the study, the results are discussed in terms of (1) the types and sources of produce sold in the markets and (2) factors influencing the profitability of the produce and possible correlations among them.

#### **7.3.1 Types and sources of produce sold in the study markets**

##### **7.3.1.1 Types of produce sold in the study markets**

The profitability of produce sold by market operators is influenced by the types of produce and the sources from which they were acquired. The types of produce sold in the markets were influenced by such factors as the demand, supply, and subsequent prices of those produce.

The produce sold in the Tshakhuma and Khumbe markets were observed to be mostly (a) subtropical fruits such as pawpaws, mangoes, bananas, avocados, and litchis and (b) citrus fruits such as oranges and tangerines. Limited quantities of other agricultural produce such as vegetables were also sold. Fruits were the major produce sold in the markets under study and were therefore the focus of this investigation.

##### **7.3.1.2 Sources of fruits sold in the markets**

The sources from which the fruits were acquired were influenced by their associated costs and this would in turn influence the market price of the fruits. The costs of acquisition of fruits were influenced by such factors as the production and transport costs for delivery to the market. The study revealed that different sources were used to acquire various types of fruits, both subtropical (pawpaw, mango, banana, avocado and litchi) and citrus (orange and tangerine) fruits (Table 1).

###### **(a) Sources of subtropical fruits**

Based on rating by market operators, the most important source of pawpaws was own production followed by acquisition from smallholder farmers and last acquisition from commercial farmers. A large number of households in the study area were observed to have fruit trees in their residential sites and these included pawpaw trees. Pawpaws were also mostly included among fruit trees owned by smallholder fruit producers in the area. The rating of own source as most important for supply of pawpaws to the study markets resulted

from the fact that the fruit trees were planted by many households, and accordingly smallholder farmers were the second most important source.

**Table 7.1** Sources of major fruits sold at Tshakhuma and Khumbe Markets and their level of importance based on rating by market operators

Type of fruit	Source and frequency rating			
	Own production	Smallholder	Commercial	Hawker
<b>Subtropical</b>				
Pawpaw	1	2	3	N
Mango	3	2	4	1
Banana	3	4	1	2
Avocado	1	2	3	4
Litchi	N	1	2	N
<b>Citrus</b>				
Orange	4	3	1	2
Tangarines	3	4	1	2

**Note:** **1 = Most important**, source used by most market operators; **4 = Least important**, source used by least market operators; **N = Unused**, source not used by any market operator

The most important source of mangoes were hawkers followed by smallholder farmers, then own production and last commercial farmers. Although most households had mango trees in their residential sites, those were mostly indigenous varieties with large seed, lot of fibre and sometimes sour taste and were less liked by consumers. As a result, the market operators mostly bought mangoes from hawkers who sold modern cultivars acquired from commercial farmers followed by those who bought the fruit from smallholder farmers as they were mostly also planting modern cultivars. Direct acquisition of mangoes from commercial farmers was probably restricted by lack of transport as the fruit is less produced in nearby portions of Levubu Farms and most of the mango farmers were located away from the study area.

As for bananas, the most important source from which the fruit was acquired by market operators was commercial farmers followed by hawkers, then own production and last smallholder farmers. Bananas were abundantly produced in the nearby commercial Barrota



and Levubu Farms and these were likely the major sources of the fruit to the study markets. Hawkers probably also bought the bananas from those nearby commercial farms.

As was the case with pawpaws and mangoes, most households in the study area had avocado trees in their residential sites. The varieties of avocados produced by the households largely included modern cultivars, and contrary to the situation with mangoes, the indigenous varieties were relatively more accepted by consumers; hence own production constituted the most important source of avocado fruit to market operators. For similar reasons, smallholder farmers were the second most important source of avocados and commercial farmers only came third and hawkers had no business opportunity as there was abundant supply locally. Litchis were mostly sourced from smallholder and from commercial farmers. The subtropical fruits were coordinated under specific commodity associations affiliated to the Subtropical Growers Association (Subtrop) and these had different levels of strengths for coordination.

#### (b) Sources of citrus fruits

The most important source of citrus fruits (oranges and tangerines) was commercial farmers followed by hawkers who mostly bought the fruits from the commercial farmers, and this was because production of these fruits by local households and smallholder farmers was limited. Also, the citrus commodity seemed to be well coordinated under the Citrus Growers Association and therefore smallholder farmers producing citrus found it relatively easier to become commercial.

### **7.3.2 Factors influencing profitability of fruits sold at the markets**

In investigating the factors influencing the profitability of fruits sold at the Tshakhuma and Khumbe Market, the study considered (1) the socio-economic characteristics of market operators and (2) the factors that were closely linked to the operation of the market business.

#### **7.3.2.1 Socio-economic characteristics of market operators**

Analysis of the characteristics of human beings as participants in a development process is essential for successful community development (Crouch & Camala, 1981). Other than the factors discussed above, the profitability of fruits sold at the Tshakhuma and Khumbe Market is influenced by characteristics of market operators, and those include gender, age, education and size of household.

(a) Gender

Gender plays an important role in development and would therefore influence the profitability of fruits sold at the markets. As stated by Bembridge & Tshikolomo (1998), decision making among fruit growers in the Phaswana area was male dominated with women mainly focussing on decision implementation.

Table 7.2 Distribution of respondents in the Khumbe and Tshakhuma markets according to sex of heads of household

Name of the market	Sex of head of household				Total no of Households	
	Male		Female		N	%
	N	%	N	%		
Tshakhuma	32	47.8	35	52.2	67	100
Khumbe	14	58.3	10	41.7	24	100
Total	46	50.5	45	49.5	91	100

Of the 91 market operators selected for the study (67 from Tshakhuma and 24 from Khumbe Market), about one in ten (8.8%) were male and nine in ten (91.2%) female. All male market operators were found at Khumbe Market, a situation that suggest that operators in that market could also have provided other services that necessitated characters of men, e.g. security and farming to supply the market. Market operators at the Tshakhuma Market mostly bought produce from large commercial Levubu farmers who are focused in their farming business and could not possibly have served as operators, hence the operators in this market were all female. The results suggest that the job of market operation in the study area was largely regarded a responsibility for women (Dagada et al., 2013). Contrary to the situation with men, women would likely keep their fruits well packed and clean and would therefore attract more buyers, and this would make the fruits more profitable.

(b) Age

The age of an individual is one of the most important factors that determine the way he or she thinks and behaves. The types of decisions made by elderly people and their ways of behaving tend to be different from those of their younger counterparts.

Table 7.3 Distribution of respondents in the Khumbe and Tshakhuma markets according to age

Age category (years)	Tshakhuma Market		Khumbe Market		Combined	
	N	%	N	%	N	%
	0-18	1	1.5	0	0.0	1
19-20	1	1.5	1	4.2	2	2.2
21-30	11	16.4	5	20.8	16	17.6
31-40	17	25.4	3	12.5	20	22.0
41-50	19	28.4	1	4.2	20	22.0
51-60	12	17.9	2	8.3	14	15.4
61+	6	9.0	12	50.0	18	19.8
Total	67	100.0	24	100.0	91	100.0

Some 1.1% of the respondents were at most 18 years old while some 2.2% were in the age group of 19 to 20 years old, and this comprised of 1.5% for Tshakhuma and 4.2% for Khumbe Market (Table 3). The fact that 17.6% of the respondents (16.4% for Tshakhuma and 20.8% for Khumbe Market) were in the age group of 21-30 reveals that youth in the study area do participate in agriculture at the marketing level of the value chain. Also, one in five (22.0%) of the respondents were aged 31-40 years old, and this confirmed participation of youthful members of the study community in the marketing of agricultural produce. The respondents in this age category comprised one in four (25.4%) for the Tshakhuma and one in eight (12.5%) for the Khumbe Market.

The same number (22.0%) of respondents was in the middle ages of 41-50 years old with more (28.4%) for Tshakhuma and fewer (4.2%) for Khumbe Market. Relatively fewer (15.4%) respondents were in their elderly ages of 51-60 years old comprised of 17.9% for Tshakhuma and 8.3% for Khumbe Market. Also, one in five (19.8%) of the respondents were over 60 years (9.0% for Tshakhuma and 50.0% for Khumbe Market) and this would include those in pension.

As mentioned by Bembridge, Graven, Hough, and Van Rooyen (1982), although increasing age may have an impairing effect on the physical ability of participants, several research

studies indicated little or no mental deterioration at least up to sixty years of age. Since marketing and its management is considered primarily to be a mental process, it is assumed that at least up to the age of sixty, managerial ability will not be seriously impaired. It may therefore be concluded that approximately 80% of the respondents ( $\leq 60$  years of age) in the two markets had necessary mental capacity to carry out their operation efficiently and to make profits.

(c) Education

As stated by Ndegwe, Mureithi, and Green (1985), education is a basic need in its own right, a way of meeting other basic needs, and an activity that sustains and accelerates overall development. This statement was affirmed by Olaiton (1984) and Tompson (1981) who indicated that more years of schooling are associated with higher rates of adoption of innovations than are fewer years of schooling.

About one in five (22.0%) of the market operators had no schooling, and this comprised of 22.4% for Tshakhuma and 20.8% for Khumbe Market (Table 4). Some 2.2% of the market operators (3.0% for Tshakhuma and none for Khumbe Market) reportedly passed grades 1-3, up to 12.1% (11.9% for Tshakhuma and 12.5% for Khumbe Market) passed grades 4-5 while 11.0% (10.4% for Tshakhuma and 12.5% for Khumbe Market) passed grades 6-7 and these are primary school grades. The market operators with primary education (or none) constituted 47.3% and probably had none to low literacy and numeracy skills with those who attained higher grades (grades 4-5 and 6-7) possibly having achieved basic levels of these skills.

Table 7.4 Distribution of market operators in the Khumbe and Tshakhuma markets according to Level of education

Level of education	Tshakhuma Market		Khumbe Market		Combined	
	N	%	N	%	N	%
No schooling	15	22.4	5	20.8	20	22.0
Grade 1-3	2	3.0	0	0.0	2	2.2
Grade 4-5	8	11.9	3	12.5	11	12.1
Grade 6-7	7	10.4	3	12.5	10	11.0
Grade 8-9	5	7.5	4	16.7	9	9.9
Grade 10-11	14	20.9	4	16.7	18	19.8
Grade 12	9	13.4	4	16.7	13	14.3
Diploma	7	10.4	1	4.2	8	8.8
Total	67	100.0	24	100.0	91	100.0

One in ten (9.9%) of the market operators (7.5% for Tshakhuma and 16.7% for Khumbe Market) had passed grades 8-9, two in ten (19.8%) of them (20.9% for Tshakhuma and 16.7% for Khumbe) had passed grades 10-11, while 14.3% of the market operators (13.4% for Tshakhuma and 16.7% for Khumbe Market) had passed Grade 12. The market operators with secondary education constituted 44.0% and would have better literacy and numeracy skills than those with only primary education.

Only 8.8% of the market operators (10.4% for Tshakhuma and 4.2% for Khumbe Market) had completed diplomas. These market operators acquired high levels of competencies in their fields of study and could be under-utilized by working as market operators. The market job for this category of operators could have been taken as interim responsibilities while they search for preferred jobs aligned to their diploma qualifications. Some of these market operators might even be performing the market job as complementary while also involved in some other jobs where their competencies are fully utilized. The market operators with higher education levels were probably those that had other incomes and were able to make profits in their sales of fruits.

(d) Household size

Many factors act together to determine the size of a household, and those include access to information on family planning services, family income, maternal and child health care, women's status in society, level of education, religious and cultural factors. Although larger households would have advantage of providing more labour, they also cause great financial burdens which affect the family's ability to finance development initiatives (Williams, 1986). Rural areas are characterized by occurrence of extended families that tend to make the households rather large. The extended family, according to Goodman and Marx (1978), consists of several nuclear families united by parent-child relationships and living together either in the same house or in a compound. The market operators in the area under study reported large families of an average of 6 members for Tshakhuma and 7 members for Khumbe Market (Dagada *et al.*, 2013).

Most of the households involved in market activities used their own family members with only 1.5% of those working at the markets being hired labour. From the informal discussions with the participants in the two markets, it became apparent that hired labour had become too expensive for households to afford. The large families of market operators made it possible for some household members to be assigned the responsibilities of selling the produce at the market, and this made the business more profitable as otherwise expensive labour did not have to be hired.

### **7.3.3 Factors linked to the operation of the market business**

The market linked factors that influenced profitability of the fruits sold were fruits that were own produced, expenditure on fruit acquisition, fruits wasted, fruits consumed, other household income, fruit storage and belief in cooperative approach. Analyses of these factors were based on (a) regression coefficients showing the extent to which the factors determined profitability of fruits sold and (b) correlation coefficients for various pairs of the factors.

(a) Regression analysis of the extent to which the factors determined profit

As shown by the regression coefficient (Table 5), reduction of expenditure on fruits resulted in increased profits ( $p < 0.05$ ). Also, profit seemed to be determined by the ability of market operators to produce their own fruits ( $P < 0.01$ ). This was mainly because own production by market operators had lesser costs. The costs incurred would normally be those of production

inputs such as seedlings, fertilizers and pesticides. It was observed that market operator and other households in the study area were able to produce their own seedlings from seeds of selected varieties, and this reduced the cost of production of the fruits sold at the markets. Households that could not produce their own seedlings were able to buy from neighbours and from nearby small nurseries at highly reduced prices.

Also, households in the study area mostly relied on plant materials and application of manures for improving their soil fertility and did not have to buy fertilizers. The plant materials and manures were mostly locally freely available, and this further reduced the cost of own production of fruits. Own production was at very small scale and therefore families involved used own labour, and this further reduced the cost of production. Households that hired labour also used it for chores other than production of the fruits.

Although the market operators identified only pawpaws and avocados to be mostly supplied from own production, the source also served as third most important for mango, banana, and tangerines and was least important for oranges (Table 1). The contributions of market operator fruits that were own produced to profitability of items sold at the study markets were therefore important.

**Table 7.5** Regression coefficients of business linked determinants of fruit profits in the Tshakhuma and Khumbe Markets

Variable	Standardised coefficient Beta ( $\beta$ )	Significance level
Fruits wasted	0.023	0.876
Expenditure on fruit	-0.098	0.021
Fruits own produced	0.817	0.0001
Cooperative approach	0.086	0.064
Fruit consumed	0.085	0.623
Other income	-0.020	0.641
Fruit storage	-0.110	0.018

Availability of storage facilities would allow for the items to be stored when the supply to the market is abundant and released when the supply is scarce. The prospect for a storage facility in the study area was associated with reduced profits ( $P < 0.05$ ), a situation that could be attributable to (1) high costs of refrigeration to maintain the quality of the fruits or (2) quality deterioration in the storage resulting in sales at reduced prices or complete disposal.

Although a cooperative approach would easily be recommended for small businesses in the study area, it did not emerge as an important issue for the markets under study (Table 2). The less regard for a cooperative suggests that market operators would rather work as individuals than a cooperative. A detailed investigation on the prospect of establishing a market operator cooperative would be necessary to fully understand the rationale for the respondents not considering it important.

(b) Correlations among business linked factors determining fruit profits

The effect of identified factors on profitability of fruits sold at the Tshakhuma and Khumbe Markets might probably also be influenced by interactions among those factors. It is for this reason that the study also assessed the correlations between pairs of factors that were considered to determine the profitability of fruits sold at the two markets (Table 3).

There was a strong positive correlation ( $r = 0.883$ ;  $P < 0.01$ ) between fruits that were own produced and those wasted. The market operators that produced their own fruits had low input costs and could therefore afford to waste some of the fruits, and this resulted in more wastage when own production increased. A rather low negative correlation ( $r = -0.236$ ;  $p < 0.05$ ) was noted between cooperative approach and fruit wastage, suggesting that market operators believing in cooperative approach had lesser fruits wasted. The market operators believing in cooperative approach would therefore be more efficient and profitable.



**Table 7.6** Correlations among business linked variables determining fruit profits at the Tshakhuma and Khumbe Markets

Major Variables	Fruits wasted	Expenditure on fruit	Fruits own produced	Coop approach	Fruit consumed	Other income	Fruit storage	Profit
Fruit wasted	1.000	0.059 (0.293)	0.883 (0.000)	-0.236 (0.014)	0.961 (0.000)	-0.043 (0.345)	-0.269 (0.006)	0.046 (0.335)
Expenditure on fruit		1.000	0.085 (0.214)	-0.104 (0.167)	0.057 (0.298)	0.022 (0.421)	-0.090 (0.202)	-0.180 (0.047)
Fruit own produced			1.000	-0.293 (0.003)	0.912 (0.000)	-0.111 (0.152)	-0.281 (0.004)	-0.023 (0.414)
Coop approach				1.000	-0.235 (0.014)	0.232 (0.015)	0.328 (0.001)	0.063 (0.280)
Fruit consumed					1.000	-0.070 (0.258)	-0.290 (0.003)	0.044 (0.341)
Other income						1.000	0.250 (0.010)	0.212 (0.023)
Fruit storage							1.000	0.130 (0.115)
Profit								1.000

A negative correlation ( $r = -0.293$ ;  $p < 0.01$ ) was also recorded between cooperative approach and fruit own produced and this suggested that the market operators who believed in a cooperative approach were less reliant on own production. The strong positive correlation between fruit consumed and that wasted ( $r = 0.961$ ;  $p < 0.01$ ) suggests that market operators who consumed more of the fruit also wasted more of it. The market operators who consumed more of the fruits were mostly involved in own production ( $r = 0.912$ ;  $p < 0.01$ ), had less belief in a cooperative approach ( $r = -0.235$ ;  $p < 0.05$ ), and were probably less profitable.

The positive correlation between other income and cooperative approach ( $r = 0.232$ ;  $p < 0.05$ ) indicates that market operators who believed in a cooperative approach also had other sources of income, suggesting that they were involved in other income generating activities. These were probably the operators who had higher levels of education, were demanded by other sectors and would likely be more efficient in their businesses.

It was interesting to note that fruit storage was negatively correlated with factors such as fruit wastage ( $r = -0.269$ ;  $P < 0.01$ ), fruit own produced ( $r = -0.281$ ;  $p < 0.01$ ) and fruit consumed ( $r = -0.290$ ;  $p < 0.01$ ) while positively correlated with belief in a cooperative approach ( $r = 0.328$ ;  $p < 0.01$ ) and other income ( $r = 0.250$ ;  $p < 0.05$ ). The results implied that market operators with fruit storage had less wastage as unsold items could be stored and sold the next day. The fact that operators with storage were less involved in fruit own production suggests that storage was more important where the produce was procured (probably in bulk) from other areas. The operators who produced own fruits probably had less need for storage as small amounts of fruits could be picked for daily sales while the rest is left on the trees, at least for some days. The positive correlation between fruit storage and belief in a cooperative approach suggests that the operators with storage were aware of the benefits of a cooperative approach to their business as this would allow for bulk procurement and storage where the costs would be reduced thereby increasing their chances of making profit. These operators with fruit storage mostly had other incomes and were economically well off compared to their counterparts.

The main determinants of profits were expenditure and availability of other income. An increase in the spending of market operator households resulted in lower profits ( $r = -0.180$ ;  $p < 0.05$ ) while availability of other income resulted in more profit ( $r = 0.212$ ;  $p < 0.05$ ). The increased spending would probably be that on acquisition of fruits, e.g. the spending on procurement and on transportation of the fruits for sale at the markets. Availability of other income would, for instance enable operator households to buy own car and spend less on transport of the fruits from places where they were bought and to market as opposed to relying on local entrepreneurs for hiring of transport.

#### **7.4 Conclusion**

The fruits sold at the Tshakhuma and Khumbe markets were mainly (1) subtropical fruits such as pawpaw, mango, banana, avocado and litchi, and (2) citrus fruits such as oranges and tangerines. Market operators acquired the fruits from combinations of sources, and those were mainly own production, hawkers, smallholder and commercial farmers.

Factors that influenced the profitability of the fruits sold were (1) socio-economic characteristics of market operators and (2) factors linked to the operation of the market

business. Considering socio-economic characteristics of market operators, fruit profitability would likely be enhanced for (i) nine in ten (91.2%) of the operators who were women, (ii) four in five (80%) who were  $\leq 60$  years old and (iii) majority of operator households that were large (6-7 persons) and allowed for family labour. Low levels of education (47.3% had only primary or no education) necessitated training for increased fruit profitability.

As for factors linked to the operation of the market business, the profitability of the fruits sold was influenced by (a) method of acquisition (own production resulted in more profit than procurement from other sources); (b) expenditure on fruit (increased spending resulted in loss of profit); (c) fruit storage (increased storage resulted in loss of profit), and (d) cooperative approach (associated with increased profit). Highly significant positive correlations ( $p < 0.01$ ) were noted between pairs of some of the factors, e.g. fruit own produced and fruit wastage, and highly significant negative correlations ( $p < 0.01$ ) were noted between pairs of other factors, e.g. cooperative approach and fruit own produced.

## CHAPTER 8

### CREATING THE SUSTAINABLE COOPERATIVE DEVELOPMENT MODEL FOR SMALLHOLDER FARMERS

#### Abstract

Socio-economic study on cooperative is an attempt to understand the extent in which cooperatives impacted into the livelihood of the patrons who established them. Cooperatives in South Africa especially in the Limpopo Province where this study was based are still facing many challenges in terms of sustainability and effectiveness. This has a negative impact on the fight against poverty and food insecurity because smallholder farmers rely on their cooperatives to have more bargaining power in order to enhance their income generating capacity and ensure food security. To understand this in more in-depth, the logical approach was used to plot all aspects of cooperation in the different systems. The paper, maps out different factors and activities that build up a cooperative to make it operational. The study also logically maps out the flow of resources towards achievement of the goal.<sup>3</sup>Through the logical approach, the objective tree plugged all factors and resources that are necessary for an ideal functional and sustainable cooperative. Limpopo Agricultural Development Programme (LADEP) was a very good attempt by the Finish Government to develop an ideal cooperative approach which covered most of the issues on the objective tree. This model was used as a case study in this chapter to demonstrate how developers can assist farmers to establish sustainable cooperatives.

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<sup>3</sup> Paper prepared for submission to a Journal

## **8.1. Introduction**

This chapter presents the log-frame analysis of the challenges that cooperative members raised during the field survey. This will assist in planning and managing an ideal sustainable cooperative model. In the Guide to Logical Framework published by Serbia Government, Delevic (2011) the logical framework approach (LFA) was defined as an analytical process and set of tools that are used to support objectives-oriented project planning and management. The same literature suggests that LFA provides a set of interlocking concepts which are used as part of an iterative process to aid structured and systematic analysis of a project or programme idea. World Bank (2011) outlined eight advantages of LFA of which one of them states that “it guides systematic and logical analysis of the inter-related key elements which constitute a well-designed project”. This means therefore that the tools of LFA packaged logically the whole flow of processes and resources in the development of the project to achieve a set goal.

## **8.2 Methodology**

A random sample of 91 market operators consisting of 67 market operators and 24 cooperative patrons were interviewed. They were required to indicate the role of the cooperatives in the production of the agricultural produce that are being sold in the two adjacent markets as well as the challenges they are facing. This was subjected to a Log-Frame Analysis instrument to determine causes of their challenges as van Niekerk et al (2011) stated that the log frame analysis was used to determine the cause-effect relationship of problems the farmers face. In this case the farmers from Khumbe – Dzondo cooperatives faced with different challenges trying to produce their own produce to sell. According Ortmann and King (2007) smallholder farmers have the potential to grow high-value crops such as vegetables and fruit. Farmers who are selling at Tshakhuma Market were also interviewed to establish challenges which led most of them in buying from commercial farmers and re-sell instead of relying solely on their own production. LADEP cooperative model was used in an attempt to address issues which were concluded from the log frame analysis in order to propose an ideal cooperative development model.

## **8.3 Findings**

### **8.3.1 Problem Analysis**

The livelihood of majority of rural people mostly on communal land depends on farming activities as indicated by Shiferaw (2006) that the majority of the poor and food insecure are concentrated in rural areas, where their livelihoods depend on smallholder agriculture, rural labor markets, and livestock production. In most cases farmers produce their own produce and then sell in the open informal market and also by the roadside. In order for the farmers to increase their bargaining power, they form cooperatives. In this way they farm and sell together, however there are problems which they experience and negatively affect their operations. Farmers operating Khumbe-Dzondo and Tshakhuma markets participated in this study and have identified the problems that they are experiencing. During a Focused Group Discussion (FGD), farmers listed problems that they face in their day to day farming life. A problem tree below (figure 1) is mapping out those problems:

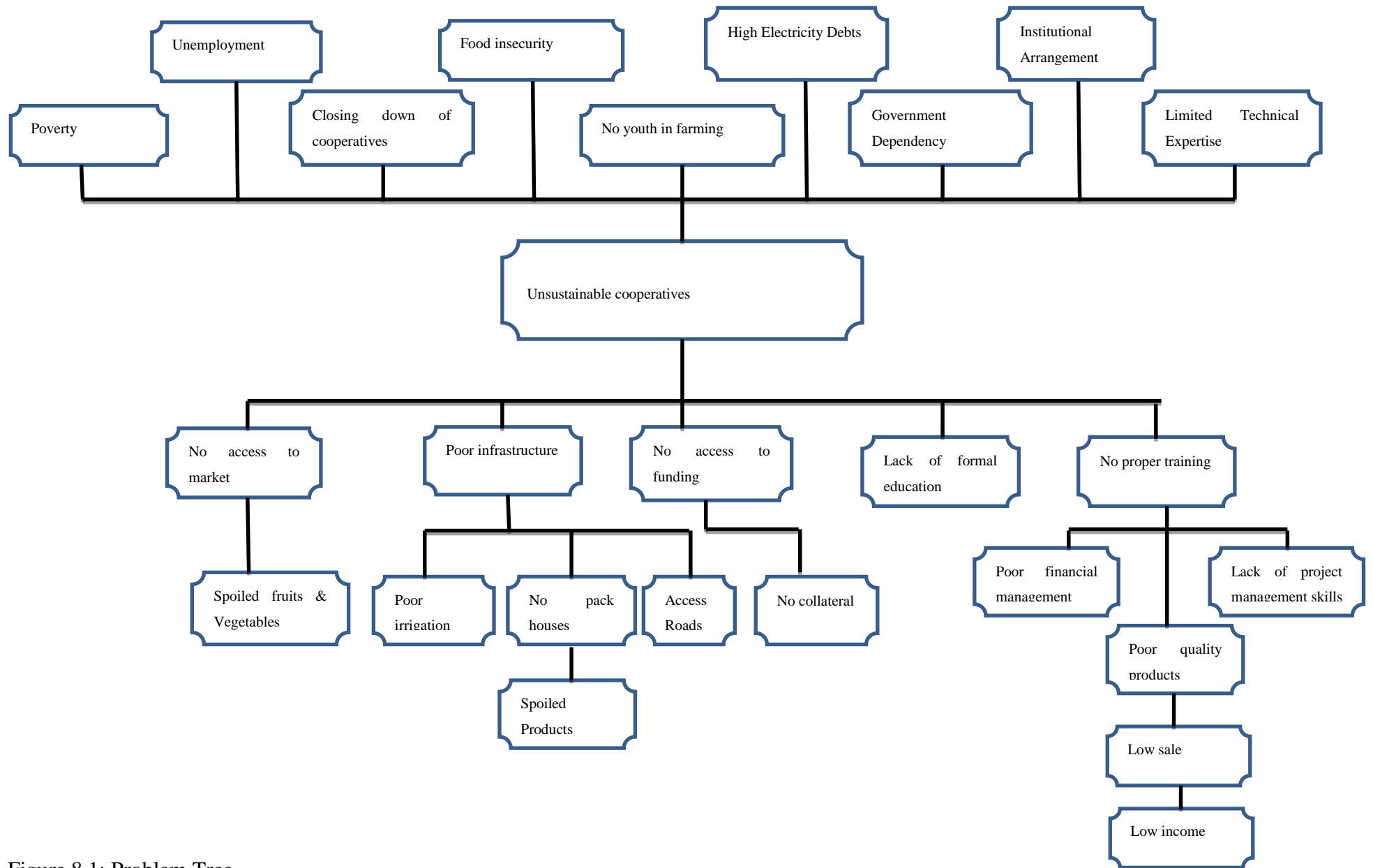


Figure 8.1: Problem Tree

The unsustainability of cooperatives was identified as the main core problem in experienced by farmers (Figure 8.1). Several problems were raised by farmers as the root cause of this problem. These causes are the roots that lead to the main core problem. The core problem therefore results to the effects which are the top part of the problem tree.

No access to market is the first main cause that was identified and it affect farmers since they end up getting their produce spoiled or sell them at lower prices to get rid of them. These lead farmers to be out of business since running a cooperative come with overhead costs. According to Oustapassidis (2000) co-operatives are supposed to operate on both requisite and marketing sides, in a much wider context. The New Generation Cooperative model for tend to have solution to the market access challenge because membership entitles farmers to a guaranteed market for a portion of their production, a share of the earnings generated by the co-operatives' processing operations, and any change in the value of the tradable shares (Harris, Stefanson and Fulton, 1996).

Makhura et al. (2003) indicated that overcoming infrastructure backlogs, improving market information, institutional reform (such as promoting a land rental market), supporting small-scale food processing and value adding, and encouraging closer links between small-scale and established commercial farmers can be solutions to challenges concerning market access. There are two common types of marketing co-operatives: bargaining and processing. Tennbakk (1995) believes that co-operatives have the potential to improve overall market performance. This means that marketing challenges experienced by cooperatives may be solved by using the same cooperatives as market plantforms.

Second main cause is poor infrastructure which is linked to poor irrigation systems, lack of pack-houses and poor access roads. Chaminuka et al, (2008) stated that infrastructure is the capital stock that can help to provide goods and services to the public and as such infrastructure plays a major role in the success of any business enterprise including cooperatives. Ortmann and King (2007) viewed that in addition to public investments in improved physical infrastructure, institutional infrastructure such as land rental markets, marketing associations, contract enforcement, is critical for lowering transaction costs for sample households, which could stimulate their production and marketing activities. Marketing for small-scale farmers is a challenge mainly because of economics of scale, poor



market infrastructure and distances from the potential market institutions. These affect the quality of their production and quantity thereof. They end up buying produce from other commercial farmers to supplement what they are getting from their field. Since they are not producing enough to sustain their cooperatives, most of them ended up closing. The third main cause is lack access to funds to grow their primary production and cooperatives. The last main cause is lack of training which is linked to poor financial and project management. Subsequently these also result to poor quality of products which is linked to low sale and low income.

The effects of these identified causes include poverty, unemployment, food insecurity, dependency in government, no youths attracted in agriculture, poor institutional agriculture, closing down of agricultural cooperatives and high debts.

### **8.3.2 Objective Analysis**

In their article entitled “towards redesigning the agricultural extension service in South Africa: views and proposals of smallholder farmers in the Eastern Cape”, Van Niekerk et al. (2011) indicated that the next phase in the LFA process was to turn the Problem Tree into an Objective Tree (Figure 9.2) and in doing that the objective tree was used to describe the future situation once the identified problems have been addressed. The objective tree as indicated in figure 2 shows the objective that farmers have as achieving developed and growing cooperative business. The wanted to see their cooperatives running as commercial businesses instead of projects which were failing to even sustain themselves. The roots are represented by the activities and conditions that need to be put in place in order for the farmers to achieve their core objective.

These activities range from market access improvement, funding, quality roads, pack-houses, irrigation systems and training. The implementation of these activities will lead to better production of quality which will attract the market and farmers’ cooperatives will be in business. Some activities need farmers to action while others need investors to assist.

The branches of the objective tree are represented by the envisaged fruits which are the outcomes of achieving the objective. Farmers see themselves as having enough food and have surplus to sell and contribute in the growing of the economy. In this way all households will

be food secured with jobs and job opportunities created as more people will be needed at the production sites to increase volumes of production to match the market demand. Currently, they also have problem of storage but the objective tree shows the availability of pack-houses which means farmers can store more product in the cold-rooms at the pack-houses to lengthen the shelf life of their products.

The ultimate result of this inputs and efforts will lead to creation of employment, food security for all, resourced cooperatives with both immovable assets such as offices and pack-houses and movable assets such as tractors, trucks and vehicles. The ideal situation will be to have youths' cooperatives in the whole value chain from production through to agro-processing. One of the branches is self-sustainable cooperative businesses wherein cooperatives do not depend on grants and loans only but make enough to sustain their businesses. A well-oiled machinery management structure will help to make the cooperative run smoothly unlike the cooperatives with institutional arrangement challenges.

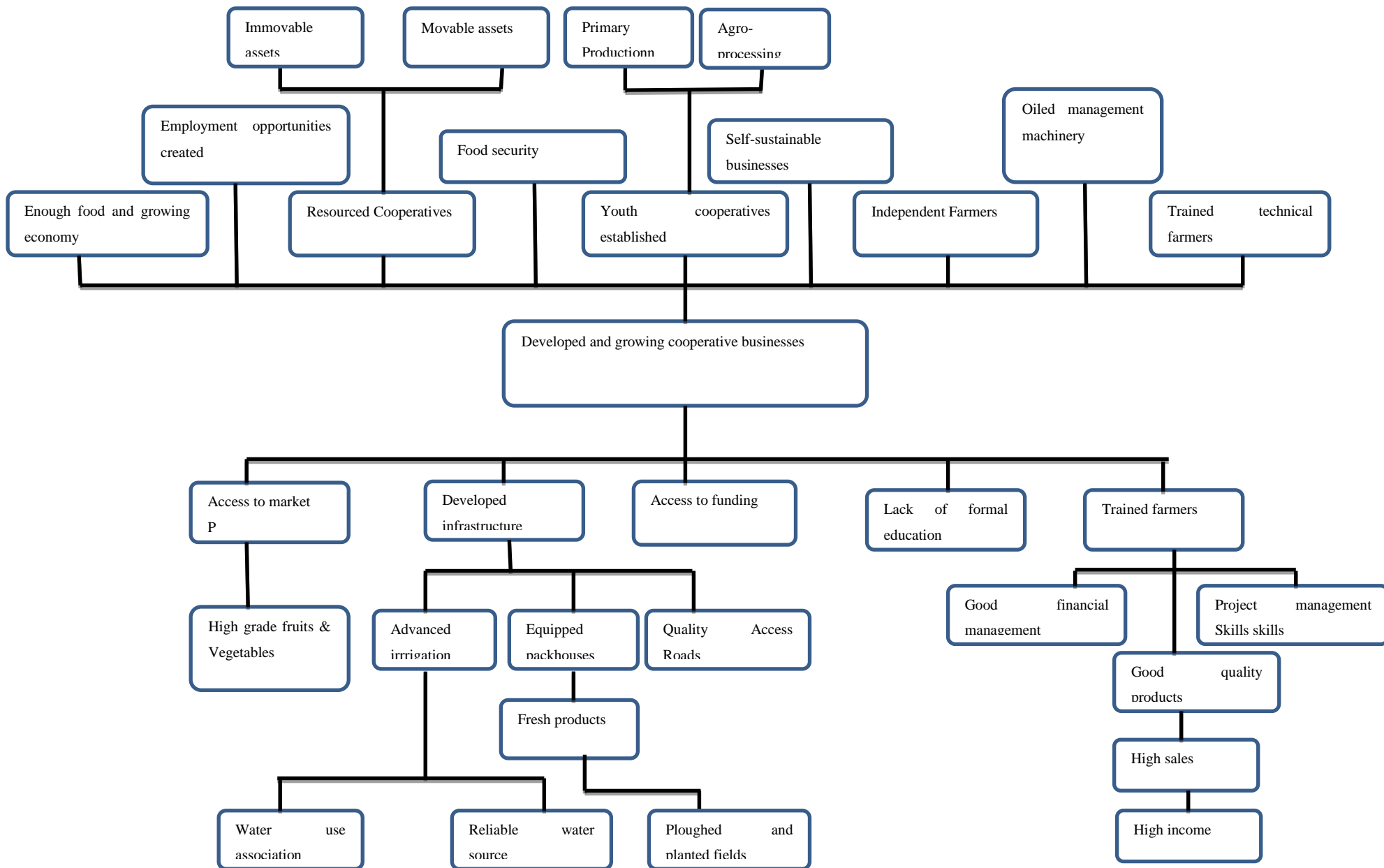


Figure 9. 2: Objective Tree

Another important branch is the trained farmers who have the expertise to handle business at farm and cooperative level.

#### **8.4 Analysis of Findings**

The findings illustrated well that there are many challenges which affect the sustainability of cooperatives specifically those in farming sector. Cook (1995) articulated in line with this understanding indicating that even though cooperatives have made considerable advances in the market share at farm gate, first handler level and minor progress in the food manufacturing in the past thirty five years, they still are not dominant form of business organisation in the agribusiness value chain. Nganwa et al (2010) concluded from case studies in KZN that the contention that emerging producer cooperatives are constrained by institutional problems.

Gala (2013) also indicated that agricultural cooperatives have been widely promoted as a vehicle for smallholder agricultural development in South Africa however; they have generally not been effective, successful and functional as such farmers activities are hampered by a number of constraints. These constraints according Gala include resource constraints such as lack of access to land (in one cooperative), machinery and equipment, finances and information relevant to production, marketing, transportation, poor infrastructure as well as low capability to manage institutional arrangements rendered the cooperatives ineffective in achieving their set objectives.

Ortmann and King (2007) concur with this finding that farmers have limited access to farming inputs, credit and information, and markets are often constrained by inadequate property rights and high transaction costs and in addition household heads are often poorly educated, have no own transport, are geographically dispersed, and are faced with poor road and communication infrastructure.

The Illustrative Sustainable Development Goals, as proposed by the High-level Panel (2013) of Eminent Persons on the Post- 2015 Development Agenda and were cited by

ICA & ILO (undated) matches objectives in the branches of the objective tree raised by the farmers as envisaged ideal life through cooperative development:

1. End poverty
2. Empower girls and women and achieve gender equality
3. Provide quality education and lifelong learning
4. Ensure healthy lives
5. Ensure food security and good nutrition
6. Achieve universal access to water and sanitation
7. Secure sustainable energy
8. Create jobs, sustainable livelihoods and equitable growth
9. Manage natural resource assets sustainably
10. Ensure good governance and effective institutions
11. Ensure stable and peaceful societies
12. Create a global enabling environment and catalyse long-term finance

Farmers indicated that they want to fight poverty through making food available for all and create job opportunities. They wanted to have good infrastructure, to be equipped with skills to run their cooperatives. All these are in line with the HLP agenda and other literature as also illustrated by Chitja et al (2011) in their Framework for analysing the effectiveness of primary agricultural cooperative that key successes factors for cooperatives are:

1. Improved financing of cooperatives
2. Effective use of resources
3. Well organised institutional arrangements
4. Improved market access

Good institutional arrangements and good governance both have a direct impact on good performance (Chibanda et al, 2009). Access to market also allowed emerging farmers to grow their operations while generating rental income for other households too poor to farm (Thompson, 1996; Crookes & Lyne, 2001; Sparks et al, 2011). The wishes and

dreams of the farmers and cooperative patrons are therefore in line with the world wide understanding of what cooperatives can achieve.

### **8.5 Sustainable Cooperative Model**

The results of the problem and objective tree revealed that there are factors such as lack of infrastructure, funding, inputs and market which affect negatively the sustainability of the cooperative. In this study, LADEP model which covers most of the issues raised in the objective tree was used as an approach which is more likely to address the challenges raised in the problem tree.

### **8.6 The Model**

The Limpopo Agricultural Development Programme (LADEP) is a programme in the Limpopo Department of Agriculture (LDA) funded by the Finnish Government. The programme supported 28 cooperatives from all six (now five) districts in the province. The programme is the result of a joint effort by the Finnish and South African governments. It was preceded by the first phase which mainly focused on natural resource management.

The Small Scale Agri-business Enterprises that registered as co-operatives are local producers of agricultural products. These enterprises serve the consumer market, as well as local supermarkets and national fresh produce markets. They succeeded in developing a profitable business through the use of their two competitive advantages - quality and flexibility. Their pursuit of high quality, coupled with the flexibility of small, local growers, allowed them to exploit the opportunity in the current market. Kwaw (2006) confirmed that access to market can be hampered by the quality of product, competitive pricing, and better packaging of chain stores. Currently demand outstrips supply in Limpopo Province and neighboring provinces, when it comes to quality agricultural products. The local farmers cannot produce enough products to satiate local demand. Every week, they sell out of their products, wishing that they had more to sell.

Cooperatives saw this market opportunity and prepared to exploit it. Their relentless pursuit of quality, combined with their agri-business approach and sheer passion, assisted them in propelling their businesses into profitability. In its phase two, LADEP introduced the agribusiness approach. This was to say that all land based cooperatives were to be market led entities. They were no longer operating as just food security projects, and were expected to operate as businesses using business principles. To ensure that this was taking place, all enterprises underwent entrepreneurship training from which they acquired business and marketing skills.

### **8.6.1 Farmers Mobilizations**

The provincial office of the Department of Agriculture worked through the district and municipal offices to identify agricultural projects. Extension officers mobilised communities to identify the possibilities of establishing community projects. Needs assessments were done and a priority list was developed through ranking of projects by community members. Several facilitated workshops were held in each identified community. These workshops included gender analysis, feasibility studies and needs assessment.

Village plans were developed with the assistance of specialist consultants. This was done in the context of the local municipality's Local Economic Development (LED) and Integrated Development Plan (IDP). A list of 28 agricultural projects was adopted by the Department of Agriculture and the Limpopo Agricultural Development Programme (LADEP).

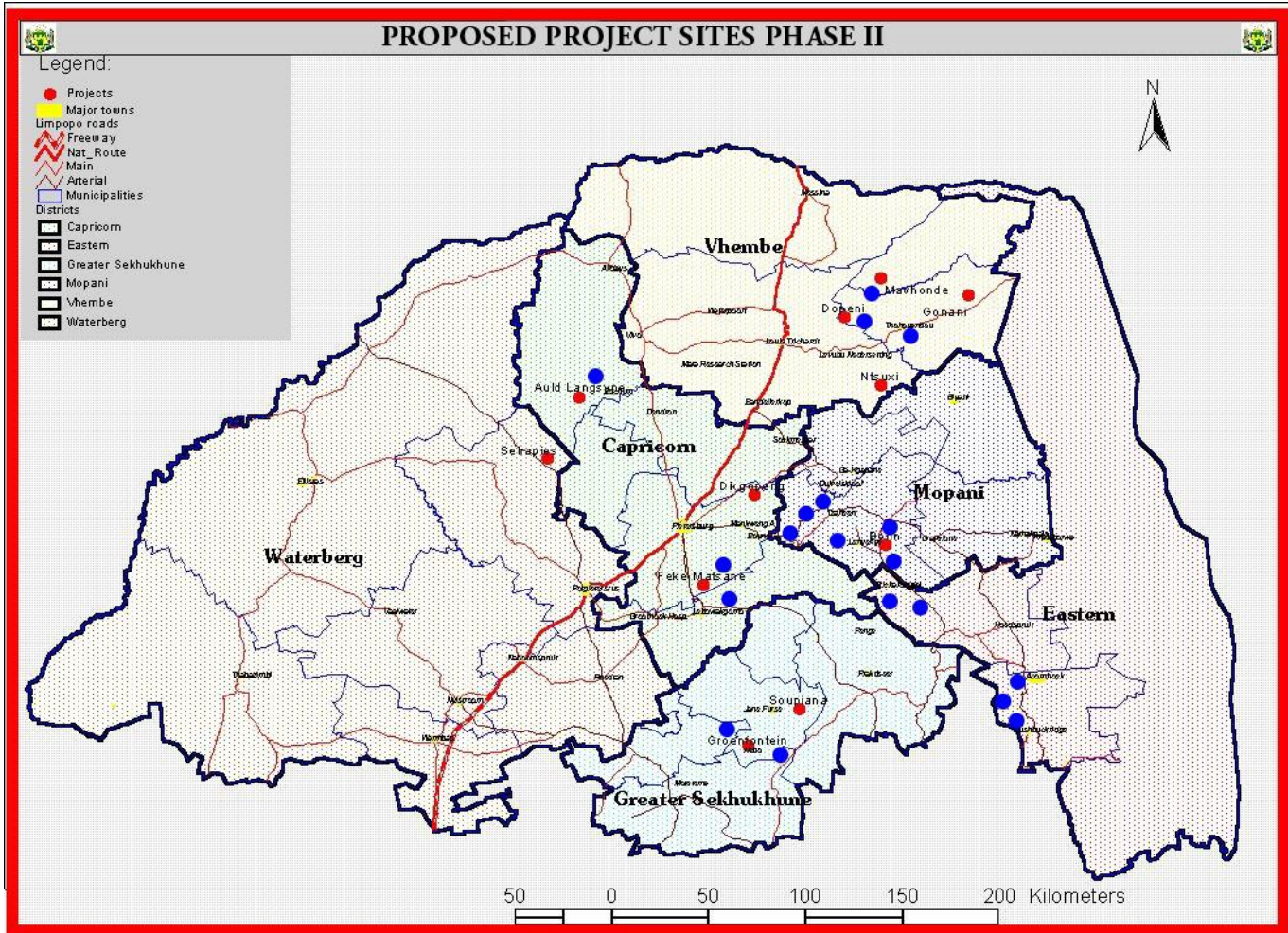


Figure 8.1 : A map showing proposed projects sites

### 8.6.2 Development of Sustainable Model

To make sure that these enterprises met market requirements by the time of production, LADEP developed a model showing how a project can increase the standard of commercial business (See figure 8.1 below). The main mandate of LADEP in phase two was to assist these enterprises to achieve all these requirements. The programme insisted that if the project could not achieve any of these requirements, it was likely that it would stall, with insufficient production for the market. Such projects would only survive their first production cycle and then terminate, leaving a redundant infrastructure that had absorbed substantial investment.



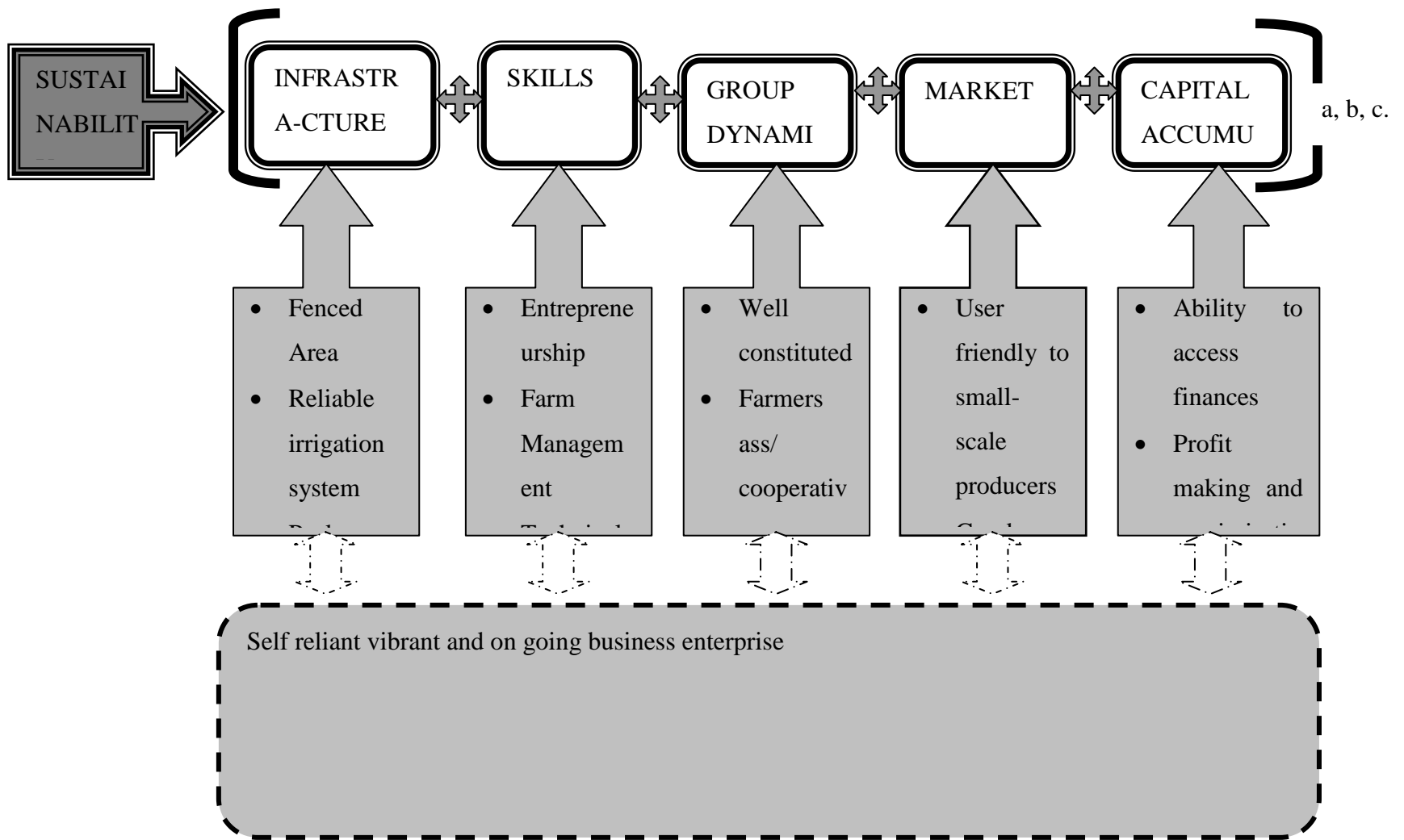


Figure 8.2: Enterprise Sustainability Model (Source: LADEP, Limpopo Provincial Department of Agriculture 2004)

The main idea was to develop all critical business infrastructures for production, skills training and to provide two cycle inputs for each enterprise. Infrastructure is one of the main factors identified in the objective tree as a necessity for the sustainability of a cooperative. According to Makhura and Mokoena (2003) potential solutions to the sustainable of cooperatives include overcoming infrastructure. Chaminuka et al, (2008) stated that infrastructure is the capital stock that can help to provide goods and services. In LADEP infrastructure was the first thing to be developed followed by skills development, group dynamic and market access. After that the enterprise would be handed over to its owners. At that stage the enterprise would produce for the readily available market. However, the program continues to support the projects with agri-business and market related matters.

Improvement of marketing systems for both farm produce and inputs in developing countries and emerging economies necessitates a strong private sector, backed up by appropriate policy frameworks and effective government support services. Such services can include provision of market infrastructure, supply of market information, and the presence of agricultural extension services able to advise farmers on marketing. In addition, governments need to ensure that the legislative and regulatory environment is suitable for competitive and efficient private-sector marketing. Training in marketing at all levels is also needed - from farmers' groups to postgraduate students at universities. New marketing links between agribusinesses, large retailers and farmers need to be developed. For example, through contract farming or group marketing, those working in marketing and agribusiness would be encouraged to join together in associations to promote their common goals. Financing of marketing is another important issue, as is the whole question of the development of improved food supply chains to supply the world's rapidly growing cities.

### **8.6.3 Development of Marketing Strategy**

LADEP Small Scale Agribusiness-Enterprises' marketing budget was limited, so the strategy needed to be simple. Developing visibility and brand equity was the key factor. To achieve this, LADEP Small Scale Agribusiness-Enterprises advertise in newspapers and on

radio. Advertisements will be for individual enterprises, and include some co-branded ads with the Farmer's Market (association or co-operative).

As indicated in figure 8.2 below, the farmers will be encouraged to develop specialization in their production. Those producing similar commodities could then form a commodity association (e.g. Tomato Growers' Association). Together, these associations can establish roadside stalls, undertake contract farming with potential bulk buyers/commercial consumers, and pursue collaborative farming to produce sufficient goods. If they wish, they may establish a co-operative (e.g. a marketing co-operative, processing co-operative or savings and credit co-operative) to minimize some of their costs, which for individuals can be very high. The input suppliers, private processing companies, bulk buyers and other role-players will interact with farmers both as individuals and associations or co-operatives. In this way their enterprises will expand and they can open more stalls and /or processing plants.

In addition to the advertisements, which would be used to drive consumer sales, enterprises will leverage a networking campaign among the local farmers to drive commercial sales.

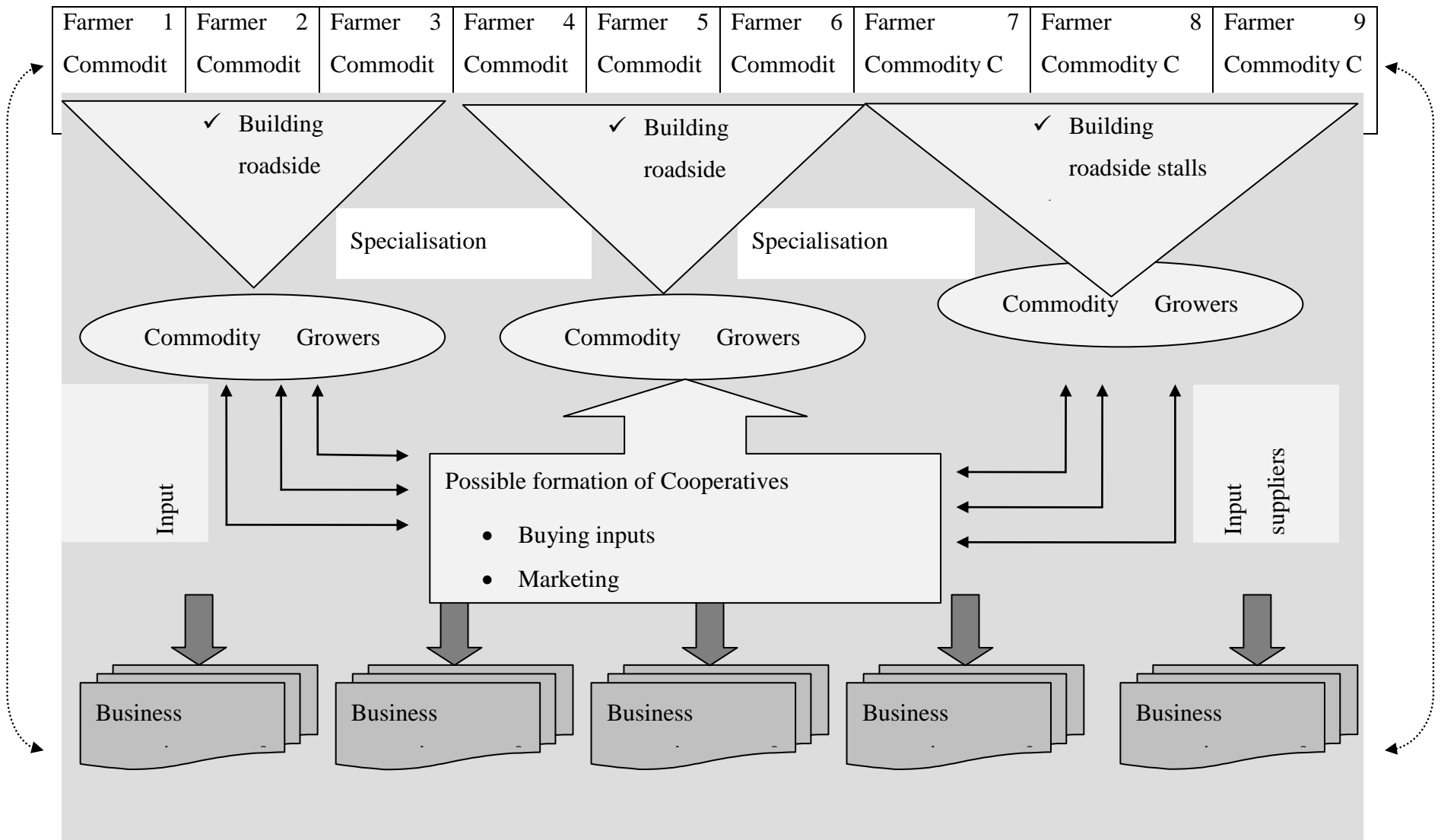


Figure 8.3: Smallholders Marketing Model (Source: LADEP, Limpopo Provincial Department of Agriculture 2004)

#### **8.6.4 Marketing Model**

The marketing model as depicted by figure 8.2 in the previous sub-section above clearly indicates how farmers who are in co-operatives can benefit through different marketing channels. This section thereof looks into each of the marketing arrangement and how they operate.

##### **a) Contract Farming -**

Contract farming has been in existence for many years as a means of organising the commercial agricultural production of both large-scale and small-scale farmers. Contracting out the production of fresh agricultural products is a widespread and important tool for organising agricultural production, in line with corporate strategies and market demands (Vellema, 2003). This system leads to social and technical integration of independent farmers into extensive production and marketing schemes adopted by internationally operating agribusiness. Interest in contract farming continues to expand, particularly in countries that previously followed a central planning policy and that have liberalised marketing through the closing down of marketing boards. The co-operation between a company and growers can sustain a profitable and stable enterprise, but it essentially depends on the capability to incorporate divergent interests and variant cultural notions of solidarity, into one organisational framework functional to production and marketing of products (Vellema, 2003). Within the organisational framework of contract growing, both company and growers maneuver to improve their own positions, and individuals within the two groups pursue individual goals and strategies, which change over time (see Porter and Phillips-Howard, 1994: 320). Sustainable contract farming arrangements are only possible when the various parties see themselves as involved in a long-term partnership.

b) Possible arrangements

Enterprises will be encouraged to enter into negotiation with companies, which will be interested in buying the produce. These negotiations will be basically related to contract farming, as is already taking place between Dovheni Enterprise and Spar Supermarket in Thohoyandou. Dovheni Farmers send their produce to Spar Supermarket on a weekly basis. There are many prospective company customers who are in a processing business, or are wholesalers and retailers. The programme (LADEP) will assist the farmers to meet these institutions and facilitate negotiations. Contract farming is feasible if farmers practice a collective farming strategy (discussed in the next section), which ensures that they meet certain market requirements, such as quantity and quality.

c) Collective Marketing and Selling

Collaborative marketing occurs when a retailer and a strategic manufacturer jointly devise marketing campaigns to key shopper groups. These comprehensive campaigns utilise the store and retailer's database as a marketing medium.

All marketing elements are integrated around a common store-wide theme that communicates a brand value for the retailer and the strategic manufacturers. Return on Investment is measured in short and long term increases in brand loyalty/equity.

Collaborative marketing provides farmers with an opportunity to reach a much larger group of consumers than would be possible as individual sellers. It also provides the opportunity to market products directly to consumers.

d) Direct Selling

This marketing strategy is about individual customers who may come to the farm or a farm stall outside the farmyard to buy produce. Normally prices at the farm are cheaper as there are no transport costs to the market.

e) Selling Depots

These are the depots in the form of roadside stalls where farmers can send their produce for customers to buy. Produce becomes cheaper if it is not an individual effort. Farmers can collaborate and share transport to take their produce to the stall. At the stall, bulk buyers can place orders.

f) Processing

Farmers may decide to establish a processing plant to process some of their produce. In this way they will be adding value to their produce and increasing their profit. They can agree amongst themselves to form a processing co-operative, where each farmer will have delivery rights in the form of shares (New Generation Co-operative Principle). The farmer will have a guaranteed market for his or her produce and on the other hand, the processing plant will have guaranteed raw material from farmer members. The profit from the processing plant can therefore be distributed amongst members and part of it set aside for co-operative development. The farmer adheres to the quality and quantity agreed upon at the signing of the delivery right contract. In addition, the farmers will also benefit from the profit achieved by the co-operative, which may be shared by members according to the amount of business a member has done with the co-operative.

#### **8.6.4.1 Co-operatives**

LADEP Agri-business Enterprises were in general smallholder farmers. This means that they may find it difficult to meet the market requirements as individuals. Arrangements for contract farming and supplying fresh produce markets like Johannesburg and Pretoria require consistent provision of large amounts of agricultural products. For LADEP Agri-business Enterprises to afford that, they may need to consider establishing co-operatives. These are legal organisations and should be run according to the Act as laid down by the legislature. Through co-operatives, farmers in LADEP agri-business enterprises can market their products together. In this way they may increase their bargaining power, minimize transport costs and secure big contracts.

However, it is important that only farmers can decide if they really want a co-operative, and what type of co-operative it should be. LADEP can only train them on how to establish a co-operative and run it. The *onus* of forming a co-operative should be left to the farmers. Although co-operatives are doing very well in many countries, including Finland, India, Kenya and Germany (to mention but few), we should still leave the establishment of co-operatives to the farmers themselves (Simmons and Birchall, 2008). It is known that the previous homeland governments in South Africa (Transkei, Bophuthatswana, Lebowa, Gazankulu, Venda, Ciskei and Kwazulu) made the mistake of forming co-operatives for farmers, and the results were that they all collapsed after exhausting government funds. This happened because people at that time used to perceive co-operatives as a snare to catch government money. The same perception related to the poverty alleviation projects in South Africa.

The approach in LADEP will therefore be to inform farmers about co-operatives through training and awareness campaigns. They will undergo training on the establishment process of co-operatives, as well as how to constitute management and registration. Farmers will be equipped with the knowledge of the advantages and disadvantages of co-operatives. It is, however, recommended that formation of co-operatives open some of the most inaccessible marketing channels.

### **8.6.5 Business Sustainability**

Majority of farmers in South Africa are in general smallholder farmers with a sizeable number of commercial farmers in land reform farms. This means that, they may find it difficult to meet the market requirements as individuals. Arrangements of contract farming and supplying fresh produce markets need large amount of agricultural products consistently. For farmers to can afford that, they may need to consider establishing co-operatives. Co-operatives are institutions through which people pull together their resources to achieve a common goal, which cannot possibly be attained by an individual e.g. marketing, processing, credit, purchasing resources, training, packaging etc. These are legal organizations and should be run according to the act as laid down. There are seven main principles, which need to be considered when operating a co-operative. Even



though principles of traditional cooperatives differ a little with those of New Generation Cooperatives (NGC), they all advocate democratic control and collective efforts. However, NGC is perceived nowadays as being proper for business affairs. Through cooperatives farmers can market their products together. In this way they may increase their bargaining power, minimize transport cost and secure big contracts.

However, it is important that, only farmers can decide if they really want a co-operative and what type of co-operative. Government can only train them how to establish co-operatives and how to run them. The onus of forming them should be left for farmers. Although we know by now that co-operatives are doing very well in many countries including Finland, India, Kenya, Germany to mention few, we cannot in any way establish them for farmers. It is a fact that the previous homeland committed a mistake when forming cooperatives for farmers and the results were that they all collapsed after exhausting government funds. That was so because people then were used to perceive co-operatives as a snare to catch government money. The same perception was adopted by the poverty alleviation projects in the country.

So the approach by agricultural officers should be to let farmers know about co-operatives through training and awareness campaigns. They should undergo training on the establishment process of co-operative as well as how to constitute its management and registration. Farmers should be equipped with the knowledge of advantages and disadvantages of co-operatives. It is however, our view that formation of co-operatives can open some of the most difficult accessible marketing channels.

## **8.7 Conclusion**

Farmers during the discussions have raised issues that frustrate them and which they attribute to the failure of their cooperatives. They indicated various challenges including lack of proper infrastructure, access roads, electricity, skills and access to finance. All these led to the discontinuation of cooperatives, high level of unemployment within the community. Farmers also indicated that the community due to these challenges

experienced poverty, dysfunctional cooperatives, high debts and food insecurity. As results youth shun away from farming and agricultural related cooperatives.

It was the understanding of the farmers and patrons that if all the challenges that the cooperatives are facing can be addressed, lives of farmers and the community at large could change for good. There will be better infrastructure for cooperatives which will lead to better production and improvement of people's lives.

The LADEP approach gave the developers an opportunity to do ground work analysis and managed to find out the needs of the people concerned. Issues like gender mainstreaming and project prioritizing were done thoroughly. The developers also assisted the community to check the viability of the enterprises they have chosen and the areas they have selected for their projects.

The programme which was funded by Finnish Government and housed by the Limpopo provincial Department of Agriculture assisted the farmers to focus on running their co-operatives through business principles. Although these farmers registered with the Registrar of Co-operatives, they were operating more like New Generation Co-operatives where members market their products together but get profit according to what they have posted to the market through the co-operative. This in New Generation Co-operatives is called delivery rights, where in farmers fulfill their delivery rights obligations. These co-operatives are involved in primary production, some in processing and even marketing their products.

## CHAPTER 9

### CONCLUSION AND RECOMMENDATIONS

#### 9.1 Introduction

This chapter focuses on the conclusions derived from the study and gives the recommendations which will assist the policy makers and developers in establishing a sustainable cooperative model. The main purpose of the study was to examine the socio-economic impact of agricultural and processing co-operatives in the Limpopo Province. According to Sangonet, co-operatives offer an alternative model for the implementation of viable, community-based initiatives in South Africa (SEDA, 2009). Co-operatives provide the potential for shared resources to improve economic power even with limited resources. Their reputation came about because they have ability to give patrons with a vehicle for communal economic action, which can result in them having bargaining power when negotiating business deals.

Properly managed co-operative can pool together it produce and bargain for lucrative contracts ad market for its members. Through these efforts a cooperative ca secure sustainable income for the patrons. In addition, co-operative is conducive for mutual grouping of small scale businesses to benefit from the improved economies of scale.

“Cooperative model is favoured by government actively advocates the use of this model for social upliftment projects” (Williams, 2007:03). There are many non-agricultural co-operatives that are no longer functioning and cannot be traced in the Vhembe and Mopani Districts. There is a need to encourage SMMEs to establish or re-establish co-operatives, because as is another way of efficiently running their businesses. For co-operatives to be sustainable, proper linkages between production of raw material and processing should be emphasised. Also, the general perception and attitude about co-operatives should be changed. The paradigm shift should encourage SMMEs to establish co-operatives for the ultimate benefit in economics of scale. The previously disadvantaged communities can greatly benefit due to chronic lack of access to markets.

## **9.2 Study Findings**

### **9.2.1 Literature Review**

Literature review revealed that cooperatives are indeed vehicles through which farmers manage to enhance their livelihood. This is confirmed by the United Nations who estimated in 1994 that the livelihood of three billion people which is approximately half of the world's population was secured through co-operative enterprises (NCASA, 2003). These institutions played a key role in food production in 1993 to 1994, 180 million people were members of 330 000 agricultural co-operatives in 47 countries (DESA, 1999). It was also established that Co-operatives have significant potential to contribute to the reduction of poverty and are in good position to mobilize extensive contribution and can minimize the costs, improve earnings and improve the feasibility of business activities (Philip, 2003).

The formation of the cooperative in line with Rochdale principles was also reviewed. Some of the cooperative principles were found to be contribution into the downfall of cooperatives. A New Generation Cooperative (NGC) approach was found to be a solution to principles such as open and voluntary membership which was in the traditional cooperative approach. NGC membership entitles farmers to a assured market for a ration of their production, a portion of the earnings produced by the co-operatives' processing operations, and any variation in the value of the tradable shares (Harris et al, 1996).

### **9.2.2 The Establishment of the Co-operative Movement in South Africa**

Historical background which was gathered from developed areas like Europe have demonstrated the power of co-operatives to change society and empower impoverished people. This was well stated by Crabtree (1993) who said that our view of history shapes the way we view the present, and therefore it dictates what answers we offer for current difficulties. This therefore means history acts as a foundation on which young societies and Limpopo Province can base their efforts and fine tune such societies in the line of successful societies across the world

Cooperatives in South Africa started as indigenous co-operatives which were established mostly through mutual agreement, and in most cases legal measures were not involved. Modern cooperatives were initiated by NPOs and government officials. Farmers were not included in the process or informed about how the co-operatives were formed and this was the reason why sense of ownership was never developed (Dawson, 2002). According to the National Co-operative Association of South Africa, modern co-operatives first emerged in South Africa in the 1890s and they were very much informal in nature. Only after the Anglo-Boer war in 1902 did Formal co-operatives in South Africa started (Ximiya, 2004) and the main aim was to afford commercial farmers the collective bargaining power (CompCom, 2005). In the beginning, cooperatives in South Africa developed along two parallel lines. There were white commercial farmers who were afforded support from government and black smallholder farmers who developed with very little resources to support them.

### **9.2.3 Situational Analysis of Cooperative Development in Limpopo Province of South Africa**

A survey on the situational analysis of cooperatives in Limpopo Province was conducted. This was done to analyse the state in which these institutions are and extent in which farmers are utilizing them to achieve the objectives they formed them for. The main force behind conducting the study was that there have been numerous attempts to establish cooperatives (mainly agriculture) in rural areas of South Africa, but they were formed as a direct result of projects and interventions supported by the old system. There have been numerous attempts also in South Africa to establish agricultural co-operatives but their level of success and ability to help farmers with food security and income was unknown.

In Limpopo Province the survey indicated that more than 74% have been in business for more than 5 years which is an indication that patrons value cooperatives and see them as important for their farming business. O'Connor and Thompson (2001) find these as the reason why cooperatives are sustained and exist for a long time.

Massive 65% of cooperatives were found to be not operational, and with no doubt this affect the farmers and their efforts to ensure food security and increase their income. Reasons for this varies from the board that that lacks capacity, commitment and lack of resources and as the result are make bad decisions which lead to loses (Carter et al, 2009) and also lead to total failure of such cooperatives (Hoyt, 1989). However, cooperatives had big number of membership with some having up to 1 000 members. This is an indication that most farmers find cooperatives being necessary and important.

#### **9.2.4 Operator Characterization and Acquisition of Sold Items for Tshakhuma and Khumbe Markets of Limpopo Province, South Africa**

The main items sold in the markets are agricultural produce which include fruits, vegetables and field crops. Mostly fruits were sourced from commercial farmers while vegetables and field crops were from farmers who are members of the agricultural cooperatives. Tshakhuma and Khumbe markets play a vital role in effort to improve food security and income because majority of operators (91.2%) are economic active women.

#### **9.2.5 Factors Influencing Fruit Profitability at Tshakhuma and Khumbe Markets, Limpopo Province, South Africa**

Tshakhuma and Khumbe markets sell subtropical and citrus fruits from different sources such as own production, hawkers, small-holder and commercial farmers. Profitability of the fruits sold includes socio-economic characteristics of market operators and factors linked to the operation of the market business. There is however need for training because 47.3% is of low levels of education

The profitability of the fruits sold was influenced mainly by method of acquisition which showed that own production resulted in more profit than procurement from other sources; expenditure on fruit which also showed that increased spending resulted in loss of profit; fruit storage meaning that increased storage resulted in loss of profit, and lastly cooperative approach referring to increased profit.

### **9.2.6 Creating the Sustainable Cooperative Development Model for Smallholder Farmers**

In this study it was obvious that there are factors which affect the sustainability of cooperative development. As indicated under the situational analysis in chapter 4, majority of cooperatives are not operational. This was evident also on the problem tree which identified several issues that had a hand in the downfall of farmer cooperatives. Some factors included lack of training, infrastructure, institutional arrangement, inputs supply, mechanisation and market. The objective tree outlined the factors that are needed to establish the sustainable cooperative model. This was also demonstrated by LADEP case study which stated flow of activities in developing a sustainable model.

### **9.3 Recommendations**

It is important to note that although cooperatives are important tools in food insecurity, unemployment and low incomes, they still face challenges to sustain their existence. Policy makers and developers need to consider focusing on the following development factors:

#### **a) Training**

Many developers perceive training as important for the development of the industries (Chishimbi, 2010). The study reveals that members of the co-operatives need training to enable them to run their co-operatives as a business. This training should be thorough to leave them standing on their own, and also capable of training their fellow cooperators. It is recommended that Value Chain Analysis be an emphasis coupled with change management activities. Training however could not salvage cooperatives from all problems they were facing as Lyne and Collins (2008) also stated that training is significant, but it will have little bearing if fundamental institutional difficulties discourage cooperative directors and patrons from growing the business

b) Infrastructure

Infrastructure is the investment that can help to offer goods and services to the community (Chaminuka et al, 2008). Infrastructure is critical in the success of any business enterprise including cooperatives. Ortmann and King (2007) stated that what is important to lower transactional costs is institutional infrastructure which include land rental markets, marketing associations, contract enforcement and this could contribute in stimulating production and marketing. Some co-operatives are not functioning properly because of lack of infrastructure such as suitable and safe buildings, security and facilities for handling members' commodities for marketing. Policy instruments should be applied in an integrated manner to support co-operatives across the value chain of productions.

c) Institutional Arrangement

Cooperative principles are claimed to be the essence of the cooperative movement resulting from the values that have infused the movement from the beginning (Mentani, 2006) and the governance and institutional arrangements principles are critical for the sustainability of the cooperative.

d) Transformation

The existing co-operatives should be transformed from their present way of functioning into co-operatives catering for the broader needs of their members and those of the communities. The broader needs include facilitating banking and loaning money to members, and the marketing of members' products and other alternatives which may flow from thriving co-operatives. These co-ops should be transferred into multi-purpose coops. Transformation should also include the need for succession planning and mentoring to the young and energetic.

e) Revitalisation

It is important that, while government envisages establishing new co-operatives, the existing (agricultural and manufacturing) co-operatives should be revitalized through renovating their infrastructure, building new infrastructure, capacitate co-operative members and assist them with input capital. Provision of funds for resuscitation should be



based on developed and attested business plans. These funds should be made available as a soft loan via the Limpopo Development Agency (LimDev) or SMME desk.

f) A co-operative model for small holder farmers

As previously mentioned, the survey showed that it is not difficult to start and register a co-operative however; there are many factors that contribute to the malfunctioning of these organisations, especially in the Vhembe and Mopani Districts. For sustainable development, new model generation of co-operatives should be considered.

g) Production of Horticultural and Field crops

Households and smallholder farmers seem to have a competitive advantage in the informal market when they sell fruits and vegetables that are own produced and the cost of production is not costed. For this scenario to improve local agricultural co-operatives should be resuscitated for inputs supply to the irrigation schemes. Only one agricultural co-operative exist at Khumbe by the name of Dzondo Agricultural Co-operative. It should also be stated that the smallholder farmers in the irrigation plots could create a niche market in high value crops like herbs and spices and continue only in those crops where little competition exist between smallholder farmers and commercial farmers.

h) Creation of other co-operatives

Several stakeholders exist to the informal market that needs to be organized in co-operative formation. Though this may be happening at an informal manner, facilitation of such will be to the benefit of all involved. Mention has been made of the existing agricultural co-operative at Dzondo with a potential to service the Land Care Project of Lwatshatsimu that stretches from Tshakhuma, Ha-Mutsha, Tsianda and Lwamondo. The main commodities here are horticultural fruit crops, such as mango, avocado, litchi, and bananas. A marketing, transport, savings and credit co-operative could also be considered as the varieties of fruits are now in production.

i) Development of a Processing Co-operative.

Judged by the amount of waste in the fresh produce market due to lack of cold storage facility and the over-production of fruits in season, especially mango, papaw, avocado, litchis and sweet potato one can conclude that a processing cooperative is important to add value into rural businesses. However, this should be done in partnership with commercial estate in the area, consultation with traditional leaders, and Land care projects.

j) Creation of a secondary co-operative.

In order to bring all stakeholders together to deal with the continuum of the value chain in fresh produce fruits and vegetable, a secondary co-operative could be the solution. A cooperative at a secondary level composed of democratically elected members of several primary cooperatives dealing with processing, marketing, transport, savings and credit. Other stake holders could be the traditional leaders owning land, commercial estate that could form trusts, and for workers. The arrangements could be negotiated on a shareholding basis as explained in detail in the business plan.

Secondary co-operative should be established with affiliates of several primary co-operatives distinct to address the total value chain from production to marketing of fruits and vegetables. Of emphasis should be the processing of such commodities to deal with huge losses being experienced by the market participants. The existing agricultural co-operative in Khumbe (Dzondo) should be resuscitated.

Also, our study revealed that the following primary co-operatives should be considered: processing, marketing, transport, savings and credit. As part of the model, production of market oriented crops could be encouraged via contract farming whereby market institutions provide funds, technical and market linkage to farmers.

## References

Abdelrahman, AH and Smith, C. 1996. *Co-operatives and agricultural development: a case study of groundnut farmers in Western Sudan*. Community Development Journal. 31(1): 13–19.

Abdulsaleh, A.M and Worthington, A.C. 2013. *Small and Medium-Sized Enterprises Financing*. Canadian Center of Science and Education. International Journal of Business and Management; Vol. 8, No. 14; doi:10.5539/ijbm.v8n14p36

Abdu-Raheem, K.A. and Worth, S.H. (2011). *Household Food Security in South Africa: Evaluating Extension's Paradigms Relative to the Current Food Security and Development Goals*. Journal of Agricultural Extension, 39(2): 91-103.

Ardt C.J and Coetzee M, 2010. *Personal income estimates in South Africa*. Bureau of Market Research. UNISA. South Africa

Aronson, A.L, 2010. *Crime and Development in Kenya: Emerging Trends and the Transnational Implications of Political, Economic, and Social Instability*. Inquiries Journal, 2010, VOL. 2 NO. 09 | PG. 1/2

Babak, D. 2006. *Co-operatives in South Africa: Knowledge and Information System*. SANGONeT. South Africa.

Baiphethi M.N., and Jacobs, P.T. (2009). *The contribution of subsistence farming to food security in South Africa*. Agrekon, Vol 48, No. <http://dx.doi.org/10.1080/03031853.2009.9523836>

Bakken, Henry H. *"Principles and Their Role in the Statutes Relating to Bakken. HH. 1963. Basic concepts, principles and practices of cooperation*. Mimir publishers. Madison, Wis.

Beierlein, JG & Lee, FS. 1978. *Patron valuation of a farmer co-operative under alternative financial policies*. American Journal of Agricultural economics. 60: 636–641.

Bembridge, T.J. Graven, E. H., Hough, M.A. & Van Rooyen, C.J. 1982. *An evaluation of the Sheila and Mooifontein projects, Ditsobotla district, Bophuthatswana*. Department of Agricultural Extension and Rural Development. University of Fort Hare, Eastern Province, South Africa

Bembridge, T.J. & Tshikolomo, K.A. (1998). *Communication and decision making among fruit growers in the Phaswana area of Northern Province*. South African Journal of Agricultural Extension. 27 : 19 – 29.

Bester, H. Chamberlain, D. Short, R and Walker, R. 2005. *A regulatory review of formal and informal funeral insurance markets in South Africa*. Finmark Trust.

Bielik, M. 2002. *Forming a New Generation Co-operative in Manitoba*. Manitoba Rural Adaptation Council, Department of Agribusiness and Agricultural Economics. Faculty of Agricultural & Food Sciences, University of Manitoba: Winnipeg

Bob Reiss, Jeffrey L. Cruikshank. 2000. *Low Risk High Rewards: Practical Prescriptions for Starting and Growing Your Business*. New Edition. R&R Publishers, Inc.

Bophuthatswana Department of Agricultural Extension and Rural Development.

Briscoe, R, *Utopians in the marketplace*. Harvard Business Review September–October (1971), pp. 4–9

Briscoe, R. 1971a. *Traders versus idealists*. Unpublished Ph.D. Dissertation. Harvard University.

Carter, C. et al 2009 '*A Study in Co-operative Failure: Lessons from the Rice Growers Association of California*'. Journal of Co-operatives, Vol. 23,

Chaminuka, P., Senyolo, G.M., Makhura, M.N., & Belete, A. (2008). *A factor analysis of access to and use of service infrastructure amongst emerging farmers in South Africa*. Agrekon , Vol 47 , Issue 3

Chibanda M, Ortmann G.F & Lyne M.C, 2009. *Institutional and governance factors influencing the performance of selected smallholder agricultural cooperatives in KwaZulu-Natal*: Agrekon, Vol 48, No 3 (September 2009) 293 – 306

Chishimbi, Lorraine. (2010) *Visit strengthens Zambian dairy: trade and technology*. Dairy Mail Africa: Publication for the Dairy Industry in Africa , Vol 5 , Issue 3

Chittenden, F., Hall, G. C., & Hutchinson, P. J. 1996. *Small Firm Growth, Access to Capital Markets and Financial Structure: Review of Issues and an Empirical Investigation*. Small Business Economics, 8(1), 59-67. <http://dx.doi.org/10.1007/Bf00391976>

Cloudius, Rl And Mueller, Wf. 1961. *Market structure as an orientation for research and agricultural Economics*. American Journal of Agricultural Economics. 43: 515–553.

Cobia, D., J. Royer, R Wissman, D. Smith, D. Davidson, S. Lurya, J. Mather, & P. Brown. *Equity Redemption: Issues and Alternatives for Farmer Co-operatives*. Washington, D.C.: USDA ACS Res. Rep. 23, Oct. 1982

Competition Commission South Africa (CompCom). 2005. *Research Report: the South African Agricultural Industry in context*. Lynwood, Sunnyside, South Africa.

Cook, M. 1995. *The future of U.S. agricultural co-operatives: a neo institutional approach*. American Journal of Agricultural Economics. 77(5): 1153–1159. Co-operatives." Wisconsin Law Review (1954):549-70.

Cotterill, RW. 1987. *Agricultural co-operatives: a unified theory of pricing, finance, and investment in Jeffrey S. Royer (ed)*. Contemporary theory: New approaches. Washington, DC: USDA ACS Service Report 18 (July 1987), pp.171-258

Cousteau, P 2011, *'the status quo: Philippe Cousteau tells the ICA General Assembly that the co-operative movement has solutions to the big global issues that will provide the world with hope for the future.*

Crabtree, D. 1993. *The Importance of History*. McKenzie Study Center, an institute of Gutenberg College.

Creswell, J.W. & Garrett, A.L. 2008. *The movement of mixed methods research and the role of educators*. South African Journal of Education, 28:321-333.

Crookes, T.J. & Lyne, M.C. 2001 . *Improvements in the rental market for cropland in a communal region of KwaZulu-Natal*. Agrekon 40(4):669–677

Cropp, R. 1996. *New generation co-operatives defined*. University of Wisconsin Centre for Co-operatives. Presentation to New Generation Co-operatives Conference. April. Stevens Point, Wisconsin.

Crouch, B.R., & Chamala, S. (1981). *Extension education and rural development: experience in strategies for planned change*. Department of Agriculture, John Wiley. University of Queensland, Australia.

Dagada, M.C., Nesamvuni, A.E., Van Rooyen, J., & Tshikolomo, K.A. (2013). *Operator Characterization and Acquisition of Sold Items for Tshakhuma and Khumbe markets of*

Limpopo Province, South Africa. *International Journal of Business and Social Science*, 4 (8): 181-190.

Dahl, WA and Dobson, W. 1976. *An analysis of alternative financing strategies and equity retirement plans for farm supply co-operatives*. American Journal of Agricultural Economics. 58: 198–208.

Dawson, R. 2002. *Living Networks*. Financial Times/ Prentice Hall. United State

Eastern Cape Department of Economic Development and Environmental Affairs (DEDEA), 2008. *Strategy and Implementation Plan for Support and Development of Co-operatives in the Eastern Cape Province*. Eastern Cape Government, South Africa

Dedet. 2006. *Consolidated Monthly Report*. March 2006. Polokwane. South Africa

Delevic M, 2011. *Guide To The Logical Framework Approach: A key tool for project cycle management, Second edition*. Government European Integration Office, Republic of Serbia. Available at [http://www.evropa.gov.rs/Evropa/Show\\_Document.aspx?Type=Home&Id=525](http://www.evropa.gov.rs/Evropa/Show_Document.aspx?Type=Home&Id=525).

Development Bank of Southern Africa (DBSA). 1995. *Northern Province: Statistical Review*. Compiled by Meitjies, CJ; Rousseau, BG and Viljoen, DJ. Development Information Chapter. 103. Midrand

Development Technology. 2009. *Houers Co-op: a unique packaging business*. Parkhurst, South Africa

De Vaus, D. A. 2006. *Research Design in Social Research*. London: SAGE, 2001;

Trochim, William M.K. *Research Methods Knowledge Base*..

Dlamini, J.R, 2001. *Impact of poverty alleviation programmes with special reference to Lower Umfolozi District*. A dissertation submitted to the Faculty of Arts in partial fulfillment of the requirements for Masters Degree in Social Work (Community work) in the Department of Social Work at the University of Zululand, 2001.

Department of Trade and Industry (DTI), 2003. *Comparative Study- Cooperative Banks and the Grameen Bank Model*. Co-operative and Policy Alternative Center (COPAC)

*Economic watch, effect of the global credit crunch on market*. 14 October 2010.  
<http://www.economywatch.com/economy-articles/effect-global-credit-crunch.html>

Elferink, M and Schierhorn, F. 2016. *Global Demand for Food Is Rising. Can We Meet It?* Havard Business Review.

Engel, P.G.H. 1995. *Facilitating innovation: an action-oriented approach and participatory methodology to improve innovative social practice in agriculture*. PhD thesis. Proefschrift Wageningen: Netherlands enterprises.

Engelhardt, W. (1986). *The Position of Co-operative Science within the Overall System of Sciences, in Treacy M. and Varadi L. (eds.), Co-operatives To-Day: Selected Essays from Various Fields of Co-operative Activities*, ICA, Geneva.

Enriquez, C. (1986). *Co-operatives in Third World Development*, Coady International Institute, Antigonish.

Erdman, HE & Larsen, GH. 1965. *Revolving finance in agricultural co-operatives*. Mimir Publishers. Madison, Wis.

*European Association of Consumer Co-Operatives*. 5 Feb 2010 2010. Av. de Tervueren 12, bte3, B-1040 Bruxelles



Fairbairn, B. (1990). *Social Bases of Co-operation: Historical Examples and Contemporary Questions*, in Fulton M., (ed.), *Co-operative Organizations and Canadian Society: Popular Institutions and the Dilemmas of Change*. University of Toronto Press.

Fairbairn, B., C.S. Axworthy, M. Fulton, L.H. Ketilson, & D. Laycock, (1990). *Co-operative Institutions: Five Disciplinary Perspectives*, in Fulton M. (ed.), *Co-operative Organizations and Canadian Society: Popular Institutions and the Dilemmas of Change*. University of Toronto Press .

Fals, O. (1970), *Formation and Deformation of Co-operative Policy in Latin America*, in *Co-operative Information*, No. 4.

Fals, O. (1970). *Estudios de la Realidad Campesina: Co-operación y Cambio*, UNRISD, Vol. 2, Geneva.

Fals, O. (1971). *Co-operatives and Rural Development in Latin America: an Analytical Report*. UNRISD, Vol. 3, Geneva.

Fals, O. (1976). *The Crisis of Rural Co-operatives: Problems in Africa, Asia and Latin America*, in Nash J., Dandler J., and Hopkins N.S., (eds.), *Popular Participation and Social Change: Co-operatives, Collectives and Nationalized Industry*. Mouton Publishers, The Hague.

Farrington, J. 1994. *Public sector agricultural extension: is there life after structural adjustment? Natural Resources Perspectives. 2: November. in South Africa: a history and new institutional challenges*. Working chapter: 2002-19. Department of Agricultural Economics, Extension and Rural Development. University of Pretoria: Pretoria

Food and Agriculture Organization of the United Nations, 1995. *The State of Food and Agriculture 1995*. Rome, Italy. ISBN 92-5-103700-0

Food and Agriculture Organization of The United Nations [FAO], (2001). *The state of food and agriculture*. United Nations, Rome, Italy

Frederick., D.A. 1997. *Co-ops 101: An Introduction to Co-operatives*. *Co-operative Information Report* 55. Rural Business-Co-operative Service. U.S. Department of Agriculture

Fuentes, M. & Frank, A. (1989). *Ten Theses on Social Movements, in World Development, Vol., 17*.

Gagnon, G. (1976). *Co-operatives, Participation and Development: Three Failures*, in Nash J., Dandler J. and Hopkins N.S. (eds.), *Popular Participation and Social Change - Co-operatives, Collectives and Nationalized Industry*. Mouton Publishers, The Hague.

Gala X.M.H, 2013. *Challenges facing LED Agricultural Cooperative in the Greater Tzaneen Municipality: A case study of Nkomamota Primary Agricultural Cooperative in Limpopo*. A Masters Thesis, University of Limpopo, South Africa

Gary Toenniessen, Akinwumi Adesina, And Joseph Devries, 2008. *Building an Alliance for a Green Revolution in Africa*. New York Academy of Sciences, Vol. 1136, pp. 233-242.

Gasson, RC. 1976. *Farmers participation in co-operative activities*. *Sociologia Ruralis*. 17: 107–22.

Good, M. 2003. *New Generation Co-operatives - 10 Things You Need to Know*. Edmonton: Alberta

Goodman, N., and Marx, G.T. (1978). *Society today (3rd ed)*. Randon House, New York.

Gouldner, A. (1961). *Metaphysical Pathos and the Theory of Bureaucracy*, in Etzioni A. (ed.), *Complex Organizations; A Sociological Reader*, Rinehart and Winston. New York.

Guy Ryder, *The UN World Conference Against Racism (WCAR)*. December 2003.  
<http://www.icftu.org/www/pdf/RacismeE2004.pdf>

Gyllström, B. (1988). *Government versus Agricultural Marketing Co-operatives in Kenya; Co-operatives Revisited*. Scandinavian Institute of African Studies, Uppsala.

Hackman, Deanne. (2001) “*What is a New Generation Co-operative(NGC)?*” *Ag Decision Maker*. Iowa State University Extension. December 2001.

Haley, C.W. & Schall, L.D. 1979. *The theory of financial decisions*. 2<sup>nd</sup> ed. McGraw–Hill. New York.

Hall, H. (1946). *The Development of the Co-operative Movement in the Colonial Dependencies*. Circular of the Secretary of State for the Colonies, 20th March.

Harper, M. 1992. *The critical factors for the success of co-operatives and other group enterprises*. *Small Enterprise Development*. 3(1): 14–21.

Harris, A & Covington, M. *The Role of Co-operative Reward Interdependency in Success and Failure*. *Journal of Experimental Education*,

Harris, A., B. Stefanson & M. Fulton. 1996. *New generation co-operatives and co-operative theory*. *Journal of Co-operatives* 11: 15-28

Hedlund, H. (1988). *Co-operatives Revisited*, Scandinavian Institute of African Studies, Uppsala.

Helmberger, GG. 1964. *Co-operative farm enterprise as a structural dimension of farm Markets*. Journal of Farm Economics. 65: 603-617.

Helmberger, P & Hoos, S. 1962. *Co-operative enterprise and organization theory*. Journal of Farm Economics. 44(2): 275–290.

Hendriks, S.L. and Lyne, M.C. (2009). *Does Food Security Improve When Smallholders Access a Niche Market?* Pietermaritzburg: African Center for Food Security.

Hickman, B. 2015. *Lack of education is root cause of poverty*. Rochester Business Journal, March 13, 2015

High Level Panel (HLP) 2013, “*A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development*”. New York: United Nations. Available at: <http://www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf>, accessed on 15th November, 2013)

Hind, AM. 1994. *Co-operatives – under performers by nature? An exploratory analysis of co-operative and non-co-operative companies in the Agribusiness Sector*. Journal of Agricultural Economics. 45(2): 213–219.

Hirschfield, A. (1975). *The Co-operative Movement in the Ivory Coast; Background, Present Situation and Future Prospects, in Co-operative Information, No. 3*.

Huang, Z., Bolin, O., Xu, X & Chen, K. 2003. *Is there a future for farmer co-operatives in China?* 25<sup>th</sup> International Conference of Agricultural Economics. (16 – 22 August) Durban. South Africa.

Hurmerinta-Peltomaki, L., & Nummela, N. (2006). *Mixed Methods in International Business Research: A Value-Added Perspective*. *Management International Review*, 46(4): 439 – 459. <http://dx.doi.org/10.1007/s11575-006-0100-z>

IFAD. 2003. *Promoting market access for the rural poor in order to achieve the Millennium Development Goals*

International Labour Organisation (ILO), 2015. *ILOs Global Employment Agenda*. ILO Library, Switzerland.

International Co-Operative Alliance (ICA) And International Labour Organisation (ILO). 2014, *Cooperatives and Sustainable Development Goals: A contribution to the post-2015 Development Debate*. Geneva: ILO. Available at [http://www.ilo.org/wcmsp5/groups/public/-d\\_emp/documents/publication/wcms\\_240640.pdf](http://www.ilo.org/wcmsp5/groups/public/-d_emp/documents/publication/wcms_240640.pdf)

International Co-operative Alliance. 2009. *What is a co-operative?* Geneva, Switzerland

International Organisation of Industrial and Service Cooperatives, 2005. *What is a Cooperative*. European Cooperative House, Belgium.

Kachru, U. 2011. *India: Land of Billion Entrepreneurs*. Dorling Kindersley (India) Pvt. Ltd, New Dheli. India

Karlyle, J. 2005, *Chapter given at the Hobart conference: Community, Economy and the Environment: Exploring Tasmania's Future*, 15 October 2005. Prout Institute of Australia

Kaswan, Mark J. 2012. “*Developing Democracy: Cooperatives and Democratic Theory*.” In Paper Prepared for Delivery at the American Political Science Association 2012 Annual Meeting.

Katz, H 2007, *An Introduction to Collective Bargaining*. McGraw-Hill.

Kwaw, I.L. (2006). *The Challenges Facing Organised Community Agricultural Projects to Alleviate Income*.

KZN Government, 2007. *Co-operatives are the answer to our challenge of poverty – Speech by Sibusiso Ndebele, Premier of KwaZulu-Natal*. 16 March 2007

Ladep. 2004. *Smallholder Marketing Strategy*. Limpopo Provincial Department of Agriculture. Polokwane. South Africa

Lazenby, P 2010, '*The Importance of Co-operatives*'. The Guardian

LDA (Limpopo Department of Agriculture), 2014. *GIS Map Production*. Polokwane, Limpopo Province, South Africa.

Le Vay, C. 1975. *Co-operative Theory and Farmers' Attitudes: A Preliminary Study*. Department of Agricultural Economics, University College of Wales.

Le Vay, C. 1983. *Agricultural co-operative theory: a review*. Journal of Agricultural Economics. 34: 1–44.

Le Vay. C. 1981. *Towards a theory of co-operative advertising*. Journal of Agricultural Economics. 32: 71–75.

Ledet. (2006) *Consolidated Monthly Report*. March 2006. Polokwane. South Africa

Leedy, P.D. & Ormrod, J.E. (2010). *Practical research, planning and design* (8th ed.). Pearson Merrill Prentice Hall, New Jersey, USA.

Limpopo Province Profile. 2004. *State of the province address by Dr Ngoako Ramatlhodi*, Premier of Limpopo, to the sixth and last session of the second legislature, 12 February 2004, Limpopo

Lyne, M. and Collins, R. (2008) *South Africa's new Cooperatives Act : a missed opportunity for small farmers and land reform beneficiaries*. *Agrekon* , Vol 47 , Issue 2

Lyne, M.C (1996). *Transforming developing agriculture: Establishing a basis for growth*. *Agrekon* 35(4):188-192.

Makhura, M.T. & Mokoena, M.R. (2003). *Market access for small-scale farmers in South Africa: In: Nieuwoudt and Groenewald (Eds). The challenge of change, agriculture, land and the South African Economy*. University of Natal Press. Pietermaritzburg, South Africa.

Manuh, T 1998, 'Women in Africa's development', Africa Recovery Briefing Chapter: A UN publication

Markelova, H., Meinzen-Dick, R., Hellin, J., & Dohrn, S. (2009). *Collective action for smallholder market access*. *Food Policy*, 34(1), 17. doi: <http://dx.doi.org/10.1016/j.foodpol.2008.10.001>

Mateman, DI. 1976. *A review of the literature of marketing theory and selected applications*. *Journal of Agricultural Economics*. 27: 1711–27.

Mateos-Ronco, A & Mas, A 2011 '*Developing a business failure prediction model for co-operatives: Results of an empirical study in Spain*'. *African Journal of Business Management*, Vol.5 No.26

Matungul, P.M. Lyne, M.C & Ortmann G.F (2001). *Transaction costs and crop marketing in the communal areas of Impendle and Swayimana, KwaZulu- Natal*. Development Southern Africa 18(3):347-363.  
<http://dx.doi.org/10.1080/03768350120070017>

Mavimbela, P., Masuku, M.B. and Belete, A. (2010). *Contribution of Savings and Credit Cooperatives to Food Crop Production in Swaziland: A Case Study of Smallholder Farmers*. African Journal of Agricultural Research, 5(21): 2868-2874.

Mbanza and Thamaga-Chitja, 2014. *The Role of Rural Subsistence Farming Cooperatives In Contributing To Rural Household Food and Social Connectivity: The Case of Mwendo Sector, Ruhango District In Rwanda*. African Journal of Indeginous Knowledge System, Vol 13 (2) 2014

Mentani, Phumlani S. (2006) *Possible effects of the co-operative principles and co-operative action approach: a case of wine co-operatives*. Agriprobe , Vol 3 , Issue 4, Pages: 8-9

Menzani, T., & Zamagni, V. (2010). *Cooperative Networks in the Italian Economy*. Enterprise and Society, 11(1), 98-127.

Mogoto Youth Co-operative 2011, *'The co-operative learning centre'*, viewed 6 January 2012,

Murray, GC. 1983. *Towards an agricultural co-operative classification*. Journal of Agricultural Economics. xxxiv: 151–161.

Murray, A. 2011. *Co-operative model provides hope for the world, says Philippe Cousteau*. Co-operative Press Ltd. Manchester



Muthuma, Elizabeth, 2012, *Do co-operative development policies really lead to the development of co-operatives? Lessons from Kenya*, Africa Insight, Vol 41, Issue 4, Mar, University of the Witwatersrand

Mwale, M., Sarfo-Mensah P., Zwane, E. M., Netshandama, V. O., & Mudau, M. J. (2012). *Marketability and Sustainability of Food Security Programmes: Products and Productivity of Agricultural Projects*. South African Journal for Agricultural Extension., Vol.40 2012: 1 – 15

Mwalukasa, E.E., Kaihura, F.B.S. & Kahembe, E. 2000. *Socio-economic factors influencing small scale farmers livelihood and agro-diversity*. East Africa PLEC General Meeting. Arusha, Tanzania.

Myburgh C, Poggenpoe M, 2007. *Qualitative methods: a research approach worth considering*. S Afr Psychiatry Rev, University of Johannesburg, Johannesburg

NCASA. 2008. *Co-operatives*. South Africa Pretoria

Ndegwe, P. Mureithi, L.P. Green, R.H.(eds). (1985). *Development options for Africa in the 1980's and beyond*. Oxford University Press with the Association of the Society for International Development, Nairobi, Kenya.

Nesamvuni, A.E., Odhiambo J.J.O. & Dagada, M.C. (2003). Executive Summary In: Nesamvuni A.E., Oni S.A., Odhiambo J.J.O and Nthakheni N.D (eds.). *Agriculture as the Cornerstone of the Economy of the Limpopo Province*. University of Venda, Thohoyandou, South Africa.

Nganwa P, Lyne M & Ferrer S. 2010. *What will South Africa's new Cooperatives Act do for small producers? An analysis of three case studies in KwaZuluNatal*. Agrekon, Vol 49, No 1 (March 2010): 39 – 55

Ngulube P and Ngulube B, 2014. *Mixed methods research in the South African journal of economic and management sciences: an investigation of trends in the literature*. South African Journal of Economic and Management Science. 18 (2015) No 1:1-13

O'Connor, J AND Thompson, G. 2001. *International trends in the structure of agricultural co-operatives: a report for the Rural Industries Research and Development Corporation*. Rural Industries Research and Development Corporation. Publication No. 01/06.

Office of the Premier [OTP], (2009). *Limpopo Employment Growth and Development Plan*. Polokwane, South Africa.

Official Journal L 107 of 30/04/1996. (1996) *Definition of small and medium sized*

Okem A.E, 2015. *Achieving the Comprehensive Africa Agricultural Development Programme's Goal of Food Security: What Roles can Cooperatives Play?*. Journal of African Union Studies (JoAUS) Volume. 4, Number 1, 2015, pp 69-86

Olaiton, S.O. (1984). *Agricultural education in the tropics: Methodology for teaching agriculture*. Macmillan Intermediate Agricultural Series. New York, United States of America

Organisation for Economic Co-Operation and Development, 2006. *Review of Agricultural Policies: South Africa Highlights and Policy Recommendations*. Paris, France

Ortmann, G.F., King, R.P. (2007) *Agricultural Cooperatives I: History, Theory and Problems*. Agrekon, Vol 46, No 1 (March 2007)

Ortmann, G.F., King, R.P. (2007) *Agricultural cooperatives II : can they facilitate access of small-scale farmers in South Africa to input and product markets?*. Agrekon, Vol 46, No 2 <http://dx.doi.org/10.1080/03031853.2007.9523769>

Otto, J.M, 2015. *National Credit Act. Vanwaar Gehási?\* Quo vadit lex? And some reflections on the National Credit Amendment Act 2014\*\** (part 1). [ISSN 0257 – 7747

Oustapassidis, K. 1982. *Structural characteristics of agricultural co-operatives in Britain*. Department of Agricultural Economics. Oxford University.

Özdemir, G. (2005). *Cooperative-shareholder Relations in Agricultural Cooperative in Turkey*. Journal of Asian Economics, 16(2005): 315-325.

Parliamentary Monitoring Group, 2006. *1st Draft Co-operative Development Strategy of South Africa*. South Africa, Pretoria

Perret S, 2002. *Water policies and smallholding irrigation schemes*. Provincial Government, South Africa

Philip, K. 2003. *Co-operatives in South Africa: their role in job creation and poverty reduction*. South African Foundation. SARPN, Pretoria

Pickard, DH. 1970. *Factors affecting success and failure in farmers' co-operative associations*. Journal of Agricultural Economics. 21: 105–119.

Plunkett Foundation. 1992. *Directory of Agricultural Co-operatives*. Oxford University Press. New York

PORTER, G. AND Phillips-Howard, K. (1994) *Farmers, labourers and the company: Exploring relationships on a Transkei contract farming scheme*. Journal of Development Studies, Volume 32, Issue 1 October 1995 , pages 55 – 73

Poverty in South Africa: *The Case of Limpopo Province*. Africa Institute of South Africa. Africa Insight Vol 36 No 2

Pretty, J. 2007. *Agricultural sustainability: concepts, principles and evidence*. The Royal Society. DOI: 10.1098/rstb.2007.2163

Rabobank 2011, 'Rabobank group', viewed 13 January 2012,

Ricardo Lotti & Peter Mensing & Davide Valenti & Booz Allen Hamilton. 2006. *A co-operative solution: this self-governing corporate structure protects communities and prospers in a globalizing world*. Management Quarterly - Fall, Thomson Corporation Company

Richard Barrows & Michael Roth. *Land Tenure and Investment in African Agriculture: Theory and Evidence*. The Journal of Modern African Studies, Vol. 28, No. 2 (Jun., 1990), pp. 265-297, Cambridge University Press: USA

Rizzo, S and Carbot, D.B. 2006. *Financial Participation of Employees in Malta*. Bank of Valletta Review, No. 34

Robtka, F. 1947. *A theory of cooperation*. Journal of Farm Economics. 29: 94–114.

Rome. *Discussion Paper, International Fund for Agricultural Development*, Rome. <http://www.ifad.org/gbdocs/gc/26/e/markets.pdf> (accessed 15 April 2015).

Rowan, K. 2014. *Education Importance in Today's Society*. Udemy, Inc. · Built on the Genesis Framework

Roy, EP. 1976. *Co-Operatives: Development, Principles And Management*. 3<sup>rd</sup> ed. Interstate Press. Danville, Illinois.

Royer, JS. 1978. *A general non-linear programming model of a producers co-operative association in the short run*. Unpublished Ph.D. Dissertation. Iowa State University.

Sanaco 2010, '*Presentation on the South African National Apex Co-operatives*', viewed 2 January 2012

Saskatchewan Economic and Co-Operative Development. 1999. *New Generation Co-operatives for Agricultural Processing and Value Added Projects*. New Generation Co-operatives Development Guide, November 1999. North Battleford

Satgar, V. 2003. *Comparative Study- Cooperative Banks and the Grameen Bank Model*. Co-operative and Policy Alternative Center(COPAC).

Satgar, V 2007, '*The State of the South African Co-operative Sector*', *Co-operative and Policy Alternative*. University of Witwatersrand, South Africa

Satgar, V. 2011. *Challenging the Globalised Agro-Food Complex: Farming Cooperatives and the Emerging Solidarity Economy Alternative in South Africa*. University of Witwatersrand, South Africa. DOI: 10.1111/j.1743-4580.2011.00331.x

Schaars, MA. 1951. *Basis principles of co-operatives – their growth and development in American cooperation*. 1951: 835– 852. Washington D.C. American Institute of Cooperation.

Seda. 2010. *Co-operatives - How co-operatives started in SA*. South Africa. Pretoria

Selvavinayagam, K. 1995. *Improving Rural Financial Markets for Developing Microenterprises*. FAO Investment Center Division. United Nations

Simmons, R and Birchall, J. 2008. *The role of co-operatives in poverty reduction: Network perspectives*. Journal of Socio-Economics. Volume 37, Issue 6, December 2008, University of Stirling, UK Pages 2131-2140

Sokoni, CH. 2001. *The influence of agricultural marketing reforms on highland farming systems in Tanzania*. The case of the Uporoto Highlands, Mbeya Region. Unpublished Ph.D. Thesis. University of Dar es Salaam.

Sparks G.D, Ortmann G.F & Lyne M.C. 2011. *A normative economic analysis of cooperative biodiesel production using soybeans produced by smallholders in Kwazulu-Natal*. South Africa. Agrekon Vol. 50 (3): 51–67

Ssemakula, E and Mutimba, J.K, 2011. *Effectiveness of the Farmer-to-Farmer Extension Model in Increasing Technology uptake in Masaka and Tororo Districts of Uganda*. S.Afr. Tydskr. Landbouvoorl./S. Afr. J. Agric. Ext., Vol. 39 Nr 2, 2011: 30 – 46

StatsSA, 2014. *Quarterly Labour Force Survey*. StasSA, South Africa

Stewart, AIT. 1993. *Have traditional co-operative structures outlived their usefulness?* Farm Management. 8 (6): 287–291.

Steyn, G.J. (1988). *A farming system study of two rural areas in the Peddie district of Ciskei*. D.Sc. – Thesis, Department of Agricultural Extension & Rural Development. University of Fort Hare, Eastern Cape, South Africa.

Strickland, C.F, 1937. *The Co-operative movement in South Africa*, *Journal of the Royal African Society*, Vol. 36, No. 145 (Oct., 1937), pp. 461-468. Oxford Journals, viewed 15 January 2012,

Sullivan, Arthur; Steven M. Sheffrin (2003). *Economics: Principles in action*. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall. pp. 157. ISBN 0-13-063085-3.

Tennbak, B. 1995. *Marketing co-operatives in mixed Duopolies*. Journal of Agricultural Economics. 46 (1): 33–45.

Thamaga-Chitja, Joyce M. Dlamini, Thulile R. & Makanda, I. (2011) *Qualitative elements constituting effective agricultural cooperatives among rural smallscale farmers*. Indilinga African Journal of Indigenous Knowledge Systems : Indigenous Knowledge Systems : The Challenge. Vol 10 , Issue 1, **Pages:** 1-16

Thirkell, JD. 1989. *Attracting and motivating managers in UK. Agricultural Co-operatives*. The Yearbook of Co-operative Enterprise 1989. 47 – 52. Oxford. Plunkett Foundation.

Thompson, D.N. 1996. *A study of land rental markets and institutions in communal areas of rural KwaZulu-Natal*. Unpublished PhD dissertation, Department of Agricultural Economics. University of Kwazulu-Natal, South Africa

Tompson, A.R.(1981. *Education and development in Africa*. MacMillan Education, Ltd. London, Britain

Torgerson, RE. 2001. *A critical look at new generation co-operatives*. Rural Co-operatives Magazine. January/February.

Tshabalala, J. 2013. *Youth participation in cooperatives in the central district of the north- west province - a cooperative model and its impact on performance of SMME's in the central district of the NW province*. Mini-dissertation. North West University, South Africa

Tshenkeng, S.T. (1985). *Evaluation of the accessibility of communication of farming practices in Gakhunuane Village*. Ditsobotla District, South Africa.

Tshikolomo, K.A., Nesamvuni, A.E., Stroebel, A., & Walker, S., 2012. *Water Supply and Requirements of Households in the Luvuvhu-Letaba Water Management Area of South Africa*. International Journal of Business and Social

Technoserve Inc. 1991. *En Nahad co-operative credit marketing study*. Agricultural Bank of Sudan. Khartoum, Sudan.

United Nations Department Of Economic And Social Affairs (DESA. 28 December 1999. *Status and role of co-operatives in the light of new economic and social trends*). Report of the Secretary-General. General Assembly. Fifty-first session, Item 102 of the provisional agenda

United Nations Department of Economic And Social Affairs, online survey on Promoting Empowerment of People in achieving poverty eradication, social integration and full employment integration and full employment and decent work for all.

United Nations Educational, Scientific and Cultural Organization, 2008. *South African National Report on the Development and State of the Art of Adult Learning and Education*. United Nation

United Nations. Background Paper on Cooperatives. Available at <http://www.un.org/esa/socdev/social/cooperatives/documents/survey/background.pdf>

United Nations (UN), 2008. *Achieving Sustainable Development and Promoting Development Cooperation*. United Nations, Department of Economic and Social Affairs. ISBN 978-92-1-104587-1

University of Limpopo. 2012, 'Co-Operative Capacity Development in Capricorn and Waterberg District, 2007 – 2009',



URT. 2001. *Agricultural sector support strategy. ASDS, October 2001*, United Republic of Tanzania. Dar es Salaam.

Van der Heijden, T and Vink, N. (2013). *Good for Whom? Supermarkets and Small Farmers In South Africa – A Critical Review of Current Approaches to Increasing Access to Modern Markets*. Agrekon, Vol. 52 (1) 2013. DOI: 10.1080/03031853.2013. 778466

Van der Rheede, C. 2015. *Education the Most Powerful Weapon to Change the World*. SANGONeT

Van Der Walt, J.L. 2003. *The resuscitation of the co-operative sector in the Limpopo province of South Africa*.

Van Niekerk J.A, Stroebel A., Van Rooyen C.J, Whitfield K.P. & Swanepoel F.C.J, 2011. *South Africa: Views and proposals of smallholder farmers in the Eastern Cape*. South African Journal of Agricultural Extension. Vol. 39 Nr 2, 2011: 57 – 68

Van Schalkwyk, H.D. Groenewald, J.A. Fraser, G.C.G. Obi, A, Aad van Tilburg, A. 2012. *Unlocking Markets to Smallholders: Lessons from South Africa*. Wageningen Academic Publishers. Netherlands

Varsity Online. 2003. *Stokvel – more than just a saving scheme*. University of Cape Town. South Africa

Vellema, S. 2003. *Management and performance in contract farming: the case of quality asparagus from the Philippines*. In: Vellema, S. and Boselie, D. (ed) *Cooperation and Competence in Global Food Chains: Perspectives on Food Quality and Safety*. Maastricht. Shaker Publishing

Vermaak, N.J (2014). *The Thohoyandou Informal Market and Integrated Development*. *Journal of Public Administration*. Volume 49 Number 4

Vermaak, N.J. 1999. *Indicators for sustainable rural finance: theory, evidence and prospects*. Unpublished Chapter. Department of Business management and Administration. University of Venda: Thohoyandou

Villarreal, M. 2014. *World Food Day and the closure of the International Year of Cooperatives: Message of José Graziano Da Silva, Fao Director-General*. Food and Agriculture Organization (FAO). New York

Vitaliano, P. 1985. *The co-operative as an economic association: an institutional analysis with special reference to agriculture*. Unpublished chapter. Virginia Polytechnic Institute and State University.

Waner, J. undated. *New generation co-operatives and the future of agriculture: an introduction*. Illinois Institute for Rural Affairs. California

Watkinson, E. & Makgetla, N. 2002. *South Africa's food security crisis*. *National Labour and Economic Development*. Community Development Journal. 36(1): 42– 52.

Welman, C., Kruger, F. & Mitchell, B. (2005). *Research Methodology (3rd Ed.)*, Oxford University Press, Cape Town, South Africa.

Wessels, A. (2011). *Boer Guerrilla and British Counter guerrilla Operations in South Africa, 1899 To 1902*. *Scientia Militaria, South African Journal of Military Studies*, Vol 39, Nr 2, 2011, pp. 1-24. University of Free State, South Africa, doi: 10.5787/39-2-110

Williams, G. 2007. *An overview of sport programmes and sport facilities available to youth in Philippolis*, South Africa. Are children being left to play in the dust?. Article submitted in accordance with the requirements for the Master's degree in Development

Studies. Faculty of Economic and Management Sciences, (Centre for Development Support. Bloemfontein.

Williams, J.L.H. (1986). *An evaluation of Training and Visit (T and V) extension programme in the Keiskamahoek District of Ciskei*. Department of Agricultural Extension and Rural Development, University of Fort Hare, Eastern Cape, South Africa.

World Bank (Editor) (2000): *The Logframe Handbook: A Logical Framework Approach to Project Cycle Management*. Washington DC: The World Bank. Available at <http://www.sswm.info/sites/default/files/reference>

Ximiya, W. 2004. *Co-operative Development*. Sakhubukumkani Co-op Ltd. Morelata Plaza York.

Zeuli, K, Freshwater, D, Markeley, D & Barkley, D. undated. *The potential for non agricultural co-operatives in rural communities*. University of Wisconsin. Madison, WI

Zeuli, K. 2002. *The role of co-operatives in community development*. University of Wisconsin. Extension Bulletin. 3: Sept.

ZYL, J et al 2000, *South African Agriculture at the Crossroads: An Empirical Analysis of Efficiency, Technology and Productivity*, Palgrave Macmillan.

**ANNEXURE 1: CO-OPERATIVE QUESTIONNAIRE**

SOCIO-ECONOMIC IMPACT OF AGRICULTURAL AND AGRO-PROCESSING CO-OPERATIVES ON FOOD SECURITY AND INCOMES IN LIMPOPO PROVINCE, SOUTH AFRICA

FOR OFFICIAL USE

ENUMERATOR NAME	
DATE OF INTERVIEW	
NAME OF VILLAGE/ TOWN	
NAME OF WARD	
NAME OF MUNICIPALITY	
NAME OF DISTRICT	
QUESTIONNAIRE NO.	

SECTION A: BIOGRAPHIC INFORMATION OF CO-OPERATIVE

A.1. Name of the Co-operative

A.2. Type of your Co-operative

A.3. Who owns your Co-operative?

A.4. Which of the following documents does your co-operative have? (Request a copy)

Business Plan	
Membership Registration Book	
Bank Book	
Constitution	
Assets Registration Book	
Stock Record	
Sales Record	
Expenditure Record	
Registration Certificate	
Other (state)...	

A.5. How many members do you have in your Co-operative?

Males		Females		Total	
-------	--	---------	--	-------	--

A.6. How many dropped out since it was established?

Males		Females		Total	
-------	--	---------	--	-------	--

A.7. Is your co-operative registered?

Yes	1	No	2
-----	---	----	---

A.8. Have you affiliated to any organization/association?

Yes	1	No	2
-----	---	----	---

If yes, list them ...


A.9. Is your co-operative presently operational?

Yes	1	No	2
-----	---	----	---

A.10. How do you rate your capacity service to your clients?

High	1
Medium	2
Low	3

A.11. Which of the following best describes the co-operative's current status? The co-operative has been in operation for:

The co-operative has not yet begun its operations	
1 year or less	
More than 1 year to 3 years	
More than 3 years to 5 years	
More than 5 years	

A.12. How would you define your co-operative?

Producer	
Marketing	
Processing	
Worker	
Consumer	
Multi-stakeholder	
Other (state).....	

B. Membership

B.1. Presently, how many qualifying shares or membership fee required to become a member of your co-operative? In case of share please, provide their values.

Membership Fee	R	R
Membership share(s)		R

B.2. How many regular members have belonged to the co-operative over the past 3 years (at the end of the fiscal period of the specified years)?

2004	
2003	
2002	

B.3. For the last fiscal year, what has been the percentage of the co-operative's turnover realized with non-members? \_\_\_\_\_%

B.4. What are the advantages of being a regular member as compared to the status of non-members? You may check more than one box, if applicable.

Preferred rates on products and /or services	
Access to exclusive products and/or services	
Access to social activities reserved for members	
The right to patronage refunds	
Discounts in other co-operatives or enterprises	
Priority over non-members	
No advantage whatsoever	
Other (specify).....	

C. Co-operative's Activities

C.1. In what field of activity does the co-operative operate? You may check more than one box, if applicable.

Vegetables	
Field Crops	
Fruits	
Livestock	
Other (specify).....	

C.2. Which territory was initially targeted by your co-operative?

Ward	
Municipality	
District	
Province	
National	
No territorial limit	
Other (specify).....	



C.3. Does the geographical origin of the current clientele correspond to that originally targeted?

Yes	
No	

C.4. If not, for what reason?

The co-operative deliberately expand the territory	
Critical needs of other sectors of population compelled co-operative to expand	
Clientele from elsewhere naturally joined the co-operative unplanned	
Clientele initially targeted was too vast	
Other (specify)	

C.5. Which means does your co-operative employ to promote its activities?

Community activities	
Brochures	
Community news chapter	
Word of mouth	
Local radio stations	
Roadside boards	
No means are employed to promote co-operative's activities	
Other (specify)	

C.6. Are there any future projects that the co-operative wishes to realize to answer unmet needs within the enterprise or the community?

Yes	
No	

C.7. How would you describe the general attitude of each of the following persons or organisations with regards to the co-operative's presence in the community?

		Favorable 1	Unfavorable 2	Neither for or against 3	Does not apply 4
1	Unions				
2	Agricultural operators				
3	Other co-operatives				
4	Private enterprises				
5	Citizens				
6	Community Based Organisations (CBOs)				
7	Public or para public organizations				
8	Municipality				
9	Non profit organisations (NPO)				
10	Co-operative members				
11	Non member farmers				
12	Other (specify)				

C.8. What have been the 3 principal impacts, in order of importance, of the arrival of the co-operative in the community? Please choose 3 most importance impacts and rate the 1 to 3, 1 being the most significant impacts.

1	Solve the problem of agricultural produce market	
2	Lowering unemployment rat	
3	Has favoured participation within the organisation	
4	Has addressed unmet needs within the community	

5	Has brought people together in the community	
6	Sense of community ownership	
7	Has contributed in curbing exodus of youth	
8	Retention of elderly people in their community	
9	Training (academic/professional) of numerous people	
10	Growth of the local economy	
11	Has increased the municipality visibility	
12	Improvement of people's perception in regards to co-operative organisations	
13	Has allowed members to benefit from better prices on their purchases	
14	Reintegration of physical challenged people	
15	Other (specify)	

C.9. Please indicate if the following elements are strength or weaknesses for your co-operative, based on the scale shown below. Please note that 1 represent a considerable strength and 5 a considerable weakness.

		Considerable strength				Considerable weakness	Does not apply
		1	2	3	4	5	6
1	No of members						
2	Customer loyalty						
3	Self financing rate						
4	Member participation						
5	Recruitment of members						
6	Quality of service						
7	Have sustainable market						
8	Member satisfaction						
9	Internal info flow						

10	Co-operative education provided to the community						
11	Development fund within the co-operative						
12	Profitability of the co-operative						
13	Employee participation						
14	Employee training						
15	Competency of employees						
16	Effectiveness of board of directors						
17	Facility of recruit competent leaders						
18	Community support						
19	Time and resources dedicated to management						
20	Resorting to government programs						
21	Other (specify)						

C.10. Please indicate if the following elements are opportunities or threats to your co-operative, based on the scale shown below. Please note that 1 represents a significant opportunity and 5 a significant threat.

		Considerable opportunity 1	2	3	4	Considerable threat 5	Does not apply 6
1	Partnership with public organisation						
2	Perception of public network						
3	Perception of unions						
4	Opening new point of service of the co-operative						
5	Competition from the private sector						
6	Market growth						

7	Development of technology						
8	Diversification of activities						
9	Sharing of expertise with other co-operatives						
10	Competition between co-operative sectors						
11	Risk of government budget cuts						
12	Training of community members						
13	Other (specify)						

C.11. For each of the following potential challenges, please indicate its degree of importance for your co-operative in the coming years.

		Essential	Very important	important	Of little importance	Not important	Does not apply
1	Adequately inform and train new members						
2	Produce more products and/or services						
3	Address new needs						
4	Contribute to the development of the community						
5	Create an impact on the regional development						
6	Improve the marketing of products and/or services						
7	Acquire equipment						
8	Obtain private financing						
9	Recruit additional employees						
10	Improve financial viability						

11	Offer training to employees and/or members						
12	Increase salaries or dividends						
13	Institute prevention programs						
14	Develop partnership with the private sector						
15	Other (specify)						

D. Co-operative Establishment

D.1 Did you take one or several of the following steps before the legal incorporation of your co-operative? You may check more than one box, if applicable.

1	Realization of a needs analysis	
2	Realization of market research	
3	Preparation of business plan	
4	Consultation with a government department	
5	Consultation with other coops	
6	Other (specify.	
7	None of the steps were realized	
8	Do not know	

D.2 How many people employed by the coop?

\_\_\_\_\_ (number)

D.3 How many are Full time \_\_\_\_\_ and Part time \_\_\_\_\_

D.5 List other organizations you are linked or affiliated with \_\_\_\_\_

D.6 In which way do you collaborate with such organization?

1	Information sharing	
2	Exchange of management tools	
3	Lending of personnel	
4	Joint activities	
5	Assistance in the startup process	
6	Other (specify)	

D.7 Does an association or federation or apex organization exist in your business sector?

1	Yes	
2	No	

D.8 What is the name of this organization

---

D.9 Is your co-operative a member of this organization?

1	Yes	
2	No	

NB. The researcher and the University of Free State express their sincere thanks for the time that you have taken to correctly complete this questionnaire. Your contribution is of great value and we appreciate your collaboration.

E. Income

E1. Production of Crops

Commodity	Hectares	Metric tons	Amount
Maize for grain			
Grain Sorghum			
Wheat			
Sunflower			
Groundnuts			
Soya Beans			
Dry Beans			
Lucerne			
Maize for silage			
Sugarcane			
Cotton			
Tobacco			
Potatoes			
Tomatoes			
Onions			
Pumpkins			
Carrots			
Cabbage			
Green beans			
Oranges			
Pineapples			
Bananas			
Apples			
Pears			
Peaches			
Grapes			
Macadamia			





E3. Other Income

Income received for work done for other/fellow farmers (such as ploughing, harvesting, threshing, baling, picking, spraying, shearing, water drilling, earth moving and transport) and leasing of farming equipment (not land) and sales of fixed assets, vehicles, machinery, equipment and tools \_\_\_\_\_

E4. Income earned from:

1. Source	Income
2. Agri tourism	
3. Farm based retail stores	
4. Processing and small manufacturing enterprise	
5. Professional services rendered (also hunting)	
6. Shares (dividends and interest received)	
7. Rebates (eg. For animal feed)	
8. Other (specify)	

F. Employment

- 1. Owners who farms for him/herself, including part-time farmers
- 2. Other owners directly involved in the farming activities
- 3. Family members involved in the farming operation but who do not receive regular salaries
- 4. Total

5. Number of full time employees as at 28 February 2005 (include family members who do receive salaries)

	Males	Females	Total
5.1 Farm Managers			
5.2 Farm foreman			
5.3 Employee who do 5.4 farm work			
5.5 Total			
5.6 No of dependants who normally do not do farm work			

6. No of Casual and seasonal workers employed during the financial year

Contractors \_\_\_\_\_

Employees \_\_\_\_\_

G. Expenditure

1. Item	Amount
2. Salaries	
3. Cost price of payment in kind	
4. Seeds and seedlings	
5. Fertilizers	
6. Fuel	
7. Packing material	
8. Transport	
9. Electricity	
10. Pesticides and other chemicals	
11. Other farm service (ploughing., weeding)	
12. Repairs and maintenance	
13. Licenses and insurance	
14. Levies	
15. Interest on loan	
16. Working Clothes	
17. Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	

Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	
Other (specify)	

**ABSTRACT**

Voedsel sekuriteit is sentraal tot die nuwe demokratiese regering se beleid in Suid Afrika. Na beraming is 70 persent van die landelike gemeenskap steeds geklasifiseer as arm en is die meeste van hulle ook vas gevang in armoede en bestaans boerdery. Daar is egter n groeiende tendens van besef en aanvaarding dat landbou en vervaardigings ko-operatiewe as produktiewe en effektiewe meganismes kan dien in die oplossing van armoede deur dit deel te maak van n voedsel sekuriteits strategie. Klein boerdery eienare het kooperasies gevorm om hulle self te help en word beleids rigtings en strategiee tans in plek gestel om die historiese uitsluiting van swart kleinboere in Limpopo Provinsie aan te spreek

Die tradisionele sisteme in landelike omgewings is afhanklik van instellings wat bydra tot die voortbestaan van die stelsel en daarom is landbou en verwerkings kooperasies midde in die proses deur die voorsiening van dienste soos finansiering, plaas insette, ploeg dienste, bemarking en waarde toevoeging. Kommer bestaan wel oor die finansieele stabiliteit van die entiteite as regerings fondse nie meer beskikbaar is nie.

Ko-operasies het histories n integrale deel gevorm van voedsel produksie en bewys bestaan dat gedurende 1993 en 1994 nagenoeg 180 miljoen mense lede was van 330 000 landbou ko-operasie in 47 lande. In ontwikkelde lande is die lede talle ook steeds hoog. In die Ivoorkus is 827 000 kleinboere lede van ko-operasies en word 78% van mielies en 59% van die bone in Nicaragua deur kooperasies bemark.

In plaaslike handel, bemarking en institutionele beleids rigtings word min voorsiening gemaak vir die unieke behoeftes van ontwikkelende klein boere en is die instellings verantwoordelik vir mark blootstelling van Suid Afrika nie goed gekoördineerd nie.

Kooperasies en voorligtings dienste vorm n hegte band met mekaar en speel voorligting n belangrike doel ten opsigte van die ontwikkeling van kooperasies. Dit is meldbaar dat waar voorligting en kooperasies sterk bande het daar steeds produksie plaas vind wat huishoudings van voldoende voedsel voorsien vir hulle voort bestaan. Mark toegang is n ander belangrike faktor wat bydra tot die stabiliteit van kooperasies en kan n beduidende impak he op armoeds verligting deur die mobilisering van deelnemers deur koste te verlaag van produksie en dus meer geld beskikbaar stel aan huishoudings en die besighede meer stabiliseer en lewensvatbaar maak. Die kooperatiewe model wat deur LADEP ontwikkel en toegepas is, is bewys hoe kooperasies kan werk en volhoubaar voortbestaan in n Landelike Provinsie soos Limpopo.

Deel van die model is waar mark georiënteerde produksie van gewasse plaas vind in die vorm van gekontrakteerde boere, proseseerders voorsien finansieele. tegniese en bemakings ondersteuning aan die klein boere as deel van die pakket. Om die plan volhoubaar en voordelig te maak moet klein boere deel wees van die verskillende aktiviteite van waarde toevoeging in die kooperasie en kan bewerstelling word deur die totstankoming van primere, sekondere en tersiere kooperasies. In die heersende monopolistiese market in landbou is dit feitlik onmoontlik vir individuele klein boer om impak te maak en kan die saamstaan in die vorm van n kooperasie die boere beduidende bedingings magte gee wat die beperkinge in skaal van operasie aanspreek. Dit kan moontlik bydra om produktiviteit te verhoog wat kan bydra tot armoeds verligting en verhoogde verdienste.

## **ENGLISH VERSION**

### **ABSTRACT**

Food security is central to the policy of the new democratic government in South Africa. An estimated 70 percent of rural populations are classed as poor with most of them still locked into poverty and subsistence farming. However, there is a growing realization and acceptance that agricultural and processing co-operatives can be both productive and efficient at alleviating poverty through a food security strategy. Most smallholder farmers have established co-operatives to help themselves. Co-operatives' policies and strategies are currently being put in place to redress past neglect of smallholder farmers, who are predominately black in Limpopo Province.

The rural traditional system is dependent on rural institutions for a livelihood. Agricultural and processing co-operatives are central to the supply of farm inputs, farm tillage, marketing, product value adding and provision of much needed finance. However, their sustainability beyond the period they have government funding is questionable. The co-operative enterprise plays a major role in food production. Records show that in 1993 to 1994, 180 million people were members of 330 000 agricultural co-operatives in 47 countries. Also, in developing countries co-operative membership is high. In Ivory Coast 827 000 small farmers are members, in Nicaragua 78% of maize and 59% of beans are marketed by co-operatives.

Present trade, marketing, and institutional policies in South Africa make limited provision for the unique interests of emerging small-scale farmers. Furthermore, the current institutions involved in promoting market access are not well co-ordinated.

Co-operatives have direct linkage with extension services. The extension services play a vital role on the development of co-operatives. It was noted that where there is strong link between co-operatives and extension, those co-operatives are still surviving and able to provide enough food in their families. Market access is another factor that determine the sustainability of the co-operative and its ability to have significant potential to contribute



to the reduction of poverty and are better able to mobilise wide participation and can reduce costs, enhance incomes and improve the viability of business activities. The co-operative model which was developed and practiced by LADEP showed how co-operatives can be developed and be sustainable even in the rural province of Limpopo.

As part of the model, production of market oriented crops could be encouraged via contract production, whereby processors provide financial, technical and marketing services to smallholders. To make the plan viable and to ensure beneficiation throughout the value chain, co-operatives should have a stake at all levels of the value chain. This can possibly be done by establishing primary, secondary and tertiary co-operatives. It is difficult for smallholders to penetrate the monopoly of market fraternity individually - clubbing together as co-operatives can give them enough bargaining power and solve the economics of scale challenge. This way they can enhance and improve their production which, will resulted in poverty reduction and increase income.