

**IMPACT OF FREE MARKET ECONOMY ON TOBACCO COOPERATIVE  
SOCIETIES. A CASE STUDY OF WESTERN ZONE TOBACCO GROWERS  
COOPERATIVE UNION (WETCU) IN TABORA REGION**

**BY**

**FILBERTO HASSAN SANGA**

**A RESEARCH PAPER SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION IN AGRIBUSINESS OF SOKOINE  
UNIVERSITY OF AGRICULTURE, MOROGORO**

2008

31 DEC 2009

## ABSTRACT

Cooperatives as grassroots organizations have engaged themselves in the provision of agro-marketing and of other social services. Cooperatives thus play a key role of promoting development, hand in hand with the government, in the rural as well as in the urban areas. Actually in that way, they have, in deed, been agents of socio-economic change and for poverty alleviation. After market liberalization, coops fail to deliver and performed poorly under competition partly due to the withdraw of government guarantees. This report is the output of the research study which analyses the impact of free market economy on tobacco marketing cooperatives, in Tabora region as a case study. The study successfully covered 21 randomly selected primary cooperative societies (PCS) in three branches of Western Zone Tobacco Growers Cooperative Union (WETCU). All the PCSs were tobacco marketing cooperative societies. Secondary data were collected from published materials, handbooks, files, and other related documents from WETCU, TTB, association of tobacco companies (ATTT) and the district cooperative offices as well as Regional commissioner's office. The general objective of this study was to evaluate the performance of cooperative union before and after free market economy. The research findings reveal that free market economy have both advantages and disadvantages to cooperatives. As for the issue of tobacco cooperative societies, there is an improvement on input supply and distribution, extension services, the market for the crop, payments to the farmers and financial stability for tobacco cooperative union (WETCU). However, the findings show that there are no improvements on input price, interest rates on input credit and tobacco marketing have continued to encounter problems. Tobacco Leaf Commercial company (TLCC), which is

considered to be an association formed out of collusion of Tanzania tobacco traders, lack of government intervention, poor pricing system, contract farming and low producer prices compared to cost of production are the eminent problems. In this study, the researcher found out that the government efforts, in the present stance towards the restructuring of coops along its promotional role seemed to have less enthusiasm, less seriousness, and less commitment towards the cooperative revival. The study, under the above circumstances, show that the market liberalization has both advantages and disadvantages to cooperatives, and to farmers. Recommendations, based on above findings, are emphasize on the government appropriate coops development and implementation policy. Also, the government should take into consideration the importance of creating a conducive environment under which cooperative societies will be able to operate and thrive under current free market and trade liberalization macro-economic policies. Alternatively, the tobacco farmers can opt for other agricultural crops such as maize, ground nuts, paddy, cotton or paprika which can do better than tobacco.

**DECLARATION**

I, **SANGA FILBERTO HASSAN**, do hereby declare to the Senate of the Sokoine University of Agriculture that this research paper is my original work and that it has never been submitted for a degree award to any other University.

  
.....

**Filberto H. Sanga**  
(MBA Candidate)

.....  
12.06.2008

**Date**

The above declaration is confirmed by,

  
.....

**Dr Anna A. Temu**  
(Supervisor)

.....  
13/6/08

**Date**

**COPYRIGHT**

All right reserved. No part of this research paper may be reproduced, stored in any retrieval system, or transmitted in any form or by any other means; electronic, mechanical, photocopying, recording or otherwise without prior written permission of the author or Sokoine University of Agriculture in that behalf.

## ACKNOWLEDGEMENTS

I wish to extend my sincere gratitude to all those who made this work successful. Fore most, special thanks and appreciation are due to Dr Anna A. Temu my supervisor who tirelessly using her knowledge, advice and accumulated experience guided me during the entire period of study where without her effort this work would have been difficult to accomplish.

I am also grateful to Dr Kilima F.T.M. MBA Cordinator, Dr Kashuliza A.K. Director and Registrar of Cooperatives (Minstry of Agriculture, Food security and Cooperatives), Mr Sinka D.M. Assistant Registrar – Tabora region., Ndagabwene N. the General Manager WETCU, Kibasa G.T Chief Internal Auditor WETCU for their invaluable research assistance. Furthermore, I am greatly indebted to all those who assisted in the implementation of the research by providing information, advice and facilities. My outmost gratitude goes to the WETCU workers including the branch managers, Primary societies' boards, Tanzania Tobacco Board, tobacco buyer's companies and other stakeholders interviewed for this study who unselfishly spared their time for this study without direct benefit. I'm equally grateful to my classmates and staff of the Department of Agriculture Economics and Agribusiness at Sokoine University of Agriculture. Lastly those who are not mentioned by names are implicitly implied in this acknowledgement. May almighty God bless them all!

I am hoping that this report can raise topics for policy debate with the aim of strengthening the cooperative societies to improve their performance under market liberalization.

## **DEDICATION**

This work is dedicated to my beloved wife Saida Mgeni and my children Monica and Sara who stayed alone during the time of my study.

## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>ii</b>
<b>DECLARATION.....</b>	<b>iv</b>
<b>COPYRIGHT .....</b>	<b>v</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>vi</b>
<b>DEDICATION.....</b>	<b>vii</b>
<b>TABLE OF CONTENTS.....</b>	<b>viii</b>
<b>LIST OF TABLES .....</b>	<b>xi</b>
<b>LIST OF FIGURES .....</b>	<b>xii</b>
<b>LIST OF APPENDICES .....</b>	<b>xiii</b>
<b>LISTS OF ABBREVIATIONS AND ACRONYMS .....</b>	<b>xiv</b>
<b>LISTS OF ABBREVIATIONS AND ACRONYMS .....</b>	<b>xiv</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.0 Overview.....	1
1.2 Tobacco Production in Tanzania.....	1
1.3 Historical Background .....	2
1.4 Tobacco Marketing .....	3
1.5 Cooperative Development Constraints .....	4
1.6 Problem Statement and Justification.....	5
1.7 Objectives.....	6
<b>CHAPTER TWO .....</b>	<b>7</b>
<b>LITERATURE REVIEW.....</b>	<b>7</b>
2.0 Introduction.....	7

2.1	Importance of Cooperatives .....	7
2.2	History of Agricultural Marketing Cooperative System in Tanzania .....	8
2.3	Current Cooperative Reforms 1991 to 2007 .....	12
2.4	The Tobacco Primary Cooperative Societies and Cooperative Unions .....	15
2.5	Free Market.....	15
2.6	Agricultural Marketing Reforms in Tanzania .....	18
	<b>CHAPTER THREE</b> .....	<b>22</b>
	<b>METHODOLOGY</b> .....	<b>22</b>
3.0	Introduction .....	22
3.1	Location of Study Area .....	22
3.2	Background Information .....	23
3.3	Conceptual Framework.....	25
3.4	Research Approach.....	27
3.5	Data Collection and Analytical Techniques.....	27
3.6	Limitations of Data Collection .....	28
	<b>CHAPTER FOUR</b> .....	<b>29</b>
	<b>RESULTS AND DISCUSSION</b> .....	<b>29</b>
4.0	Introduction.....	29
4.1	The Place of Tobacco Cooperatives after Liberalization .....	29
4.2	Contract farming .....	31
4.2.1	Credit services.....	31
4.2.2	Farm input supply and distribution .....	32
4.2.3	Input price .....	33
4.2.4	Loan Repayment and Interest Rates.....	33

4.3 Pricing Mechanism .....	34
4.3.1 Marketing chain .....	34
4.3.2 Grading and Classification.....	35
4.3.3 Produce purchases.....	36
4.3.4 Market Information.....	37
4.5 Problems Encountered by Cooperatives.....	38
4.5.1 Competition with other crops.....	39
4.5.2 Government Intervention.....	39
4.5.3 Labour requirement.....	40
4.5.4 Auctioning and Sellers freedom is minimal.....	41
4.6 Susceptibility of the Movement to Political Interference .....	41
4.7 Tobacco Marketing Compared to other Cash Crops .....	41
4.4 Tobacco Commercial Companies.....	42
<b>CHAPTER FIVE.....</b>	<b>44</b>
<b>CONCLUSION AND RECOMMENDATIONS.....</b>	<b>44</b>
5.0 Introduction .....	44
5.1 Summary of major findings.....	44
5.2 Conclusion.....	45
5.3 Recommendations.....	45
<b>REFERENCES.....</b>	<b>48</b>
<b>APPENDICES.....</b>	<b>51</b>

**LIST OF TABLES**

Table 1:	Summary of history of agro-marketing organizations in Tanzania .....	11
Table 2:	Agro-economic zones of Tabora region.....	25
Table 3:	Conceptual framework of cooperative after market liberalization .....	26
Table 4:	Farm input requirement.....	32
Table 5:	Marketing and pricing of tobacco .....	35
Table 6:	Other problems facing cooperatives .....	39

**LIST OF FIGURES**

Figure 1: Export earnings of major cash crops to Economy in Tanzania.....	2
Figure 2: The organization structure of the agricultural marketing cooperative before reform.....	13
Figure 3: The General organization structure of the cooperatives in Tanzania.....	14
Figure 4: The organization structure of tobacco marketing before and after market liberalization.....	20
Figure 5: A map of Tanzania showing Tabora region.....	23

**LIST OF APPENDICES**

Appendix 1: Employment by growers, leaf buyers, processors and manufacturers from 1994/95 to 1998/99.....	51
Appendix 2: Questionnaire to the primary societies.....	52
Appendix 3: World employment records by the crop.....	54
Appendix 4: Distribution of sample primary cooperative societies by branch.....	56
Appendix 5: Cost of production per hectare in the year 2004/2005 .....	57
Appendix 6: Cost of labour requirement .....	59

**LISTS OF ABBREVIATIONS AND ACRONYMS**

AMCOS	-	Agricultural and marketing cooperative societies
ASDP	-	Agriculture Sector Development Programme
ATTT	-	Association of Tanzania Tobacco Traders
BAT	-	British American Tobacco
BOT	-	Bank of Tanzania
CRDB	-	Cooperative and Rural Development Bank
EAT	-	East Africa Tobacco
EATCO	-	East African Tobacco Corporation
FAO	-	Food and Agriculture Organization
FME	-	Free Market Economy
IB	-	Individual Buyer
MBD	-	Marketing Development Bureau
MoA	-	Ministry of Agriculture
NAPB	-	National Agricultural Product Board
NBC	-	National Bank of Commerce
NBS	-	National Bureau of Statistics
NMC	-	National Milling Corporation
PCS	-	Primary Cooperative Society
SACCOS	-	Savings and Credit Cooperative Societies
TAC	-	Tnanganyika Agricultural Corporation
TAT	-	Tobacco Authority of Tanzania
TCC	-	Tanzania Cigarette Company

TLCC	-	Tobacco Leaf Commercial Company
Tshs	-	Tanzanian Shillings
TTB	-	Tanzania Tobacco Board
TTPMB	-	Tanzania Tobacco Processing and Marketing Board
URT	-	United Republic of Tanzania
WB	-	World Bank
WETCU	-	Western Zone Tobacco Growers Cooperative Union.

## **CHAPTER ONE**

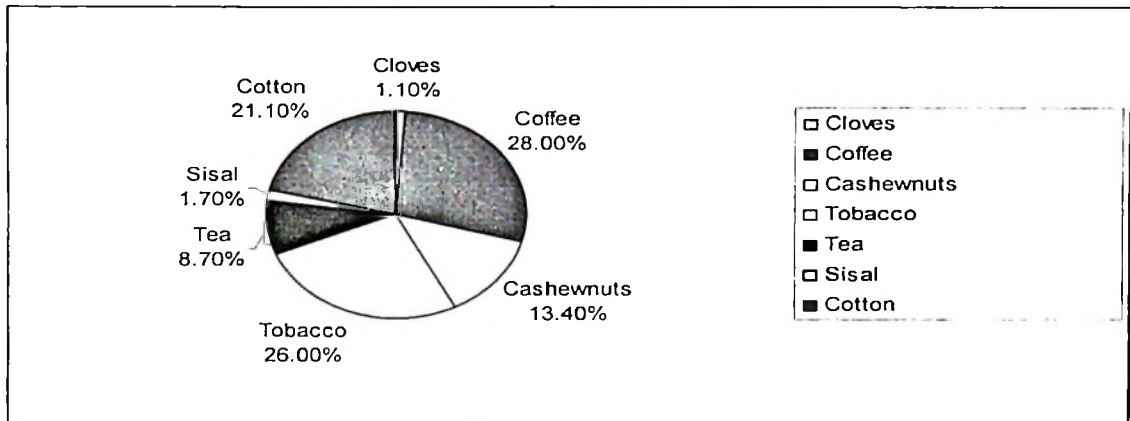
### **INTRODUCTION**

#### **1.0 Overview**

Agriculture is the leading sector of the economy of Tanzania. It is the principal contributor in export earnings of about 75% and accounts for over 50% of the GDP. The agriculture sector grew by 4.1% in 2006 compared to 5.1% in 2005 (URT, 2007). Over 80% of the poor live in the rural areas and their livelihood depends on agriculture. One of the major economic objectives of Tanzania is to increase self sufficiency in food and substantially promote cash crop production in order to generate foreign exchange earnings, provide income and employment to rural based population, and to provide raw materials for agro-based industries. Agriculture remains the largest sector in the economy and hence its performance has a significant effect on output and the corresponding income and poverty levels (URT, 2006).

#### **1.2 Tobacco Production in Tanzania**

Globally, Tanzania is a small tobacco producer, with the contribution of less than 0.5 % in the global production and 0.75% in tobacco exports. The major tobacco producing countries are US, India, Brazil and the People of Republic of China. Tobacco is one of the Tanzanian's leading export crops, ranking second as a foreign exchange earner with an average export earnings of 28% after coffee followed by cotton, sisal, tea, cashew nut, and cloves Figure 1 (BOT, 2008). An estimate of 150,000 families depend on tobacco, 90% of these are smallholders with an average of one to two hectares of tobacco.



Source: BOT Monthly report February 2008

**Figure 1: Export earnings of major cash crops to Economy in Tanzania**

A large proportion of tobacco grown in Tanzania (85%) is exported to overseas markets. Also the crop provides raw material for cigarette manufacturing factories, thus offering further employment opportunity in the country. Appendices 1 and 2 show the employment distribution by the crop in Tanzania and other countries (MBD 1994).

### 1.3 Historical Background

The history of tobacco industry in Tanzania dates back from 1908 when the British American Tobacco Company Ltd (BAT) established its base in Nairobi with its operations covering Kenya, Uganda and Tanzania. The name of the company was changed to East Africa Tobacco Company (EATCO) after World War II. The first institution to be involved in the promotion of small-scale tobacco production in mid-fifties was Tanganyika Agricultural Corporation (T.A.C). In 1961, E.A.T. established the first tobacco processing plant in Dar es Salaam and at the same time started offering extension services to farmers in Tabora region in order to increase

production. In 1965, a local company called British American Tobacco Tanzania Limited was formed in place of E.A.T. In 1967 after the Arusha Declaration, the company was nationalized then operated under Tobacco Authority of Tanzania (TAT). In 1972, it was established under the tobacco industry Act of 1972 which later became known as the Tanzania Tobacco Processing and Marketing Board (TTPMB) before finally acquiring the name of Tanzania Tobacco Board (TTB) in 1993. Following market liberalization, Tanzania produce three main types of tobacco: flue-cured, fire cured and air-cured burley tobacco. On average, 80% of the tobacco produced in Tanzania is flue-cured. The main producing areas of flue cured tobacco are Tabora, Iringa, Mbeya, Rukwa, Kigoma, Kagera and Singida. Fire-cured tobacco is grown mainly in Ruvuma region specifically in Songea and Tunduru districts. Air-cured burley tobacco is mainly grown in Kilosa district in Morogoro region and Handeni district in Tanga region.

#### **1.4 Tobacco Marketing**

Like other export crops in Tanzania, the marketing of tobacco experiences several organizational changes after independent. These include native or farmers cooperatives (before 1961), village government based marketing (1961 – 1975), crop authority (1976 – 1983), government controlled cooperatives (1984 – Early 1990's) and liberalized market (Early 1990's to today). Market Liberalization aimed at providing competition and promoting efficiency in tobacco industry. Before market liberalization crop purchasing was performed by regional cooperatives unions in all the regions except in Kigoma and Rukwa regions where TTPMB continues to purchase and procure tobacco brought to marketing centers by farmers. After the

introduction of free market economy, tobacco industry in Tanzania is now in a situation whereby production is increasing while the performance of the cooperatives is deteriorating hence the living standards of the people are becoming worse. Tobacco growers via their cooperatives are heavily indebted to the tobacco buying companies as a result of accumulated input debts over years. This situation led to the imposition of harsh repayment programmes including retention of 50% of tobacco sales to repay the past and current debts.

### **1.5 Cooperative Development Constraints**

Cooperatives as a grass root organization of the poor have engaged themselves in the provision of social services and play the role of promoting development, in the rural and urban areas. In that way, they have, indeed, been agents for socio-economic change and for poverty alleviation (Banturaki 2000). The changing environment for cooperatives and their reduced role in input supply, crop marketing and processing, has left a hiatus that the private sector cannot fill. Similarly, without cooperatives, small producers would have been left with almost no form of collective organization to operate at the grassroots level. In the current economic environment where market access is poor and market information is inadequate, not being involved in collective organizations would leave the individual small farmer in a weak position. Also, the present cooperative management system has failed to transform cooperatives into competitive business enterprises (URT 2003).

### **1.6 Problem Statement and Justification**

Currently, problems facing tobacco industry might be an indication of cooperative failure or gross inefficiency in the marketing system, which could be a result of a number of reasons. First, imperfect competition where a small number of buyers are able to influence aggregate demand and therefore affect market prices. Secondly, failure may result from externalities in which producers are unable to capture the full benefits for the crops they produce. Finally, “institutional” cooperative failures can be experienced in a situation where markets do not function efficiently because of inadequate development due to lack of infrastructure and institutions. Cooperative failure alters costs and revenues and prevents the realization of potential income gains by the member societies. This has been a result of free market economy whose the main expectation was the improvement of cooperative performance in performing its primary duties through market competition of the tobacco buying companies. In some recent literature, knowledge on the impact of free market economy on cooperative societies in Tanzania is still insufficient; thus the challenges facing tobacco cooperative societies in Tanzania under market liberalization are not yet known.

Despite the fact that cooperative sector plays a very big role to the sustainability development of agriculture in Tanzania, little efforts have been directed to examine and evaluate its performance. Because cooperatives have, to a great extent, been plunged into failures, weaknesses, and operational problems by sheer incompetence that have been recorded as quite pervasive in the cooperative movement, they have failed to deliver the desired development services to beneficiaries in communities,

hence the loss of their identity as development promoters' to-date. In many platforms this is attributed to market liberalization. The aim of this study therefore was to find out the impact of market liberalization policy on agricultural cooperatives, specifically the tobacco cooperatives in Tabora region, Tanzania.

### **1.7 Objectives**

The general objective of this study is to evaluate the performance of cooperative union under free market economy. The specific objectives were:

- i. To examine the impact of free market economy to the cooperative societies development;
- ii. To asses the performance of tobacco cooperative union and its member societies before and after liberalization and;
- iii. To formulate possible alternatives to cooperatives marketing organization institutions after market liberalization.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This research takes cooperatives as a grass root organization of the rural poor who have engaged themselves in the provision of agro-marketing and other social services. Rural cooperatives play the role of promoting development in the rural areas. This research will cover the History of Agricultural Marketing Cooperative System in Tanzania explaining different stages passed from colonial error to the present; the current Cooperative Reforms 1991 to 2007 and the major challenges it faces; agricultural marketing reform in Tanzania; and cooperative development policy, 2002. The chapter concludes by explaining how it will fill up the missing information on the impact of free market economy on cooperative performance in Tanzania which other authors have not filed in.

#### **2.1 Importance of Cooperatives**

According to Munker (1984) a cooperative is a pure organizational model which is any kind of group of persons linked together by economic interest and undertaking a planned economic activity by using their own resources in solving their own problems. According to cooperative development policy of 2000, (URT, 2003), a cooperative society is an association of persons who have voluntarily joined together for the purpose of achieving a common goal through a formation of a democratically controlled organization and making equitable contributions to the capital required for the formation of such an organization, and accepting the risks and the benefits of an undertaking in which they actively participate.

From the authoritative circles, public and private, there has been much discourse on the potential of the coops to service the needs of the poor and eradicate poverty in their communities. “Following the unsuccessful attempts through costly programmes in the 1960s and 1970s by UN agencies to eradicate poverty in the third world, commented that there were good reasons for the coops system to be an important part of a new development strategy” (Sic)(Laidlaw 1977). However, problems in poverty eradication through cooperative in developing countries are still rife (Banturaki 2000). Although cooperatives have considerable potential they are not able to become dynamic, practical and efficient in servicing the members and the local beneficiaries. It is further pointed out that the failure of cooperative organization now being experienced in Tanzania stems from the colonial cooperative model which invented state-sponsored and state controlled cooperative organizations. These state-controlled cooperative organizations have little in common with the cooperative ideal of voluntary, self-reliant, self-help organizations because of not following cooperative principles. These give no room for independence and autonomy in cooperatives for evolving new structures that can instill potency for cooperative improvement and prosperity (Banturaki 2000). Tanzania has a long history of cooperative starting from colonial cooperative- followed by farmers-state controlled to cooperative and now the current cooperatives in the liberalized markets.

## **2.2 History of Agricultural Marketing Cooperative System in Tanzania**

During colonial era, the major aim of the cooperative was to promote agricultural exports and extraction of surplus from the agricultural sector for the colonial government (Banturaki 2000). At the time of independence, well established marketing

co-operatives handled export crops such as coffee, cotton, tea and tobacco (Matiku, 1993). Food crops were relatively given little attention by the colonial administrators. Thus, in 1963 the post-independence government established the National Agricultural Product Board (NAPB) to handle commercial purchases of grain in the country. In 1975, co-operative societies and marketing boards were abolished and their roles taken over by crop authorities (one for each cash crop) and National Milling Corporation (NMC) responsible for all food crops (Amani *et al.* 1987). The consequence of high indebtedness and inherent liquidity problems was reflected in their poor services to farmers. The effect of this was loss of interest among farmers in the production of food and cash crops. Buying of crops was based on officially announced pan-territorial producer price. During this time, the government outlined the rural development strategy through ujamaa villages as basic units of cooperation and not the co-op societies as previously (Maghimbi 1992). It has been noted that villages and crop authorities failed to provide the services once provided by the cooperatives and this directly contributed to the decline in rural economy.

Maliyamkono and Bagachwa (1990) argue that the dissolution of the programme including cooperative unions of the 60's were abolished because the government feared that they could achieve too much political influence. The established crop authorities which replaced cooperatives had no sound financial basis hence they resorted to overdrafts. But again, the re-established co-operative in mid 80's have performed so poorly that peasants decided to resort to parallel markets where prices were higher or transactions were carried out conveniently (Maliyamkono and Bagachwa, 1990; Putterman, 1995 and Nindi 1990). By 1992, co-operative societies had accumulated

debts from the National Bank of Commerce (NBC) that led the government to remove financial support for co-operative societies thus many of them were failed to continue with their marketing functions (MDB, 1992). The history of crop marketing organizations in Tanzania is summarized in the table below.

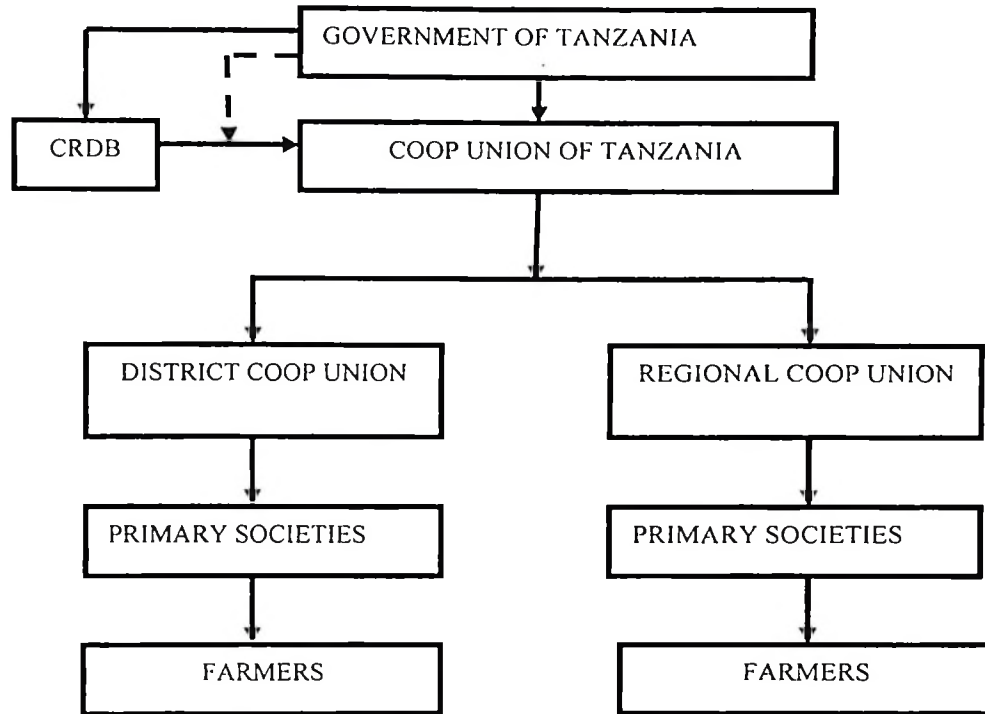
**Table 1: Summary of history of agro-marketing organizations in Tanzania**

<b>Time Frame</b>	<b>General Characteristics</b>	<b>Outcome</b>
Colonial era (Before 1961)	<ul style="list-style-type: none"> <li>-Exporter based</li> <li>-Cash crop only</li> <li>-Profit for colonial Government</li> <li>-No political movement</li> </ul>	Abolished after independency
1961 – 1975	<ul style="list-style-type: none"> <li>-Coops looked as institutions for economic and social progress</li> <li>-Coops registered as multipurpose for multifunctional activities i.e. commercial, political and administrative</li> <li>-Ujamaa villages basic unit</li> <li>-Farmer based</li> <li>-Government support</li> </ul>	Failed and dissolved
1976 – 1983	<ul style="list-style-type: none"> <li>-Ujamaa villages basic unit of coops</li> <li>-Government support and control</li> <li>-Crop Authorities</li> </ul>	Failed and dissolved
1984 – Early 1990's	<ul style="list-style-type: none"> <li>-State controlled in centralized market economy</li> <li>-Government support and control through ujamaa village</li> <li>-Free market and trade liberalization</li> <li>-Crop Marketing Boards</li> </ul>	<ul style="list-style-type: none"> <li>-Accumulation of debts</li> <li>-Coops reform</li> </ul>
Early 1990's to today	<ul style="list-style-type: none"> <li>- Withdrawal of Government to support and control coops</li> <li>-Cooperatives in free market</li> <li>- Private traders and exporters</li> <li>- Private processing companies</li> </ul>	<ul style="list-style-type: none"> <li>-Free market economy</li> <li>-Formulation and implementation coop policy</li> </ul>

The interest of this study is to investigate the current cooperative in terms of finding out its performing under the existing free market policies. The performance of the cooperative today in any case is influenced by its history as well as the current economic and market environment.

### **2.3 Current Cooperative Reforms 1991 to 2007**

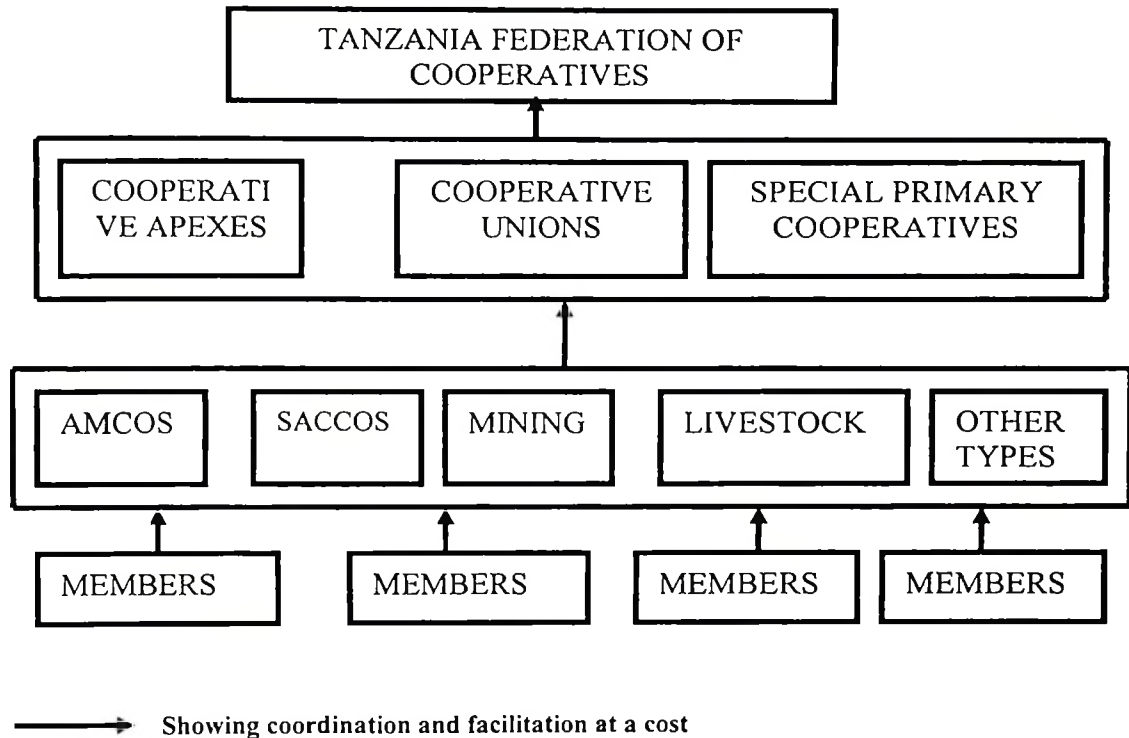
After passing all these stages cooperatives were expected to perform better, but have not been able to resuscitate their activities in the face of competition from better prepared private traders. As a consequence they have been unable to provide adequate services to their members, who resorted to do business with private traders. The government move is vital because the cooperative are no longer true self-organizations of and for the members because it is believed that the cooperative had been serving the interests of non-members and other outside bureaucratic forces instead of the interests of the members. The situation of serving the none beneficiaries have been contributed by the government while failure in marketing the produce are due to market changes and in some case the changes in the world's market. Msambichaka, (1982) argues that government intervention was one of the obstacles to sustainable growth of Tanzanian's agricultural cooperatives sector. The government made monopolistic parastatals in charge of marketing agricultural inputs and produce. This come about after the realizations that cooperatives are weak in the areas management and finance hence they were unable to provide adequate services to their members. The primary societies were answerable to the district and regional cooperative unions that are the primary societies and were coordinated by some administrative districts or regions. The unions enjoyed government guarantees on bank loans which were used in procuring produce from farmers and in supporting input distribution to farmers. PCSs were cooperatives union's agents facilitating transaction with the farmers. This was the time of state control and centralized market economy where the government supported and controlled everything. Figure 2, shows the organization structure of cooperative before reform in the early 90's.



—————> *Show ownership and flow of services*

**Figure 2: The organization structure of the agricultural marketing cooperative before reform**

The formation of the new structure of the cooperatives basing on members interests introduced in order to rescue the situation after the introduction of free market economy (Figure 3). In the enactment of 1991 cooperative societies Act, cooperatives were organized in a five tier vertical system starting with farmers, primary, secondary, apex societies and the federation (URT, 2003). The problems in the operation of this system did not emanate from members' interests. Also the system increased bureaucracy, inefficiency and resulted in weak accountability to the members. Further, it proved to be an expensive system to maintain and became an unnecessary burden on the members, in particular, its performance was very poor.



Source: Ministry of Agriculture Food Security and Cooperatives.

**Figure 3. The General organization structure of the cooperatives in Tanzania**

Members are coordinated along functional and product lines, Agricultural marketing cooperatives (AMCOS), savings and credit cooperative societies (SACCOS) and mining and livestock. Cooperatives union coordinate the functional or product base cooperatives along administrative district or region lines while cooperatives apexes are based on specific product e.g. coffee, cotton or tobacco Apexes. Tobacco cooperative is one of Agricultural Marketing cooperative societies (AMCOS) (Figure 3). Before market liberalization, tobacco was marketed on behalf of farmers' cooperative unions by the TTPMB which was instituted in 1984 to replace the Tobacco Authority of Tanzania (TAT) which was entrusted with the national responsibility for growing, processing and marketing of tobacco. After the dissolution of TAT, its functions were taken over by TTPMB and Cooperatives; and

the government took the responsibility of the provision of extension services. Tobacco marketing was based on a three-tier single channel marketing system consisting of primary societies, cooperative union, and the tobacco processing and marketing board.

#### **2.4 The Tobacco Primary Cooperative Societies and Cooperative Unions**

Before market liberalization, PCSs were the major link between tobacco farmers and leaf dealers. PCSs were formed by the farmers who come together on the basis of common economic interests (Surukhanyan, *et al.*, 2002). PCSs' main responsibilities are to collect tobacco from farmers, pay for it and hand the crop to the cooperative union (WETCU 1994). PCSs' also distribute farm inputs to the member farmers and keep relevant records. Cooperative unions were responsible for collecting and purchasing tobacco from PCS. To be able to finance these functions, cooperative unions obtain crop purchase credit from the then National bank which TTPMB reimburses after receiving the crop. The loans to cooperatives had government guarantee. TTPMB is the sole seller of Tanzania tobacco from the cooperative unions at the collection or marketing centre for delivery to the factory for processing before it is sold to cigarette processing factory and being exported.

#### **2.5 Free Market**

With respect to agricultural marketing systems, in 1980s and 1990s, state marketing organizations were to be reformed so as to operate on a sounder commercial basis and the private sector permitted to enter marketing systems to provide competition and encourage efficiency (World Bank, 1994). With regard to cash crops, state

control remained in place until 1993 when private marketing agents were allowed to compete with public marketing organizations in the marketing of export crops (MDB 1994); that was the start of free market economy in Tanzania. Here, free market is a market where prices of goods and services are arranged completely by the mutual non-coerced consent of sellers and buyers, determined generally by the supply and demand law with no government interference in the regulation of costs, supply and demand. Free market economy has an important role to play in achieving sustainable development of agriculture especially to the tobacco cooperative societies.

According to URT (2003), under the liberalized economic environment cooperatives were among many business players in the market where some of the works that were carried out by the cooperatives were now taken by the private sector. This was due to the factor that most of the cooperative societies reached a stage that could not qualify for bank loans under normal commercial terms. For the case of tobacco, to avoid complete market failure, the buying companies intervened by advancing production inputs to farmers under what is loosely referred to as contract farming. In the course of development, the tobacco cooperatives became vulnerable to rapidly changing circumstances brought about by highly dynamic and the desire of the government to use cooperative as a tool of development vanished (Kimario, 1992). Hence cooperatives were affected by different structural adjustment programmes measures, in terms of the roles they can play in the framework of structural adjustment and the roles they could play in the future.

Kimario (1992), further explains that the setbacks of cooperatives can be categorized under two categories; internal, such as lack of support from members, inefficient

committee members in cooperatives, too much powers and responsibilities vested to committee members over the affairs of the cooperative organizations, and inefficient management. The lack of qualified managerial staff is identified as the greatest obstacle which hindered the achievement of a high level of efficiency and effectiveness in agricultural marketing cooperatives. Managerial problems include inability to reduce costs, inability to control losses, inadequate personnel, inadequate transport facilities and poor conditions of employment and low morale among workers. The second category is external problems, which are the results of influences the marketing cooperatives experienced through government interventions. The influence is in form of policy guidelines, administrative measures, and bureaucracy. Cooperative system grew into a big bureaucracy that absorbs a large portion of the income of farmers undermining its members instead of helping them to achieve the desired objective. It is difficult for the bureaucracy which have become insensitive to the needs and wishes of farmers to operate efficiently.

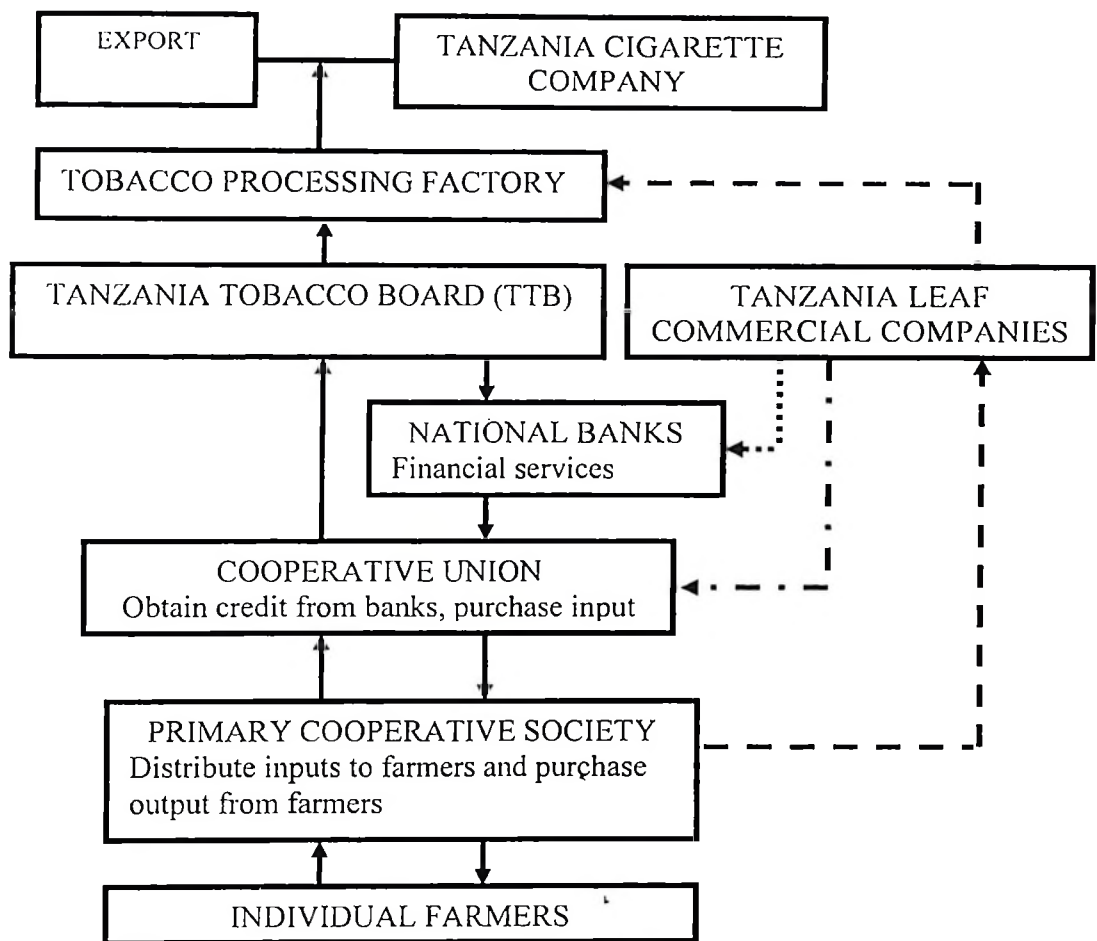
The problem of market liberalization is that soon after tobacco buying companies entered the market, farmers were hired by economic incentives provided by private traders. Farmers started abandoning their cooperatives and considering coop services as free rider commercially; the potential for intermediate buyers presented itself, thus local marketing agents emerged and became much more active than the PCSs. In the process of liberalization, cooperatives lost its role and control of farmers. Other changes that were taking place were external to the cooperatives, but they affected its performance. These include reform of financial institutions (they were also privatized), withdrawal of government in guaranteeing loans privatization of processing factories, and the change in the market trend.

## **2.6 Agricultural Marketing Reforms in Tanzania**

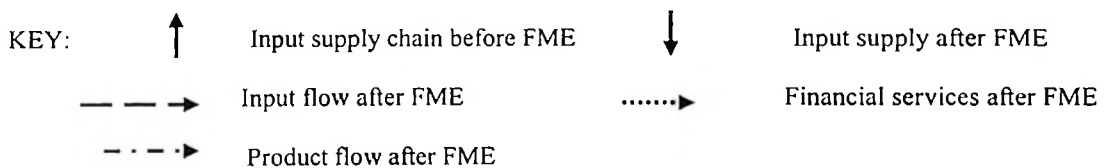
The World Bank (1994), focusing particularly in sub-Saharan Africa argues that a top priority for reforms in Africa is to increase competition through domestic deregulation, trade reform and the privatization of public enterprises. The framework for reforms to be implemented in agriculture sector was provided by World Bank recommendations and were included in the 1983 Tanzania Agricultural Sector Report (World Bank 1983). Most of the recommendations were included in the Agriculture Policy of Tanzania. According to the World Bank (1993), some of the core functions listed in the World Bank document was the legalization of the private sector in agricultural marketing and transport.

The 1991 cooperative Act established the policy and legal framework for cooperatives after liberalization. The Act gives a total control of cooperatives by the members following the withdrawal of the government from operating them (Lauder, 1998). The cooperative societies through their unions are not receiving government protection nor credit guarantees for inputs and crop purchases as it used to be the case before reform. Primary cooperative societies have the autonomy to act as independent organizations and have the option of selling produce direct to private traders (Figure 4). Tanzanian's agricultural reform has been similar to other reforms in the country. The aim was to unleash the creative forces of private entrepreneurship, in particular within smallholder agriculture through cooperatives and their trading system. With respect to agricultural marketing systems, state marketing organizations were to be reformed so as to operate on a sounder commercial basis and the private sector permitted to enter marketing systems to provide competition and encourage efficiency.

Before market liberalization, tobacco was handled by a number of institutions each of which has a specific mandate and responsibilities. PCS were the major links between tobacco farmers and leaf dealers. The marketing functions of market centre organization which include, record keeping of farmers, input distribution to the members, cash payment and purchasing cured tobacco were done through the PCS. The cooperative union (WETCU) was in charge of input distribution and advance of credit to the PCS and tobacco transportation from primary societies to the market centers. TTB was the sole legal buyer of tobacco in the country, owner of the market centers, source of seeds, tobacco processing and exporting.



Source: Survey 2007



**Figure 4: The organization structure of tobacco marketing before and after market liberalization**

After market liberalization, so many things changed in the tobacco industry except the functions performed by the primary societies. The tobacco growers are registered by the TTB through registered PCS. The PCS prepare input requirement and production estimates as well as managing and coordinating its supply and

distribution to the members, sign production contracts on behalf of the member farmers and facilitate and supervise tobacco grading, balling and transportation up to marketing centers. The cooperative union (WETCU) verifies and approves inputs and production estimates, signs contracts of PCS and training PCS on proper record keeping and accounts. Tanzania Tobacco Board (TTB) was formed as a result of liberalization policies, and when the government stopped undertaking all direct production and marketing activities leaving them to the private sector. In 1997, Tanzania Tobacco Processing and Marketing Board (TTPMB) shed its commercial activities and officially changed Tanzania Tobacco Board. The basic functions of the board were ensuring that all the growers are registered, tobacco purchasing is carried out in authorized centres only, issuing of export permits and buying license, classification of tobacco in the auction where they stand for the government.

The core activities of tobacco leaf commercial companies (TLCC) are sourcing and purchasing green tobacco at the market centre, processing green tobacco into processed tobacco, and exporting of the crop. Besides the above functions, the TLCCs is involved in non-core activities such as extension service provision, and input supply to the farmers through cooperative societies. Before market liberalization all the financial transactions were done through national banks. After market liberalization such activities are now carried out through different banks. No research has been done to explore about the impact of free market on cooperatives; this research will be of great use in rectifying all the problems facing agricultural marketing cooperative societies.

## **CHAPTER THREE**

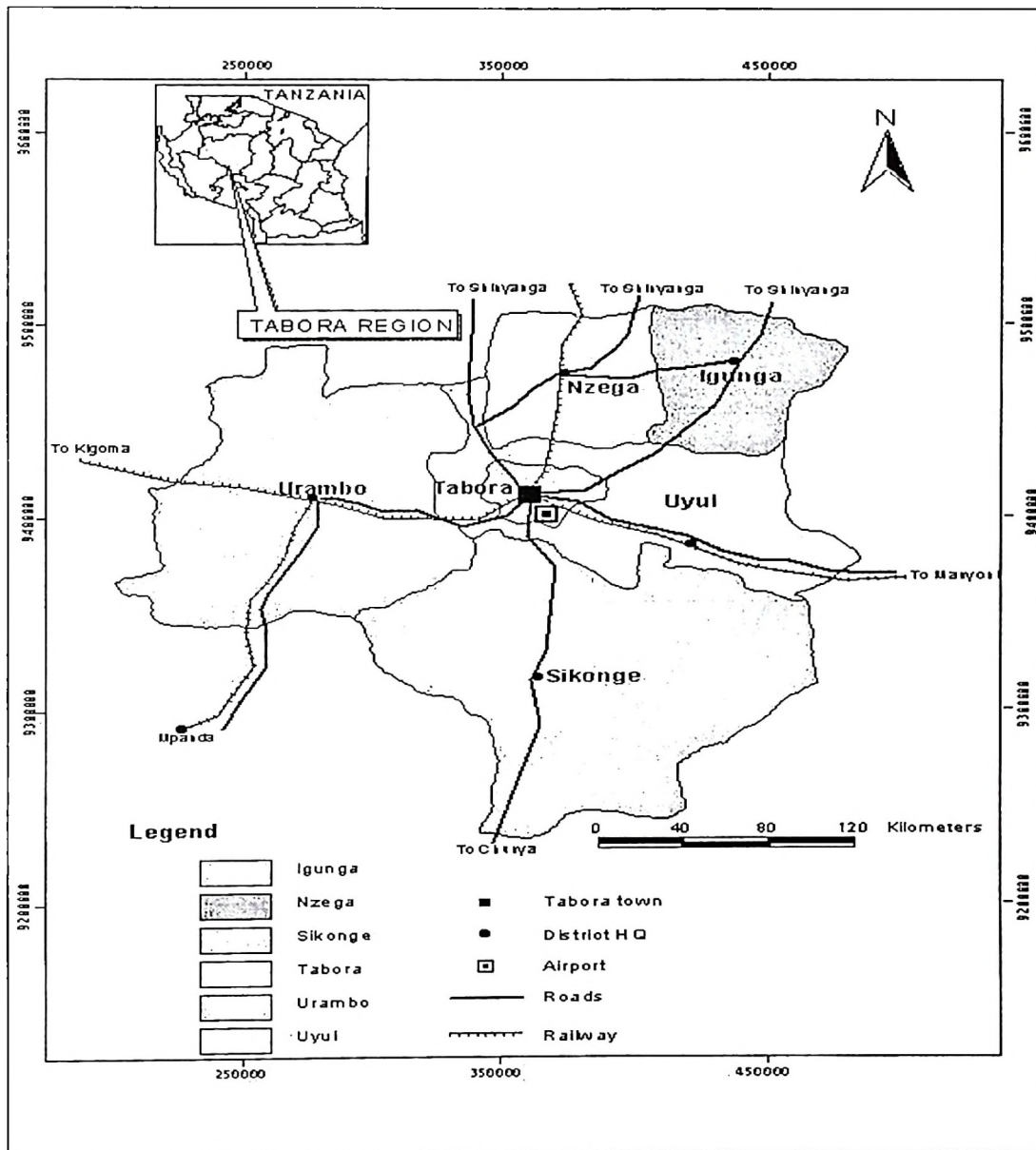
### **METHODOLOGY**

#### **3.0 Introduction**

This chapter presents the methodology on which the analytical part of the study is based. It starts by presenting the location of the study area, background information, conceptual framework, research approach, data collection, analytical techniques, and lastly are the limitations encountered during data collection. The general objective of this study was to evaluate the performance of cooperative union under free market economy. After the free market, the performance of cooperatives has been deteriorating and does not give a general direction of cooperative development. Hence, the expected future guide to the Tanzanian society, is to develop a cooperative system that fulfils cooperative members' social and economic aspirations by the existing social-economic environment.

#### **3.1 Location of Study Area**

This study was undertaken in Tabora region in the midwestern part of mainland Tanzania on the central African plateau. To the north east, it borders by Shinyanga region and in the east borders Singida region. Neighbors to the south are Mbeya and Rukwa regions, and the area shares a common border with Kigoma region in the west (NBS 2005).



Source. Survey 2007

**Figure 5: A map of Tanzania showing Tabora region**

### 3.2 Background Information

The region has a total surface area of 76,663 km<sup>2</sup> and this is about 9% of the total area of Tanzania of which 76,151 km<sup>2</sup> is land while 512 km<sup>2</sup> comprise water mass. Most of the region lies at an altitude of 1000 to 1500M above the sea level.

According to 2002 population and housing census, the region has a population of about 1,717,908. The climate of Tabora region is warm with daily mean temperature of around 23 degrees centigrade. The region has rainfall patterns which are extremely variable and unpredictable; showers are often much localized and long dry spells may occur at any time during rain season. The rains fall between October and April. However, a broad general pattern shows that normally the region is characterized as a bimodal type in which the rains start in October reaching its peak in December; this is followed by a slight spell in January or February.

A second lower peak occurs in February or March and the rains then tail off in April, sometimes extending to May (TRIDEP 1984). Tabora region is divided into six different agro-economic zones (Table 2) based on topographic soil type as well as climatic conditions. Variations in these zones affect land use and demarcate several economic zones; Tabora's largest single sector in its economy is agriculture, which like in rest of the country, it employs 90% of the adult population. It has a total arable land of 2,087,752ha of which only 410,820ha are under cultivation annually. The principle crops grown for foods are maize, sorghum, paddy (rice), cassava, sweet potatoes and pulses; while tobacco, groundnuts, sunflower and cotton are the cash crops of economic importance.

**Table 2: Agro-economic zones of Tabora region**

<b>Zone</b>	<b>Location</b>	<b>Rainfall</b>	<b>Major Crops</b>
Western	Urambo District	1000 - 1100mm	Tobacco and maize
Southern	Sikonge	850 - 950mm	Maize, paddy, groundnuts and tobacco
Central	Tabora Urban	850 – 950mm	Maize, sorghum, groundnuts, cassava and cotton
North West	Uyui	850 – 950mm	Maize, sorghum, groundnuts, cassava and cotton
Central East	Nzega and Part of Uyui	750 – 850mm	Paddy and groundnuts
North East	Igunga	650 – 750mm	Sorghum and cotton

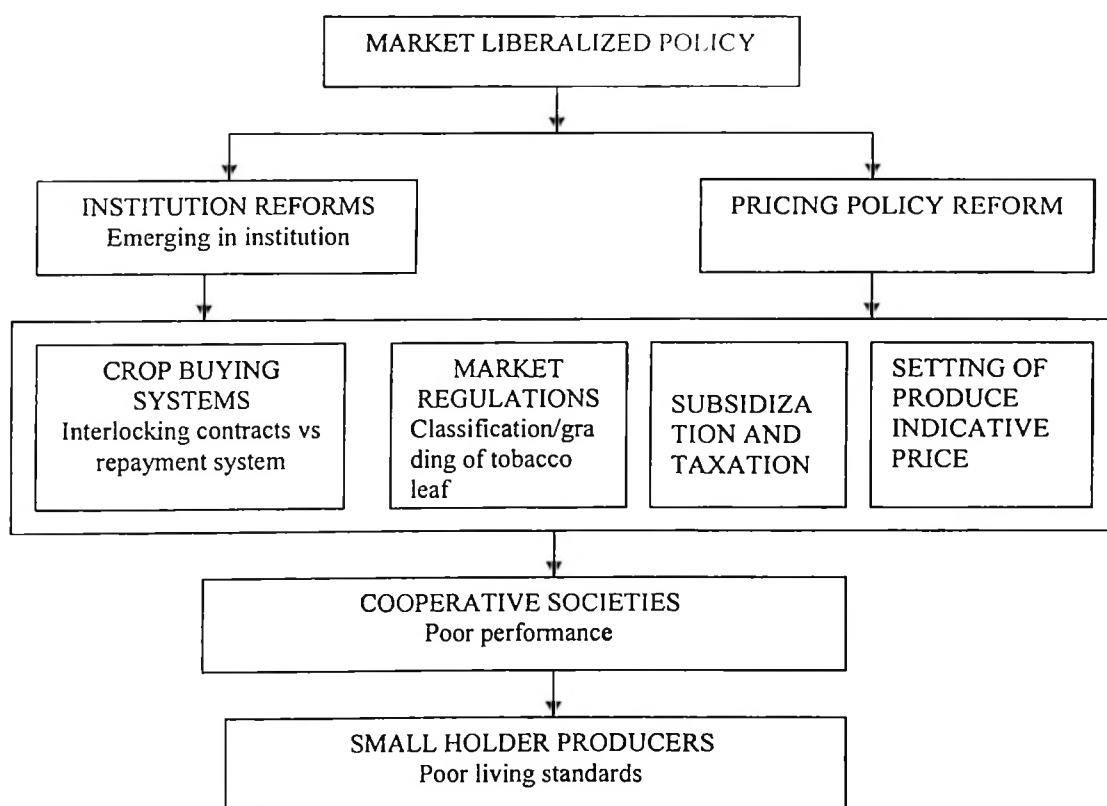
Source: URT 2005

Tobacco farming system can be categorized into three cropping systems: Farming system I; Food crops (maize, groundnuts and cassava) with a non food cash crop (tobacco). Farming system II; Food crops (maize, groundnuts and cassava) with a planned surplus of maize or rice. Farming system III; Pure subsistence system (maize, ground nuts, beans and cassava) on mixed field. Each farmer can practice any of the three cropping systems depending on the size of the land and labour availability.

### **3.3 Conceptual Framework**

A conceptual framework of the cooperatives after market liberalization is shown in the figure below (Figure 6). Changes in the macro- economic policies, which started in late 1980s, aimed at introducing free markets and trade liberalization policies, which in turn led to the on-going efforts to make cooperatives members base organizations (URT 2003). The cooperative societies Act of 1991 was enacted for that purpose and the first cooperatives development Policy was thus formulated in 1997. With market liberalization policy, new institutions and free marketing

arrangements emerged with the aim of enhancing competition in both input and output markets. However, cooperative failure resulted into a situation in which markets do not function efficiently because of inadequate development or lack of regulations. An evaluation of the impact of the cooperative development policy comes from an understanding of how it affects the performance of cooperatives and thus impacts farmer's economic welfare. On the basis of this conceptual framework, information necessary for this study was collected, organized and analyzed.



Source: Survey 2007

**Table 3: Conceptual framework of cooperative after market liberalization**

### **3.4 Research Approach**

This research was of both qualitative and quantitative approach. The data and information were obtained from both primary and secondary sources during researcher internship attachment with cooperative union carried out from June 18<sup>th</sup> to November 31<sup>st</sup>, 2007. A survey research method was applied alongside with questionnaire which comprised by both open and closed ended questions (Appendix 1). Focus group discussions technique was used to obtain primary data from primary cooperative society leaders. The survey was used to gather information about the cooperatives structure, quality of membership and change in size before and after market liberalization.

### **3.5 Data Collection and Analytical Techniques**

Primary data collection involved the use of structured questionnaire, pre survey, sampling and administration of the questionnaire to PCSs with reference to the cooperative performance from 1994/95 to 2004/5. The questionnaire was divided into three sections (Appendix 2). Section I: Historical background of the PCS, Section II: Comparison before and after FME and Section III: Opinion and suggestions. Also primary data were collected through informal discussion with WETCU staff, primary cooperative society's members, key informants and tobacco buying private companies. Interviews were conducted by holding a meeting with board members of the randomly selected primary societies. The informal and key informant surveys were very important in answering some of the questions which could not be answered by individual primary cooperative society. Issues pertaining to cost of production per acre/hectare, prices of different tobacco grades and grading

system in which farmers are not involved. The research covered all the three branches Tabora/Uyui, Sikonge and Urambo of the cooperative union (WETCU) in which 21 PCS were randomly selected out of 139 registered primary societies (Appendix 4).

Secondary data were collected from published materials, handbooks, files, and other related documents from WETCU, TTb, individual tobacco companies, Association of Tanzania Tobacco Traders (ATTT), the district cooperative offices and Regional commissioner's office. A substantial part of the analysis was based on descriptive statistics to describe the responses, characteristics and trends of some of the data and information. An attempt was made to assess and compare the past and present situation of the current cooperative societies, that is before and after free market economy.

### **3.6 Limitations of Data Collection**

Due to lack of proper record keeping, collection of secondary data depended mostly on respondent's ability to recall past events. There were notable difficulties on the part of knowing the main differences between the performance of cooperative societies before and after free market economy. Some of the data from secondary sources especially those associated with costs of production per acre as well as cost benefit ratio were not available at PCSs because all the calculations are done at the headquarter and the PCS's leaders don't know how the calculations are carried out. This compelled the researcher to estimate other information available. The study failed to get all information from each PCSs member due to transport problem, instead the PCSs board members rectified the problem on behalf of each member.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.0 Introduction**

This chapter presents the research findings for the data obtained from the formal, informal and key informant surveys. It presents descriptive statistics showing characteristics and trends of data obtained from the respondent. It then describes and assesses the performance of tobacco agricultural marketing cooperatives before and after free market and discusses their implications. The discussion base on the performance of cooperative after liberalization, contract farming, pricing mechanism, tobacco marketing compared to marketing of other cash crops, susceptibility of the movement to political interference and problems encountered by cooperatives.

#### **4.1 The Place of Tobacco Cooperatives after Liberalization**

The existence of farmers' organization in the form of cooperative societies provides tobacco growers with institution structure that can stand for issues of their common interest. By bringing together the small scale farmers under cooperative societies the cooperative tructure raises their voice and provides an opportunity for collective bargaining with other stakeholders (traders and the government). The coop societies provide an effective and efficient mechanism for accessing or channeling of any kind of support/services to tobacco growers. Its principal activities are the provision of high quality technical and advisory services to its member primary cooperative societies growing tobacco within Tabora region. After liberalization all the activities which were carried out by the cooperative union were taken up by the tobacco buying companies. The research findings show that in early 1994/95 tobacco buying

companies started buying tobacco from farmers. This made the cooperative union loose most of its activities as well as the control of PCSs. Apart from this, participation of private companies in the market led to the improvement of most of functions which were performed by cooperative union and this in turn led to a better performance of the tobacco buying companies. The position of Cooperative Union as a facilitator of PCSs in accessing financial services of commercial banks and agents of PCSs in marketing tobacco was threatened. Particularly so given the indebtedness of cooperative union and the absence of government guarantees. The survival of private tobacco leaf companies depended much on accessing produce from small-scale farmers and hence the importance of PCSs in facilitating this function. The business agreement between private company and PCSs and limited interest of private company of going directly to individual farmer stimulated farmer's interest towards PCSs membership.

The research results show that about 514 farmers joined PCSs as new members in the period from 1993/94 to 2006/07 (Appendix 4). In the period from early 1993 to 2006/07, the PCSs increases from only 85 to 139 PCSs and raised from mere affiliated PCSs to the Cooperative Union. PCS profiles have revealed that PCS memberships increased significantly between the early period 1994 to 2000, the number of farmers joining PCS increasing by 20.4% (Appendix 4). These changes could be in relation to the requirement that new private buyers could only buy tobacco from PCSs and not directly from individual farmers.

## **4.2 Contract farming**

By having contracts between tobacco growers and buyers, producers became assured of tobacco market and buyers became assured of the supply of raw materials.

### **4.2.1 Credit services**

After market liberalization the tobacco buyers engaged in contracts with producers, they provided credit for inputs and gave advice on the best practice for producing tobacco. The producer, in turn, became committed to the delivering of the tobacco to the contractor. Contract farming has considerable potential where small and marginal farmers can no longer be competitive accessing technologies and support. The contractual agreement with the farmer guarantees access to the production of services and credit as well as access knowledge of new technology. Hence contract arrangements significantly reduce the risk and uncertainty of the market place.

In 1997/98, tobacco commercial companies engaged in contracts with producers of tobacco directly. The buyers provided credit for inputs and gave extension services. The grower in turn, was committed to delivering the tobacco to the contractor. Each farm household was linked to the tobacco buyers through PCS in what is known as contract farming. According to tobacco farming system, the tobacco buyers' pre-finance inputs, PCS who require loan, this was done by signing a contract under cooperative union as their guarantor. The survey results indicate that 96.6% of the respondents prefer input supply through contract where they get inputs on loan bases instead of getting them on cash. Many respondents reported that cash flow problems make farmers fail to acquire inputs in time. Therefore, there is need for seasonal

input credit. Furthermore, the agricultural sector has been exposed to unfavorable environment given by the existing banks thus limiting productive investments and growth of the sector.

**Table 4: Farm input requirement**

<i>Item</i>	<b>Improvement</b>	<b>No Improvement</b>	<b>Total</b>
Credit services	96.6	3.4	100
Inputs supply and distribution	71.4	28.6	100
Input price	9.5	90.5	100
Loan repayment	71.4	28.6	100
Interest rate	85.7	14.3	100

Source: Survey 2007

#### **4.2.2 Farm input supply and distribution**

Before market liberalization, farm inputs were supplied and distributed by the cooperative union to the farmers through their primary cooperative societies. In the FME, farm inputs are supplied by Tobacco Leaf Commercial Companies (TLCC). About 71.4% of the respondents indicated that input supply after FME has improved and has been timely to the farmers. Only 28.6% reported that input supply was not improved. The fact is that tobacco is a crop that requires a lot of inputs which are tradable in the world market (e.g. imported fertilizers and pesticides). The parity prices of tradable inputs will therefore affect production desirability. Thus the tobacco companies cover the gap effectively which was created by inefficient input supply of cooperatives. Therefore by having formal arrangement of input supply to the producers, tobacco production has not been constrained by input supply.

### **4.2.3 Input price**

Survey results indicated that 90.5% of the primary societies prefer input price system before the introduction of free market economy and declared that there is no improvement while 9.5% support the input price after FME system. Also many tobacco growers prefer input loans from leaf buyers through their PCS. Most growers admit that they are tied up by loan because there are no alternative means of getting input either by cash or loan apart from the buyer. Input price offered by TCLB is lower than market price simply because some of these costs are covered by World tobacco buyers such as Phillip Morris and British American Tobacco through through social responsibility programme.

### **4.2.4 Loan Repayment and Interest Rates**

Formally, before private companies merged their input distribution operation, some farmers practiced a strategic default by deliberately seeking to avoid repayment. The most used strategy was produce diversion whereby farmers obtain inputs from one company (with which they have interlocked contracts) and later sell their crop to other companies. The findings of this study show that 71.4% of the respondents admitted that loan repayments have improved. But the improvement in loan repayment has been reflected in interest rates. For example in 1997/8 cropping season, the interest rate for input loan was 4-5% (original price) for a repayment period of 12 months. This rate is below the inflation rate which was between 7.5 and 8.0% and below the loan interest rate offered by the banks which is 21%. However, since tobacco buying companies commenced providing input loans to farmers in Tabora region, the increase in interest rate is still affordable for farmers. According to the survey, about 85.7% of the PCSs showed to have no improvement on input

interest rates simply because the farmers do not know the value of money as well as inflation rates.

### **4.3 Pricing Mechanism**

#### **4.3.1 Marketing chain**

The concept of market chain analysis entails overall activities and functions as well as transition process involved as a commodity moves from producers to consumers. Tobacco from producers is collected by the PCS to the market centre and taken care of by the PCS before it is sold to the commercial companies. Eighty eight percent of the respondents indicated that there has been an improvement, while 22% indicated to have no improvement. The respondent, who indicated of there being improvement, mentioned farmers' assurance of the market for their produce and timely payment as the factors for the improvement. But with all these advantages, farmers are not free to choose the buyer because they are interlocked by contracts signed before the supply of inputs.

Contract farming arrangements between leaf dealers and tobacco growers take place before the announcement of seasonal prices for inputs and produce. After entering into the agreement, the farmer has to abide by the contract and therefore has no choice as to where to sell his/her produce. Despite the fact that there can be price differences among leaf dealers (in both input and output markets), contracts pin down the farmers to one specific dealer. The current market structure consists of a few buyers facing a multitude of growers (sellers). The buyers usually have market control in this situation. But if farmers act jointly, neither producers nor buyers can operate without the other unless considerable investments and highly costly

undertakings are involved. Given that both have a profit objective, so there has to be some give-and-take.

**Table 5: Marketing and pricing of tobacco**

<b>Item</b>	<b>Improved</b>	<b>Not Improved</b>	<b>Total</b>
Marketing chain	88.4	21.6	100
Grading/classification	23.8	76.2	100
Produce purchases	14.3	85.7	100
Market information	33.3	66.7	100

Source: Survey 2007

#### **4.3.2 Grading and Classification**

Tobacco growers are required to grade their tobacco into specified farm grades/plant position grades before delivering it to the market centre operated by their PCSs. Prices for individual grades – up to 64 grades are set at the time of planting. Growers are uncertain of what grade their crop will be due to several factors including rainfall availability and pest attack. In addition, the lack of an objective grading scheme makes it more uncertain as the price to be paid depends much on mutual agreement of the grades at the auction. Hence, the contracted tobacco has to be sold officially through the auction, called a silent auction, where the contractor is the only one who is allowed to bid. Silent auction negotiations may take longer than a normal auction. In theory, growers can withdraw their bales from the silent auction and offer them at the normal auction, but the difficulty in switching to the normal auction

and the fact that the limited numbers of buyers are aware of the redirection of the bales make this option unprofitable to growers.

The existence of contract growers could be short-lived. However, the study found ample evidence that contract growing is considered as a positive move by growers and buyers, and that it has contributed to a revival of flue tobacco production in the country resulting into the positive spill-over effects for the society at large. However, 76.2% of the respondents claim of there being no improvement on grading and classification of tobacco produce. Only 23.8% reported of there being improvement in grading and classification, this is because classification of tobacco is confusing to farmers since it has so many grades which are not easily understood by the farmers.

#### **4.3.3 Produce purchases**

Presently, crop procurement and purchasing are almost exclusively performed by cooperatives. During the tobacco purchasing season, from March to August, farmers place their tobacco in bales of between 40 to 100 kilos before delivery to the sales points. Prices are agreed for individual grades up to 64 grades at the time of planting. The government through TTB announces tobacco producer price a year in advance to enable farmers to plan and make proper production decisions. Before price announcement consideration is given to the expected farmers production costs, crop volume and quality, foreign exchange rate and the expected sales realization of tobacco in the international market. Since there is no reliable information that allows a comparison between prices received at the international markets and the prices paid to growers at the farm level, many tobacco growers believes that they are exploited

by the tobacco buyers. One important characteristic in the chain is stakeholders' market power.

It has been observed that many links in the chain are monopoly structures dominated in most cases by the exporters and buyers of tobacco. If we assume that these monopolists or partial monopolists do not earn higher profits than they would on competitive markets a most likely unrealistic assumption experience from other countries indicates that the costs of such monopolists are too high and that these structures are more prone to bribes than more competitive ones. From the survey it has been observed that 85.7% of the interviewees affirms that there is no improvement on pricing system. Fourteen percent believed that the pricing system was good before FME. They also pointed out that there was a consideration of natural calamities to the farmers and when did happen the compensation was given to farmers. Marketing organization of cooperatives internalized crop insurance service.

#### **4.3.4 Market Information**

There are marketing constraints such as lack of market information to farmers as most small holder farmers have limited experience in free operations. There are also transport constraints such as poor road infrastructure in some parts of cash crop growing regions. During rain seasons some of the roads are impassable thus creating unnecessary delays for farmers to sell their produce. Escalating agricultural input prices especially the price for fertilizer and improved seed varieties has gone up under reform compared to falling producer prices. For example despite rising of input prices, coffee producers have seen prices for their crop go down. Cash crop production through bank borrowing is very limited for smallholder farmers as they

do not possess title deeds for their farms whilst estate owners easily secure borrowings through provision of title deeds as security for loans.

The survey indicates that, for a long period, tobacco farmers have not been aware of the price structure payable to the farmers. The export price obtained in the market is not communicated to the farmers. As such, the farmer had been in the dark as regards to the whole issue of buying and selling of their crop overseas. It has been observed that 66.7% of the PCS interviewed indicated that there is no improvement on the price of tobacco, while 43.3 % affirmed that there is improvement. This may be because of new members in the PCSs.

#### **4.5 Problems Encountered by Cooperatives**

Free market was to bring about competition in the market by the buyers; instead there is no competition in the auctions on each floor because the buyer is one. Due to the absence of competition, growers are not assured of getting remunerative prices in accordance to the quality of tobacco. Hence, the power of PCSs is not significant in the tobacco industry. Also the buyer has the freedom or is permitted to exercise the option of accepting or rejecting the price offered in the auction. The cooperative union is now facing a problem of financial constrain where many activities are not properly handled especially input supply. Many workers have moved to work with commercial companies for good salaries.

**Table 6: Other problems facing cooperatives**

Item	Improved	Not Improved	Total
Competition with other crops	58.6	41.4	100
Government intervention	14.3	85.7	100
Labour requirement	66.7	33.3	100
Sellers freedom is minimal	28.3	71.7	100

Source: Survey 2007

#### 4.5.1 Competition with other crops

Farmers grow various crops alongside tobacco. There is evidence that crop competition especially food crops is high. Due to competition for land and labour farmers would like to opt for other crops whose investment costs are lower than those for tobacco. The survey results show that 58.6% of the respondents believe that there is no competition between and tobacco with other crops. Although tobacco gives low return per hectare, yet in Tabora it is the principle cash crop whose returns is Tanzanian shillings 999,898 per hectare (Appendix 6). Sixty seven percent of the respondents affirm that there is an improvement in the return rate per hectare.

#### 4.5.2 Government Intervention

The research findings show that both district and regional authorities are more involved in the tobacco marketing system in Tabora. From informal discussion conducted during the study, it is evident that from the very beginning, the government was in favor of tobacco buying companies expecting that it would help farmers who have been complaining about coops. The research findings show that 85.7 % of the respondents reported that the government was in favour of cooperative

society before market liberalization against 14.3% who said that the government is in favor of coops after FME.

#### **4.5.3 Labour requirement**

According to the survey, tobacco enterprise is highly demanding in terms of labour. However, it was found out that a higher percentage of labour employed in the enterprise mostly comprised family labour. A tobacco grower and his family is the production factor in small scale farms and are devoted extensively to both the production of tobacco for cash and to attaining self sufficiency in basic food requirements for the family members. No other crop has high production cost and create much employment per hectare of cultivated land as tobacco. Appendix 5 and 6 give the total number of labour requirement per hectare which is 363 man days. Tobacco's high labour requirements have been instrumental in stemming the flow of under-employed and unemployed people from rural to urban areas looking for simple jobs. Basing on the survey, about 66.7% of the PCSs interviewed claimed that the production costs in terms labour requirement have increased after FME (because many casual labours move to towns to look for other jobs while many others join farming) and became scarce resource while 33.3% believe that labour is not a problem.

Therefore, tobacco is often seen as a means of partial alleviation of the socio-economic and political problems associated with surplus labour from outside of Tabora region. Due to shortage of casual labour, then hired labour becomes costly whereby the research results show that about 48% of the total production cost per hectare covers hired labour (Appendix 6).

#### **4.5.4 Minimal auctioning and Sellers freedom**

Auction prices for the different types and grades of unmanufactured tobacco are influenced by the world market situation, leaf quality, government price support and production control provisions and local currency devaluation. From the survey data, it has been observed that before free market, there was no auction of tobacco the classifier gave grades to the farmers' produce. After market liberalization classification is still done by TTB but the survey results show that 71.7% of the respondents believe that there is no improvement. Although, in the process of silent auctioning TTB classifiers are usually in favor of the tobacco buyers the farmers' representatives are not knowledgeable enough to disagree with the assessment of commercial company's representatives. The problem with the silent auction arises from lack of a neutral body to monitor and arbitrate disputes over grades and prices. Because of this problem, the process of bidding between the grower and the farmers takes much longer than in the normal auction system.

#### **4.6 Susceptibility of the Movement to Political Interference**

The research noted that there was widespread political interference in the PCSs and cooperative union. Because of the strategic position which cooperatives occupy in the rural areas, politicians tended to use them as stepping stones to their political ambitions.

#### **4.7 Tobacco Marketing Compared to other Cash Crops**

Tobacco production like other agricultural crops is an important occupation in Tanzania. The production and its associated business (i.e. marketing of unprocessed tobacco, processing and cigarette manufacturing) have a strong positive contribution

to the development of the country. When compared with other crops as an annual crop tobacco has the following characteristics: high labour requirement per hectare, higher input requirement especially fertilizer as opposed to cotton for example; also tobacco has low output per hectare, after market liberalization there is no competition in the market while other crops allow competition. The auction market will not work favourably as in coffee because in coffee allowing farmers either individually or as groups to sell their coffee directly to the auction has created a wider range of alternatives for buyers and has proved to growers to be more efficient in terms of prices. Good quality coffee fetches higher prices as opposed to sub-standard quality coffee.

#### **4.4 Tobacco Commercial Companies**

As far as market liberalization is concerned, tobacco buyers were the key players expected to enter the marketing system to improve competition that will challenge cooperatives into becoming competitive hence improve market efficiency. The main activity of commercial companies was to buy leaf tobacco, process it for export or sell to the domestic cigarette processing factories. The input supply was to be handled by cooperatives, but private companies found cooperative union unable to support farmers in terms of securing credit, purchase and distribute inputs. Also, farmers lack access to credit and fail to purchase input on cash basis. Individual companies tried to fill the gap by distributing input to farmers. Individual companies tried to use interlocking exchange of input – output control. However farmers defaulted strategically. Due to high costs to private companies they decided to merge the input distribution to reduce the risk of default, hence the formation of Association

of Tanzania Tobacco Traders (ATTT 1999). The objectives of ATTT were to provide services associated with the production of tobacco and other related activities including transportation, storage and warehousing, handling, and extension services in the way of advice, supervision, training, and distribution of farm inputs. Also, ATTT was given the task of coordinating contractual arrangements between farmers and buying companies to counteract any defaults.

The tobacco commercial companies supply inputs to the farmers through their cooperative union. One of their key activities was timely provision of the required quantities of inputs to tobacco PCSs in their respective areas. The yield and quality of the tobacco crop is very sensitive to the use of inputs, tobacco companies instituted a mechanism for ensuring that inputs reach farmers at the right time and place.

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

The general objective of this study was to evaluate the performance of cooperatives under free market economy. It aimed at tracing the general performance of the cooperatives before and after FME identifying failures and their causes or success achieved.

#### 5.1 Summary of major findings

Under market liberalization, tobacco industry involved many participants with different roles. These include farmers, PCSs, the Cooperative unions, TTB and TLCC. The study found out that free market economy in general has positive and negative impact to cooperatives in Tanzania. However, positive impact plays a big role in reviving the crop in the following aspects: PCSs members and number increases, timely input supply and input loan repayment have been improved, labour requirement has increased hence employment, tobacco marketing has improved and hence cooperative union. Also the study identified the set-backs with the free market arrangements those include interlocking contracts, which not give freedom of selling the crop to any individual; price setting mechanism, which results into monopolistic rather than competitive prices; unfair classification system, uncoordinated input loan arrangements and unnecessary government intervention.

## **5.2 Conclusion**

The research findings indicate that market liberalization policy opened up markets by formally allowing TLCCs to invest in the marketing of tobacco. However, there have been efficient operations within the liberalized market. Few problems have been noted from the study, which indicated inefficiency in the entire business. The results of this study indicate clearly that many of the activities performed by the cooperative societies before and after free market have been improved while others have remained the same. Therefore, improvements have been observed on input supply and distribution, agricultural services such as extension services, effective and timely payment to the cooperative societies and hence farmers, no violation of contracts and tobacco marketing, there is an increase in number of individual farmers joining PCSs. After FME the following activities performed by the cooperatives have shown to deteriorate: input prices and high interest rates, there is a single tobacco buyer after merging of the tobacco buying companies hence lack of an effective competition; farmer's price is not as good as is the export price. There are problems in classification and grading of tobacco leaf at the market because of poor and incompetent classifiers. Therefore it can be concluded that free market economy has more advantages than disadvantage to tobacco agricultural marketing cooperatives.

## **5.3 Recommendations**

For the cooperatives to be able to capture the benefit of the liberalization of agricultural markets, the following recommendations are made:

- TLCCs should deal with tobacco buying only while the input supply should be left to the cooperatives as before. This will increase the freedom of

farmers through their cooperatives to decide where to sell their crop and ensure that the credit agreement does not pin down farmers' freedom of where to sell their products.

- To see the possibility of introducing an auction system. Auction systems have been found to be the fairest way of buying export crops. The system has been used and appreciated elsewhere such as in the US, India, Malawi and Zimbabwe. The system is quick and simple and efficient. It promotes good grading and presentation and ensures maximum competition on prices to the benefit of farmers. This will allow price setting at the tobacco sales floor.
- The PCSs should be able to secure and obtain loans from financial institutions and give credit to their members. This will allow competition, and it will also be possible to auction the crop and hence attract price increase.
- Government and political interference should be reduced or eliminated because the government's regulatory role has been entrusted upon the TTB. To be able to create a fair and competitive environment; no further government intervention in favor of one party amongst the stakeholders is required. The cooperative societies should ensure that they establish some funds solely for the acquisition of various farm inputs required for tobacco production from various suppliers and to ensure that such inputs reach the members/farmers in time. In order to facilitate this, the coops have to embark on the provision of education to the members to enable them understand the idea and contribute to such fund willingly from their sales proceeds.
- Farmers and society representatives should be well trained and improved transport infrastructure is needed to reduce the costs of tobacco marketing

and production; and an increase in yield per hectare can still be achieved through improved growing techniques, while improved quality and presentation of tobacco leaves can be achieved through better handling, curing, grading and advanced marketing techniques.

- Further research and the provision of adequate and quality extension services are in achieving this. At present, a few insiders generally dominate Primary Cooperative Societies, with little accountability, technical capacity and credit worthiness. Very few are sufficiently trusted by traders in fulfilling an effective intermediary role. To address this problem, the government should encourage the establishment and continuous operation of member-owned and member-controlled cooperatives which are economically strong and capable of operating as viable independent business entities
- To eliminate complains on grading and classifying tobacco, a team of tobacco classifiers should include the entire representative from all parties including representative from cooperatives, TTB, TLCCs and farmers' representative.
- The government can advice and encourage farmers to shift to other agricultural activities of cropping other crops such as groundnuts, cotton, maize, paddy, or paprika.
- Collusion among tobacco buyers should be forbidden and penalized; this is another role for the not yet functioning Competition Commission. The commission should investigate price formation on these oligopolistic markets. Free markets will only lead to efficiency in the economy if there is sufficient competition. Competition is lacking on the market and conflict of interests seems to worsen the market failure.

## REFERENCES

- Aman H.K.R, Kapunda M.S, Lipumba T.H.N and Ndulu J.B.(1987). Effect of market liberalization on food security in Tanzania. In: Rukumi M. and Bensen H.R. eds South Africa Food security and Option. UZ/MSU, Food security Project, Department of Agricultural Economics and Extension: Harare.
- Association of Tanzania Tobacco Traders Ltd. (1999). Memorandum and Article of Association, ATTT. Tabora.
- Banturaki J.A (2000). Cooperative and Poverty alleviation, Tema publishers CompanyLtd, Dar es Salaam, Tanzania. 158pp.
- Bank of Tanzania (2008). *Monthly economic review*. Tanzania House Press, Dar es Salaam, Tanzania. 7pp.
- Bank of Tanzania (1999). *Economic and operations report for the year ending 30<sup>th</sup> June 1999*, Dar es Salaam, Tanzania. 128pp.
- Koester, U Olney, G. Matay, C. and Chidzanja, T. (2004). Status and Prospects of Malawis' Tobacco Industry: A value chain analysis. Ministry of Agriculture Malawi.  
[<http://ineb18.worldbank.org/ESSD/sdvext.nsf18ByDocName>] sited on 15/11/2007
- Kimario A.M (1992). Marketing Cooperatives in Tanzania, Problems and Prospects, Dar es Salam University Press 140 pp.
- Laidlaw,A.F.(1977).Cooperative and the poor (A review from within the cooperative Movement), Ottawa.
- Launders J.(1998). Cooperatives and agricultural marketing. Liberalization in Eastern and Southern Africa, *Journal of International Cooperation*, 91(1) 25-31
- Maghimbi, S.(1992). The abolition of peasant Cooperatives and crisis in the rural economy in Tanzania, University of Dar es Salaam.
- Malyamkono L.T and Bagachwa D.S.M (1990). The second Economy in Tanzania. Villers Publications. London.
- Marketing Development Bureau (MBD)(1992). Industrial review of tobacco, Ministry of Agriculture and Livestock Development, Dar es Salaam. 78pp.

- Marketing Development Bureau (MBD) (1992). Basic data Agricultural and Livestock Sector 1985/86- 1990/91. 87pp.
- Marketing Development Bureau (MBD) (1994). 1993/1994 Industry review of cotton. MALD, Dar es Salaam, Tanzania. 80pp.
- Matiku E.J. (1993). Cooperative in Tanzania (1925- 1982): Lessons from the false steps towards its development. *Journal of management Volume 5 Number 3, Mzumbe Morogoro.*
- Msambichaka,L.S., Ndulu, B.J. and Amani H.K.R (1983). Agricultural development Tanzania: Policy evaluation. First two decades of independency. Friederic-Ebert-Stiftung. Federal Republick of Germany. 155pp.
- Munker H.H(1984).Cooperative principles and cooperative law, Friendrich- Stiftung
- Mwakyambiki S.M.S, (1998). Peasants strategic Resource use under Free Market Conditions and factors affecting its optimal allocation: A case of Tobacco based farming systems- Tabora.
- Nindi B.C. (1990). Agriculture marketing and public Vs Private debate. *Journal of rural cooperation 28(3), 3-29.*
- Putterman L. (1995). Economic reform and smallholder agriculture in Tanzania; A discussion of a recent market liberalization, road rehabilitation and technology dissemination effort. *World development Volume 23.*
- Suruoukhanyan, R., Vardanyan, F., Abrahamyan, L., Alexandryan, M., & Vanyan, A. (2002). Innovative Approaches to Farm Enterprise Development, Cooperation and Partnership Arrangements for Improved Livelihood in Armenia. Paper presented at the FAO Workshop, Prague, Czech Republic, October 13-16, 2002.
- Tanzania Tobacco Council, Proposed Tobacco Sub Sector Development Programme. Programme Period: 2006/07 – 2017/16. 40pp.
- Tanzania Tobacco Board, Social- Economic Importance of Tobacco in Tanzania, June 2000. 24pp.
- TRIDEP (1984). Tabora rural integrated development project- Land use component and planning handbook. Land resource development centre. Tolworth Tower, Surbiton, Surrey, England KT6 7DY, Project record 66, TANZA-05-37/REC-66/83.
- United Republic of Tanzania (2007). Economic survey 2006, The Ministry of Agriculture, planning, Economy and Development DSM Tqanzania, Kiuta Dar es Salaam Tanzania.

- United Republic of Tanzania (2006). National sample census of Agriculture 2002/2003, Crop sector- National Report Vol. II. 354pp.
- United Republic of Tanzania (2006). Agricultural Sector Development Programme, Government programme 103pp.
- United Republic of Tanzania, (2005). Tabora region social-economic profile, National Bureau of Statistics (NBS), Second Edition. 284pp.
- United Republic of Tanzania, (2004). The Cooperative Societies Rules,2004: The Cooperative societies Act Number 20 of 2003. Printed by the government printer, Dar es Slaam - Tanzania. 73pp.
- United Republic of Tanzania (2003).Social-Economic profile of Tabora region. National bureau of stastics and planning commission, Dar es Salaam. 46pp.
- United Republic of Tanzania, (2003). Cooperative Development policy, 2002, Ministry of Cooperative and Marketing , Printed by the government printer, Dar es Slaam Tanzania. 42pp.
- WETCU (1994). Western Zone Tobacco Growers Cooperative Union Ltd, Profile-Tabora.25pp.
- World Bank (1994). Adjustment in Africa: Reforms, results and the road ahead, World Bank, Washington DC. 196pp.
- World Bank (1993). Tanzania. A poverty profile. Report No. 12298-TA, World Bank, Washington DC. 269pp.
- World Bank (1983). Tanzania Agricultural Sector Report. Report No. 4052-TA, World Bank, Washington DC. 8pp.

## APPENDICES

**Appendix 1: Employment by growers, leaf buyers, processors and manufacturers from 1994/95 to 1998/99**

CATEGORY	FAMILY MEN/WOMEN EMPLOYMENT					
		1994/95	1995/96	1996/97	1997/98	1998/99
PRIMARY SOCIETIES	Casual/Seasonal labourers	603	670	894	997	1108
	Permanent employees	554	498	447	335	301
UNION	Casual/Seasonal employee	125	144	70	66	62
	Permanent employees	42	63	180	178	178
APEX	Casual/Seasonal employee	0	0	35	21	6
	Permanent employees	15	28	11	4	1
TOBACCO PROCESSING FACTORY	Casual/Seasonal employee	3000	2370	3100	3100	2790
	Permanent employees	364	164	306	306	314
LEAF BUYERS	Casual/Seasonal employee	500	450	600	600	580
	Permanent employees	150	120	130	130	120
TRANSPORTERS	Casual/Seasonal employee	0	0	0	0	0
	Permanent employees	100	65	45	25	10
MANUFACTURERS	Casual/Seasonal employee	0	0	0	0	0
	Permanent employees	750	850	1000	1250	1350
TOTAL	Casual/Seasonal employee	4733	3961	4664	4457	401
	Permanent employees	1975	1788	2119	2226	2274

Source: Tobacco cooperative apex

0: Indicate missing data or no employment

**Appendix 2: Questionnaire to the primary societies**

**SOKOINE UNIVERSITY OF AGRICULTURE  
FACULTY OF AGRICULTURE  
DEPARTMENT OF AGRICULTURE ECONOMICS & AGRIB.**

**SECTION: I** Historical background of the cooperative society

1. Name.....
2. Branch.....
3. Registration date.....
4. Number of PCS members during registration time.....
5. Registration number.....
6. The number of PCS in 1994/1995 .....  
1999/2000 .....  
2004/2005 .....
7. Tobacco buying companies signed contract farming with the primary society .....

**SECTION: II**

What is the difference of tobacco farming and business before and free market economy. Please tick [v] implying GOOD and [X] implying BAD

	Question	Before	After
1	Input price and its distribution procedure		
2	Extensión services		
3	The price tobacco at the market in general		
4	Tobacco classification at the market		
5	Different deductions per Kg of tobacco		
6	Underpayment carried forward		
7	Side selling of tobacco and selling to the middlemen		
8	PCS have poor and weak capital base		
9	The number of farmers and PCS members who support this system of marketing		
10	Farmers registering and joining the PCS		
11	There is alarmingly big drop in cooperative membership		
12	Many PCS problems have been caused by		
	Leadership conflict		
	Shortage and later delivery of input		
	Later payments		
	Absence of extension officers		
	Environmental degradation		
	Soil degradation		
	Lack of casual labour		
	Lack of qualified and experienced workers		
	High input interest rate		
	Repayment problems		
	Payment problems the members		
	Government withdrawal assisting farmers		
	Tobacco buyers have power in classification		
	PCS representative have no influence on market price and classification		

**SECTION: III**

- 13. Which is the best way preferred by farmers in getting farm inputs; loan or buying by cash? Why?
- 14. What are the main factors that hinder farmers to fail in input loan payment?
- 15. What is your opinion on tobacco marketing procedure?
- 16. What is your observation and opinion on the tobacco coops after introduction of free market economy?
- 17. Do you think tobacco farming aims at helping the farmers against poverty alleviation?
- 18. Is there any deductions on one Kg of tobacco?
- 19. Give your suggestion on what should be done on improving tobacco business to cooperative societies.
- 20. What are the benefits of using US Dollars as a means of exchange?

*TOGETHER LET BUILD OUR ECONOMY*

THANK YOU, FOR YOUR CORPORATION.  
END

.....  
 .....  
 Signature and stamp of the primary society.

Appendix 3: World employment records by the crop

COUNTRY	Agricultural Employment	Manufacturing employment	Retail & Distribution Employment	Total number of people employed	Estimated number of dependent people	Unmanufactured tobacco in tones 1996
Algeria	11,240	6,150	9,940	27,330	27,330	5,300
Argentina	105,000	9,727	7,700	122,427	1,000,000	79,010
Bangladesh	700,000	102,803	34,100	836,903	5,000,000	60,000
Brazil	600,000	43,870	120,200	764,070	8,000,000	398,000
Chile	3,760	1,945	2,550	8,255	8,255	12,356
China	16,000,000	500,000	1,070,000	17,570,000	50,000,000	2,314,000
Columbia	302,000	9,350	30,000	341,650	341,650	28,178
Cuba	20,000	40,100	13,400	73,500	73,500	28,000
Egypt	---	16,700	38,630	55,330	55,330	---
Ethiopia	22,360	858	1,870	25,088	25,088	3,500
Guatemala	24,200	1,480	930	26,610	26,610	10,720
Haiti	1,226	436	1,520	3,182	3,182	730
India	6,000,000	500,000	900,000	7,400,000	25,000,000	524,500
Indonesia	1,500,000	259,030	1,055,000	2,814,030	20,000,000	171,400
Iraq	28,600	1,990	10,190	40,780	40,780	2,180
Kenya	35,500	1,216	854	100,000	100,000	9,910
Malawi	662,121	20,251	30,400	712,772	4,250,000	130,686
Malaysia	37,678	2,841	20,162	60,681	188,390	10,867
Mexico	350,000	4,813	25,900	380,713	1,000,000	45,427
Morocco	14,680	3,536	6,250	24,466	24,466	3,962
Myanmar	350,000	19,320	106,500	475,820	475,820	44,000
Nigeria	93,948	1,698	1,810,610	1,906,256	1,906,256	9,223
Pakistan	200,000	39,270	1,025,500	1,264,770	2,000,000	80,917
Peru	10,000	1,440	1,900	13,340	13,340	3,100
Philippines	565,000	55,030	272,200	892,230	8,000,000	63,651
Romania	60,900	23,900	9,870	94,670	94,670	13,300
South Africa	66,000	8,550	28,600	103,150	103,150	23,006
South Korea	281,900	16,700	65,000	363,600	1,000,000	83,861

Sri Lanka	150,000	1,830	44,680	196,510	750,000	9,000
Syria	9,610	4,810	7,010	21,430	21,430	17,208
Tanzania	66,000	2,000	2,081	70,081	333,000	25,080
Thailand	1,360,000	11,464	159,000	1,530,464	7,000,000	58,500
Tunisia	15,310	2,884	3,105	21,299	21,299	6,500
Turkey	500,000	25,103	66,700	591,803	3,000,000	206,580
Venezuela	95,000	3,570	6,700	105,270	105,270	18,857
Zaire	21,000	2,440	4,700	28,140	28,140	4,110
Zimbabwe	110,500	8,495	8,120	763,000	763,000	209,042

Source: [<http://www.tobaccolleaf.org>] site visited on 05 /01/ 2008.

Appendix 4: Distribution of sample primary cooperative societies by branch

BRANCH	PCS	YEAR OF 1 <sup>st</sup> REG. OF PCS	MEMBERS AT REG.	MEMBERS AT YEAR	MEMBERS AT YEAR	MEMBERS AT YEAR
				1994/1995	1999/2000	2004/2005
TABORA	CHESSA	1993	120	254	250	230
	IBIRI	1993	150	0	150	56
	IBUSHI	1998	25	0	25	55
	MIG/MALO	1993	160	165	156	198
	UGOWOLA	1993	100	120	194	106
	ISIKIZYA	1993	104	104	156	162
	MSIMBA	2003	134	0	0	191
	INONELWA	1997	104	0	90	114
	I/NSIMBA	1993	152	152	210	136
UFULUMA	1993	262	260	250	145	
URAMBO	UPENDO	1993	145	160	155	170
	KILOLENI	1993	102	98	106	120
	UYELA	1997	56	0	56	60
	MISHENI	1993	205	210	233	230
	MWAMKO	1993	230	240	241	230
SIKONGE	KISANGA	1994	78	78	66	80
	MITOWO	1993	90	102	96	98
	MGAMBO	1993	250	246	250	230
	IGWISI	1993	300	280	290	290
	MOLE	1997	120	225	315	350
	USESULA	1999	95	0	95	245
<b>TOTAL</b>			<b>2982</b>	<b>2694</b>	<b>3384</b>	<b>3496</b>

Source: WETCU

## Appendix 5: Cost of production per hectare in the year 2004/2005

COST TYPE	LABOUR			MATERIALS				
	Hours	Cost per hour	Total	USD	Quant.	Cost per unit	Total	USD
<b>1. SEEDBED NUMBER PER HA (3)</b>								
Leveling the soil	24	250	6000	5.3				
Watering to stimulate weed growth	14	200	2800	2.5				
Weeding seedbed	36	200	7200	6.3				
Fertilizer application	6	500	3000	2.6	0.5	27000	13500	11.8
Sowing	2	500	1000	0.9				
Insecticide application	4	500	2000	1.8	2	5200	10400	9.1
Mulching	40	200	8000	7.0				
Water management	540	40	21600	18.9	1	1870	1870	1.6
Thinning	3	350	1050	0.9				
Clipping	3	350	1050	0.9	1	1200	1200	1.1
Clean, disinfect & store seedbed materials								
Others.								
<b>2. FIELD</b>								
Plowing	168	100	16800	14.7	1	2500	2500	2.2
Harrowing	56	50	2800	2.5				
Furrowing	56	50	2800	2.5				
Basal fertilizer application	50	50	2500	2.2	10	27000	270000	236.6
Ridging	100	50	5000	4.4				
Transport of seedlings	10	100	1000	0.9				
Transplanting	90	150	13500	11.8				
Fungicide application	24	50	1200	1.1	1	8000	8000	7.0
Insecticide application	24	50	1200	1.1	2	11200	22400	19.6
Herbicide application								
Irrigation-equipment + operation								
Irrigation-Fuel								
Side-dress fertilization	48	100	4800	4.2	2.5	22000	55000	48.2
Cultivation/weeding	100	100	10000	8.8				
Mulching								
Scouting & other IPM practices								
Topping	32	200	6400	5.6				
Suckering	64	200	12800	11.2				
Suckercide application	32	200	6400	5.6	1	20000	20000	17.5
Reaping / Stalk-cutting	256	100	25600	22.4				
Transport of leaves	48	200	9600	8.4				
Stalk and root destruction	24	50	1200	1.1				
Others.								
<b>3. CURING</b>								
Stringing / Racking / Spiering	192	50	9600	8.4				
Loading	48	60	2880	2.5				

Curing supervision	1344	10	13440	11.8				
Fuel (+ loading wood, coal)	56	20	1120	1.0	4	1500	6000	5.3
Electricity (kW)								
Re-humidify								
Unloading	48	100	4800	4.2				
Others.								
<b>4. MARKET PREPARATION</b>								
Stripping / dc-stringing	190	40	7600	6.7				
Grading	170	70	11900	10.4				
Bundling	21	40	840	0.7				
Baling + baling materials	20	100	2000	1.8	8	5884	47068	41.3
Transport to buying station	20	500	10000	8.8				
Others.								
<b>SUB-TOTAL</b>	<b>3963</b>		<b>241480</b>	<b>211.6</b>	<b>34</b>		<b>457938</b>	<b>401.3</b>

COST SUMMARY	Local Currency	
	%	US\$
Labour		241480
Machinery+operator		
Materials		457938
Depreciation		
Maintenance and repair		
Other costs		
<b>TOTAL PRODUCTION COST</b>	<b>100%</b>	<b>699,418</b>
		<b>613.0</b>

### Appendix 6 Cost of Labor Requirement

A C T I V I T Y	# OF LABOR	DAYS	TOTAL MANDAYS	RATE/DAY	TOTAL COST
A: Field					
Land clearing	4	3	12	1,850	22,200.00
Ridging	4	4	16	1,850	29,600.00
Transplanting	6	2	12	1,850	22,200.00
NPK basal fertilization	6	2	12	1,850	22,200.00
Weeding and earthing up	6	3	18	1,850	33,300.00
Top fertilization - CAN	6	2	12	1,850	22,200.00
Weeding and earthing up	6	3	18	1,850	33,300.00
Breaking earth crust	6	3	18	1,850	33,300.00
Insecticides application	2	2	4	1,850	7,400.00
Topping and suckeride	4	4	16	1,850	29,600.00
Harvesting and tying	6	10	60	1,850	111,000.00
Curing	2	45	90	1,850	166,500.00
Grading and wrapping heassian	6	10	60	1,850	111,000.00
Baling	3	5	15	1,850	27,750.00
<b><i>SUB TOTALS</i></b>	<b>67</b>	<b>98</b>	<b>363</b>		<b>671,550.00</b>
B: Inputs					
	Quantity	Price/unit			Total cost
Bags of fertilizer - NPK 10:18:24	10	33,000			330,000.00
Bags of fertilizer - CAN	3	26,240			78,720.00
Insecticides - Confidor 360g in pcts	12	7,168			86,016.00
Insecticides - Hasafat 600g	2	9,216			9,216.00
Suckeride (YAMAOTEA) 1.5 litre					30,720.00
Hessian cloth - pcs	50	1,139.20			56,960.00
Jute twine - kgs	5	1,740.80			8,704.00
Cotton twine - kgs	2	4,608			9,216.00
Fuel wood					120,000.00
<b><i>SUB TOTALS</i></b>					<b>729,552.00</b>
C: Total production cost per hectare = (Field/labor cost + Inputs cost)					1,401,102.00
D: Yield per ha (kgs)					
	2,000				
Average price/kg (Tshs)					
	1,200				
<b>TOTAL REVENUE</b>					<b>2,400,000.00</b>
<b>E: PROFIT/HA</b>					<b>998,898.00</b>

Source: ATTT and Urambo seed farm.