

**IMPROVING COMMUNITY LIVELIHOODS THROUGH IMPROVED
CASSAVA PRODUCTION FOR MATANZI VILLAGE COMMUNITY IN
MKURANGA DISTRICT, COAST REGION**

OMARY MOHAMED NDONDO

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTERS IN COMMUNITY
ECONOMIC DEVELOPMENT OF THE OPEN UNIVERSITY OF**

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for the acceptance by the Open University of Tanzania a dissertation entitled: **“Improving Community Livelihoods through Improved Cassava Production for Matanzi Village Community in Mkuranga District, Coast Region”** in Partial Fulfilment of the requirements for the Degree of Master of Community Economic Development of the Open University of Tanzania.

.....

Dr. Felician Mutasa

(Supervisor)

.....

Date

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DECLARATION

I, **Omary Mohamed Nondo**, do hereby declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for similar or any other degree award.

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Signature

.....

Date

DEDICATION

This work is dedicated to my wife, Hadija O. Kisigalile, who encouraged and supported me to undergo the programme, also to my beloved Son; Luqman Omary and his sisters, Rahma Omary and Zainabu Omary for their patience, integrity and obedience during my study period. Others include my beloved late mother Pili Omary, and my father Mohamed Said Ndondo.

ACKNOWLEDGEMENT

I would first and foremost thank God who gave me strength to this work also for keeping me alive until today. However it will not be possible to mention everyone by name, they all owe my heartily gratitude. Special thanks should go to few people, who will be mentioned, my supervisor Dr. Felecian Mutasa I sincerely appreciate his acceptance to supervise me also for his time, patience, advice and endless constructive comments during the preparation of this dissertation.

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ABSTRACT

A dissertation on Improving Community livelihood through improved cassava production is a result of the Community Needs Assessments (CNA) conducted in Matanzi village in Mkuranga district. The Project Goal is enhancement of living standard of Matanzi village community at household level by raising income, employment opportunities, and food security through improved cassava production. CNA results revealed that Matanzi community earn low income due to low yield of cassava crop. Cassava low yield is caused by poor agriculture's practices such as poor spacing, poor disease control, small areas/plots of cultivation and lack of reliable market for agricultural product. Matanzi village community have resources but they are not empowered to utilize their resources and available opportunities for their social economic development. Using a participatory method, four objectives were set; To sensitize and train 55 head of households on improved cassava production techniques, Raise cultivated area from less than 1ha per household to 2 ha per household by the January 2016, Controlling Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) by March 2016 and To instruct cassava best practice to Heads of households and reliable to the Market by June 2016. The Community Needs Assessment was carried by using participatory methodologies such as Focused Group Discussions, Interview and Observations. Research tools used are Questions, Discussion Guide, and Interview guide, came out with five major community needs which needed to be urgently addressed.

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LIST OF ACRONYMS

ARI	Agriculture Research Institute
ASDP	Agricultural Sector Development Programme
ASDS	Agricultural Sector Development Sector
CBSD	Cassava Brown Streak Disease
CED	Community Economic Development
CMD	Cassava mosaic disease
CBO	Community Based Organization
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
GDP	Gross Domestic Product
MCED	Masters of Community Economic Development
MDG	Millennium Development Goals
NBS	National Bureau of Statistics
NGO	Non Governmental Organization
NSGRP	National Strategy for Growth and Reduction of Poverty
PASS	Private Agricultural Sector Support
PRSP	Poverty Reduction Strategy Paper
RIU	Research Into Use
SACCOS	Savings and Credit Cooperative Society
TARUCODEF	Tambani Rural Community Development Fund
TASAF	Tanzania Social Action Fund

TDV	Tanzania Development Vision
TTCL	Tanzania Telecommunication Company Limited
UNDP	United Nations Development Programme
VEO	Village Executive Officer
VICOBA	Village Community Bank
VAEO	Village Agriculture Extension Officer

CHAPTER ONE

PARTICIPATORY NEEDS ASSESSMENT

1.1 Introduction

This chapter presents the findings of the Participatory Needs Assessment conducted in July 2015 in Matanzi Village, Beta ward, Mkuranga District, Coast Region. Extended Participatory Rural Appraisal was used to ensure community and other stakeholders' participation in identifying resources and real needs of the community. CED projects responds to a communities real needs. A real need whether there is existing direct documentation of these need or whether community stakeholders would recognize it as felt need and accept as their own (CED Student Hand Book, 2013).

Participatory Needs Assessment is an approach that involves community to identify and assess their needs. It also involves community in identifying their opportunities that can be used as an alternative in meeting the community needs. Participatory approaches such as PRA, engage people in learning about their needs, available opportunities and working out actions required to address their needs. Participatory approaches toward needs assessment challenges the conventional biases that underrate local knowledge, values and solutions.

In PNA, therefore, much emphasis is put on interactive learning, shared knowledge and values. It is a multi-disciplinary approach to enable practitioners to envision a holistic view of livelihoods and well-being (Kasaija and Nsabagasani, 2008).

1.2 Community Profile

1.2.1 Location

Matanzi village is found in Beta Ward, one of the 25 wards in Mkuranga District within Coast Region. The village is located about 37 kms from Mkuranga Town, which is about 87 kms from Dar es Salaam city. In the Northern side, the village is bordered by Mkenge and Tundu villages (north east and north west) respectively, to the south it is bordered by Kimanzichana town, to the west by Mburani and Nyatanga Villages and to the east by Kiimbwanende village.

1.2.2 Topography and Vegetation

The village is situated at an altitude range of 0 - 200 m from sea level. There is no notable mountain instead only coastal belt along with small hills at eastern part of the village. The village is covered with grasses and Savannah trees.

1.2.3 Climate and Precipitation

Matanzi village is found in Coastal Region which characteristics with climatic condition as any other village in the belt. These include temperature and rainfall like as follow; Average temperature for the region is about 28⁰C while average annual rainfall of 800 mm as minimum and 1000 mm as maximum per year. According to CED Student Hand Out, 2013, the heavy rainfall is received for 60 days and is common from October to December each year. However, the light rainfall does not cover whole region and is very unreliable. According to agronomic factors, the heavy rainfalls are used for cultivating crops that require more moisture such as paddy, maize and cotton. On the other hand, short rainfalls are used by smallholder –

farmers to cultivate crops that require less moisture. These crops include pulses and vegetables (NBS, 2012).

1.2.4 Population

Matanzi village has a total number of 388 households with a total population of 2010 people out of that 910 are male and 1100 are female. According to 2012 Census, Mkuranga District population was 222,921, which indicated average household size 4.3 while sex ratio 94.

1.2.5 Administrative Services

Matanzi is under the jurisdiction of Mkuranga District. The village Administration comprises village chairperson, village executive officer (VEO) and different committees. The daily routine activities of the village are supervised by the village Council under the chairmanship of the village chairperson of the village while secretary is VEO (Participatory survey, 2015).

1.2.6 Transportation and Communication

The main tarmac road is passing in eastern part of the village running from Dar es salaam to Mtwara just four kilometers to this area, while the feeder rough road of about 4 Kilometer to the village is better passable in the dry season than in wet season. Mobile phone services particularly Airtel and Tigo are well-organized to cover the whole area of the Village (Participatory Survey, 2015).

1.2.7 Health Services

There is no Dispensary in Matanzi village instead the people get services from the third neighbouring village-Kilimahewa, which is almost seven kilometres far from the village.

1.2.8 Education Services

The village has one primary school, which has only one classroom in which 290 pupils was enrolled. Unfortunately, there is no Secondary School in the Village. Secondary services are found at the nearest Village- Kiimbwanende, which is located at Eastern part of Matanzi Village.

1.2.7 Agriculture and Livestock

Matanzi community residents basically are peasants. They mainly cultivate cassava, maize, coconut, paddy, oranges, simsim and cashew nuts. Most of people in Village keep indigenous chicken while others engage in fishing activities from the nearby Pond (Manzi Pond), which is found in eastern part of the Village.

1.2.8 Financial Services

There are no Banking services in the village. There is only one bank (National Microfinance Bank) operating from Mkuranga District headquarters. However the community established several VICOBA group to carter problem. TIGO– Pesa and Airtel –Money are the most reliable financial services which tend community for just small amount of money transactions. However in case of huge amount of money from 500,000 and above the Matanzi people get services from neighbouring town- Kimanzichana (Participatory Survey, 2015).

1.2.9 Ethnicity

The Matanzi people basically comprise five ethnic groups – The Zaramo, Ndengereko, Matumbi, Ngindo and Makonde. Most people live in poor and simple

houses thatched by coconut leaves or grass, mud and poles walls with earth floor (Participatory survey, 2015).

1.2.12 Market

Matanzi village has no specific market place instead there is place where various things are sold with few shops which is referred it as 'Magengeni'.

1.3 Community Needs Assessment

Community needs assessment for Matanzi village was undertaken so as to assess level of development in the area, to identify and examine needs and gaps in relation to available resources, opportunities that can be utilized by the community itself.

Deliberately it was undertaken in a participatory manner to facilitate identification of the genuine needs of the community and after that the interventions, is made to the vital problem. The assessment was done based on the appropriate use of research design, research methods in order to obtain relevant data (CED Hand Out, 2013). That appraisal will enable planning strategies and interventions that would carry a desirable change. The research findings were expected to be beneficial for various development agents such as Policy makers particularly Government and other related stakeholders.

1.3.1 Community Needs Assessment Objectives

The general objective of community Needs Assessment was to collect information from the community in order to identify needs, opportunities, and obstacles, which shall be used to improve community livelihoods of Matanzi Community in Mkuranga District.

However specific objectives of Community Needs Assessment are here below;

- (i) To find out the major community needs.
- (ii) To study community livelihood opportunities and obstacles.
- (iii) To recognize likely interventions for the identified community needs.

1.3.2 Research Questions

- (i) What are the problems do community faces?
- (ii) What are the community income sources and challenges in the Village?
- (iii) What should be done to attend the acknowledged problems?

1.3.3 Research Methodology

1.3.3.1 Research Design

The survey design was both descriptive and cross-sectional because the projected data were collected at once in a time. The study used documentary review, field observation, focus group discussion and interview. The descriptive study design was used to find out the facts and description of the community under study to set up how there features have an impacted on the broad perform of the people.

1.3.3.2 Sampling Techniques

Matanzi village has a total number of 388 households with a total population of 2010 people. The sample was engaged from the population of 5 influential people, and 4 members of Tambani Rural Community Development Fund (TARUCODEF), 27 households, and 4 Village officials, were sampled and interviewed during ten days. Random sampling Probability in which include systematic or interval sampling similar to Non-probability sampling were used. The researcher interviewed one

household after every fourteen houses. However, Purposive non-Probability sampling was applied to include, influential people, TARUCODEF members, village community Officials and Village officials.

Table 1: Sample Distribution (N = 40)

Number of Respondents	Sample Size	Percent
Influential people	5	12.5
TARUCODEF members	4	10
Heads of households	27	67.5
Village officials	4	10
TOTAL	40	100

Source: Field Survey Findings (2015)

1.3.3.3 Data Collection Methods

The assessment employed Participatory Rural Appraisal (PRA) approach, the method is the means of facilitating pooled decision making and empowerment of community on mutual planning to the interventions. Following tools were used under PRA approach:

(i) Interview

According to CED Hand Out, 2013, Interview is method of collecting information through oral or verbal communication between the research and the respondents (bell, 1998). The researcher used unstructured questions to the 4 village officials, 5 influential people and 4 TARUCODEF Tanzania members. The method was used to test some particular practices. The questions were preplanned and reframed on the basis of the pre studied situation. The method was used because it facilitated to study the events that are too opened to observations also to study abstract factors like

attitude, back emotions, interview phenomena in the historical background (CED Hand Out, 2013).

(ii) Focus Group Discussions

The researcher formed four group discussions of Elderly female, elderly male, female youth, and male youth. The researcher created four groups identified above in order to obtain various participants from categorized groups in relation to their culture. Debates were mainly concerned on the existing opportunities and problems in the community. Discussion was also employed in the institutions. All focus group meet in seven day of the assessment where fused what they had discussed in their respective group.

(iii) Observation and Observation Guide

Non participants observation method was used whereby, the researcher was not included into respondents' activities instead he was observing their day to day activities that may raise their income, opportunities available in the village and environment scenery.

(vi) Documentary review

The tool was also employed to search information from Secondary data. This modus operandi was employed to explore data of NGOs roles, demographic information and their participation level in the community development project. The documents examined included community development plans and timed reports (quarterly, midterm and annually) from village and ward offices. The data obtained were roles/activities of the NGOs, Community problems, opportunities, obstacles and community development plans.

1.3.3.4 Data Analysis Methods

Data analysis is an important step towards data presentation and analysis. In this case types of data that is qualitative and quantitative data were analyzed. For qualitative data, data were collected and transcribed because some was in Kiswahili language. Preparation for analysis of the current research included editing, screening, computer data entry and verification (CED Hand Out, 2013).

After which quantitative data processing was carried out by Statistics Package for Social Science (SPSS) which helped the researcher to prepare tables and diagrams. After data collection, the researcher summarized data in tabular and diagrammatic forms analyzed facts so as to bring out their salient features that is patterns and relations and converted the data into statements and conclusions which ultimately answered research objectives, (CED Hand Out, 2013).

1.4 Community Needs Assessment Findings

1.4.1 Finding on the Person Particulars

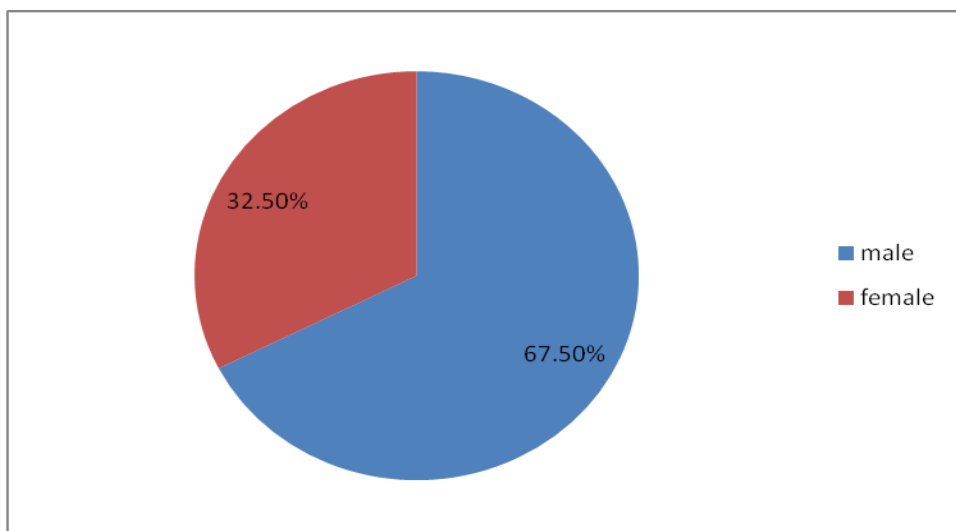


Figure 1: Sex of Respondents

Source: Field Survey Findings (2015)

The Figure 1 shows male interviewee make up 68% that is 27 and female 32% that is 13 of the total respondents. The number of male is higher for 35% than female because most of head of households are males. However it shows that views were exploited from both sexes despite their ratio in number to keep away from biasness.

Table 2: Education Level of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary	20	50.0	50.0	50.0
Secondary	8	20.0	20.0	70.0
Technical education/vocational	6	15.0	15.0	85.0
College	4	10.0	10.0	95.0
Higher education	2	5.0	5.0	100.0
Total	40	100.0	100.0	

Source: Field Survey Findings (2015)

Findings from the Table 2 in ascending order shows that 50% had attained Primary school education, 20% had attained secondary school education level, 15% attained technical education/ vocational skills while 10% attained College education and remaining 5% attained higher education. The aim of information collected above was to comprehend ability of Matanzi community on running the project after training and sensitization.

1.4.2 Finding Major Community Needs

Table 3: Major Community Needs

Major community needs				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Food security	09	22.5	22.5	22.5
Improved agriculture production	16	40.0	40.0	62.5
Access to clean and safe water	8	20.0	20.0	82.5
Good health	5	12.5	12.5	95.0
Access to Primary school education	2	5.0	5.0	100.0
Total	40	100.0	100.0	

Source: Field Survey Findings (2015)

The major community needs was finding by researcher as seen on the Table 3. The Table 3 shows that 40 % of interviewees said that improved agriculture production can handle their daily life, followed by 22.5% who identify food security as basic need, third rank basic need was access to clean and safe water which was mentioned by 20% respondents, followed by Good health 12.5% and Access to Primary education carried 5% of the interviewees. The findings above be a sign of that income poverty is the major problem of the Matanzi community since agriculture is key income source most of the rural residents.

1.4.3 Finding Sources of Community Income

Table 4: Average Monthly Income

			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than	40,000	7	17.5	17.5	17.5
	Tsh. 40,000 –	80,000	17	42.5	42.5	60.0
	Tsh. 81,000–	100,000	5	12.5	12.5	72.5
	More than	100,000	11	27.5	27.5	100.0
Total			40	100.0	100.0	

Source: Field Survey Findings (2015)

It was revealed that minority of people of 27% earning an average month income of more than 100,000 while the majority of almost 73% earning less than 100,000. This clearly indicates that majority of the people face object poverty. This is an indication that there is lack of viable income generating opportunities. Through this assessment community and other change agents will be in a position to identify viable activities, which will increase income to the community (CED Hand Out, 2012).

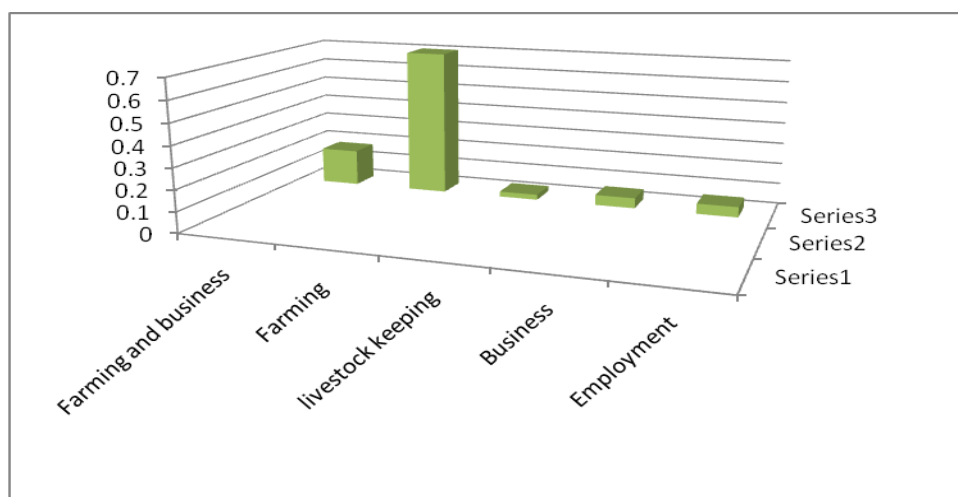


Figure 2 Major Sources of Community Income in the Village

Source: Field Survey Findings (2015)

The findings in the Figure 2 revealed that 70% of Matanzi community practiced farming, which reflects that farming is the major source of income in Matanzi Village. 17.5% engaged in farming and business whereas 5 percent each are engaged in Business and Employment and the rest of about 2.5 percent are engaged in Animal keeping. The findings exposed that efforts on farming sector will increase Majority income in Matanzi community.

1.4.4 Strategies to Curb the Identified Major Source of Income (Farming) in the Village

Table 5: Kind of Crop has to be Improved by Matanzi Community

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Maize	7	17.5	17.5	17.5
Cassava	25	62.5	62.5	80.0
Cashew nuts	6	15.0	15.0	95.0
Simsim	2	5.0	5.0	100.0
Total	40	100.0	100.0	

Source: Field Survey Findings (2015)

As per Table 5, 62.5% of interviewees confirmed that cassava will raise their income. Despite source of income cassava has several benefits to the community. Among of those benefits cassava were used for food (Ugali and vegetables), can be used as a tea (Polage) in the morning and source of fuel (firewood).

Table 6: Size of Areas that Farmers Grow Cassava

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 0.5ha	20	50.0	50.0	50.0
	0.6ha to1.0ha	8	20.0	20.0	70.0
	1.1ha to 1.5ha	5	12.5	12.5	82.5
	1.6ha to 2.0 ha	3	7.5	7.5	90.0
	Above 2ha	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

Source: Field Survey Findings (2015)

The findings revealed that the majority farmers of about 83% grows cassava in the plots of less than 2 hectors while is only 17% of respondents grow cassava in the area of more than 2 hectors. That implied that the Matanzi community cannot improve farming production without increasing the size of plots. It is recommended that at least 2ha will accomplish the genuine needs of the community.

Table 7: Reasons for Low Cassava Production in Matanzi Community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lack of appropriate farming techniques	18	45.0	45.0	45.0
	Disease infection	12	30.0	30.0	75.0
	Lack of credit facilities	3	7.5	7.5	82.5
	Market unavailability	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

Source: Field Survey Findings (2015)

The Table 7 shows the causes of low cassava production as about 45% of respondents stated that the lack of appropriate farming techniques like proper spacing, quality seed application is, followed by 30% who mentioned disease infection as one of the obstacles to development of cassava production in Matanzi village whereas 17.5% argued on unavailability of market while inaccessibility to credit is about 7.5 percent. Therefore factors mentioned above should be addressed accordingly so as to improve cassava production in Matanzi village.

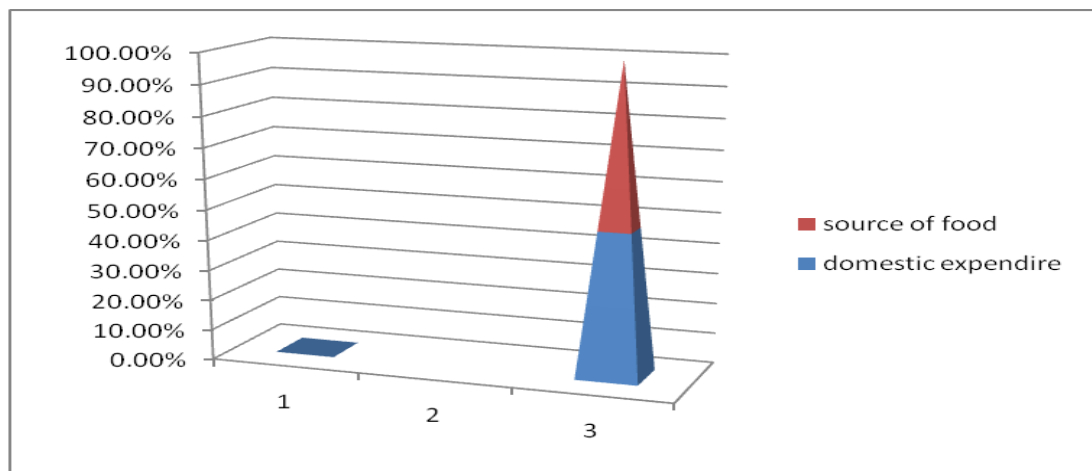


Figure 3: Major use of Cassava

Source: Field Survey Findings (2015)

From the Figure 3 revealed that majority respondents 52 percent consume cassava as source of food whilst 47 percent utilize it to earn income for resolving a various domestic requirements, like school fees for their children, to pay health expenses and excess served for future use.

1.5 Community Needs Prioritization

A number of community needs were mentioned and were prioritized in order to come up with one most need which was to be addressed through a project which had to be

designed by majority of respondents. Preferences were placed on a piece of paper and the selected respondents ranked the items. Pair wise ranking technique was used to prioritize the identified problems so as to get a project area as appears below;

Table 8: Pair Wise Ranking

	Access to clean and safe water	Good health	Improved agriculture production	Access to primary education	Food security	Score	Position
Access to clean and safe water		Access to clean and safe water	Improved agriculture production	Access to clean and safe water	Food security	2	3
Good health			Improved agriculture production	Good health	Food security	1	4
Improved agriculture production				Improved agriculture production	Improved agriculture production	4	1
Access to primary education.					Food security	0	5
Food security						3	2

Source: Field Survey Findings (2015)

Key: Higher score means first priority

1.6 Conclusion

The Participatory Needs Assessment employed at Matanzi village revealed income poverty is the major concern in the community. From this study the community members came to agree improved cassava production project will contribute to the improvement of socio-economic status. The information was gathered through participatory tools which are Questions, Discussion Guide, and Interview guide.

Participatory research tools were aiming to answer three research question, through research findings and pair wise ranking was revealed that Improved agriculture

production to improve Community livelihood was ranked as the first, followed by Food security; Access to clean and safe water; Good health and lastly was Access to primary education.

Findings exposed that 70 percent of Matanzi community engaged in farming, as a major source of income similarly it was also affirmed by respondents that cassava will raise their income so as to improve livelihood of residents.

CHAPTER TWO

PROBLEM IDENTIFICATION

2.1 Background to Research Problem

The chapter examines in depth the various problems which were identified in the previous chapter as being the most needs of the community and later been taken as community problem which had to be addressed by a development project agreed by majority of stakeholders.

Table 9: Problems, Causes, Effects and Assets/Opportunities

Problem	Causes	Effects	Assets/Opportunities
1.Lack of clean and safe water	<ul style="list-style-type: none"> • Higher cost of water installation • Low income to meet installation cost 	<ul style="list-style-type: none"> • Diseases • Lack of human capital 	<ul style="list-style-type: none"> • Presence of Water Department in Mkuranga District council
2.Access to primary education	<ul style="list-style-type: none"> • Lack of classrooms. 	<ul style="list-style-type: none"> • Poor studying. • Lack of experts. 	<ul style="list-style-type: none"> • Education department in Mkuranga LGA
3.Low agriculture production	<ul style="list-style-type: none"> • Lack of appropriate farming methods • Poor quality of cassava. • Small area of cultivation • Lack of disease control 	<ul style="list-style-type: none"> • Low purchasing power • Low crop output due to poor and less Inputs. • Less capital for business Creation 	<ul style="list-style-type: none"> • Availability of human capital • Availability of Land for cultivation • Drought resistant crops (cassava) • Availability of Un-infected Cassava seedlings. • NGOs volunteering to offer skills
4.Adequate health facilities	<ul style="list-style-type: none"> • Lack of drugs and laboratory services • Lack medical nurses 	<ul style="list-style-type: none"> • Diseases • Lack of human capital 	<ul style="list-style-type: none"> • Health Department in Mkuranga District council
5.Food insecurity	<ul style="list-style-type: none"> • Low agriculture production. • Low income earning. 	<ul style="list-style-type: none"> • Low purchasing power • Low crop output due to less Inputs. 	<ul style="list-style-type: none"> • Availability of human capital • NGOs volunteering to offer skills • Availability of Land for cultivation • Drought resistant crops (cassava)

Through the process five needs was obtained and prioritized through Pair wise ranking. Five priority needs were noted as follows; Improved cassava production has been identified as a core problem was ranked as the first, followed by Food security; Access to clean and safe water; Good health and lastly was Access to primary education.

By improving agriculture production as the core community problem, shall improve Community livelihood because is the main economic occupation, which conveys almost 70% of the Tanzanian population (FAO 2003), as well as being the main source of the rural household incomes (ASDP 2005). Focused Group Discussions was employed to identify the causes, effects, opportunities consequently intervention. The Table 9 shows causes, effects, and opportunities of the problems.

2.2 Problem Statement

Low agriculture production is a major problem facing most of farmers. The problem is a result of multi-factors such as inappropriate farming activities, crop infection diseases, unreliable market and inaccessibility to the credit. Matanzi Village is situated 34km from Mkuranga Township, which is along the Dar es Salaam – Kilwa road. About 75 percent of Matanzi community dealing with farming, as a major source of income whereby 70 percent cultivate cassava. Cassava contributes to an average of 15% in the national food production basket and is second to maize, which is the leading staple food crop for many Tanzanians (Mtambo, 2007). The dwellers of Matanzi Village are unable to attain necessary social and economic obligations due to low income earnings. Low income earnings have a result on low crop yield

caused by inappropriate farming techniques, poor quality cassava seedlings, small size of cultivated plots, prevailing of cassava disease and inaccessibility to the market.

Despite some efforts have been taken by some organizations to improve community livelihood in the village such as TASAF, which supported road construction of Matanzi – Kiimbwanende (main road of Dar es Salaam-Mtwara) road through cash for works project, yet Matanzi communities face income poverty. Moreover, for countries where majority of the people still live below the poverty line as Tanzania (NBS, 2012), cassava could be used to bridge the income gaps. Thus this project will improve Community livelihoods through improved Cassava production.

2.3 Project Description

The project based on Improving Community livelihood through improved Cassava production for Matanzi Village community in Mkuranga District, Coast Region - Tanzania. The project aimed at improving the productivity of Cassava at Matanzi Village. Cassava is very potential in Tanzania whereby Eighty-four (84) percent of the total production in the country is utilized as human food; the remaining percentages are for other uses like starch making, livestock feed and export to earn income (CED, Hand Out 2013).

Improved agriculture production to improve Community livelihood was ranked as the first priority as per pair wise ranking which results from low agriculture production as a root problem. Focused Group Discussions was employed to identify the causes, effects, opportunities hence intervention or project. Among the

Opportunity available in Matanzi Village is Land, being the case it was agreed by Focused Group Discussions that improving cassava production will also improve community livelihoods to sense that Matanzi Community will be in a position to have food, selling improved cassava seedlings to the neighbouring communities and surplus cassava will be sold to earn income, given the fact that formal employment opportunities are limited in the village.

People living in Matanzi Village had been cultivating cassava and other crops for a long time but the productivity remained low because the dwellers of Matanzi Village do not practise modern agriculture. Tambani Rural Community Development Fund (TARUCODEF) through Bill Gate Foundation (BF) which sponsored Tsh. 54, 877,000/= while the Matanzi village contributed Tsh. 9,280,000/= so as to fight against income poverty to improve their livelihood. The Organisation participated full in the process of community needs Assessment and prioritization.

The Organisation will improve cassava production through establishment of field's class in the Village. Apart from that, the researcher and four staffs, 3 from TARUCODEF and 1 from Mkuranga District Council will facilitate training to Matanzi dwellers as well as support commercialization initiatives, market information and linkages among cassava stakeholders.

The project is expected to commence with 55 households out of 388 total household. Each 55 households should cultivate two hectares, which means 110 hectares are planned to be cultivated. During village meeting conducted on 22nd July 2015,

Matanzi community selected a committee of 10 Village members to manage the project in collaboration with Tambani Rural Community Development Fund (TARUCODEF). Committee members also elected their leaders Ally Said Lwambo-Chair Person and Halima Mangosongo to be vice chairperson.

Through training, which will be conducted to head of households and 10 project committee members, the committee shall be conversant to manage and assist other members responsible in the project. Through applying modern cassava cultivation methods a farmer can obtain 15 to 20 tons of cassava per hectare, compared to 6.5 to 10 tons which acquired local cultivators. Matanzi Village Council, Tambani Rural Community Development Fund (TARUCODEF) has made consensus with Cassava Consumers like Beta Cassava Processing Company (Company will buy almost half of all Cassava-850 tons) from the Matanzi village.

Kiroba breed will be used as recommended by ARI-Kibaha collaboration with Village Agriculture Extension officer so as to control Cassava mosaic disease (CMD) and Cassava Brown Streak Disease (CBSD).

2.3.1 Target Community

The target community of this project is 55 households of Matanzi village community. Secondly latter on the project would be extended to other people who are residents of the village. The study has revealed that for the project to succeed and grow, the farmers have to increase cassava production through modern and appropriate agriculture methods, disease control, and availability of reliable market.

2.3.2 Stake holders

Stakeholders are those duty bearers in development who are influenced by and exert an influence on those things that place in the project direct or indirectly. They can be individuals, groups, community or an institution. Stakeholder groups are made up of people who share a common interest such as an NGO, or community (CED Hand Out, 2012).

Table 10: Analysis of Stakeholders Involved in the Project

Stakeholder	Roles of the stakeholder	Concerns	Expectations	Assumptions
Tambani Rural Community Development Fund (TARUCODEF)	Key project implementers	Income poverty reduction and improved socio-economic status of the community	Contribute to improved community livelihood opportunities of the village	Positive cooperation among members
Village Agriculture Extension Officer	Provide advisory and extension services to project including monitoring and backstopping	Community empowerment on cassava production	Improve cassava productivity through extension and advisory services	Continued project support for sustainability
Local government Institutions and Donors (ARI-Kibaha, Bill Gate Foundation and Matanzi Village Council)	Production of fertilizers, funds provider, Market, provision of technical expertise, and disease surveillance in case of outbreak	Higher cassava productivity	Contribute to more productivity and improved livelihoods	Continued supply of fertilizers and Market
Cassava Consumers (BETA Processing Company) and other from D'salaam.	Buyer and processor of cassava	Availability of cassava flower, cassava chips, starch and animal raw material at the right time, place, price, quality and quantity	Improved health and nutritional status as well as contribute to improved community livelihood	Stable price
CED Student	Provide technical assistance through training and advisory services	Achievement of outputs, specific objectives and overall project goal	Improved cassava productivity to ensure maximum yield	Good cooperation among major stake holders

The target stakeholders of the project as arranged in of priority are: Matanzi Village Community, Host Organization which is TARUCODEF, Beta Cassava Processing Firm and Buyers, Village Agriculture Extension Officer, local government, donors and CED Student. The following table is indicating respective role and expectations from stakeholders.

2.3.3 Project Goal

The Project Goal is enhancement of living standard of Matanzi village community at improved cassava production.

2.3.4 Project Objectives

The project expects to achieve the following objectives.

- (i) To sensitize and train 55 head of households on improved cassava production methods and business skills by September 2015.
- (ii) Raise cultivated area from less than 1 ha per household to 2 ha per household by January 2016.
- (iii) To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) for 99% by March 2016.
- (iv) Impart cassava best practice to Heads of households and reliable to the Market by the year June 2016.

2.4 Host Organization

The name of the organization hosting the project is Tambani Rural Community Development Fund. TARUCODEF is a Non Governmental Organization, established

in 2001 with Registration Number SO 10944 and to operate in three regions namely; Pwani, Mtwara and Lindi.

2.4.1 The Organisation Vision

The vision statement of the organization is to achieve sustainable socio-economic development among the members by 2025.

2.4.2 The Organisation Mission Statement

Improving the living standard of the community by engaging themselves in various income generating projects by using available local resources sensibly and sustainable through training and sharing knowledge.

2.4.3 The Organisation Values Statement

TARUCODEF believe that, as a significant social, economic and technological development driver, the efforts are ultimately driven to encourage innovation, opportunity creation, highly transparent, extremely collaborative and partnerships approach that would bring together thousands of dedicated individuals and communities.

2.4.4 The Organisation Administration

TARUCODEF has the following office bearers The Executive Chairperson, The Director, Project Coordinator, and Treasurer.

2.4.5 The Organisation Objectives

- (i) Enables communities (fishers, peasants and small and Medium Entrepreneurs) through participatory approaches to be able to identify their

needs, prioritize them, develop Community Based Action Plans, implement, monitor and evaluate, lobbying their development plans to the stakeholders..

- (ii) Facilitate the advancing of gender understanding and sensitivity to the community at large and girls in particular on the rights to sexual reproductive health and fighting against spread of HIV/AIDS notably prevention measures.
- (iii) Support groups and communities to establish and formalize micro lending systems ranging from credit associations to cooperatives for improving their capital growth in their businesses as well as to Solicit fund to support community Initiatives
- (iv) To ensure that all children who are enrolled to study at primary schools and secondary school have the opportunity to qualify their study and we give priority to girls.

2.3.6 TARUCODEF NGO'S SWOC analysis

Strengths, Weaknesses, Opportunities and challenges of NGO were identified as shown in the Table 11.

Table 11: SWOC Analysis

NO.	STRENGHT	WEAKNESS	OPPORTUNITIES	CHALLENGES
1.	Strong and committed leadership	Two out five attended the entrepreneurial training	Members are Trainable Availability of training institutions Existence of District Business Development Services-Shop	Sometimes they ever busy being engaged in individual's economic activities.

2	The NGO reputation has the status of getting lobbying fund from Financial Institutions and sponsors.	-	Availability of sponsors like Bill Gate Foundation.	They under utilize the opportunity they have. The usually invest in small projects
3	Project plan and implementation have got high support from LGA and Central government.	Bureaucracy of the government institutions causes some activities not to commence in planned time.	Good Leaders' rapports of NGO make it smooth successful.	-
4	The Matanzi Village Government has provided land to the NGO.	The NGO has not office to the village.	Village government office to be used.	No electricity service and reliable security of the government office.

Source: Study Findings (2015)

CHAPTER THREE

LITERATURE REVIEW

3.1 Introduction

This chapter reviews authors who wrote on issues related to improving cassava production, reports the findings from various projects related to cassava production, and the policy that guides the operation of agriculture in Tanzania. The chapter is divided into four parts: theoretical literature, empirical literature, policy reviews, and the literature review summary. In theoretical reviews, the emphasis is to analyze the theory behind cassava production.

The empirical review's objective is to narrate work done by others, with special interest on the approach used, outcomes, experiences, and lessons learned, and their similarity and relevance to the intended project (CED Hand Out, 2012). Finally, it ends by analyzing policy issues as they impact the project. All together books, professional journals, reports from agriculture departments, as well as personal experience were used in collecting information.

Information was gathered from theoretical literature where definitions of key concepts have been given in relation to best practice of cassava production. Whereas the empirical literature review focused on describing the experience of other countries in Africa and Tanzania, where these projects were implemented, also contributed to the analysis of existing gaps that need to be addressed by this study. While policy review focused on searching for national level policy review.

3.2 Theoretical Literature

Agriculture is the mainstay of the Tanzanian economy contributing to about 24.1 percent of GDP, 30 per cent of export earnings and employs about 75 percent of the total labour force (U.R.T. 2013). The rate of growth in agriculture is higher than the average annual population growth rate of 2.6 percent implying growth in incomes. However, the average agricultural growth rate of 4.4 percent is insufficient to lead to significant wealth creation and alleviation of poverty, given the low level of agricultural development (CED Hand Out, 2012)

3.2.1 Definitions of Key terms

3.2.1.1 Poverty

Basing in Tanzania Poverty is defined in the National Poverty Eradication Strategy (NPES) and the Poverty Reduction Strategy Paper (PRSP) as a state of deprivation prohibitive of decent human life. This is caused by lack of resources and capabilities to acquire basic human needs as seen in many, but often mutually reinforcing parameters which include malnutrition, ignorance, prevalence of diseases, squalid surroundings, high infant, and maternal mortality, low expectancy, low per capital income, poor quality housing, inadequate clothing, low technological utilization, environmental degradation, unemployment, rural – urban migration and poor communication (U.R.T. 1998)

3.2.1.2 Livelihoods

A livelihood comprises the capabilities, assets, and activities required for a means of living (CED Hand Out, 2012). It is deemed sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities, assets, and activities both now and in the future, while not undermining the natural resource base, (www.adb.org on 15.11.08).

3.2.1.3 Cassava

Cassava is perennial, vegetative propagated shrub, grown throughout the lowland tropics. It is a drought resistant crop grown mainly in dry areas and contributes significantly to the nutrition and livelihood of many farmers. It is also said to be more productive per unit of land and labour than even the high yielding cereals and the highest producer of carbohydrate (Nweke, 2003).

3.2.2 Status of Cassava Production in Tanzania

Cassava is one of the most drought tolerant food crops and can be successfully grown on marginal soils, giving reasonable yields where many other crops do not grow well. Cassava is adapted to the zone within latitudes 30° North and South, at elevations of not more than 2000 m above sea level, in temperatures ranging from 18 to 25 °C, rainfall of 50 to 5000 mm annually, and poor soils with a pH from 4 to 9.

In Tanzania, cassava is mostly grown in Kigoma, Coast, Mtwara, Lindi, and Ukerewe in Mwanza region. Cassava is also grown in other locations but in smaller quantities on small farms (IITA, 2005). Cassava in Tanzania is mainly a subsistence

crop where 84 per cent of its total production is utilized as human food, making it second after maize in importance as food crop though in some regions it is the primary staple crop. The remaining amount (16%) is for other uses such as animal feed, alcohol brewing, starch making and for export. Both roots and leaves of cassava are of major nutritional importance in the country. Tanzania's average cassava fresh root yield is about 8 t/ha (FAO, 2001). This is well below the continent's average of 10 t/ha and the average yield of 14 t/ha of Africa's (and the world's) largest producer, Nigeria.

3.2.2.1 Problems facing Cassava Production in Tanzania

Despite cassava having multi –benefits to Tanzanian community, however there is the big yield gap with countries leading in producing cassava like Nigeria. This yield gap is caused by many factors including genetically low yielding potential of local varieties, existence of a biotic stress factors (low soil fertility, drought and weed infestations) and biotic stresses. Biotic stresses include susceptibility of the commonly grown varieties to major diseases and pests such as cassava mosaic diseases, caused principally by the East African Cassava Mosaic Virus (EACMV), its Ugandan variant (UgV), and the African Cassava Mosaic Virus (ACMV), cassava Brown Streak Disease (CBSD), Cassava Bacterial Blight (CBB), Cassava Green Mite (CGM), Cassava Mealy Bug (CMB) and Nematodes. Previous research reported from Tanga, Tanzania revealed as high to 74 % crop losses due to Cassava Brown Streak Disease (Muhanna and Mtunda, 2002)

Other major problems related to cassava commercialization are poor processing technologies and limited utilization of cassava. These cause poor qualities of cassava

products, wasted market opportunities and low level of food safety. In addition, there is lack of market for this crop caused by inadequate market information, poor linkages among cassava stakeholders, poor market infrastructure. Furthermore, there are misconceptions that cassava is consumed by impoverished rural households, and this stigma contributes to lack of markets for this important crop. Moreover, there is inadequate capital investment and poor credit facilities in the cassava subsector. These problems are caused by lack of conducive policy, which favours cassava commercialization

Although cassava is an easy crop to cultivate, most farmers tend not to manage the crop properly. Most of the time, cassava is planted on exhausted soils. Studies show that infertile soils produce 40% less cassava storage root yields and the same trend can be observed in cassava shoot yield (IITA, 2005). The production of cassava is dependent on a supply of quality stem cuttings. The multiplication rate of these vegetative planting materials is very low compared to grain crops, which are propagated by true seeds.

In addition, cassava stem cuttings are bulky and highly perishable as they dry up within a few days. Late planting of the cassava crop is also a problem, even though cassava is drought tolerant relative to other arable crops. Studies have shown that cassava planted earlier gives higher yields than those planted late. An unwedded cassava crop, especially when in monoculture, is a constraint to increased cassava yields. As a root crop, cassava requires considerable labour to harvest if a farm is large (Mtunda et al, 2002).

In addition to these, literature shows that in the mid of 1980s, cassava was utilized in the marking of poultry and pig feeds by the Tanzanian Feeds Company, a practice that was later discontinued as cassava prices were found high compared with grains (Kapinga *et al.*, 1996). More over Cassava can be processed into several products with different tastes and textures. It is processed into chips and flour in many cassava growing zones in Africa. These products are not able to compete effectively with food grains such as maize and rice in the market. Quality processed cassava products are more convenient to buy for urban consumers and their prices are competitive with food grains in the market. The IITA/ SARD-SC project in collaboration with farmers in some of the project areas have established small-scale but improved processing centres for them to process their cassava roots into different products instead of selling the roots to other regions/countries at low prices.

Lack of diversified cassava products in Tanzania has very much hindered the widespread usage of cassava in the country (IITA, 2005). This is an evidence that cassava chips for animal feeds are highly demanded since the maize grains' price is increasing due to world food shortage problem, which is expected to escalate with global challenges of climate change and bio fuel production. It is obvious from the above stated situation that there are significant and unmet markets for quality cassava flour, but much of the cassava flour produced in Tanzania is of poor quality due to improper drying, peeling, chipping and milling (URT, 2005).

3.3 Empirical Literature

Cassava production projects similar to this one being developed by this study have been carried out in most countries all over the World. In such countries, there are concerted efforts on cassava development being initiated, sometimes with strong political support at the highest level (Nang'ayo *et al.*, 2007). For example in Nigeria, due to presidential initiatives since 2000's, Cassava production is well-developed as an organized agricultural crop. It has well-established multiplication and processing techniques for food products and cattle feed. There are more than 40 cassava varieties in use. Cassava is processed in many processing centres and fabricating enterprises set up in the country. The land holding for farming in Nigeria is between 0.5–2.5 hectares (1.2–6.2 acres), with about 90% of producers being small-scale farms.

In order to increase production, several varieties of cassava have been developed which are pest resistant; production in the country is hampered with problems with, the cassava and the. Diseases affecting cassava crop are mosaic disease, bacterial blight, and root rot (<http://en.wikipedia.org>.25.9.2013). The New Partnership for African Development (NEPAD) has also recognized cassava as crops which can reduce poverty in Africa and has recommended a Pan-African Cassava Initiative based on a broad based strategy which emphasizes better markets, better organization of producers for collective action, and better participation by the private sector.

Currently, about half of the world production of cassava is in Africa. Cassava is one of the world's most important food crops, with annual global production at approximately 276 million metric tonnes (MT) in 2013. The top producing countries

globally in 2013 were: Nigeria (accounting for ~19% of the total), Thailand (~11%), Indonesia (~9%), Brazil (~8%) and Democratic Republic of Congo (~6%).³ Africa accounts for the majority of global production, at approximately 158 million MT (57%) in 2013 (see Figure 2 below). The continent's production grew at an average rate of 6% per year from 2009 and 2013. In comparison, Asia grew at 2% annually while America's production declined at -2% per year over the same period (www.growafrica.com . reviewed on June 2015)

Throughout the forest and transition zones of Africa, cassava is either a primary staple or a secondary food staple. Cassava production in West Africa has doubled from 25.8 million tonnes in 1990 to 52.3 million tonnes in 2004 (FAO, 2007). Across the countries, cassava production has witnessed a tremendous increase for different reasons; the introduction of high-yielding multiplication seedlings, introduction of disease-resistant varieties, applying proper spacing methods and commercialization of the crop.

IITA, through its Integrated Cassava Project (ICP), implemented in the south-south and south-east States of Nigeria in 2002, campaigned extensively for commercializing cassava production. It distributed planting materials of high-yielding varieties of cassava resistant to cassava mosaic disease (CMD) with on-farm training on appropriate agronomic technologies and management practices. Findings showed that farmers' yields have doubled from an average of 11 ha to 25 ha.

Under the pre-emptive management of CMD, 10 improved cassava varieties selected from the 43 varieties screened were officially released. Newly bred varieties were

multiplied on more than 500 ha by IITA, NRCRI, RTEP, ADP, and other farmers using certified stocks. Large-scale cassava farms (> 1000 ha) e.g., Obasanjo Farms, Nigerian Starch Mill, Zimbabwe farmers, and Ekha Agro Farms, had began production (Sanni, L.O et *al.*, 2009:2).

Similarly, Benin has recorded increased production of cassava over time, although not as much as that of Nigeria. The crop is grown all over the country and, by total production the Atlantic Department had the highest recorded volume in 2006 (934,511 t), followed by Plateau (307,262 t) and Collines (287,864 t), all in the south. Communities with registered high production volumes are spread in the far south and north central parts of the country (Sanni, L.O et *al.*, 2009:6).

There is increased availability of land for commercial cassava cultivation, according to some farmers, NGOs, and government workers. At the inaugural stakeholders' workshop of the cassava value chain development project, held on 16 June 2008 in Abomey, the representative from the Ministry of Commerce and Industry said that the Benin's Government strongly supported the idea of a policy to include at least 10% cassava flour in bread flour, as they had witnessed the success of the same policy in Nigeria. Assuming this will be realized, the level of cassava production in Benin will surely be different in the next couple of years. (Sanni, L.O et *al.*, 2009).

Sierra Leone has the lowest volume of production among the three beneficiary countries. It produced only 350,000 t in 2006. In relation to this, it is important to note that the country is still in the process of recovery from a decade-long civil war that was officially declared over in January 2002. It was then that economic activities

started to regain strength. Sanni, L.O et al., (2009:14) Cassava is also grown all over the country, just as in Nigeria and Benin. Major production (based on production area), however, is recorded in different chiefdoms in the south-west, central, and far north regions of the country.

The three countries have shown remarkable success in cassava processing at both domestic and commercial scales, although to varying degrees. The introduction of machines for most unit operations of processing has greatly eased the labour-intensiveness of the trade, releasing time for women into other income-generating activities and allowing them to attend to family responsibilities. In all three countries, cassava is processed into some common products: *gari* (Gari is further milled into a fine, smooth powder and consumed as a complementary food), *lafun* (Lafun is another cassava-based food commonly consumed in Nigeria, Benin and Sierra Leone), and starch. Each country also has some exclusive cassava-based products being traded: *gari* and cassava bread (very thin, small, flat, round pieces) are traded mainly in Sierra Leone. *Gari*, starch, chips, and high quality cassava flour (HQCF) are common, mainly in Nigeria, and *gari* and starch in Benin (Sanni, L.O et al., 2009:18)

Direct involvement by Governments in the promotion of the cassava subsector and sometimes policy directives has enhanced development in Nigeria and other countries of West Africa. The Nigerian Government's Cassava Initiative that started in 2003 was highly successful in promoting new entrants and investment into cassava micro-processing as well as encouraging both small and large-scale processing

industries. Most micro- and small-scale processors are involved in producing traditional foods or intermediate products, such as chips, HQCF, or starch (Sanni, L.O et *al.*, and 2009:22).

Medium-scale factories, processing cassava into HQCF, starch, and high-grade *fufu* (Fufu is a fermented wet paste widely consumed in eastern and south-west Nigeria and in other parts of West Africa) for export, have also been established by local entrepreneurs near cassava farming communities. Ekha Agro Co. along Lagos–Ibadan road was commissioned in March 2007 to produce 26% of the annual national demand for glucose syrup. The company currently supplies cassava-based glucose syrup of high quality to Nestlé, Cadbury, and Guinness for the manufacture of beverages and malt production. However, many companies in Nigeria are yet to obtain the technology for processing cassava into adhesives and glucose syrup. Many manufacturing industries, again, are yet to adopt the use of cassava-based refined products, such as glucose syrup.

Nevertheless, apart from HQCF being used in the food industries, cassava also has found uses in other industries, especially feed and non-food industries, including starch for the manufacture of textiles, paints, adhesives, and other chemicals. In Nigeria, the industrial utilization of cassava is not merely emerging but increasing day by day (Sanni, L.O et *al.*, 2009:25).

In 2007, global production capacity of cassava amounted to 228.14 million tons. Thailand was by far the third largest producer at 26 million tons, following the lead

by Nigeria and Brazil. Nevertheless, since domestic consumption in Thailand is minimal Thailand is the largest exporter accounting for more than 80% of world trade. In the year 2006, the export generated income to the country more than USD 1,400 million. The export of cassava is concentrated in three product areas: chips, pellets, and starch. Due to Thailand's strong development on breeding, technology and transportation for over 30 years along with more than 200 exporters, it is able to respond any kinds of demand. Its major markets include China, Europe, Japan, Indonesia, South Korea, Australia, New Zealand, Malaysia, India, and Russia (C.S.T.R.U 2007:3).

Thailand is also the leader in breeding, planting, producing and trading of the world cassava. Cassava are one of the crucial trading products of Thailand that are used for human consumption, animal feed, and other products More importantly, in face of the world's food and energy crisis, cassava can be used in the renewable energy industry, as ethanol (T.T.D.I 2008).

However, in Tanzania cassava is still perceived as a food security crop rather than a raw material for other industries. Cassava contributes to an average of 15% in the national food production basket and is second to maize, which is the leading staple food crop for many Tanzanians (Mtambo, 2007). Moreover, for countries where majority of the people still live below the poverty line as Tanzania (NBS, 2012), cassava could be used to bridge the income poverty gap.

Furthermore, as the world's food and energy shortage are still ongoing, Cassava as a magic plant, which can be used as both food and energy, will definitely be a buffer

and alternative in alleviating such shortages. The key to success is the stabilization of the cassava price. Emphasis should be put on the reduction of raw material costs, and policy that advocates the production of bio-fuel. In this connection, price can be stabilized, and new products will be created by higher technologies and innovation (C.S.T.R.U 2007:5).

3.4 Policy Review

In recognition of the importance of Agriculture sector, the Government has been continuing to design and implement a number of policies and programmes supportive to the development of the sector.

3.4.1 Current Agricultural Policies

The agricultural sector is guided by the National Agriculture Policy. The *National Agriculture Policy of 2013 (NAP 2013)* revolves around the goals of developing an efficient, competitive and profitable agricultural industry that contributes to the improvement of the livelihoods of Tanzanians and attainment of broad based economic growth and poverty alleviation.

It implies that The Government is committed to bring about a green revolution that entails transformation of agriculture from subsistence farming towards commercialization and modernization through crop intensification, diversification, technological advancement and infrastructural development.

The *Cooperative Development Policy of 1997* evolved on the basis of experiences in implementing the Cooperative Development Act of 1991. It marks a change from

cooperatives being state controlled institutions to becoming autonomous and member-controlled private organizations. The policy provides the framework for the restructured co-operatives to operate on an independent, voluntary and economically viable basis and to develop into centers for providing and disseminating agricultural inputs, implements, technologies and information.

This will empower farmers to enhance their bargaining position in the market. The Ministry is currently facilitating consultative meetings among cooperative stakeholders to review the 1997 Policy and the Cooperative Act of 1991 to make them meet the needs of stakeholders even more effectively.

3.4.2 Agriculture Related Policies

National Land Policy is to promote and ensure a secure land tenure system, encourage the optimal use of land resources, and facilitate broad-based socio-economic development without endangering the ecological balance of the environment.

Water Policy; One of its objectives of the *Water Policy* is to establish a multi-sector platform and framework for participatory agreements on the allocation of water use in a coordinated and rational manner. This will eventually ensure that the interests and rights of various water users, particularly the requirement of catchments, crops and livestock, are taken into account during the process of allocating water.

The National Micro-finance Policy forms the long-term basis for developing an efficient and effective micro-financial system and provides a framework for empowering farmers and livestock keepers through access to credit.

3.4.3 Agricultural Sector Development Strategy

Contemporarily, every efforts took place in Tanzania should focus on the National Development Vision of 2025. The policy envisages alleviating poverty for all Tanzanian by 2025. Majority of Tanzanian still residing in rural areas (75%) in which its major economic activity is agriculture. To realize the National Development Vision deliberate and conscious efforts should focus on agricultural development. It identifies three priority goals: ensuring basic food security, improving income levels and increasing export earnings. Agriculture is one of the priority sectors for achieving these goals (U.R.T, 2001:11).

According to the (2011/12) Household Budget Survey in Tanzania, the majority of the poor accounts about 84 percent are found in rural areas, where agriculture is the mainstay of livelihoods. Agriculture has a dominant role in the economy that it is the most critical of the sectors that have been identified as the priority poverty reduction sectors in the PRSP. In the long run, commercializing smallholder agriculture and accelerating its growth rate are critical in pulling the majority of the rural poor out of abject poverty. The ASDS lays the foundation stones for this long run objective but also proposes interventions with a more immediate impact on rural poverty alleviation through diversified and increased production and productivity of smallholder agriculture (URT, 2001:12).

Globally; Tanzania is a showcase for public-private partnership in agricultural growth, exemplified by the development of its Southern Agricultural Growth Corridor (SAGCOT). The Government of Tanzania and the G8 members commit to the “New Alliance for Food Security and Nutrition” and to working together to generate greater private investment in agricultural development, scale innovation, achieve sustainable food security outcomes, reduce poverty and end hunger (URT, 2012:2).

The Government of Tanzania intends to pursue the policy goals set out above in order to build domestic and international private sector confidence to increase agricultural investment significantly, with the overall goal of reducing poverty and ending hunger. The Government of Tanzania intends to focus its efforts, in particular, on increasing stability and transparency in trade policy; improving incentives for the private sector; developing and implementing a transparent land tenure policy; developing and implementing domestic seed policies that encourage increased private sector involvement in this area; and aligning the National Food and Nutrition Policy with the National Nutrition Strategy (URT, 2012:3).

3.5 Literature Review Summary

Cassava in Tanzania is an integral component of most cropping systems and is among the more important staples in many zones. It plays an important role as a food security crop and provides useful opportunities for extending labour use and exploiting price peaks in the food market. On the other hand the Government

recognise cassava as a food security crop, but little or no effort has been done to commercialize it.

As a result cassava production in Tanzania is generally characterized by low yields and low marketable surplus. Basing on the above information, there are problems relate to lack of appropriate processing technologies for adding value of cassava, lack of disease control, inappropriate farming techniques and poor farmers' organization and coordination as a result farmers find it difficult to access demand sectors in urban markets, hence farmers end up complaining that there is unreliable and unprofitable market for their unprocessed or locally processed cassava products.

In order to attend this unexploited demand for cassava products much has to be done to increase cassava productivity. Among the alternative to be undertaken are: the application of best highly yielding varieties, controlling of disease and pests as well as employing the modern agriculture techniques. More over changing of policy makers and farmers' (as a crop of great potential of commercialization) mindsets towards cassava will serve the untapped demand. This will encourage public and private investments in the cassava sub-sector also facilitate farmers to actively participate in the value chain effectively. As a result contribute to reducing income poverty among cassava smallholders. Therefore this project will improve Community livelihoods in Mkuranga District particularly in Matanzi Village through improved Cassava production.

CHAPTER FOUR

PROJECT IMPLEMENTATION

4.1 Introduction

This chapter narrates the whole process of the project including planning and intervention of different activities to realize the predetermined objectives. Planning phase included activities to be undertaken, resources requirement (both material and human recourses) as well as the time bound for the project accomplishment. The chapter also shows output at each intervention, which intends to realize the set objectives. The budget to accomplish the project has also been well indicated.

The chapter also show different stakeholders who participated in the project as well as their commitment to ensure that the project is well implemented. Schedule of implementation, activities undertaken and cost of the project have been well indicated. Tambani Rural Community Development Fund (TARUCODEF) is the owner of the project thus the main project implementer. The Researcher was the project facilitator providing some advices.

The improving community livelihood through improved Cassava production project started July, 2015 where 11 Head of households facilitated on Cassava agricultural best practices and entrepreneurial and business management skills. Those 11 farmers each of them train other 4 Head of households which make the total number of those who trained 55. Cultivated areas have been raised from less than 1 ha per household to 2 ha per household by January 2016.

It was planned that by July 2016 the project would accomplish its activities except evaluation. The planned project product is the improvement in community livelihood opportunities achieved through improved Cassava production. However this is yet to be realized as the project is just at the end. It will be more evidenced after the project evaluation by the end of July 2016. It is anticipated Matanzi community will improve livelihood in terms of their basic needs and savings for other obligations such as Health and Education.

It is expected that, the private firm Beta Cassava Processing Company Ltd. which owns and runs a medium scale cassava processing plant shall acquire about half of cassava from Matanzi Village. The remaining cassava produce shall only be sold to other Cassava consumers in Dar es Salaam city, after being added value by Matanzi Village Processing Machine.

4.2 Outputs and Products

During the project implementation period it was expected to achieve the following products and outputs out of the planned activities.

4.2.1 Project Outputs

The project is expected to accomplish the following outputs.

- (i) 55 Head of households (Farmers) sensitized and trained on Cassava agricultural best practices and business skills.
- (ii) Cultivated areas have been raised from less than 1ha per household to 2ha per household.

- (iii) Heads of households practiced cassava production techniques of which 110 ha planted cassava, to be sold to Beta Cassava Processing Company Ltd (half of the yield) and other Cassava consumers.
- (iv) 110ha have to be planted Kiroba breed which is not infected by CMD and CBSD.

Table 12: Project Output

Objective	Output	Activity
1. To sensitize and train 55 head of households on improved cassava production techniques, and business management skills by September 2015.	1-19 members attended Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council.
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Community Members
	4- 11 Farmers facilitated	Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills
	5-171 Participants attended the training.	Cassava growing procedure and demonstration training
2- Raise cultivated area from less than 1ha per household to 2 ha per household by the January 2016.	1-1 ha planted cassava	Preparation and Planting of cassava nursery/farm classroom.
	2- 110ha hollow out	Preparation of farm plot (2 hectares)
	3- 110ha planted cassava	Planting of Kiroba cassava stick stem into the farm Plots
3- Impart cassava best practice to Heads of households and reliable to the Market by June 2016	1- 1,650 tons harvested	Harvesting of cassava
	2-5 People participated	Conducting Project Monitoring
	3- 5 People participated	Conducting Mid and Annual Project Evaluation
4- To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) by March 2016.	50ha cleared ready for planting.	To uproot the disease infected cassava stems from the farms
	350 cassava stems' bundles Sent to Matanzi village.	Sending un infected disease cassava stems' bundles from Mkuranga's nursery.

4.2.2 Project Products

The improved community livelihood opportunities in Matanzi village are prominent aim as a result of Cassava production. This would be achieved after realization of income from the sale of cassava, which utilized as human food other uses like starch making and livestock feed.

4.3 Project Planning

The project planning is the most important element in the project advancement.

The project planning involves implementation plan, workers structuring and budget assessment. In this community project, implementation means putting in practice what has been planned. The most important actions in project implementation include the harmonization of activities, supervising and evaluation as well as ensuring community contribution.

Planning set clear that the Project is started July 2015 through implementing four main activities as the base for project. These are sensation and training of the Matanzi village, to raise cultivated area, controlling CMD and CBSD and imparting best techniques and business skills and market channel to the Matanzi Members. Planning shows that the project will phase out on July 2016 where evaluation will conducted. The project will be a model for future income generation projects within the community and will be replicated by both CED student and the project funder and the community at large. The table below clarifies the plan.

Table 13: Project Planning

Objective	Output	Activity	2015						2016								Resources/ Inputs	Responsible people
			Jul	Aug	Sep.	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
1.To sensitize and train 55 head of households on improved cassava production techniques entrepreneurial and business management skills by September 2015	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council															Personnel, Fund, Stationery	CED student, TARUCUDEF Executive. committee members
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.															Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Focus group discussion members
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members															Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Village community
	4-11 Farmers facilitated	Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills															Training Personnel, venue, fund, stationery and transport.	Facilitator, CED student. TARUCODEF.
	5-171 Participants attended the training	Cassava growing procedure and demonstration training															Personnel,transport.Fund, and Demonstration material	VAEO, CED student, 29 Farmers, TARUCODEF.

2. Raise cultivated area from less than 1ha per household to 2 ha per household by the January 2016.	1-2 ha planted cassava	Preparation and Planting of cassava to Nursery/Farm classroom															Fertilizes, Cassava steam	VAEO,CED student TARUCUDEF members, Head of household
	2- 110ha hollow out	Preparation of farm plot (2 hectares)															Fertilizes, Tractor Cassava steam	CED student TARUCUDEF members, Head of household
	3- 110ha planted cassava	Planting of Kiroba cassava stick stem into the farm Plots															Cassava stem	VAEO, CED student TARUCUDEF members, Head of household
3. Instruct cassava best practice to Heads of households and reliable to the Market by the June 2016	1- 1,650 tons harvested	Harvesting of cassava.															Hand hoe Fund and transport.	Head of household, VAEO, CED student TARUCUDEF members, Head of household.
	2-5 People participated	Conducting Project Monitoring and Evaluation															Fund and transport.	VAEO, CED student TARUCODEF members, Head of household.
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation															Fund and stationery.	VAEO, CED student TARUCODEF members, Head of household.

To control Cassava Mosaic Disease (CMD) and Cassava Brown	50ha cleared ready for planting.	To uproot the disease infected cassava stems from the farms.																Hand hoe Fund and transport	VAEO, CED student TARUCODEF members, Head of household
Streak Disease (CBSD) by March 2016.	350 cassava stems' bundles Sent to Matanzi village.	Sending un infected disease cassava stems' bundles from Mkuranga's nursery.																Fund and transport	VAEO, CED student TARUCODEF members.

4.3.1 Implementation Plan

In order to ensure smooth implementation of the project, a work plan was prepared indicating different activities to be carried out, the required resources, time frame and person responsible for each project objective. The project implementation of the project involved different stakeholders physically and others were consulted at their working places to get their views especially on technical aspects. The host organization TARUCODEF NGO's leaders was fully engaged from the beginning this as they are key implementers of the project. The implementation follows the project implementation plan as shown on Table 13. In the implementation process the project involved the following key stakeholders, Tambani Rural Community Development Fund (TARUCODEF), Community Economic Development (CED) student and the Matanzi Village Agriculture Extension Officer (VAEO). The roles and responsibilities of each stake holder are summarized in table below. Resources which were deployed in the project were contributed by both Bill Gate foundation and Matanzi village in term of labour resources. Implementation means carrying out what has been planned. Among the major activities in project implementation are securing community participation, coordination of activities, monitoring and taking care of unforeseen events (CED Hand Out, 2012). A number of stakeholders from various institutions and individuals in the community have been involved in implementing the project. Constant coordination has been done to prevent duplication of activities, to promote efficiency and to reduce costs. Monitoring has been carried out for checking whether the work is proceeding according to the plan, and in case of shortcomings to take stock of the situation and effect the necessary correction actions.

Table 14: Implementation Plan

Objective	Output	Activity	2015						2016								Resources/ Inputs	Responsible people	
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			
To sensitize and train 55 head of households on improved cassava production techniques entrepreneurial and business management skills by September 2015	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council																Personnel, Fund, Stationery	CED student, TARUCODEF Exev. committee members
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.																Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Focus group discussion.
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members																Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Village community
	4- 11 Farmers facilitated	4- Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills																Training Personnel, venue, fund, stationery and transport.	Facilitator, CED student, TARUCODEF.
	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training																Personnel, Fund, stationery, transport, and Demonstration material	VAEO, CED student, 19 Farmers, TARUCODEF members.

from less than 1 ha per household to 2 ha per household by January 2016.	2-110 ha hollow out	2- Preparation of farm plot (2 hectares)															Fertilizes, Tractor Cassava steam	CED student TARUCODEF members, Head of household
	3-110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots															Cassava stem	VAEO, CED student TARUCODEF members, Head of household
Impart cassava best practice to Heads of households and reliable to the June Market by the 2016.	1- 1,650 tons harvested	1- Harvesting of cassava															Hand hoe Fund and transport.	Head of household, VAEO, CED student TARUCODEF members, Head of household.
	2-5 People participated	2- Conducting Project Monitoring															Fund and transport.	VAEO, CED student TACURADEF members, Head of household.
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation															Fund and stationery.	VAEO, CED student, TARUCADEF members, Head of household.
To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) by March 2016.	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms															Hand hoe Fund and transport	VAEO, CED student TARUCODEF members, Head of household
	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.															Machetes, Fund and transport	VAEO, CED student TARUCODEF members, Head of household

4.3.1.1 Project Logical Framework Matrix

Table 15: Project Logical Framework Matrix

Intervention Logic	Objectively verifiable indicators (OVI)	Means of verification	Assumptions/risks
Goal: Income Poverty reduced and standard of living of Matanzi Community improved.	Increased income and improved standard of living of cassava growers.	Reports, records and household survey data available at TARUCODEF.	Good cooperation and participation in project implementation among various stakeholders.
Objective 1: To sensitize and train 55 head of households on improved cassava production techniques and business skills by September 2015.			
Output 1: Members of Matanzi Village council familiarized with the aim of conducting CNA and Project identification.	Response of Matanzi council Members	Community Needs Assessment report	Members of Village council became aware of CNA and know the importance of Project identification
Activities:			
1.1 Advocacy meeting done to Matanzi Village council members.	19 members attended	Project Reports	Readiness of the Council members to support the Project.
1.2 Community Needs Assessment done	5 needs were mentioned and prioritized.	Project Reports	Readiness of the Council members to support the Project.
1.3 Project Sensitization Meeting done to Community members.	779 Members attended	Meeting Minutes	Readiness of the Community members to support the Project.
1.4: Training to Farmers (Head of households) on Cassava agricultural best practices and entrepreneurial and business management skills	11 Participants attended the training.	Training report	Positive Participants attitude towards Cassava agricultural best practices
1.5: Cassava growing procedure and demonstration training.	171 Participants attended the training.	Survey (demonstration plot)	Positive cooperation among Head of households
Objective 2: Raise cultivated area from less than 1 ha per household to 2 ha per household by the January 2016.			
Output 2: 110 hectares planted taken care and	110 Famers (Head of households)	Survey (Cultivated	Positive cooperation among Head of

Intervention Logic	Objectively verifiable indicators (OVI)	Means of verification	Assumptions/risks
harvested tons of cassava purchased	participated	plot)	households
Activities:			
2.1: Preparation of Nursery/farm classroom and Planting of cassava done	2ha planted cassava	Survey (Planted area)	Positive cooperation among Head of households
2.2: Preparation of farm plot done	110ha hollow out	Survey (Cultivated plot)	Positive cooperation among Head of households
2.3: Planting of Kiroba cassava stick stem into the farm Plots done.	110ha planted cassava	Survey (Planted plot)	Positive cooperation among Head of households
Objective: 3 Impart cassava best practice to Heads of households and reliable to the Market by the June 2016			
Output 3: 1,650 tons of cassava harvested and sold	1,650 tons harvested	Survey and Report	Positive cooperation among Head of households
Activities:			
3.1: Harvesting of cassava and Cassava stem (Matanzi village acquires cassava for processing.)	1,650 tons harvested. 30,000 stem bundles harvested.	Survey and Report	Positive cooperation among Head of households
3.2: Conducting Project Monitoring, and Mid and Annual Project Evaluation	5 People participated	Evaluation Report	Willingness of members of the Team
Objective 4 :Control of Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) for 99% by March 2016			
Output 4: 1,650 tons of cassava harvested and sold	There is health and uninfected Cassava produces.	Survey and Report	Positive cooperation among Head of households
Activities			
4.1: Uproot the infected Cassava stems from the farms.	50 ha cleared ready for planting.	Survey and Report	Positive cooperation among Head of households
4.2: Sending treated cassava stick stems from the Mkuranga's nursery.	350 Cassava stick stem bundles brought to Matanzi village.	Survey and Report	Willingness of members of the Team

4.3.2 Project Inputs

To fulfil the project goal, which is reducing income Poverty and improving living standard of Matanzi Community some inputs were required. These are financial, material and resource person and services necessary for carrying out activities. Resource Persons were TARUCODEF Officers, Extension staff from Mkuranga District Council and other development Partners like Bill Gate Foundation. Financial resources were used for Capacity building, purchase and hiring of project equipments. Normally inputs are supposed to be stated in specific and measurable terms. Details on inputs/resources are as shown on table at the appendix.

4.3.3 Staffing Pattern

The project would run under the Project Committee elected by Village Meeting with consultation from TARUCODEF Executive Committee. However Project Committee is reporting to Village council. Project Committee led by the Chairperson who would chair the meetings. The Secretary supervises day-to-day duties including project and keeps all project records. The Treasurer keeps all project financial records. TARUCODEF Executive Committee assigned one staff to advice on day-to-day duties in collaboration with Village Agriculture Extension Officer, Staff Pattern are shown on the Table 16.

Village Agriculture Extension Officer played a big role in running the project by providing the necessary extension and advisory services with regard to agriculture best practice, which necessitated in the increase in productivity. The CED student concentrated more on entrepreneurial and business development skills.

Table 16: Staff Pattern

Staff Position	Responsibility
Project Committee - Chairperson	1- Chair of all Project meetings 2- Supervisor of implementation Plan Schedule 3- Chief spokesperson of the project 4- Submission of quarterly report to Village council.
Project Committee - Secretary	1- Supervises day to day duties 2- keeps all project records 3-Follow up of project inputs to the stakeholders in Collaboration with TARUCODEF officer 4- Direct other Project members on daily duties
Project Committee Treasurer	1- keeps all project financial records 2- Follow up of project inputs/funds from stakeholders in Collaboration with Secretary and TARUCODEF officers.
Project Committee Members	1- Project households' supervisors and implementers.

4.3.4 Project Budget

The total Project Budget was Tsh.64, 157,000 /= Out of the total budget Community Contribution was Tsh. 9,280,000/= estimated through work force while the remaining amount-Tsh.54, 877,000/=was donated by Bill Gate Foundation. The table at the appendix thoroughly clarifies the breakdown of the budget.

4.4 Project Implementation

4.4.1 Project Implementation Report

The project implementation was the responsibility of CED student, target group and other stakeholders to ensure that project activities are efficiently implemented. The

implementation started by mid July, 2015. The Project implementation was done base on four aspects, which is sensitization and training to 55 head of households on improved cassava production techniques, entrepreneurial and business management skills. To rise cultivated area from less than 1ha per household to 2 ha per household by January 2016, Impart cassava best practice to Heads of households and reliable to the Market by the June 2016 and the last aspect is to control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) for 99% by March 2016. The following activities have been conducted and almost 95% have been accomplished and one activity still going on.

Through aspect one of sensitization and training to 55 head of households in first objective, meeting was conducted to 19 members out 25 members of Matanzi Village council as part of familiarization aimed at conducting CNA and project identification. After blessing of Village council, Community Needs Assessment was conducted was conducted. Major task implemented was selection of focus Group discussion, collection of basic information data, focus Group discussion and Pair wise ranking where needs were mentioned and prioritized. Project Design and budgeting was done.

Challenge which occurred during implementation of this aspect was based on political agenda superstition among the Village Council members. This was because the village government was from opposition camp so that they sought all the process was the trick of ruling party (CCM) to lob and gaining political influence. However CED student collaboration with TARUCODEF members succeeded harmonizing the situation in the rapport manner.

Awareness to Matanzi Community on improved Cassava production was done by one day Sensitization Meeting about the Project where 779 Community members attended meeting. In the meeting 11 lead Farmers were selected to attend training on Cassava agricultural best practices and business skills. Four days training was conducted to 11 lead Farmers on Cassava agricultural best practices and business skill. Training and demonstration on selection of cassava stems, proper spacing of 1m x 1m, processing of cassava fresh into several products also were undertaken. As per project plan 11 farmers each of them should train other 4 lead of households on cassava growing procedure which makes the total number 55 households. The training was conducted by District Agriculture Officer assisted by VAEO, TARUCODEF Officer and CED Student.

More over in the second aspect/objective, as strategy to raise cultivated area from less than 1ha to 2 ha per household by the January 2016, Preparation of 1ha for farm class room by remove of foliage and Planting of cassava was done. Furthermore the supervision from project committee was made to make sure all 55 households are raising their hectars to 2 ha as agreed in the meeting. The CED student in collaboration with TARUCODEF members and other stakeholders like Mkuranga district Council staff and ARI-Kibaha staff participated in all arrangement of project take off and implementation. Monitoring of day-to-day was conducted too by project committee.

Challenge which arose in implementation of this aspect was scarcity of land to raise the intended farms. Almost one third (1/3) of the available bush in the village is occupied by foreigner who lived in town like in either Dar es Salaam or Mkuranga

that's why most of farms were bushes and uncultivated. However project committee, CED Student, TARUCODEF staffs, in collaboration with Village government tackled the challenge by finding areas outskirts of the village so as to attain the goal.

In aspect number three concerned with controlling Cassava virus Diseases-(CMD and CBSD). CED student, TARUCODEF staffs, ARI-Kibaha and Matanzi village member participated full on implementation of all activities in this objective, which lasted for almost 14 days. It included cutting cassava stems from Mkuranga nursery, transportation, uprooting of 50 ha cassava affected disease, foliage as well as planting new ones. According to ARI-Kibaha and Village Agriculture Extension Officer the viruses concerned cassava diseases have no curable measures rather than preventable measures as which undertaken by the stakeholders. It was revealed that almost there were no disease symptoms affected the cassava in all 110 hector since planting stage to the harvesting stage.

Therefore Cassava viruses Diseases were controlled at almost 100 percent as it was planned in the project. Challenge could appear in future due to presence of bushes border the cassava farms where the cassava virus disease could survive at the areas eventually re-affect cassava farms later on. However pre-caution had made by project committee, CED student, ARI-Kibaha, TARUCODEF in collaboration with Village government to ensure bushes around those farms have to be cleared in order to destroy the disease forever.

In last aspect/objective and all planned activities were well done accordingly expect one activity that is Annual Evaluation which was planned to undertake in August.

The remaining activity will be successful implemented due to skills obtained during training. Training to Farmers (Head of households) on Cassava agricultural best practices and business skills will contribute to the success of the Project as well as Contribution from stakeholders such as a District Council and Tambani Rural Community Development Fund. More over the beneficiaries have succeeded to harvest actual 1,713 tons which is 4 percent addition of those planned of 1,650 tons. Farmers have sold 850 tons of fresh cassava to Beta Processing Company, with value of Tsh. 45,500,000/= while the remaining yield will be sold in various consumers particularly in Dar es salaam with expectation of earning Tsh. 56,095,000/= .



Figure 4: CBSD Symptoms in Cassava Roots at Matanzi Village



Figure 5: Matanzi Cassava Farm Classroom

Seen on picture above (in Figure 5) is the farm class room where by Village dwellers are seen to be in practical training from the Village Agriculture Extension Officer – Miss Mwajuma who is not seen clearly at the fore right hand side.



Figure 6: Some Matanzi Women Participate in Processing Different Products of Cassava

CHAPTER FIVE

PARTICIPATORY MONITORING, EVALUATION AND SUSTAINABILITY

5.1 Introduction

This chapter discusses project participatory monitoring, evaluation and sustainability for improving cassava productivity in Matanzi village. Monitoring is the process of looking the implementation of day-to-day activities and facilitates to make improvements so as to achieve the desired goal (CED Hand Out, 2012). Evaluation is defined as systematic investigation of the worth or merits of an object. Monitoring and evaluation are linked together since monitoring sets benchmarks for evaluation. Thus monitoring and evaluation help to gather information needed to keep the project on schedule and predict problems as well as formulate solutions, measure progress and evaluate program success.

It is through this part that one can understand the health of the project whether it will die or be sustained regardless of changes in external support (funding sources) or internal resources (change in staff). Thus participatory monitoring and evaluation is an action of involving all stakeholders of the project from the beginning to an end. In so doing participants become aware of proceedings and once they overcome challenges they discuss and come with solutions and ultimately creates sense of ownership hence contribute to project sustainability. The chapter is divided into the following parts; monitoring information system, participatory monitoring methods, participatory monitoring plan, participatory evaluation plan, performance indicator, participatory evaluation methods, project evaluation summary and project sustainability.

5.2 Participatory Monitoring

It is the process of routinely gathering information on all aspects of the project activities that involves the members of the group/community in project implementation. Participatory monitoring is carried out using various techniques and different methods. It is a system of collecting information and making use of the information to determine the progress of the planned work/activities. Participatory monitoring was intended to monitor the implementation of all activities, which include advocacy meeting to Matanzi village Council, Matanzi community members, preparing classroom farms, impart training and demonstrations on best agriculture practices, uprooting of infected cassava crops, clearing new farms, planting new cassava stems, and harvesting.

Other activities are facilitating the purchase of project tools and equipments, identification of Cassava market, training of Matanzi members on several cassava products and business skills. The involvement of all stakeholders like TARUCODEF as key implementer, farmers, and LGA staff since identification project stage to implementation stage allowed them to be aware on the activity progress hence creates room for decision making.

Monitoring was conducted to first week in every months basing on monitoring tools developed and verifiable indicators such as Number of meetings held, Number of Community Needs Assessment meetings held with the community, Number of trainings, type of training and number of participants who attended, Area cultivated, Application and quantity of manure, Cost and expenditure, Tools and equipment received.

5.2.1 Monitoring Information System

It is a system designed to collect and report information on a project and project activities that enable a project manager to plan, monitor and evaluate the operations and performance of the project. Monitoring and Information System (MIS) designed was participatory in nature, which establishes a data base by recording relevant information to activities that were planned in a specified period. Information required include; Work plan/activities, Cost and expenditure, staff and supervisor knowledge, commodities, tools and equipment.

5.2.2 Participatory Monitoring Methods/Tools

Various methods and techniques were used to ensure maximum participation of primary stakeholders in monitoring of project activities. The PRA key principles and techniques were used to gather information, which includes key informants, structured interviews, direct observation, Focus Group Discussion.

5.2.2.1 Structured Interviewed

Structured interviews were used to gather information about size area of cultivation, application of manure and other information regarding to weeding and cassava treatment.

5.2.2.2 Direct Observation

Observation is a classical method of social science inquiry where eyes were used rather than ears in observing and noting how farmers (head of households) prepare their plots, the way cassava grow as well as observing application of manure those issues was recorded accordingly.

5.2.2.3 Focus Group Discussion

Focus Group Discussion was applied by involving a small group of only 12 people in discussing issues related to project performance in detail and were allowed to talk freely. Facilitation skills were taken by the CED student that an individual should not dominate the discussion. Participants group were freely talking from their experiences.

5.2.2.4 Key Informants Interview

In the implementation of the project some addition information were needed to some key informants including; District officials (Trade officer, Agriculture Officer, and DCDO), extension staffs (Agriculture extension officers), and Ward leaders (WEO and Councillors).

5.3.3 Participatory Monitoring Plan

Table No. 22 below indicates participatory plan as agreed by the team involved in the project operations:

Table 5. 1: Participatory monitoring Plan

Objectives	Output	Activities	Indicators	Data source	Methods/Tools	Person responsible	Time frame
To sensitize and train 55 head of households on improved cassava production techniques and business by September 2015.	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council	List of attendants	TARUCODEF Project progress report	Meeting CED student, TARUCODEF member and VAEO, Project Committee members	CED student, TARUCODEF member, LGA Officer	July 2015
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.	CNA reports.	TARUCODEF Project progress report	Observation, FGD, Interviews,	CED student	August 2015
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members	List of attendants, List of 29 farmers elected.	TARUCODEF Project progress report	Meeting	CED student, TARUCODEF Officer and VAEO, LGA Officer.	August 2015
	4- 11 Farmers facilitated	4- Capacity building on Cassava agricultural best practices and entrepreneurial and business	List of Participants, Training Report	TARUCODEF Project progress report	Lecture, Group Discussion, Demonstration.	CED student, TARUCODEF Officer and VAEO, LGA Officer	August 2015

Objectives	Output	Activities	Indicators	Data source	Methods/Tools	Person responsible	Time frame
		management skills					
	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training	List of Participants, Training Report	TARUCODEF Project progress report	Group Discussion, Demonstration	CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members	August 2015.
Raise cultivated area from less than 1ha per household to 2ha per household by January 2016.	1-1 ha planted cassava	1- Preparation and Planting of cassava to farm classroom.	Number of hectors planted	TARUCODEF Project progress report	Observation	Head of Households CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members	September 2015
	2- 110ha hollow out	2- Preparation of farm plot (2 hectares)	Number of hectors planted	TARUCODEF Project progress report	Observation	Head of Households CED student, TARUCODEF Officer and WAEO, LGA Officer, Project Committee members	October 2015
	3- 110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots	Number of hectors planted	TARUCODEF Project progress report	Observation	Head of Households CED student, Officer and VAEO, LGA Officer, Project Committee members	Nov. 2015
To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms	Number of hectors uprooted infected cassava.	TARUCODEF Project progress report	Observation and interviews.	Head of Households CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members.	October 2015

Objectives	Output	Activities	Indicators	Data source	Methods/Tools	Person responsible	Time frame
Disease (CBSD) for 99% by March 2016.	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.	Number of un infected disease cassava stems' bundles.	TARUCODEF Project progress report	Observation	Head of Households CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members.	November 2015
Impart cassava best practice to Heads of households and reliable to the Market by the June 2016.	1- 1,650 tons harvested	1- Harvesting of cassava.	Tons Harvested	TARUCODEF Project progress report	Observation	Head of Households CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members.	June 2016
	2-5 People participated	2- Conducting Project Monitoring	Number of Monitoring conducted, List of participants	TARUCODEF Project progress report	Interviews, Observation, Focus Group Discussion and Key informants' interviews.	CED student, TARUCODEF Officer and VAEO, LGA Officer, Project Committee members.	From July 2015 on wads
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation	Number of Evaluation conducted, List of participants	TARUCODEF Project progress report	Participatory Evaluation (Group Discussion)	CED student, TARUCODEF Officer and WAE0, LGA Officer, Project Committee members Stakeholders	February and August 2016.

5.3 Participatory Evaluation

According to Deepa Narayan, 1993 defines participatory monitoring and evaluation that “is a process of collaborative-problem solving through the generation and use of knowledge. It is a process that leads to collective action by involving all level of stakeholders in shared decision making” From the definition the key concept is involvement of stakeholders and collective actions towards problem solving or improving the situation. That evaluation to be termed as a participatory evaluation should involve stakeholders at different levels who will work together to assess the project so as to take corrective action required.

Evaluation was conducted February 2016 (mid way) and Annual Evaluation were planned to be conducted August 2016. Mid Evaluation were involved The CED student, TARUCODEF Officers, leaders of Project Committee, and Officers from Mkuranga District Council. Evaluation were based to assess the extent to which the project objectives were realized, to assess the extent to which people’s expectations were fulfilled and Suggest ways for improvement.

5.3.1 Performance Indicators

Indicators are variables that show the extent of change that resulted from the project. They help to measure what actually happened in terms of quantity, quality and timeliness against what planned. They measure progress in achieving outputs and outcomes. They show relevance, performance and effectiveness of the project as well as progress towards meeting its output and outcomes. Project goals and Project objectives performance indicators were developed as shown in Table 18.

Table 18: Performance Indicators

Objectives	Output	Activities	Resources Needed	Performance Indicators
To sensitize and train 55 head of households on improved cassava production techniques and business skills by September 2015.	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council	Stationary, Allowances Facilitator	Number of members attended
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.	Stationary, Allowances Facilitator	Needs were prioritized. 1. Improved agriculture production 2. Food security 3. Access to clean and safe water 4. Good health 5. Environmental protection,
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members	Stationary, Allowances Facilitator	Percentage of Community Members attended meeting
	4-11 Farmers facilitated	4- Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills	Stationary, Allowances Facilitator, Soft drink and snacks	Number of Trainees attended training
	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training	Demonstration Plot Tractor, Manure, Kiroba Bundle, Facilitator, Allowances	Number Participants attended the training.
Raise cultivated area from less than 1ha per household to 2ha per household by January	1-1 ha planted cassava	1- Preparation and Planting of cassava farm classroom.	Demonstration Plot Tractor, Manure, Kiroba Bundle, Facilitator, Allowances , Fuel	Number of hectors planted
	2- 110ha	2- Preparation of	Tractor,	Number of

Objectives	Output	Activities	Resources Needed	Performance Indicators
2016.	hollow out	farm plot (2 hectares)	Agriculture Extension Officer	hectors of cultivated
	3- 110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots	Manure, Kiroba Bundle, Facilitator, Allowances , Agriculture Extension Officer Fuel,	Number of hectors planted
To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) for 99% by March 2016.	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms	Agriculture Extension Officer, Fuel, Allowances, Machetes and hand hoes,	Number of hectors of uprooted.
	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.	Agriculture Extension Officer, Fuel, Allowances, Machetes and hand hoes.	Number of bundle stem brought.
Impart cassava best practice to Heads of households and reliable to the Market by June 2016.	1- 1,650 tons harvested	1- Harvesting of cassava.	Transport	Household demand for cassava markets rises
	2-5 People participated	2- Conducting Project Monitoring	Allowances, Fuel	Number of Monitoring conducted,
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation	Allowances, Fuel	Number of Evaluation conducted,

From the performance indicator Table 18, there are link between Project Objective Output, activities to be implemented, and Resources Needed. If resources requested at the right time and used effectively then output will be seen and Objective will be achieved. During Monitoring and Evaluation Participants were referring Output and performance indicators to check whether they are in truck or not.

5.3.2 Participatory Evaluation Methodology

5.3.2.1 Evaluation Methods /Tools Used

Participatory Rural Appraisal was used during the project midterm evaluation exercise conducted in February 2016; specifically the following data collection methods were used Structured-Interviews, Participatory Observations, Focus Group Discussions and Documentary and Records Review. While meetings, checklists, effective listening, group discussions, and appreciative inquiry and review of monitoring reports, Project Committee minutes were the major evaluation tools applied during the midterm evaluation exercise.

5.3.3 Project Evaluation Summary

This section based on summarization of project evaluation by looking project goal, objectives, performance indicators, expected outcomes and actual outcome. Based on the project goal, objectives and activities planned have been met with exception of annual evaluation that will be done in August 2016. Generally the evaluation shows that there are strong commitments of various stakeholders from the planning stage to the implementation activities. This indicates that the project is the real need to the direct beneficiaries and community at large. Below here find the table, which presents the evaluation summary.

Table 19: Project Evaluation Summary

Project objectives	Output	Activities	Performance Indicators	Expected Outcomes	Actual Outcomes
1 To sensitize and train 55 head of households on improved cassava production techniques and business skills by September 2015.	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council	Number of members attended	Positive responses, Cassava production improved	Out of 25 Members 19 members of Matanzi Village council attended.
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.	Needs were prioritized. 1. Improved agriculture production 2. Food security 3. Access to clean and safe water 4. Good health 5. Environmental protection,	project Identified	5 needs prioritized
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members	Percentage of Community Members attended meeting	Positive responses, Cassava production improved	779 Community members trained
	4- 11 Farmers facilitated	4- Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills	Number of Trainees attended training	Improved knowledge on cassava production techniques and proper entrepreneurial and business management	29 Farmers trained

	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training	Number Participants attended the training.	Improved knowledge on cassava production techniques and proper entrepreneurial and business management	171 Farmers (Head of households) trained
To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) for 99% by March 2016.	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms.	Number of hectors of uprooted.	The cassavas' stem diseases destroyed.	50ha infected cassava stems uprooted.
	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.	Number of bundle stem brought.	Improved and uninfected kiroba cassava stems.	350 cassava stems' bundles Sent to Matanzi village.
Raise cultivated area from less than 1ha to 2 ha per household by January 2016.	1-1 ha planted cassava	1- Preparation and Planting of cassava to farm classroom.	Number of hectors planted	Improved cassava kiroba stem	1 ha planted
	2- 110ha hollow out	2- Preparation of farm plot.	Number of hectors of cultivated	practice effectively skills and knowledge on cassava production	110ha hollow out
	3- 110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots	Number of hectors planted	practice effectively skills and knowledge on cassava production	110ha planted

Impart cassava best practice to Heads of households and reliable to the Market by June 2016	1- 1,650 tons harvested	1- Harvesting of cassava (Matanzi village acquires cassava for processing.)	Number tons Harvested	practice effectively skills and knowledge on cassava production	Tons of cassava harvested, Increased of income
	2- 5People participated	2- Conducting Project Monitoring	Number of Monitoring conducted,	Positive responses	Implementation follow working plan
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation	Number of Evaluation conducted,	Positive responses	Implementation follow working plan and new thinking developed

5.4 Project Sustainability

Project sustainability is the capacity of a project to continue functioning, supported by its own resource (human, material and financial) even when external source of funding have ended. It is commonly known as a state whereby the project functions will totally depend on its own resources. However, it is very important to the Organization CBO/NGO to develop its own definition of sustainability, the links between organization's own contexts, focus, and the state of affairs.

5.4.1 Institutional Sustainability

The sustainability of the project is likely to be sustainable since human resource (NGO's members, Matanzi farmers' members, project staff, extension staff and other stakeholders) are readily available towards project implementation. More over the beneficiaries have agreed to contribute 20% of their income after sold cassava, which will be used for buy material next season. Beneficiaries also plan to establish SACCOS.

Capacity bulging done on improved cassava production techniques entrepreneurial and business management skills which help beneficiaries to improve production as well as to be committed of what they are doing being the case project sustainability. In view of that it is expected that the project will get full support of the Community members bearing in mind that they are the primary beneficiaries of project. In addition Community participation in Identifying, planning, implementation, Monitoring and Evaluation is the key issues that create sense of ownership that leads to sustainability of the project.

5.4.2 Financial /Economic Sustainability

The project started by support from Bill Gate Foundation where donated Tsh. 64,157,000/= and the Village members themselves where contributed Tsh 9,280,000/= as the work force contribution. Through collaboration with other development partners such as Small and medium enterprise (SMEs) Coast branch, SIDO Coast branch and NAMAINGO business agency they encourage and insist the Matanzi village Cassava producers, to process TBS and TFDA permit that will allow the products to win the National and International market. Therefore having such qualifications the project will be financially sustainable since it will be in business with local market, National and International levels.

5.3.3 Political Sustainability

The Improved cassava production project is directly supporting the Tanzania Agricultural Policy, the Nation Strategy for growth and Reduction of Poverty III. That being a case, the local leaders at village level, Councillors, Executive Officers at ward level and District Council chairperson and District Executive Director are in favours of the project. Efforts done by various stakeholders, development partners to support the project has created good environment between local government and community members.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This conclusion and recommendation gives a very brief summary of the whole project from Participatory Needs Assessment, Problem identification, Literature review, Project implementation to Participatory Monitoring, Participatory Evaluation and Sustainability

This chapter also shows the summary and the way forward towards the project being under taken by Tambani Rural Community Development Fund (TARUCODEF) at Matanzi Village, Mkuranga District, and Coast Region.

6.2 Conclusion

The Improved Cassava production project for improving Matanzi Community livelihood is directly supporting the Tanzania Agricultural Policy, the National Strategy for growth and Reduction of Poverty III. Community dwellers in Matanzi village with the assistance of CED student conducted CNA exercise, which showed that there are many opportunities and possibilities to support farmers, hence bringing sustainable economic development. Findings by participatory assessment showed that although cassava farmers keeping cassava on cultivation but the rate of poverty is still high due to low level cassava production. Findings from key informants, focus group discussion show that there are many contributing factors to low cassava production. These include poor agriculture practices, small farms size used, Cassava

virus diseases, and poor knowledge in entrepreneurship skills. The assessment was carried by using participatory methodologies such as Focused Group Discussions, Interview and Observations. Research tools used are Questions, Discussion Guide, and Interview guide. The findings of community needs assessment created a base for identification of problems facing Matanzi Village Community. This information is very important in setting grounds for a successful CED project planning, implementation, management and sustainability.

Community needs prioritization was conducted through Pair wise ranking. Five priority needs were noted as follows; Improved agriculture production to address the income poverty was ranked as the first, followed by Food security; Access to clean and safe water; Good health and lastly was Environmental protection

From the literature review it was learned that in some African countries, cassava is being more and more perceived not only as a food security crop, but also as a raw material for various types of industries. Cassava can be converted into a large number of products ranging from traditional and novel food products, to livestock feeds, ethanol and starch and its numerous derivatives.

However, in Tanzania cassava is still perceived as a food security crop rather than a raw material for other industries. Cassava contributes to an average of 15% in the national food production basket and is second to maize, which is the leading staple food crop for many Tanzanians (Mtambo, 2007). Moreover, for countries where majority of the people still live below the poverty line as Tanzania (NBS, 2012), cassava could be used to bridge the income poverty gap.

The reasons which guide the choice of the Project are findings of community needs assessment and result of Community needs prioritization where low agricultural production to address the income poverty was ranked as the first. However as per community needs assessment findings about 70 percent of Matanzi community engaged in farming, as a major source of income while 60 percent cultivate cassava. Moreover, for countries where majority of the people still live below the poverty line as Tanzania (NBS 2012), cassava could be used to bridge the income gaps. Therefore the project chosen is improving Community livelihoods through improved Cassava production.

Actual execution of the project started in July 2015 by the CED Student in collaboration with target group Farmers (Head of Households) and TARUCODEF Members having prepared the process as it can be seen in the Project Plan. The Project implementation was done base on four aspects, which is sensitization and training to 55 head of households on improved cassava production techniques, entrepreneurial and business skills, To rise cultivated area from less than 1ha per household to 2 ha per household by January 2016, To control Cassava Mosaic Disease and Cassava Brown Streak Disease by March 2016 and Ensuring cassava best practice to Heads of households and reliable to the Market by the June 2016.

The project was implemented successfully, where all Project Objectives and planned activities were done accordingly except one activity that is Annual Evaluation which planned to be conducted in August 2016. The remaining activity will successful implemented due to skills obtained during training. Training to Farmers (Head of

households) on Cassava agricultural best practices and entrepreneurial and business management skills will contribute to the success of the Project as well as Contribution from stakeholders such as Mkuranga District Council and Tambani Rural Community Development Fund (TARUCODEF). The beneficiaries are expected to harvest 1,650 tons of cassava of which some will be reserved for home consumption and others will be sold to Beta Cassava Processing Company Ltd and Dar es Salaam town.

Monitoring was conducted to every second week of the second month basing on monitoring method, tools developed and verifiable indicators. Three participatory methods were applied in monitoring the project implementation. These are structured interviews, direct observation, Focus Group Discussion. Verifiable indicators used are Number of meetings held, Number of Community Needs Assessment meetings held with the community, Number of trainings, type of training and number of participants who attended, Area cultivated, Application and quantity of manure, Cost and expenditure, and Tools and equipment received. There was no something bad which hinder working plan.

Evaluation was conducted February 2016 (mid way) and Annual Evaluation were planned to be conducted August 2016. Mid Evaluation were involved The CED student, Officers, leaders of Project Committee, Officers from Mkuranga District Council and officer from TARUCODEF. Evaluation were based to assess the extent to which the project objectives were realized, to assess the extent to which people's expectations were fulfilled and Suggest ways for improvement.

So far no unexpected occurrences which could greatly affect the ability to complete the project and achieve the overarching goal and the specific project objectives. However the project anticipates achieving specific objectives on successful completion of improved Cassava production project. Heads of households practiced cassava production techniques of which 110ha planted cassava, moreover after cassava harvesting and sold Beta Cassava Processing Company and Dar es Salaam town income will be increased as the result standard of living improved as they will afford to access basic needs.

6.3 Recommendations

According to the experiences exploited from the implementation of this project, it came to be understood that local people (community members) are eagerly engaging in the implementation of any project once things are run in transparency manner. When they are fully participated in the project from the preliminary stage, they are ready to contribute their material, human resource, and time to the project. Therefore, effective participation is a deep importance since it creates a sense of ownership of the project to all stakeholders.

I would like to recommend that, Participatory Rural Appraisal and O &OD are sound and useful methods in ensuring authentic participation of the community in question. O&OD and PRA are more less the same. O&OD uses all tools of PRA but the only difference is that; O&OD starts by identifying opportunities, which are prevailing at a particular locality (asking the community what do you have), while PRA starts by identifying problems of the concerned community (asking what is your problem).

The minor difference in these two methods is PRA create sense of dependent while O&OD create independent sense in the implementation of the project (Resources in particular). Therefore, pre caution has to be taken when PRA is employed so as to avoid dependent circumstances particularly at the preliminary stages of the project design.

Effective Participatory assessment is very significant in order to come up with authentic problem, which distress the concerned community. In conducting the assessment exercise; accurate, valid, and actual data are very essential which results to sound CNA exercise in which lead to reveal a real core problem of the community in question. Participatory assessment gives chance to the community members to know various problems pertaining in their community and find possible solutions together. Participatory assessment should be representative of the community under study in order to capture all important areas.

Moreover I would like to recommend to the government to ensure the following;

- (i) Encourage Group or individual smallholder cassava farmers and policy directives so that they can be have ability to produce in bulky quantity.
- (ii) More guidance and training on value addition technologies based on local people will boost the production of cassava crops and hence increase income.
- (iii) Enhance investment into cassava micro-processing particularly smallholder cassava farmers together with encouraging both small and large-scale processing industries.

- (iv) Create local and international market opportunities of cassava products by initiating price-competitive with their substitute products like corn starch and ethanol made from other sources

Monitoring, evaluation and sustainability are very important aspects in the project intervention. Different stakeholders should abide in participatory monitoring and evaluation which create a clear opportunity to various participants to air out their views and contribution on the issue in hand. When a person is well participated in the whole process of project design and implementation he/she become familiar of all activities in the project and devote his/her efforts to ensure the project implementation. This then will simply bring about project sustainability because they become part and parcel of the project. Therefore participatory monitoring and evaluation should be encouraged.

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APPENDICES

Appendix 1: Project Inputs

Objective	Output	Activity	2015						2016						Resources/ Inputs	Responsible people		
			Jul	Aug	Sep	Oct	Nov	Dec	Jan.	Feb	Mar	Apr	May	Jun			Jul	Aug
To sensitize and train 55 head of households on improved cassava production techniques entrepreneurial and business management skills by September 2015	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council															Personnel, Fund, Stationery	CED student, TARUCODEF Executive committee members
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.															Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Focus group discussion.
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members															Personnel, Fund, stationery and transport.	CED student, TARUCODEF members, Village community
	4- 11 Farmers facilitated	4- Capacity building on Cassava agricultural best practices and entrepreneurial and business management skills															Training Personnel, venue, fund, stationery and transport.	Facilitator, CED student, TARUCODEF members.

	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training														Personnel, Fund, Tents, Demonstration material	VAEO, CED student, 19 Farmers, CDAC members.
Raise cultivated area from less than 1 ha per household of to 2 ha per household by January 2016.	1-1 ha planted cassava	1- Preparation and Planting of cassava to farm classroom.														Fertilizes, Cassava steam.	VAEO, CED student TARUCODEF members, Head of households.
	2- 110ha hollow out	2- Preparation of farm plot (2 hectares)														Fertilizes, Tractor Cassava steam	CED student TARUCODEF members, Head of household
	3- 110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots														Cassava stem	VAEO, CED student, TARUCODEF members, Head of household
Impart cassava best practice to Heads of households and reliable to the Market by the June 2016	1- 1,650 tons harvested	1- Harvesting of cassava														Hand hoe Fund and transport.	Head of household, VAEO, CED student TARUCODEF members, Head of household.
	2-5 People participated	2- Conducting Project Monitoring														Fund, stationery and transport.	VAEO, CED student, TARUCODEF members, Head
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation														Fund, transport and stationery.	VAEO, CED student TARUCODEF members, Head of household.

To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) by 2016.	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms															Hand hoe Fund and transport	VAEO, CED student TARUCODEF members, Head of household
	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.															Machetes, Fund and transport	VAEO, CED student TARUCODEF members, Head of household

Appendix 2: Project Budget

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
To sensitize and train 55 head of households on improved cassava production techniques and business skills by September 2015.	1-19 members attend Meeting	1- To conduct Advocacy Meeting to members of Matanzi Village council	Flip Chart		2	10,000	20,000
			P. Copy papers Ream		2	10,000	20,000
			Marker Pen Box		1	8,000	8,000
			Facilitator	1	4	65,000	260,000
			Allowances				
			Driver Allowances		1	45,000	45,000
			Fuel lt.		50	2,200	110,000
	2-Five needs were mentioned and prioritized.	2- Conducting Community Needs Assessment.	Marker Pen Box		5	8,000	40,000
			Flip Chart		8	10,000	80,000
			P. Copy papers Ream		2	10,000	20,000
Facilitator			10	3	65,000	1,950,000	

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
			Allowances				
			Driver Allowances	10	1	45,000	450,000
			Fuel lt.		90	2,200	110,000
	3-779 Community members sensitised	3-To conduct one day Sensitization Meeting to Matanzi Community Members	Flip Chart		2	10,000	20,000
			P. Copy papers Ream		2	10,000	20,000
			Marker Pen Box		1	8,000	8,000
			Facilitator	1	4	65,000	260,000
			Allowances				
			Driver Allowances		1	45,000	45,000
			Fuel lt.		50	2,200	110,000
	4- 11 Farmers	4- Capacity building on Cassava agricultural best	Note Book		20	1000	20,000
			Ball pen		20	400	8,000

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
	facilitated	practices and entrepreneurial and business management skills	Flip Chart		4	10,000	40,000
			Soft drink and Snacks	3	24	800	76,800
			Driver Allowances	3	1	45,000	135,000
			Fuel lt.		70	2,200	154,000
			Facilitator Allowances	3	3	65,000	585,000
			Lunch	3	24	8000	576,000
	5-171 Participants attended the training.	5- Cassava growing procedure and demonstration training	Hiring of tractor	1	1ha	65,000	65,000
			Manure		10kg	3,500	35,000
			Kiroba Bundle		7	8000	56,000
			Facilitator Allowances	3	3	65,000	585,000
			Driver Allowances	3	1	45,000	135,000

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
			Fuel lt.		70	2,200	154,000
Raise cultivated area from less than 1 ha per household to 2 ha per household by the January 2016.	1-1 ha planted cassava	1- Preparation and Planting of cassava to Nursery/farm classroom	Hiring of tractor	1	1ha	125,000	125,000
			Manure		10kg	3,500	35,000
			Kiroba Bundle		14	4000	56,000
			Facilitator Allowances	3	3	65,000	585,000
			Driver Allowances	3	1	45,000	135,000
			Fuel lt.		70	2,200	154,000
			Remove of foliage		1ha	250,000	250,000
	2- 110ha hollow out	2- Preparation of farm plot (2 hectares)	Hiring of tractor	1	110ha	125,000	13,750,000
			Manure		500kg	3,000	1,500,000
			Remove of foliage		1ha	250,000	250,000
Distribution of			2	1	45,000	90,000	

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
			Kiroba				
			Fuel for distribution		100	2,200	220,000
			Allowance for Officer	7	10	45,000	3,150,000
	3-110ha planted cassava	3- Planting of Kiroba cassava stick stem into the farm Plots	Sowing cost		110ha	50,000	5,500,000
			Weeding		110ha	125,000	13,750,000
To control Cassava Mosaic Disease (CMD) and Cassava Brown Streak Disease (CBSD) by 2016.	1-50ha cleared ready for planting.	1-To uproot the disease infected cassava stems from the farms	Uprooting cost		50ha	125,000	6,875,000
			Disposing cost		50ha	50,000	2,500,000
	2-350 cassava stems' bundles Sent to Matanzi village.	2-Sending un infected disease cassava stems' bundles from Mkuranga's nursery.	Collecting cassava stems cost.		350 bundles	1000	350,000
			Transportation cost		350 bundles	2000	700,000

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
			Fuel litre	1	70	2200	154,000
			Driver allowance	1	1	45,000	45,000
			Officers Allowance	1	3	65,000	195,000
Impart cassava best practice to Heads of households and reliable to the Market by June 2016	1- 1,650 tons harvested	1- Harvesting of cassava.	Harvesting cost		110ha	40,000	4,400,000
			Transportation cost		800	20,000	16,000,000
	2-5 People participated	2- Conducting Project Monitoring	CED student, TARUCODEF member, VAEO,	7	3	65,000	1,005,000
			Driver Allowances	7	1	45,000	210,000
			Fuel lt.		70	2,200	154,000
			3 members of village council and	7	4	20,000	315,000

Objective	Output	Activity	Resources needed	Days	Quantity	Unity price	Total TZS
			Chairperson of Project committee.				
	3- 5 People participated	3- Conducting Mid and Annual Project Evaluation	CED student, TARUCODEF members, VAEO,	3	3	65,000	585,000
			Driver Allowances	3	1	45,000	135,000
			Fuel lt.		70	2,200	154,000
GRAND TOTAL							64,157,000

Appendix 3: Semi Structured Questionnaire

Q 1: Gender (1) Male..... (2) Female.....

Q 2: Education level of the respondent.

- (1) Primary
- (2) Secondary
- (3) Technical/ Vocation
- (4) College.....
- (5) Higher Education

Q 3: Major community needs in the village?

Q 4: What is your average monthly income?

- (1) Less than Tshs.39, 999.....
- (2) Between Tshs 40,000 and 79,000.....
- (3) Between Tshs 80,000 and 100,000.....
- (4) More than Tshs 100,000.....

Q 5: Major sources of livelihood.

- (1) Farming and Business.....
- (2) Farming.....
- (3) Livestock keeping.....
- 4) Business.....
- (5) Employment.....

Q 6: If farming what type of crop are to be improved by community in the village? If others, mention.

Q. 7: What are the areas that household grow

Q. 8: Mention the major use of crop as mentioned on question 6 (depend with question 6)

Q.9: How to improve the identified situation.

THANK YOU

