

**PROMOTION OF APPLES PRODUCTION BY INSTALLING APPLES
PROCESSING MACHINE AT INIHO VILLAGE IN MAKETE**

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

SUPERVISOR'S CERTIFICATION

The undersigned certifies that I have read and hereby recommend for the acceptance by the Open University of Tanzania (OUT) a project entitled, Promotion of apples production by Installing Apples Processing Machine at Iniho Village in Makete, in partial fulfilment of the requirements for the degree of Master of Community Economic Development of the Open University of Tanzania.

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(Supervisor)

.....

Signature

.....

Date

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DECLARATION

I Mahenge Sinene Burton declare that this CED project report 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.

.....

Signature

.....

Date

DEDICATION

This work is dedicated to Hanifa Ngailo (my wife), Baraka Sinene, Fadhili Sinene and Raphael Sinene (my children) for the love and tolerance they showed to me all the time I was on studying, they really missed my care and support.

ACKNOWLEDGEMENTS

Accomplishment of this work is the result of many people whom I cannot afford to mention them in this peace of paper, let them know that their invaluable contribution has finally come up with this work. I appreciate the Open University leadership to launch this wonderful course which is more practical in the current world. The course is more practical than theory and based on understanding rather than creaming for tests and examinations.

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ABSTRACT

A dissertation on Promotion of apples production by installing Apples processing machine at Iniho Village in Makete is a result of the Community Needs Assessments (CNA) conducted at Iniho village in Makete district. Prior to project intervention, the CNA exercise was conducted which came up with the community needs and problems. The main problem unveiled with CNA exercise which faces majority community members in Iniho Village was the prevalence of income poverty. Among other activities Iniho community members do engage in fruits production as their food and cash crop which contribute to their household income for income poverty reduction. However, apples/fruits producers have been facing the problem of their fruits to be rotten and unreliable market. Under this study there were four objectives which set to facilitate solving the problem, these are: Sensitize 250 Iniho community members on apples processing project by 2013, Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013, Facilitate accessibility of Fruits processing equipment from DED Makete and other stakeholders by 2013 and to ensure 60% of apples producers access reliable market by April 2013. Three objectives have been achieved except one objective which was to ensure reliable market which will be met under the full operation of the project. The installation of the processing machine has been successful implemented. Other activities have not been executed due to different factors including; delay access fruits processing machine and extensive rain took place between December and April which lead to destruction of many fruits. However, the project will be inaugurated between November and December 2013 when the new season for fruits starts.

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LIST OF ABBREVIATIONS/ACRONYMS

BFAP	Bureau for Food and Agricultural Policy
DALDO	District Agriculture and Livestock Development Officer
DED	District Executive Officer
DPLO	District Planning Officer
ELCT	Evangelical Lutherani church in Tanzania
FAO	Food and Agricultural Organization
HCA	Horticultural Council of Africa
HO	Host organisation
IFPP	Iniho Fruits Processing Project
MDC	Makete District Council
RP	Republic of Kenya
TAHA	Tanzania Horticultural Association
TEMDO	Tanzania Engineering and Manufacturing Design Organisation
URT	United Republic of Tanzania
VEO	Village Executive Officer
WEO	Ward Executive Officer

CHAPTER ONE

1.0 PARTICIPATORY NEEDS ASSESSMENT

1.1 Background Information

Struggling for poverty alleviation is a multi- disciplinary which needs multi-dimensional approach. According to URT (2011), Poverty for a long time has said to be rural phenomena whereby majorities are engaging in subsistence farming and are worse affected. Due to this fact agricultural diversification is one among the possible way to address the problem.

Since 2000 Tanzania development plans, Researches, Assessments, and any development program are emphasized to base on the Tanzania National Development Vision 2025 under which different strategies have been in place to ensure the welfare of Tanzanians in future. Those strategies include; United Nations Millennium Development Goals (URT (2008) which has adopted by Tanzania and the Strategy for economic Growth and Poverty Reduction (MKUKUTA).

Apples are widely cultivated fruit tree in many parts of the world. Statistics show that; “in 2000 the world produced 47.6 tons of apples” (Wepukhulu, 2005:1). In 2011 the production Worldwide increased to about 93 million tons of apples (FAO, 2011:1-7). This progress in apple production is a result of their usefulness to the majority. Producers apart from using it as food crop it is also used as a cash crop for it help them to earn some money which in turn can contribute in household income poverty reduction. Further more apples are rich in vitamins, calcium, phosphorus, potassium, and organic acids. Apart from its dietary value, apple can also be used to

enhance soil conservation particularly in the highlands. According to FAO (2005) the production of apples in the 25 European Union countries in 2005 was 11.96 million tones. This show how different regions in the World engage in apples production. Apples production is also enhanced in different African countries and it has been contributing at large in the peoples income earning. Horticulture based on fruit tree growing is on the increase in the well-watered highlands of East Afriafican highlands, especially in Kenya, Uganda, and Tanzania. In Ethiopia, some fruits are being grown in the southern and south-western highlands.

Apples production in Makete has been emphasized since 2000 when new apples breed were introduce. Few farmers adopted early in the same year while others were slowly adopting it. Having seen the success from the precede farmers, currently, many people are engaging in the production of this crop. Wards which adopted early the production of apples were Kipagalo, Iniho and Bulongwa (Kusenge and Haule, 2011:1-5).

With the increased endeavour in poverty alleviation, Makete District, in line with Pyrethrum and Sunflowers is emphasizing apple production throughout the District in all areas where apples can be grown so as to contribute in their income at household level, especially in rural areas whereby there is vast poverty prevalence.

Under the needs assessment exercise, the researcher used various methods to gather data and information from the community, these are: Interview, Focus Group Discussions (FGD), Individual key- informants, abstraction of different reports, previous research reports, and observations on the particular phenomena.

1.1.1 Iniho Village Community Profile

1.1.1.1 Administrative Structure

Iniho Village is one of 97 Villages in Makete District situated in Magoma division, at Iniho ward. Makete District is one among 4 District in Njombe Region (former Iringa Region). It is about 118 KM from Njombe Region headquarters. Iniho Village is one among 5 Villages in Iniho ward which is in Magoma division. It is located at western part of Makete District headquarters and it is 25 KM apart. The Village administration structure is Village assembly (Village government), Village Council, Hamlet. Leaders at Village level are Village chair man and the Village Executive Officer (VEO) whereby at the hamlet level the leader is the Hamlet chairperson.

1.1.1.2 Demographic Features

The Village has 241 households. According to the 2012 statistic extracted from the updated Village register as updated over time, basing on the National census of 2002, the Village has a population of 921 people whereby 431 are males and 490 are females. The population distribution in the Village is as follows; Children (0-17YRS) were 430 whereby female were 220 and males were 270. Adults who are in working force were 196 whereby 82 Males females 114 Children (0-17YRS) 430 Including 210 Male and 220 females (MDC, 2012).

1.1.1.3 Ethnicity

Ethnicity wise, the villages comprises of wamagoma, wakinga and wamahanji. The most dominant tribe in the Village is wamagoma who are the native of the area. Other tribes are immigrant from neighbouring wards due to economic activities. For the case of religious, the area is dominated with Christians and few people are pagans.

1.1.1.4 Economic Activities

The people in Iniho Village engage in different economic activities including; farming, Livestock keeping and petty business. Agriculture employs more than 98% of the population (MDC, 2008). In arable farming food crops and cash crops are cultivated by in the Village. Food crops which are cultivated are; Maize, Wheat, Millet, Sorghum, Sweet potatoes, Irish potatoes, beans. The Iniho community also engages in horticultural cultivation in which vegetables and fruits (apples, Plums, Peas and Peaches) are produced. Apples currently have been encouraged to be cultivated with majority. Apart from food crops the Iniho community engages in production of cash crops. The main cash crop cultivated is Pyrethrum. Few people are engaged in livestock keeping and petty business.

1.1.1.5 Social Stratification

The community members in Iniho Village are composed of youth, men women, children, widow, widower and the children living in danger environment. There are 7 widowers, 67 widows and 79 children living in danger environment whereby females are 41 and males are 38. Among them, 56 children are orphans in which 29 are males and 27 are females (MDC, 2012).

1.1.1.6 Organisation and Management of Day to Day Activities

The host organization is the Iniho Village Government in which Village Council have been vested the day to day activities which have been conducted on behalf of the Village government. Village government leaders are Village chair person and the Village Executive Officer (VEO) who is the secretary of the Village government.

The Village Council also is led by the Village chair person and the VEO. Village Council have enormous activities/duties, from among them are as follows;

- i. To ensure peace and harmony within the Village
- ii. To ensure that community members participate into different development activities
- iii. To ensure availability of different social services within the Village such as Education, water, health services and roads
- iv. Formulation and implementation of different plans and projects to be executed within the Village
- v. Conducting different meeting in the village
- vi. Supervision of different projects intervention within the village
- vii. Overseer of all activities undertaken by different CBOs and organization within the Village
- viii. Emphasizing formulation of different Community Based Organizations
- ix. Composing by laws and monitoring its implementation

1.1.1.7 Cultural Factors

Iniho Village community is dominated by Wamagoma tribe, few are wakinga. The main language of the community is “Kimagoma” native language but Kiswahili is mostly used because majority are familiar with it.

1.1.1.8 Education

Iniho Village has one Primary school. It has one secondary school which is build at a ward level (Mwakavuta Secondary School). Primary school and Secondary school education is emphasized in the Village. The Village have kinder garten and Pre-

Primary School which helps to keep their children and preparing children before entering standard one respectively.

1.1.1.9 Institutions in the Village

There are different institution prevailing in Iniho Village; the Village has one Primary school. The school accommodated pupils from Standard I to Standard VII with a total number of 221 pupils whereby 117 are boys and 104 are girls. On religion institutions the Village is dominated by Lutheran and Roman Catholic.

1.1.1.20 Critical Issues and Problems

The main critical issues in Iniho Village are prevalence of income poverty to many households within the majority which affect majority in different ways, HIV/AIDS prevalence which has been a threat to majority within the community. Currently, another critical issue is the presence of antagonistic power from the CCM and CHADEMA parties in which both have influence towards the community members.

1.2 Community Needs Assessment

Community Needs Assessment (CNA) is a process of identifying assets of the community and determining potential concerns that face a particular community in the respective locality. A community needs assessment in depth is a way of gathering information about a Community's opinions, needs, challenges, and assets used to determine which project(s) will meet the real needs of the community. Iniho Community Needs Assessment (CNA) was conducted adhering on this principle and its essence of conducting it at any community.

1.2.1 Objectives for Community Needs Assessment (CNA)

The intention of the Community Needs Assessment (CNA) exercise was to disclose/unveiling the needs of the community as well as their challenges thereafter find the solutions for some critical identified challenges. Assumptions on any component seem to hinder the execution of the activity to combat the identified challenges were employed.

1.2.1.1 General Objective

Promoting apples production in Makete for income poverty reduction by installing processing Machine at Iniho Village

1.2.1.2 Specific Objectives

Basically the community Needs Assessment intends to fulfill the following specific objectives;

- i. To describe the Demographic of the respondents in the CNA
- ii. To examine income poverty status in Iniho Village
- iii. Identify income generating activities and their priority in the community
- iv. To assess perception of the community on merits and demerits of apples production

1.2.2 Research Questions

The research questions and the question in the questionnaire were set to fulfill the envisaged target of improving the household income poverty reduction which in turn will contribute the livelihood of the people in question. The household income poverty reduction focused on promoting together with other crops, apples

production. Other areas concentrated were; accessibility of essential human needs, food availability and accessibility and accessibility of Health services. Another component taken into consideration in the CNA was the employment status/distribution to the Iniho Village community members. The study questions in which the questionnaire was depicted were as follows;

- i).What is the location and makeup of the Iniho Community?
- ii).What is the quality of Iniho Community?
- ii).How does the Iniho community define the poverty in their own ways?
- iii).Do the Iniho community aware of the poverty classification?
- iv).What are the potential social cultural activities to the Iniho communities?
- v). To what extent do the Iniho community access their basic needs?
- vi).What is the economic activities undertaken by Iniho communities?
- vii). what are the income poverty reduction opportunities to the Iniho communities and their priorities?
- viii). How do the Iniho community perceive on apples production within their community?
- ix). What are the efforts by Iniho community in apples fruits production?
- x). To what extent do the people at Iniho community are aware of the apples potentials in their income earning?

1.2.3 CNA Research Methodology

The CNA area was in Makete District in Iniho ward. The area selected because it is one among the areas which have responded positively the Makete District campaign on apples production as one among the crops which will help the Makete community

to increase their income hence help to reduce household income poverty to majority. Some of the community members have been producing apples for more than 5 years since they commenced to the time of the CNA.

1.2.3.1 Research Design

Provided the nature of the study was explanatory study, therefore, the cross sectional design was adapted as the ideal design. The reason behind this selection was that, the design allow and helped the researcher to collect various data at single point in time and data collected at once from various respondents (Jamal, 2008). Apart from been economic way for the researcher it also evaded the tediousness approach to the respondents because they responded once for all. Both qualitative and quantitative data collected in which both secondary and primary data collected from relevant sources. Primary data collected directly from the apples producers, and apples traders.

The sampling frame was a total number of households in Iniho Village focusing on the households engaging in the apples production. The total number of people who were engaging in apples production in different categories was 40. Therefore, the sampling frame under this study was 40 households. The sampling unit in this study was the individual head of household. Key informants included were District Agricultural and Livestock officer, WEO and VEO. The sample size (key informants inclusive) selected and interviewed was 30 which is 75% of the frame. The respondent's breakdown is as shown in Table 1.

The probability sampling (simple random sampling and systematic sampling) was used in selection of the respondents, whereby it facilitates the researcher not to be

biased when selecting the respondents at household level. However non probability sampling (Purposive sampling) was also used to select key informants and some of the respondents who have great number of apples trees.

Table 1: Respondents Distribution

S/N	CATEGORY	PLACE	POPULATION	SAMPLE SIZE	
				Number	%
1	DALDO	MDC	1	1	100
2	WEO	Iniho	1	1	100
3	VEO	Iniho	1	1	100
4	Apple producers	Iniho Village	40	30	75
5	Apples traders	MDC	2	2	100
	Total		45	35	

1.2.3.3 Data Collection Methods

In this study both secondary and primary data collected. Distinction made in data collection methods and tools between secondary and primary data.

1.2.3.3.1 Secondary Data

These are readily available data/information in the particular/ intended office. These data collected through documentary review method, in which, the abstract from different reports, books, pamphlets, and Journals executed.

1.2.3.3.2 Primary Data

These are the data collected by the researcher directly from the respondents be selected through the determined sampling procedures. Interviews guided by the tested questionnaires have been used in soliciting and collecting primary data. The following methods and tools used in the exercise;

1.2.3.3.3 Questionnaire Method

This method effectively used in primary data collection. The researcher solicited the in-depth data/information from the respective respondents by using semi-structured and unstructured questionnaires in extracting data from the respondents through series of designed questions. The tool was useful in collecting data from the respective officers at the District, ward, and village level as well as to the household respondents. However, Interview method used in soliciting data from the key informants in which data given was written down. The text was divided into themes and sub themes to simplify analysis task.

1.2.3.3.4 Focus Group Discussion

This method was very useful in collecting data/Information by using small groups of 9 participants. All groups were involved in the exercise (women and youths in particular). Under FGD participants get chance to discuss on various issues pertaining in their villages and strategies to overcome income poverty in their community. Discussion facilitated by the researcher by using arranged checklist/guiding questions which facilitated the research to arrange and conduct the discussion in logical order. However, FGDs helped in verifying (triangulation process) data/information collected from other methods. The tool used in analyzing

focus group data was the content analysis. During discussion the responses from different people was written down thereafter grouped into themes and sub themes for analysis.

1.2.3.3.5 Observation Method

Under this method, the primary data collected by looking or observing physically on the phenomena under study. In this case, fields, planted apple fruit tree, apples nurseries, and physical development activities prevailing in the specific locality observed and photographed.

1.2.3.4 Data Analysis Method

Data collected was manually edited and coded prior to be entered into SPSS for analysis. Having edited data processed and analysed by computer using SPSS 16 software. Under analysis; descriptive statistics and frequencies computed. Focus Group Discussion (FGD) and observation methods in this study were used as a triangulation to verify or check the preciseness of the data collected from questionnaires.

1.3 Community Needs Assessment Findings

1.3.1 Description of the Iniho Community

The findings which are discussed under this chapter have based on the respondents interviewed. The CNA at Iniho Village involved 30 respondents who were engaging in apples production which is 75% of apples producers. Distribution of respondents in different components is as indicated in Table 2.

Table 2: Characteristics of Respondents

Characteristics	Frequency	%
Sex		
Male	27	90.0
Female	3	10.0
Total	30	100
Age of the Respondent		
20-30	1	3.3
31-40	9	30.0
41-50	8	26.7
51-60	7	23.3
65+	5	16.7
Total	30	100.0
Education		
Adult education	3	10.0
Primary education	20	66.7
Form four Level	5	16.7
Tertiary	2	6.7
Total	30	100.0
Marital status		
Single	3	10.0
Married	26	86.7
Widower	1	3.3
Divorced	-	0.0
Total	30	100
Employment/Income generating activities		
Peasant	26	86.7
Employed	3	10.0
Business man	1	3.3
Total	30	100.0

1.3.1.1. Distribution of Respondents

Table 2 indicates that 30% of the respondents aged between 31- 40 while those between 51- 60 have been 23.3%. This imply that majority of the respondents who engage in fruits production are youth hence ensured working force for a considerable long time. On the other hand, female's participation in apples production is low

(10%) which imply that the activity is mostly done by males. Education wise only 6.7% are tertiary level, 16.7% were form four level while 66.7 accounts for standard Seven as it is well indicated in Table 2. Majority of the respondents were married which also ensure the sustainability to the apples production activity for they are likely to stay at the area for a considerable time. Genders wise majority of the respondents (90%) were males as indicated in Table 2. This shows that most of the head of households of the intended population were males. Apples production activity includes both employees and peasants, though employees were at low percentage (10%).

1.3.1.2 Number of People at the Household

The interest of knowing average number of the people at one household is to know the burden of caring the member of the household. This then helps to plan on poverty alleviation at household level. According to Fig. 1 majority of the households have members 4 to 5 were 43.3% of the respondents. The house hold with only one member is only 3.3% while the household with above 5 members were 16.7%. The number of respondents revealed the need for various income generating activities to suffice the needs of all members in the household.

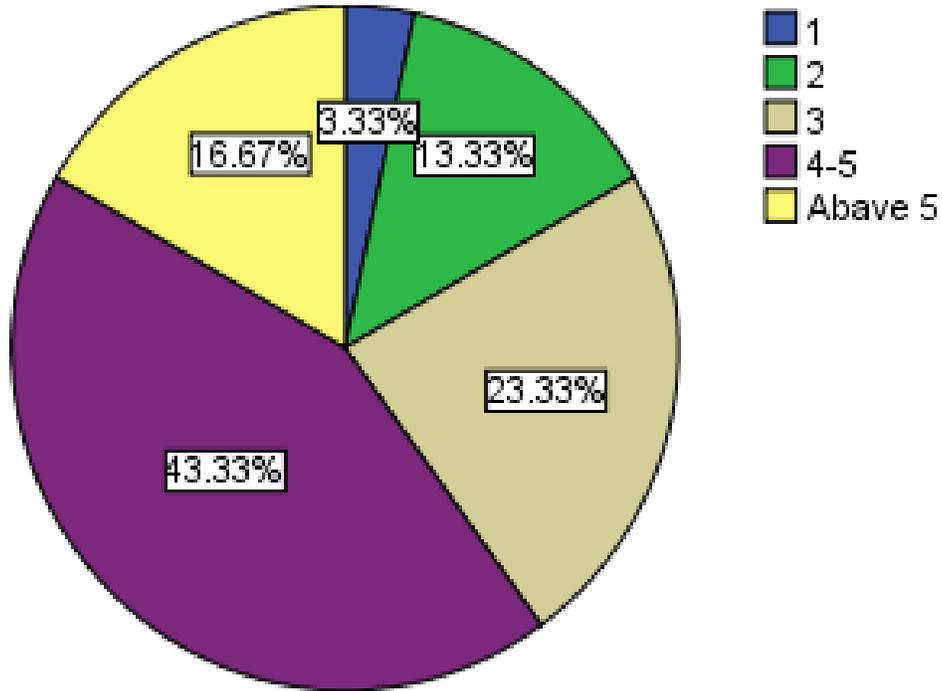


Figure 1: Number of Person in the Household

1.3.2 To Assess the Income Poverty Status in Iniho Village

1.3.2.1 Local Definition of Poverty by Iniho People

The prevalence of income poverty in any community has said to exacerbate any other type of poverty at any level. The Iniho community was aware of the general concept of poverty and they define poverty in different ways. Table 3 show that, 66.7% of the respondents, define Poverty as a person who has no access to basic needs, such as; food, shelter, health and education. On the other hand 3.3% of the respondent defined poverty as a situation of not possessing any shop while 10% defined that poverty associated with a person who has no children.

Table 3: Definition of Poverty by Local People

Category	Frequency	Percent	Valid Percent	Cumulative Percent
A person without children	3	10.0	10.0	10.0
No access to basic needs; housing, food, shelter, health and education	20	66.7	66.7	76.7
Not possessing Cattle	1	3.3	3.3	80.0
Not possessing any shop	1	3.3	3.3	83.3
Do not know	5	16.7	16.7	100.0
Total	30	100.0	100.0	

1.3.2.2 Respondents Awareness on Poverty Classification

Poverty is of different categories and types. Figure 2 shows that majority of the respondents (83%) are aware of the classification of poverty. This show that majority of the community at Iniho Village were aware of the classification of poverty. Poverty is of 2 categories namely; Income Poverty and non Income Poverty. The category of poverty which prevails at Iniho Village is Income poverty. Table 4 indicates that the category of poverty existing in Iniho Village is Income Poverty. This have depicted by 80% of the respondents. This then calls for the need to establish different income generating activities which will help the community members to earn income hence income poverty at household level reduced.

If the respondent is aware of poverty classification

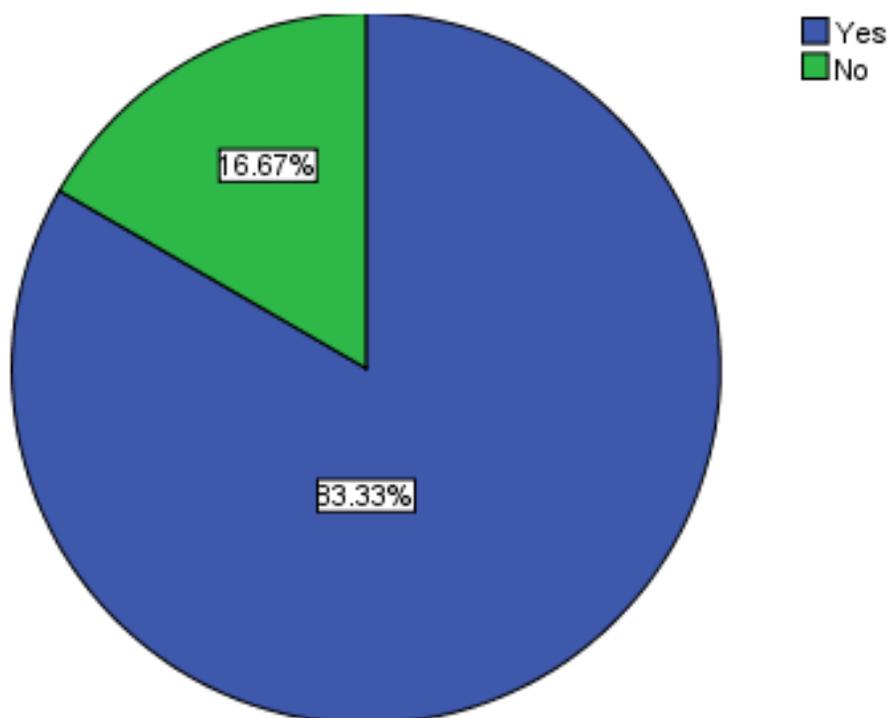


Figure 2: Awareness of the Respondents on Poverty Classification

Table 4: Categories of Poverty which Prevails in the Respective Village

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Income Poverty	24	80.0	80.0	80.0
Non income Poverty	6	20.0	20.0	100.0
Total	30	100.0	100.0	

1.3.2.3 Basic Needs Accessibility

Majority of the respondents claimed that “they were not able to access their basic needs at their household’s level” (63.3%), while only 36.7% were accessing their basic needs as it is indicated in Table 5. This implies that majority of Iniho Village

communities were not accessing their basic needs throughout the year according to their economic status prevailing at their area. Despite engaging into different activities such crop production still they were facing the problem of inadequate resources to meet their basic needs. Those basic needs include, housing, education, food and clothing.

Table 5: Family Basic Needs Accessibility Throughout the Year

Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	36.7	36.7	36.7
	No	19	63.3	63.3	100.0
Total		30	100.0	100.0	

1.3.2.4 Number of Meals per Day at Household Level

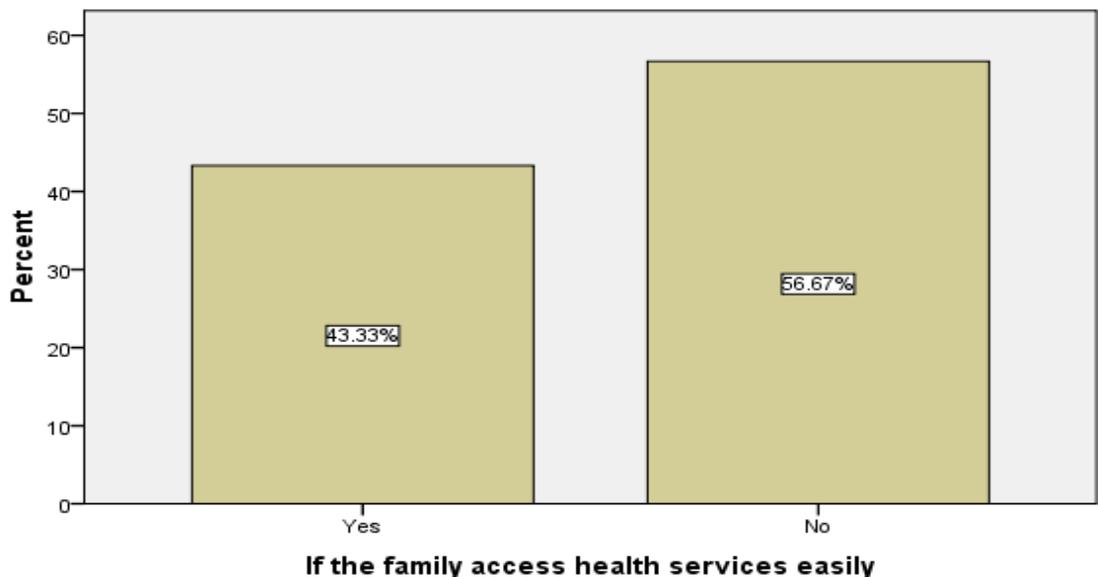
Table 6 show that, 50% of the respondent get only two meals per day while only 3.3% get more than 3 (three) meals per day. 43.3% of the respondents get three meals per day which is a standard meal. The information suggests that Iniho population were still in food poverty status. Food poverty is among the waste kind of poverty because it leads a person to starve and loose energy which results to a concerned person not to engage in any productive activity. Data in Table 6 show that 50% of the community in Iniho Village were facing the problem of inadequate food for their families. This might be contributed by using their produced food to be sold to get money for other basic needs such health, education and clothing costs. This then calls for the need to establish or expand different cash crops which will carter the gap.

Table 6: Number of Meals for a Family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	15	50.0	50.0	50.0
	3	13	43.3	43.3	93.3
	4	1	3.3	3.3	96.7
	More than 4	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

1.3.2.5 Health Accessibility

At Iniho Village there is no any health facility for the community members to access health services. Community members access health services from near Private Hospital (Bulongwa) and sometimes at Ipelele health centre which are at Bulongwa ward (10km) and Ipelele Ward about 15km. the respondents argued that; “We have no enough income to afford unexpected health problems”. Figure 3 indicates that 56.7% were not able to access health services due to inadequate income among the community members.

**Figure 3: Accessibility of Health Service**

1.3.2.6 Cultural Activities Hindering Development Activities

Different cultural activities have been hindering the performance of different activities to the community members of Iniho Village. “The issue of funeral/burial ceremonies as a cultural factor has said to be the main single great factor intervened development activities”. This is due to the fact that, once it occurs the whole community is not allowed to go to their normal works/activities instead participating at the event as indicated on Figure 4. Experience shows that, one mourning ceremony at Iniho Village takes between 3 to 6 days consecutively. Therefore people do not work for all such days but still they need to eat. 96.3% ranked the event to affect their activities.

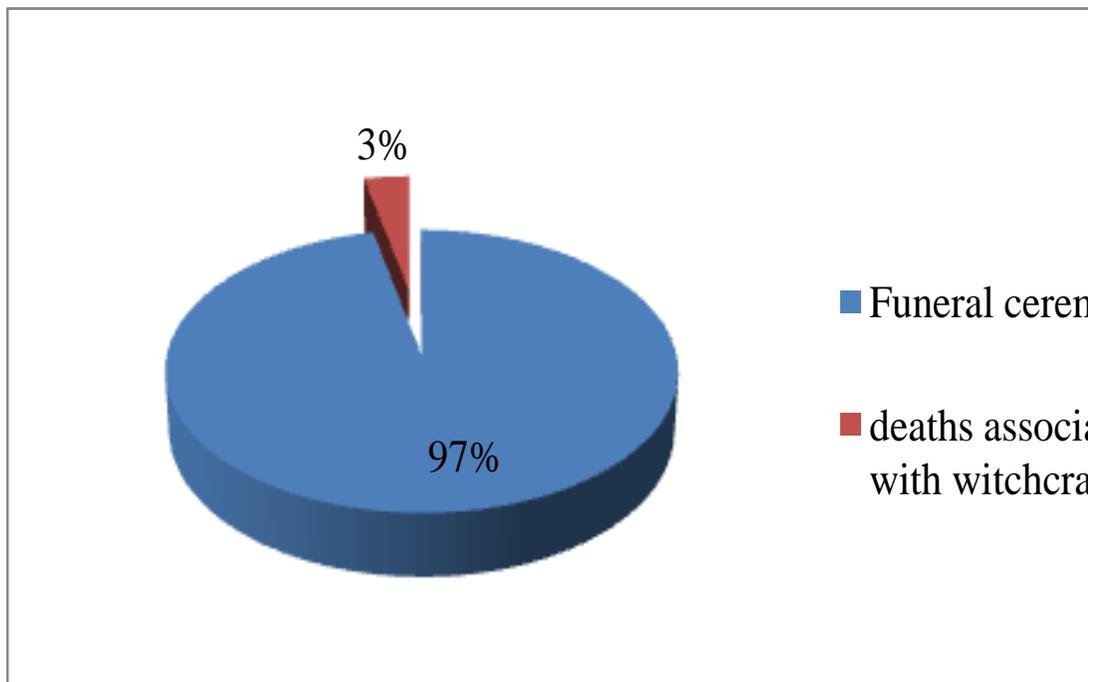


Figure 4: Cultural Activities Prevailing at Iniho Village

1.3.3 To Identify Income Generating Activities and Their Priority in the Community

1.3.3.1 Different income Generating Activities in Iniho Village

Iniho community members are engaging into different income generating activities such as small enterprises, cash crops, and food crops. For the case of cash crops the Village engages in Pyrethrum production and fruits production such as Plums, Peaches Peas, and Apples which emphasized in Makete District. Though Pyrethrum is currently resumed in the village, apples production is one among the lucrative fruits within the area and it is getting popular and the number of apples is increasing.

1.3.3.2 Category of Apples Production

There are different categories of apples production which are; apples seedling production which involve few people who were trained on how to produce seedlings. They produce seedlings by budding process to get South African variety. Another category in apples production is planting apples trees which are currently sensitized to be practiced by many people. This imply that in the coming days the area will have pretty apples due to increased number of producers. Buying and selling apples is one of the category which is practiced by few people within and from outside Iniho Village. 76.7% of the respondents were engaged in planting apples tree category, while only 1% engaged in buying and selling apple as it is shown in Table 7.

Table 7: Categories of Apples Production

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Seedling production	1	3.3	3.3	3.3
Planting apples trees	23	76.7	76.7	80.0
Buying and Selling apples fruits	1	3.3	3.3	83.3
Seedling and Planting apples trees	5	16.7	16.7	100.0
Total	30	100.0	100.0	

1.3.3.3 Apples Fruits trees Planted

According to Table 8, 26.7% have 51-100 apples tree, 16.7% have 101-200. Those who have above 1,000 are 3.3% while those who have apples trees above 3,000 are 3.3%. These data show that majority of the Iniho community have apples trees from 51 to 100. If well kept can help the community to earn more money. Provided some household practiced apples production exercise it will be so easier for promoting apples production within the area since the market will be ensured. Other people who have many apples trees such between 101 to 200, above 1,000 and those with 3,000 and above will be used as model in apples production promotion. Those with apples trees more than 3,000 will be motivated by market accessibility. This can simply be done by introduction of various products from apples fruits.

Table 8: Number of Apples Trees a Respondents have

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-50	5	16.7	16.7	16.7
	51-100	8	26.7	26.7	43.3
	101-200	5	16.7	16.7	60.0
	201-300	3	10.0	10.0	70.0
	301-400	3	10.0	10.0	80.0
	401-500	3	10.0	10.0	90.0
	Above 500	1	3.3	3.3	93.3
	above 1000	1	3.3	3.3	96.7
	Above 3000	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

1.3.3.4. Earning from Apples

Figure 5 indicates that 13.3% of the community members on Iniho Village earned between Tsh. 201,000.00 and 500,000.00. Those who earn above Tsh. 500,000.00 were also 13.3% of apples producers. Among apples producers 40% not started picking their fruits from their planted tree and whose fruits rotten. This show that apples production is likely in contribute income earning at household level for those who engage in it. This income could have been increased if accessible and sustainable market could have been ensured. Good plan for apples production promotion can help to increase income to the community members at Iniho Village.

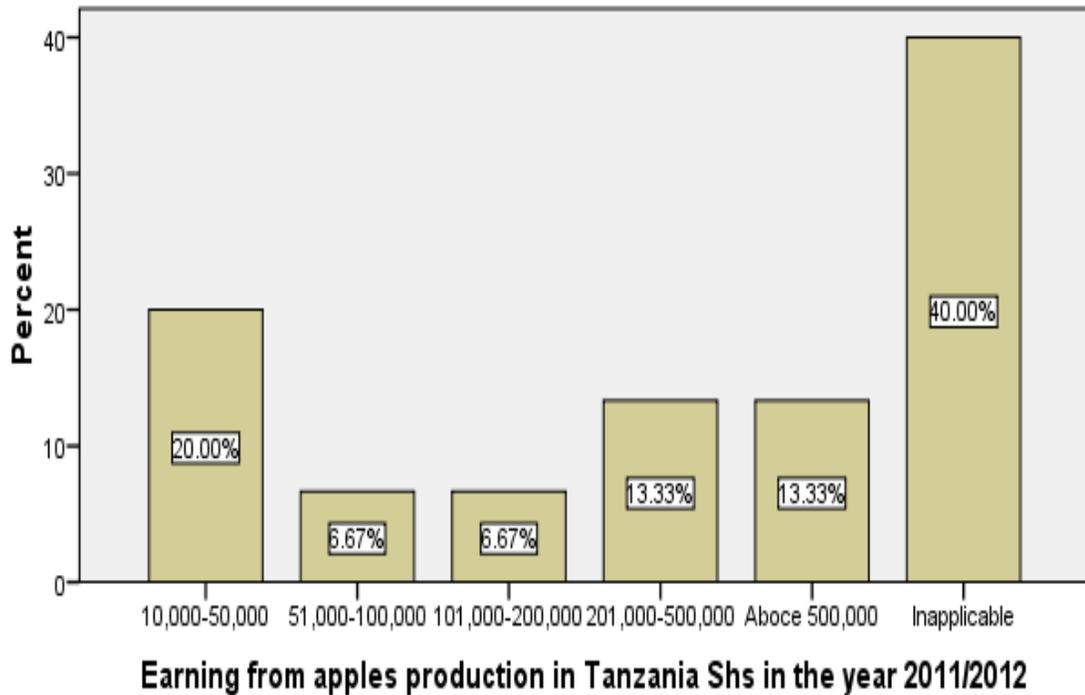


Figure 5: Earning from Apples Production in TSHS in 2011/12

1.3.3.5 Apples Seedlings Nurseries

Different people have established apples seedling nurseries within the Village (Iniho Village). Therefore apples production expansion can be simply implemented by accessing seedlings within the Village. Seedlings which are produced within the Village normally are obtainable in affordable price because they need not to transport from far. However, by being familiar with seedling producers apples producers can get seedlings in credit and pay them after they got money in case at the time they need they found themselves not possessing enough money.

1.3.3.6 Period in Producing Apples

Apples production at Iniho Village started to be exercise not very long. Previously the community members were producing indigenous apples which were just used at

their household level in recent years different varieties of apples have been introduced and the community members have preferred South African type to others. During the CNA exercise majority found to engage in this business within 2 years while others have produced for 5 years. Table 9 indicate that, the respondents (apples producers) who have been producing apples for 2 to 5 years were 53% while those who have been producing apples for more than 5 years were 47%. Those who have produced apples fruits for more than 5 years were picking and selling their fruits.

Table 9: Number of Years in Apples Production

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2-5	16	53.3	53.3	53.3
above 5	14	46.7	46.7	100.0
Total	30	100.0	100.0	

1.3.3.7 Attitude of the Community Members on Usefulness of Apples production

The attitudes of Majority of the Iniho community members acknowledge that apples production is useful and ideal activity for income generation at their household. This is justified by 73.3% of the respondents who showed that apples production is useful in income earning and it is among the lucrative crop for the Iniho community. Table 10 shows the respondent's opinion on apples potentials. These attitudes therefore pave the way for apples production promotion in the Village. The usefulness of apples in the community is on income generation and food for their good health. It is

therefore the task of Makete District Council in collaboration with other stakeholders to look on the useful way to promote apples production by ensuring sustainability of the product, market accessibility in particular.

Table 10: Opinion of the Respondents on the Apples Potentials

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid It is very useful	8	26.7	26.7	26.7
Useful	22	73.3	73.3	100.0
Total	30	100.0	100.0	

1.3.3.8 Opinion by the Respondent on Apples Production Promotion

Most of the respondents showed their concern of Installation of fruits processing machine as the way to promote apples at Iniho Village. 80% of the respondents aired out their opinion that installation of processing machine can help them to promote apples production. This is due to the fact that those apples used to be rotten will be rescued by making different product of apples such as juice and wine. By processing apples into juice or wine it create environment for the product to be kept for a considerable long time. Figure 6 shows the respondents opinion on the usefulness of apples production promotion.

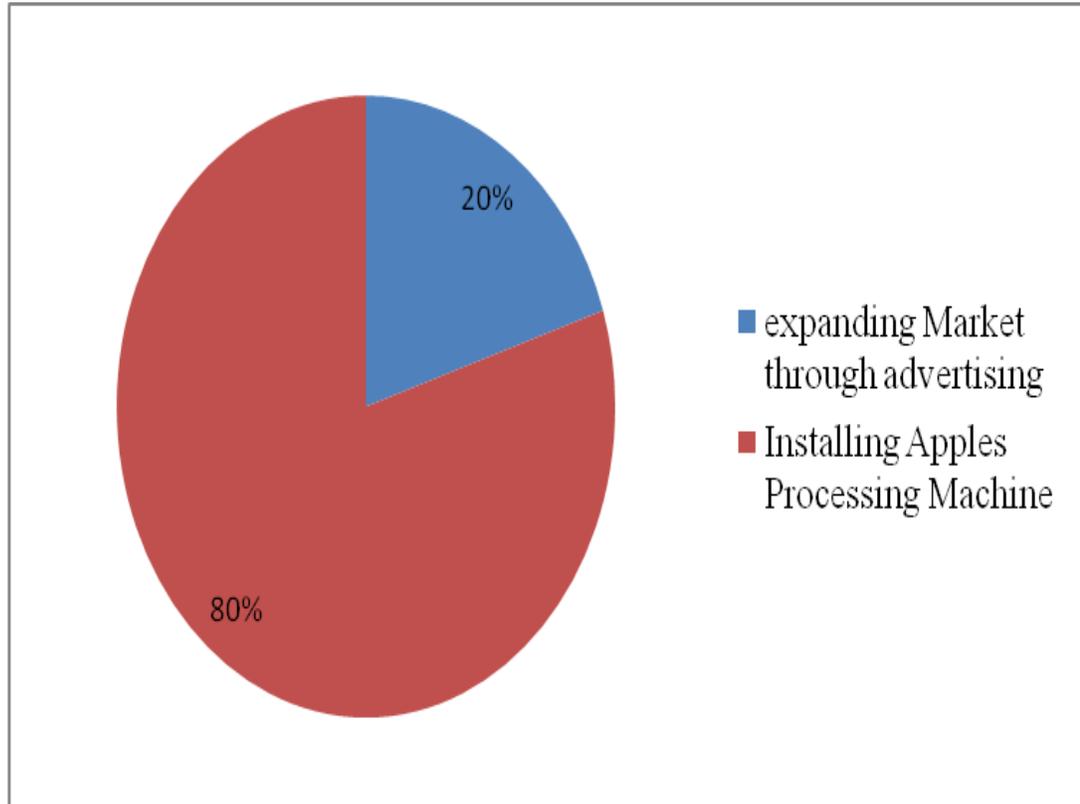


Figure 6: Opinion by respondents on Apples Production Promotion:

1.3.3.9 Other Types of Fruits Produced

Apart from apples Iniho community produces other types of fruits which contribute to their household income earning. From among them are Plums, Peaches, and Peas. Among the fruits producers; some produces all three mentioned types while others produces just two types and others only one type. The community members who produce all three types are 63.3%, while those who produce Plums are 6.7% and for those who produce Peas with Peaches are just 3.3% of the population as represented by the respondents as it is shown on Figure 7.

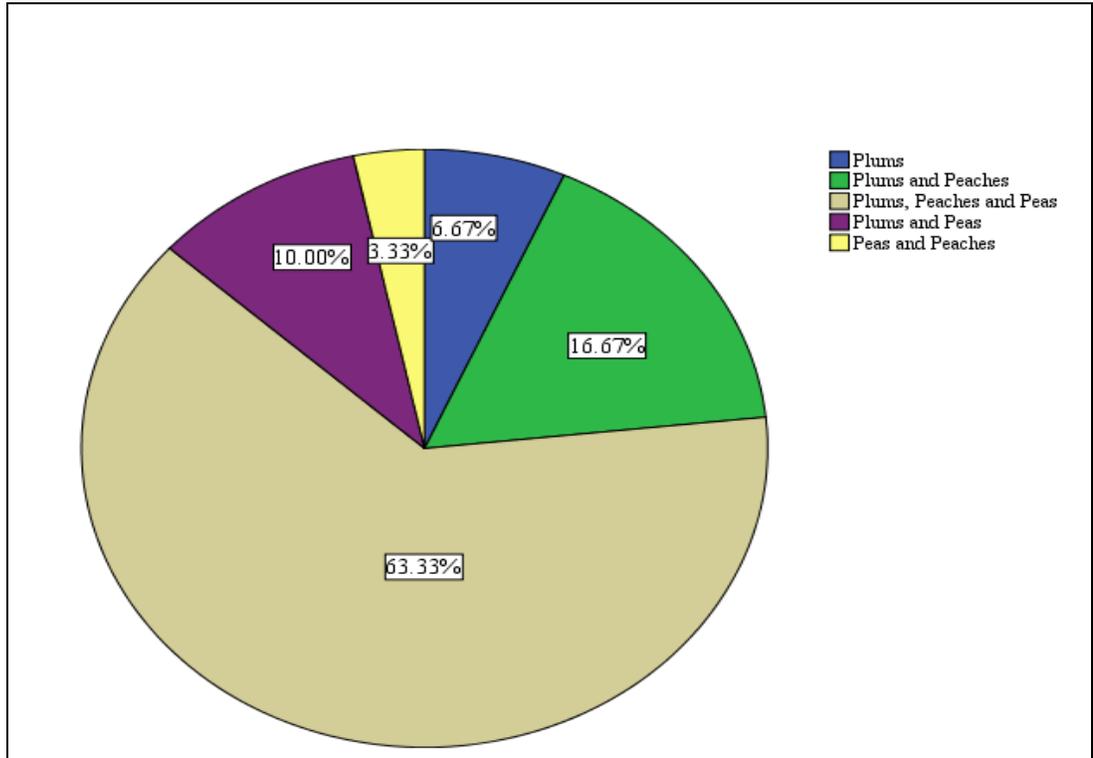


Figure 7: Other Fruits produced by Iniho Community

1.3.3.9.1 Number of Fruits Trees other than Apples by Respondent

Apart from apples trees, Iniho community also engage in producing other types of fruits as one of their means to earn income as well as for their food requirements. This has been revealed from the respondents whereby 53% of the respondents planted between 1 to 5 plums trees while those with 21-25 trees were 3.3% concomitantly with those possessed 11-15 fruits trees. For the case of Peaches, 63% have 1-5 trees, while those with 16-20 were %, and there were no one with fruit trees between 21to 25 as they are well indicated on fig. 8. Peas fruit trees are also planted by few respondents; only 3.3% planted above 30 trees as it is indicated on fig. 9. These data shows the focus of the Iniho community members on fruits production.

Provided, they have a spirit of planting fruits trees it is easy to encourage them to promote more production of fruits.

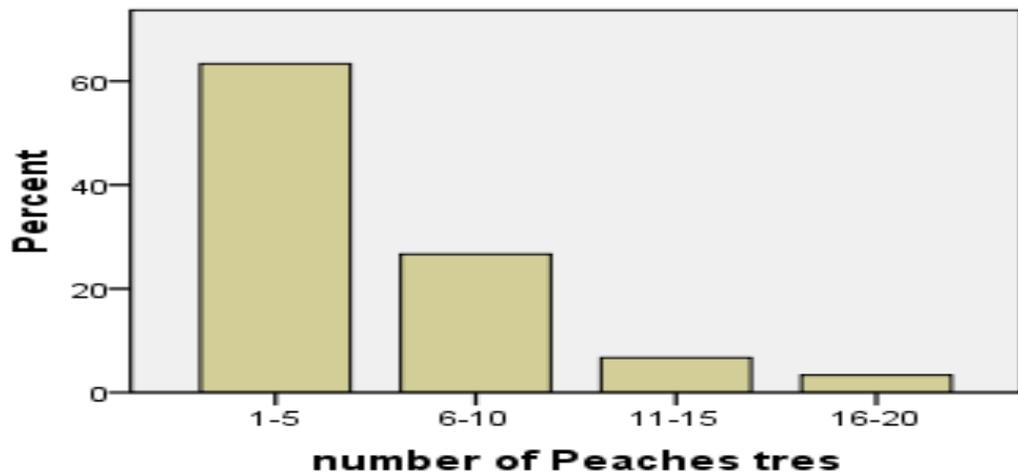
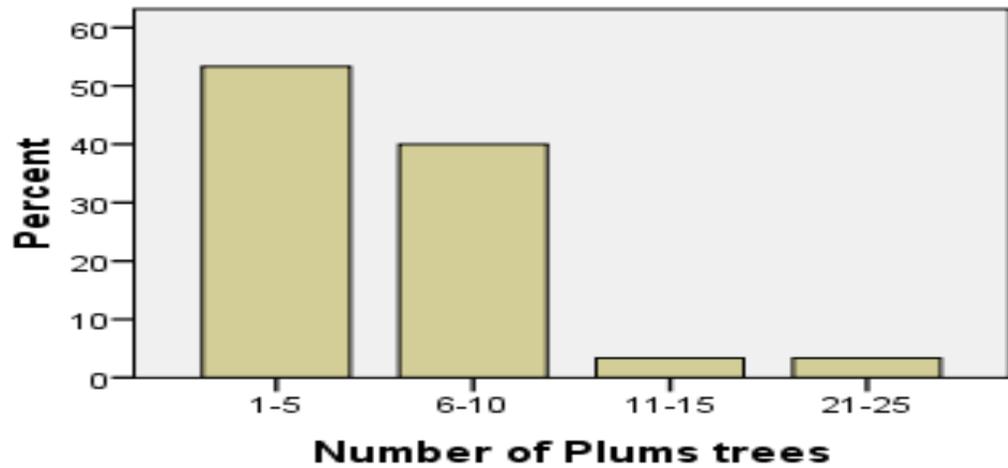


Figure 8: Number of Plums and Peaches Trees by Respondents

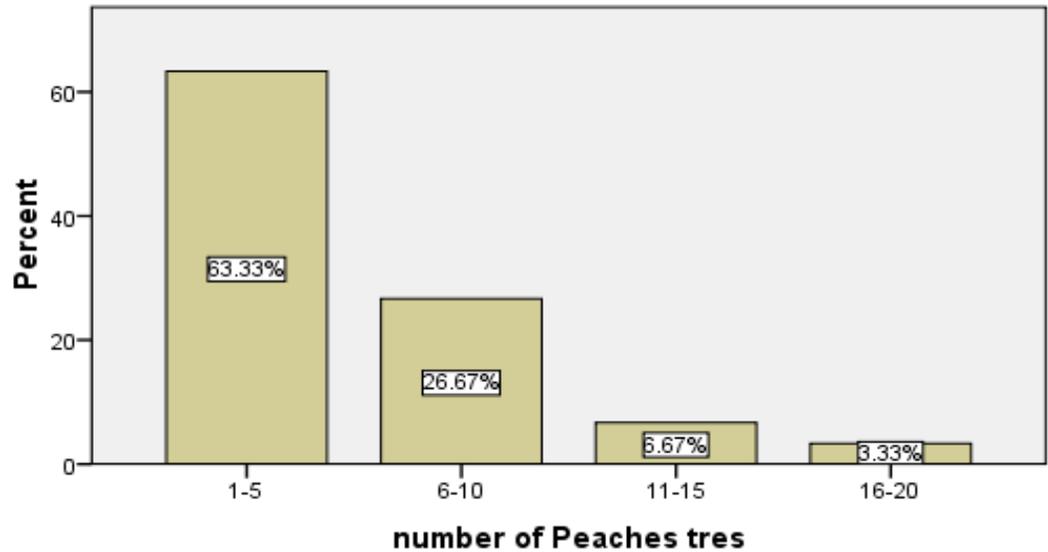


Figure 9: Number of Peas Trees by Respondents

1.3.4 Examine perception of the Community on Merits and Demerits of Apples Production.

1.3.4.1 Perception on Engaging in Apples Production

Under the community perception on apples production, majority of the respondents engage in the activity (73.3%). Table 11 shows the perception of the community who are engaging in apples production. This reflects that the Iniho community members are willing and ready to promote apples production. By using this perception analysis, apples production seems to be among the lucrative crops within the community members. In order to pull out of income poverty people look apples production as of the important crop to be enhanced at every household which can contribute to their income earning hence income poverty reduced at household level.

Table 11: Majority of Iniho Community Members do Engage in Apples**Production**

Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	6.7	6.7	6.7
	Disagree	6	20.0	20.0	26.7
	Agree	15	50.0	50.0	76.7
	Strongly agree	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

1.3.4.2 Inaccessibility of Remarkable Market

Inaccessibility of remarkable apples market hinders the efforts by individuals in apples production. 80% of the respondents accepted that this have been their main impediment in apples production as evidenced by information on Table 11. This then justifies that majority population does not engage in fruits production due to market uncertainty which exacerbate poverty among the Iniho Village dwellers. Despite its land being very fertile and suitable for fruits production, people who engage in fruits production have been not very much encouraging. However, majority are willing to engage in its production since market availability is assured.

Table 12: Lack of Remarkable Market for Apples Production

Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	6.7	6.7	6.7
	Agree	9	30.0	30.0	36.7
	Strongly agree	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

1.3.4.3 Lack of Apples Processing Machine

In order for the activity to attract majority to come in its execution, market assurance of the product itself is of profound importance. Due to the fact that not all produced fruits by the Iniho community members have sold timely majority tends to despair continue producing them. This problem has led the Iniho community members to look on the alternative way to rescue their fruits which have been rotting due to lack of market. One of the alternatives was the fruits processing machine to rescue their unsold fruits. 63.3% of the respondents claimed that lack of apples processing machine within their area has led to majority to opt on apples seedling production rather than planting fruit trees which does not ensure the sustainability of the activity. Table 13 shows percentage from the responses.

Table 13 : Lack of Processing Machine at Iniho led People prefer Seedling to Plannting trees

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	2	6.7	6.7	6.7
Agree	9	30.0	30.0	36.7
Strongly agree	19	63.3	63.3	100.0
Total	30	100.0	100.0	

1.3.4.4 Findings from Focus Group Discussion and Observation

Findings from Focus Group Discussion shown that lack of local processing industries is the great hindrance in their efforts towards apples production promotion for Majority have one option of selling fresh fruits for they can not get apples product varieties. Many fruits have been rotten due to unreliable market which

discourages the producer's morale to produce more. Through observation impassable road net works and destroyed fruits were observed. Poor road network exacerbates the unreliable market within the area.

“This year most of our fruits have rotten due to excessive rain experienced in November to December. When it rains transportation for our products becomes difficult, this then discourage continuing producing this product....” Claimed by one among the apples producers on 23rd December, 2013 at Iniho Village

Other findings from the Focus group discussion and observation was the prevalence of income poverty among the community members. The endeavour towards pooling out from abject poverty includes apples production. The group showed an interest of installing fruits processing machine to rescue their situation which will help them to earn much money and juice for their consumption.

1.4 Community Needs Prioritization

1.4.1 Community Needs Analysis

In the community needs assessment exercise, the Iniho community came up with various needs which if fulfilled would be in favourable environment in their effort to combat the worse enemy, income poverty for their suitable livelihood. However, due to the resources constraints which outweighed the available needs, the community had to undergo prioritization exercise so as to come up with a reasonable decision on what to implement first. This important step was done in Focus Group Discussion. The exercise was conducted by using the Pair wise Ranking Matrix techniques as it is shown in Figure 10 and Table. 14.



Figure 10: Needs Prioritization by Using Pair Wise Ranking Matrix

Table 14: Pair Wise Ranking

NEEDS	Preparation of manure	Preparation fruits seedlings	Procurement of fruits processing machine	Training on how to use processing machine	Preparation of juice packaging tools	Maintenance of roads	PUMP	POINTS	RANK
Preparation of manure		Preparation of manure	Procurement of fruits processing machine	Training on how to use processing machine	Preparation of juice packaging tools	Procurement of fruits spray pump	Procurement of fruits spray pump	2	5
Preparation fruits seedlings			Procurement of fruits processing machine	Training on how to use processing machine	Preparation of juice packaging tools	Preparation of fruits Seedlings	Procurement of fruits spray pump	1	6
Procurement of fruits processing machine				Procurement of fruits processing machine	Procurement of fruits processing machine	Procurement of fruits processing machine	Procurement of fruits processing machine	6	1

Table 14 shows the levelling of the needs facilitated by the Pair wise Matrix. The total needs unveiled was 7 which were as follows;

- i. Procurement of fruits processing machine (Juice making machine)
- ii. Training on how to use fruits processing machine
- iii. Procurement of fruits spray pump
- iv. Preparation of juice packaging tools
- v. Preparation of manure
- vi. Preparation of apples fruits Seedling
- vii. Maintenance of roads

Under the needs prioritization exercise, Instalments of fruits processing machine ranked number one while road maintenance ranked number seven. This indicate that the first need by the Iniho community were Installation of fruits processing machine.

1.5 Conclusion

The struggle on poverty reduction in Tanzania needs multidisciplinary approach due to the fact that poverty has a multifaceted approach which calls for multidimensional approaches. Different approached have been used to cub the problem of poverty within the communities. Provided poverty has said to be rural phenomena, effective strategies have been employed to alleviate poverty in rural areas. Income poverty is believed to be aggravating any other kind of poverty.

The conducted CNA envisaged increasing income generating activities opportunities. Apples production in Makete as one of the main three cash crops (others are Pyrethrum and Timber production), is well grown at Iniho Village. However, the producers have been discouraged by different problems facing their production such as absence of

remarkable Market of their produce which lead to distortion of their fruits (Rotten). The area could have been earned much income from apples production if they could access other means on how to keep their production from damage. 90% of Makete districts area is ideal for apples production, Iniho Ward/ Village can be used a model for apples production so as to contribute in household income poverty reduction.

The CNA has finally come up with various needs to be addressed by preparing different projects. However, the needs levelling process have simplified the chronological and logical order on how to address those needs. Therefore the end of this CNA calls for further steps to be undertaken for the exercise not to be in vain.

CHAPTER TWO

2.0 PROBLEM IDENTIFICATION

2.1 Background of Research Problem

Struggling for poverty alleviation is a multi- disciplinary which needs multi-dimensional approach. Poverty for a long time has said to be rural phenomena whereby majorities are engaging in subsistence farming. Due to this fact agricultural diversification is the only possible way to address the problem. Tanzania has engaged itself into effective Participatory approach in its different planning process to involve local communities on the war against poverty alleviation. Community participation in development planning has been the contemporary approach to ensure that community participate in struggling pulling out from abject poverty as envisaged by the National Development Vision 2025 (URT, 2000). Striving to pool out of poverty has resulted into different strategies. MKUKUTA II has an intention of halving abject poverty by 2015. Tanzania also has adopted the Millennium Goals which aim to reduce absolute poverty by 2015 (URT, 2006).

Identification of problems affecting Iniho Village was executed under Participatory assessment approach. This has been the useful tool which in turn resulted into identification of problems thereafter plan for their immediate solutions to rescue the prevailing situation which has been an impediment and hindrance to the community striving pooling themselves out of poverty wheel (income poverty in particular).

The study revealed that the Iniho Village Communities still trapped into income poverty which prohibits them from living decent life. Iniho communities have been engaging into various activities in striving pooling out from the abject poverty, mainly been agricultural activities. From among farming activities, apples production has been conducted within the Village.

The study has unveiled different opportunities prevails within the community, among others are; availability and accessibility of suitable land for fruits production in Iniho Village and many other areas (about 3/4 of land in Makete is suitable for fruits production), one Secondary School situated near Village (Mwakavuta) is another potential market for the products produced at Iniho Village.

Apples production background goes as far as the first century since commenced practiced. The word apple comes from the old English word aeppl, there are approximately 10,000 varieties of apples grown in the World with more than 7,000 of these grown in the United States (Stradley, 2004: 1-5). It has been getting popularity around the World as days goes on. Currently, it has seen to be among the lucrative production World wide which can contribute to the people (Rural dweller in particular) to get rid of poverty (both income and food poverty) once majority will engage in the production.

The problem identification at Iniho Village based on the Community Needs Assessment which came up with a number of problems and ranked according to their importance to the community. The Community Needs Assessment exercise resulted into identification of different problems pertaining at Iniho Village. The main problem is the prevalence of income poverty within the community members. Identified problems concerning fruits production as one of the strategy towards income poverty alleviation, these are; inadequate knowledge on how to prepare manure for apples production which impede majority to engage in apples production and or to undergo effective apples production. Another problem is inadequate knowledge on preparation of apples fruit seedlings which has led the majority not to plant many fruit trees scarcity of apples seedlings as well as high prices of seedlings. Lack of Fruits processing machine has exacerbated majority not to engage into apples production due market inaccessible. Apples processing machine

could have been rescued the rotten apples due to lack of market and increase the community's income for the community not selling only apples but also juice which is user friend to majority. Another problem uncounated is Lack of juice packaging tools. Once juice is made it needs to be kept into special package for the juice to be used or sold some time in future. Lack of fruits Spray pump is another problem which tend to distort fruits before harvesting. In order for the fruit trees to bear many fruits for juice making purposes protection from different insects is of great importance. Among the ways is by spraying using spraying machine.

Lack of knowledge on how to use fruits processing machine is another great problem to the community members. Fruits juice making is another useful alternative to propagate apples market but despite of lack of juice making machine majority are faced with the problem of technical know-how on the use of fruits processing machines. Feeder roads for apples transportation is of great importance because without good roads apples can not be easily transported. Therefore the problem of bad feeder roads aggravates poor apples production.

Having discussed with the community and ranked the problems by using pair wise Matrix techniques the identified core problem was Lack of fruits processing machine. The profound of this problem is due to the majority of apples producers to be discouraged planting more apples trees due to unreliable market of their product and depending one sided market channel. With fruits processing machine fruits producers will then be able to have alternative market channel by selling not only fruits but also juice. This will increase the community income hence ensure apples production sustainability.

2.2 Problem Statement

Income poverty has been a great problem for iniho community members fro a long time. Majority peasants including fruits producers have been greatly affected by low household

income. This has been attributed by many factors including; low price of their produce, unreliable markets, lack of fruits products varieties due to lack of fruits processing knowledge within the production area. Iniho people have struggled to pull out of Poverty but still they are trapped in income poverty wheel. Different studies undertaken at Iniho Village including; Community participation in identifying different opportunities and planning for development (opportunity and Obstacles to Development) conducted in 2002 throughout the District (URT, 2000). Two other studies conducted by Enterprises Works in 2003 to improve apples production in Makete (Kusenge and Haule, 2011). However, the studies did not solve the problem. The current study came up with the detailed study which unveils the opportunities for viable and reliable economic activity with the focus of contributing in sustainable economic development. The apples processing project therefore, is there to bridge the gap to ensure reliable market for sustainable apples production in Iniho and Makete as a whole. Currently, DADPS has conducted studies and established seedling nurseries in different areas to increase communities' paces towards fruits production including apples (MDC, 2011).

2.3 Project Description

The targeted community in the project is Iniho Village community which is one among 97 Villages of Makete District. The Village was legally established in 7/6/1976 with its registration number IR/VC/2002 the village has the total population of 941 people. Administratively the village is divided into 5 hamlets.

Majority of the people in the village are poor due to the small scale farming which is mostly practiced in the area and in most cases it is subsistence farming. During raining season the roads becomes worse and not passable which prohibit selling even their few crops they harvest. Fruits harvesting is on this particular period where there is heavy rain, this tend result to many fruits to rote and majority to incur loss.

The project will be executed by the small group of apples producers under the general supervision of the Village council. To ensure efficiency the group will have internal leaders. Project activities arranged to start on November but the Host organization accepted to commence the business on December and complete the project on May, 2013. Makete District Council as the great stakeholder has promised to support the project by providing all necessary equipment such as procurement of Processing machine, quality juice packing tools, and training necessary to run the project.

2.3.1 Target Community

The target community is the apples producers in Iniho Village. Under this study it has been unveiled that in order for the apples production to be promoted, apples producers are to be facilitated to access reasonable market and enabled to acquire skills on producing various products from fruits. Apples processing project is therefore there to cater the problem of unreliable and sustainable market.

The apples processing project concur the Makete district effort to fight poverty within the District by the special campaign on Pyrethrum and Apples production throughout the district. The establishment of simple apples processing machine will expand fruits market and influence majority to engage in apples production hence apples production promoted. The apples processing group will work under the supervision of the Village Council and consultancy of the District Agricultural Officer (Horticultural Officer), District Trading Officer in collaboration with Iniho extension officer. The project will run by the selected group from among the apples producers. Successful implementation of the project will help different institutions and organizations to learn of the suitability of apples production and engage in production. The immediate consumers of the project products include; Mwakavuta Secondary School, Iniho Primary School community, Iniho Villages communities and the neighbouring villages.

2.3.2. Stakeholders

Different stakeholders will contribute in the implementation of the project. The main stakeholder is the the Makete District Council (DPLO, DALDO, Trade Officer and Health officer) who will facilitate procurement of processing machine, packaging tools and the necessary training to operate the project as well as hygiene aspects for quality products. Other stakeholders include; Iniho Village Council who are the owner and the executer of the apples processing project. Mwakavuta Secondary School and Iniho Village Community who will be the consumer of the Apples processing project products. Iwawa ward communities as the consumer of the project products, ELCT Iniho Province will also be the consumer of the project products. Another important stakeholder is the Radio Kitulo FM for advertisement on the products of the projects.

Table 15: Roles and Expectations of Various Stakeholders

S/N	Name of the stakeholders	Role of the stakeholders	Expectations
1	Makete District Council	1.1 Facilitate procurement of fruits processing machine 1.2 Conduct training to the community on the best way to undergo fruits processing activities. 1.3 Technical support to promote apples production. 1.4 Assist the Village to search the market of the products to encourage farmers.	-Fund released at reasonable time for the instalment of processing machine. -Increased income earning from apples production. -Increased skills on quality fruits processing to the concerned people. -project Sustainability ensured.
2.	Radio Kitulo FM	4.1 Promotion of apples/juice market through advertisement.	-Increased number of apples/juice customers
3.	Apples producers.	2.1 Supplying apples 2.2 To ensure tools safeguard. 2.3 To improve apple production to feed the processing machine 2.4 To produce quality juice	-Attain reliable market and reasonable price of produce. - To ensure sustainability of fruits processing tools -Improved standard of living from selling apples products. -Apples value added
4.	Iniho Community.	4.1 Consumer of the produced apples products.	-Improved nutrition at household level.

Source: Researchers findings

2.3.3 The Project Goal

The project goal is to improve economic status of the community members by household income poverty reduction among the peasants (Apples/fruits producers) for their decent life. Establishment of Apples processing machine at Iniho Village will help to rescue a certain amount of apples used to rot due to extensive rain and result to a reliable market of the produced fruits. Reliable market and good price of apples products will in turn

encourage majority of the community members to engage into apples production hence, increased production.

2.3.4 Project Objectives

2.2.4.1 General Objective

The general objective of the project is household income poverty reduction through instalment of fruits processing machine by June 2013.

2.3.4.2 Specific Objectives

Specifically the project intend to;

- i. Sensitize 250 Iniho community members on apples processing project by 2013
- ii. Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013.
- iii. Facilitate accessibility of Fruits processing equipment from DED Makete and other stakeholders by 2013.
- iv. To increase by 60% of apples producers access reliable market by April 2013.

2.3 Host Organization Profile

The host organization is Iniho Village Council. The Village is in Inho Ward in Makete District. The Village Council is led by Village Chair person and the Village Executive Officer. In order to run the project, the Village Council selected a group of 20 members in which 15 are males and 5 are females among the apples producers to run the project. The group is working under the leadership of the Village Council. However, for effectiveness and efficiency of work the group has its own leaders, which are; chair person, Secretary and the treasury. The steering committee is made up with the group leaders with the three selected members to make five members of the steering committee.

2.3.1 Host Organization Leadership

The leaders of the host organization are; Village Chairperson, Village Executive Officer, and Treasurer. Under the Village leaders there are group leaders who are working in collaboration with Village leaders, specifically for the processing project, these are; Group chair person, Secretary and the treasurer. Therefore the steering committee have a sum of 6 persons.

2.3.2 Vision of the Host Organization

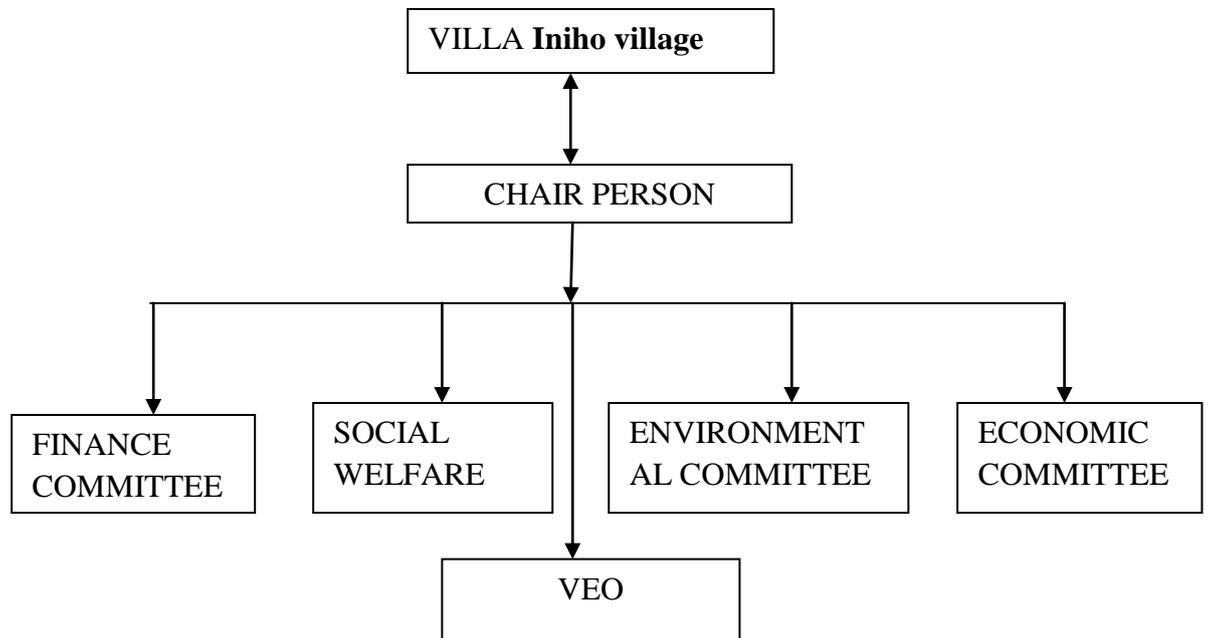
Being exemplary in facilitating the community members in changing their mindset and enhance socioeconomic development.

2.3.3 Mission of the Host Organization

Inho Village Council intends to become a model organization in provision of socio economic services to the community members so as to ensure decent life to her people and living in peace and harmony.

2.3.4 Iniho Village Council Organization Structure

At the Village level, the Village Council have been vested the day to day tasks of Village Government, therefore the Village Assembly/Village Government have not been included in this structure. The Village Council Organization structure is shown on Figure 11



Source:MDC (2008)

Figure 11 Village Council Organization Structure

2.4.6 Iniho Village Council SWOC Analysis

SWOC analysis intends to depict in-depth information of the concerned organization on the available opportunities which can help in the intervention of the project. It also focuses to determine strength, weaknesses, and the challenges facing the organization in question. In general, these components are of two major groups; internal and external components. Strength and weaknesses are internal variables while opportunities and challenges are external variables. The Strengths, Weaknesses, Opportunities, and challenges of Iniho Village Council were identified as shown in the Table 16.

Table 16: SWOC analysis of Iniho Village Council

No	Strength	Weaknesses	Opportunities	Challenges
1.	Committed and active Village leadership	Treasurer is not an employee	Members trained on how to run the project	Village Chair person has no salary
2	Premises availability	It is hired from an individual none apples producer	The premise situated at the centre of the Village along Mbeya road hence easily to access customers	The Vilage has no electricity. Generator has to be used
3	Presence of one guard man	Employed staff has no training in their duties.	The guardian is from within the Village	He has no contract
4	Extension office is within the Village	Extension officer is serving 5 villages	The extension officer is dwelling at Iniho Village	Sometimes uses to be out of the station for a long time
5	VEO is the government employee	Sometimes being busy with LGA activities	Most of the time he is available	Close participatory supervision of the project

Source: Researcher Findings

2.4.8 The Roles of CED Student in the Project

The main role of CED student's is to ensure that the planned interventions are successful implemented as per plan. To fulfil this the following activities undertaken;

- i. To sensitize Iniho community members on the importance of fruits processing project.
- ii. To consult different stakeholders to access resources needed for the project implementation
- iii. To facilitate the purchase/access of project tools and equipments for project implementation
- iv. To facilitate training to Iniho Village and group leaders on managing and operating the processing project.
- v. To facilitate market reliability in collaboration with Village and District officers.
- vi. To facilitate and ensure participatory Monitoring and Evaluation process of the project.

2.4.9 The Roles of the Host Organization

- i. To attend all required training.
- ii. To participate in the community sensitization on the project
- iii. To participate in the project product marketing
- iv. To ensure safe guard of all the project tools and equipments
- v. In collaboration with the MCED students to consult different stakeholders for fund to run the project
- vi. To participate in the process of the project tool/equipment procurement.
- vii. To sensitize fruits producers to bring at the processing centre timely
- viii. To ensure administrative activities throughout the project life.
- ix. To ensure the progress report is provided at every interval it needed
- x. To ensure the project sustainability.

CHAPTER THREE

3.0 LITERATURE REVIEW

3.1 Introduction

Under this chapter different authors who embarked on issues related fruits production and processing and on poverty reduction endeavour have been reviewed. Reports findings on fruits processing, and different projects related to fruits processing have been reviewed. However, different policies on agricultural development and horticultural development in Tanzania have also been reviewed. The chapter contain theoretical and empirical literature review, policy review as well as the literature review summary. These parts intend to narrate on fruits production, depict what have been done with others so far, and analyze different policies affect the project respectively.

3.2 Theoretical Literature

3.2.1 The Concept of Poverty and its Classification

Poverty has been the global concern for enormous years. Each country in the world is striving to get rid of poverty to her people. Poverty can be defined as a state of deprivation and prohibitive of decent life by failure to meet basic needs (URT, 2003). Poverty can be classified into absolute poverty and relative poverty. Absolute poverty is the inability of a person to attain minimum specified standards of living based on nutrition and other none food basic necessities. Relative poverty refers to the level of wellbeing which is judged to be poor or well-off based on comparing people who are of the same society or community (URT, 2005; URT, 2007). However, poverty is classified into two main different forms, these are; income poverty and none income poverty. Income poverty has said to be exacerbating any other categories of poverty (URT, 2006).

3.2.2 Income Poverty

Income poverty has said to be a rural phenomenon whereby majority is concentrated in subsistence farming by using farming implements and poor tools. Household's consumption reports have been mainly used in establishing poverty status by matching it with the established poverty lines in the particular time. Expenditure pattern tend to be more stable than income and commonly used as the best indicators of income poverty. The term income poverty has been used throughout since it is in more common usage than the more technically correct consumption poverty (URT, 2005).

3.2.3 Poverty Status in the World and in Tanzania

According to (URT, 2003), by the year 2000 the world had 6.1 billion people in which 1.2 billion were poor living on less than US Dollar 1 per capita per day. Its in billion of people was as follows; South Asia 0.52, Sub Sahara Africa 0.29, East Asia and Pacific 0.28, Latin America and the Caribbean 0.08, Europe and Central Asia 0.02, Middle East and North Africa 0.01. The sum of this is 1.2 billion people. According to (URT 2007), the rate of Poverty in Tanzania is still high. The base of the statistics is the House Budget Survey (HBs) of 1991/92 and 2000/2001 which have been adjusted over time. These surveys show that over 36% of Tanzanians were living bellow the poverty line. URT (2008) shows that the population bellow the basic needs poverty experienced low reduction since 2000/2001 to 2008 (39% to 33.64%). Such situation hinder most of Tanzanians to live decent life by being prohibited access to basic necessities such as food, shelter and clothing and other services like access to health, education, water roads and Telecommunication.

3.2.3 Global Effort to Combat Income Poverty

There have been different endeavour at the global level to alleviate poverty. According to (URT, 2003), since 1990 the World Development Reports were devoted to re-examine

how policies can help to reduce it (URT, 2003). The UNDP assembly declared the decade 1997 to 2006 to be the United Nations decade for Poverty eradication, and that every October 17 to be commemorated as an International day for poverty eradication as a strategy to remind countries to fight poverty in their countries. World development report proclaimed three major strategies on how to reduce poverty which are; to create opportunities by providing the poor with materials, Facilitating empowerment by states and social structures being more accountable to the poor people by increasing their access to market opportunities and public services, good governance, Laws, and public service delivery. Thirdly, is to enhance security by reducing vulnerability to economic shocks, natural disasters, ill health, and personal violence.

3.2.4 Effort by Tanzania to Cub Income Poverty

Tanzania has not been lagged behind in combating poverty. Currently all development plans are developed in the context of the poverty Reduction Strategy Paper (PRSP) which is written in National Strategy for Growth and Reduction of Poverty (NSGRP). It has adopted the Millennium Development Goals and established the nation development vision 2025 intend to halve and alleviate absolute poverty by 2015 and 2025 respectively (URT, 2003, URT, 2005, URT, 2006). Other strategies for Tanzania include;. To invest in human capital by providing equitable access to education, health and social services, Formulation of policies that focuses on investment in productive sectors, promotion of efficient economic opportunities for the poor and agriculture diversification and the current slogan “Kilimo kwanza”

Different strategies are in place as the deliberate and conscious efforts by government in collaboration of various stakeholders to facilitate Majority Tanzanians pool out from being trapped under poverty wheel. MKUKUTA II has envisaged to reduce national

income poverty incidence reduced from 33 .6 percent in 2007 to 24 percent in 2015, while rural areas income poverty incidence reduced from 37 .6 percent in 2007 to 26 .4 percent in 2015 (URT, 2010: 39-41). On the other hand Millennium Development Goals intend to reduce income poverty incidences to 19.3% and 20.4% for national and rural areas respectively by 2015. Under National Strategy for Growth and Reduction of Poverty (NSGRP II) intends to access GDP growth accelerated from 6 .0 percent in 2009 to 8 - 10 percent per annum by 2015 particularly in rural areas whereby poverty prevalence is enormous (Ibid). Agricultural development including horticulture expansion is the ideal efforts as the driving forces towards achieving those envisaged targets. According to URT (2011) the Tanzania economic growth reached 6% in 2011 but poverty status reduced by only 2%.

3.2.5 Major Household Income Generating Activities in Tanzania and Makete

Agriculture is the main household income generating activity which employs the majority of Tanzanians. The main income generating activities for majority people in Makete include the following; crop farming such as; maize, Irish potatoes, wheat, millet, beans sorghum, vegetables, trees and various fruits production including apples production as the emerging lucrative production. Small businesses are rarely conducted in different villages in the District (MD, 2008).

The overall GDP for Iringa Region at the basic prices for 2008 was TShs. 1,447,270 millions. Agriculture activity is the main economic base. Its share to Iringa GDP in 2008 was 89.4. Makete District registered its GDP of TShs. 133,565,000,000.00 in 2008 while it's per capital GDP in 2006, 2007 and 2008 was 851,967.00, 980,791.00 and 1,146,931.00 respectively (URT, 2011).

3.2.6 Apples Production Worldwide

Apples production is one among the crops produced in many countries in the World. “Apples are originally temperate Plants, which does well in regions which do not experience very high temperatures. Apples require well-aerated soils with good organic matter content, Soil micro organisms also synthesize various plant growths regulating compounds as the experience drawn from South Africa on apples production (Safruits 2011). Apples production as one among the horticultural products has said to be a lucrative activity if executed under the underlined principles. The Asian giant is currently producing more than half of all the apples around the globe (Negro and Lojo, 2012). The importance of fruits processing practice is based on the fact that, much of the produced fruits are not concentrated thus discourage producers for example; “the concentrated juice industry worldwide manages an average of 20% of the global production of apples (Ibid, 2012).

China established their apples processing programs after they found that their market saturated and prices depressed. By so doing they rescued apples production activity as one among their economic activity (Gale and Huang, 2010). Juice processing is one among the most useful way china used to keep their product in a considerable time for further use and market. The establishment of juice processing machine in China has currently led to the supply of apples as raw material for juice processing which previous seen limitless is limited due to much of fruits to be consumed through established machines (Ibid, 2010).

Lyon, Durham and Betula (2001), unveil the fact that Critical changes in international apple product markets have led Tree Top to (USA Apple juice processing co operate) adjust its international sales focus in recent years. The World production trade in apple juice and apple juice concentrate has expanded dramatically. The trend had influenced by

the expansion of apple production in China and that nation's entrance into the juice concentrate market. In fact juice processing is a useful way to increase fruits value to the producers and become a lucrative business to the communities. While coping with fluctuating supplies and depressed prices, Tree Top managed to increase its profits per ton from \$10.86 for juice apples and \$4.34 for pears in 1996 to \$18.80 and \$7.52 in 2001, an increase of 73 percent for both commodities in 5 years (Ibid).

Apples production in South Africa has become potential due to good post harvest practices. Apples have been grown in South Africa since 1652 when Jan van Riebeeck established the first plantings. Over 18 million cartons of apples are exported from South Africa each year to the United Kingdom (39%), Central Europe (23%), Middle and Far East (24%), Africa (11%) and the Americas (3%). Apples constitute 30% of the total deciduous crop in South Africa. When the market is saturated juice processing is an alternative to rescue fruits not to rot. Therefore, with apples production and good post harvest practices enhanced by South Africa led majority to earn much money from apples production. Apple and pear fruit production is predicted to reach over 2.7 million tons by 2020. Apples are by far the most commonly cultivated crop, representing nearly 50% of crop volume with 22.5 million apple trees, followed by 13.7 million pear trees as surveyed by the Bureau for Food and Agricultural Policy (BFAP, 2012). Due to its usefulness in income earning to different communities, many countries engaged in the production of apples in the World.

In Uganda apples production has changed the people's standard of living. "The temperate climate fruit growing introduced in Kabale District in 1999 has now attracted 100,000 families who are reaping big from apples, pears, plums, peaches and grapes" (Daily Monitor, 2011). Mr. Rwamahe one of the apples production from Kabale District says he earns about Shs 400, 000 from one apple tree and harvests about 700 apple fruits selling each at Shs 600 (ibid).

Richard Kachule and Steven Franzel (2009:10), show that; the Malawi government recognizes that expansion of horticultural production for agro- processing is one of the strategies for increasing agricultural productivity. In an effort to enhance performance of the horticulture sector, the government emphasizes developing marketing and agribusiness management skills for the horticulture sector. It is envisaged that such efforts have the potential to contribute to development of horticultural marketing and food processing in Malawi.

3.2.7 Status of Fruits Processing in Tanzania

Horticultural agriculture is one among the lucrative activity in Tanzania. According to TAHA (2012:1-5) horticultural industry plays a tremendous contribution to the agriculture sector economy presently it has contributed US Dollar 380 Million which is 40% of all the agriculture export and about 9% of Tanzania export which is one of the fastest growing sector of the economy. If the industry could have been taken seriously in its production and alleviated all the impediments towards horticultural production it could have been contribute even much to the Tanzanian economy.

Fruits production as one of the horticulture products has been practiced in Tanzania for a considerable long period. Many regions in Tanzania are endowed with apple land suitable for various fruits production. Among the regions which are the great producers of fruits include; Morogoro, Tanga, Iringa/Njombe, Mbeya, Coast, Dodoma and Zanzibar. But most of the produced fruits do rot due to market and lack of processing options. Fruits processing industry in Tanzania in many areas is a new concept for most of the products have been sold un processed. This has exacerbated poverty to majority who depend on fruits production as the case of Muheza in Tanga region. In 2008 President J.Kikwete inaugurated fruit processing factory at Kingolwira in Morogoro Region and encouraged majority to engage in local processing so as to add value of our products (Felix, 2010).

Felix (2010) asserts that, “While a lot of fruits produced in Tanzania are rotting and many more others sold very cheaply, some of the businesspeople are busy importing fruits, juice and fruit semi liquid from which juice is manufacture, leading into the stagnation of local production”. It is therefore emphasised to establish local fruits processing industry to evade selling our fruits as the primary product, rather the processed one to ensure market and adding value of the products themselves. A Dabaga fruit processing in Tanzania which is established in Iringa is one among the industries which rescue different fruits production by successively processing various fruits and vegetables to add value of different products (Dabaga, 2012). This then calls for establishment of small local processing unit in different areas where fruits production activities are taking place.

3.2.8 Fruits Processing in Makete

Apples production in Makete has been effectively sensitized since 2000 Iniho Village community is among the villages adopted the knowledge early. Currently majority have started harvesting. Fruit production as one of the potential agriculture products for income earning has not yet well employed in Makete District despite the prevalence of abundant land suitable for fruits production (MDC, 2008). Fruits processing have been a new industry in Makete because it has been rarely practiced within the District. Recent years few people among the community members for their own consumption. Currently Makete District council has announced to promote two main products (Fruits production and Sunflower production) to make three main cash crops as opposed to the solely Pyrethrum production for decades (MDC, 2012). This has made majority of apples producers to be demoralised and shift to other crops by cutting down some of the fruits tree and replace with other production such as Wheat and Pyrethrum.

However, TAHA (2011) indicate three researches conduct in Makete revealed that fruits processing (Juice and Jam) have been taking place in three different group including Iniho village but by using small blenders. For the case of Iniho Village only one person still practices the exercises and produces apples juice and wine. Majority have not been able to engage in this industry due to lack of required processing tools and technology so as to add value of their products.

3.2.9 Problems facing Fruits Processing in Tanzania

The great challenge which deprives fruits producers in poverty is lack of reliable market to enable every single fruit to be sold. As a result many fruits are rotting while still on tree apart from those been rotten in market. The problem has been exacerbated by lack or inadequate fruits local processing industries/units to add value of the products. The absence of local industry for fruits processing leads to rotting of many fruits which hinder the people's efforts to increase their income through fruits production. Tanzanians are good users of juice so if fruits processing into juice could be exercised, much of the rotting fruits could have been rescued. This is justified by Felix (2010) who unveil that; "Dar es Salaam markets are found full of imported juice, majority from countries like Dubai, Kenya, Zambia and South Africa, only some of the juice manufactured by Bakheresa Food Processing Limited at Vingunguti in Ilala District were from fruits produced in Tanzania".

TAHA (2012) shows that Tanzania is performing well in horticultural business by exporting and importing, but on fruits it is importing much than exporting. Tanzania Regional Horticultural imports dominated by South Africa and Kenya, which makes the Supermarket chains imports fresh fruits and juice which include; apples, mangoes, grapes, Seedless oranges, avocados (Ibid). Despite that Tanzania is richly endowed with

variety fruits and vegetables, however, less than 10% of the produced fruits and Vegetables in Tanzania are being processed (Damas, n.d)

3.3 Empirical Literature Review

Fruits processing industry have been taking place since many years ago in the World. Tanzania is one among the countries which engaged in fruits processing to add value of the product for the concerned communities. Dabaga Vegetable and Fruits Company which is in Iringa is one among the registered fruits processing industries established to promote fruits and vegetable production. It was established in 1979 with tomatoes being its main product but currently it has more than 40 products of different fruits and vegetables (Dabaga, 2012).

There are few other Companies that have been and are currently producing some of the fruits juice in Tanzania since 2004, from among them are; Regent Food and Drinks Company, M/s Darsh Industries, President's Food and Beverage Company and Tropical Foods Ltd (to mention a few). To some extent they have opened Tanzanian mind on the importance of fruits juice processing to reduce importing much juice from other countries (Jordaan, and Akinnifesi, 2004).

According to Jordaan, and Akinnifesi, (2004) in Tabora the effort to rescue fruits from rotting was by processing their indigenous fruits to juice, jam and win. This was a great project with a total capital of Tsh. 300,000,000.00. Local processing added value of the community members by using indigenous fruits. Experience from Tabora calls for the need of expansion and establishment of fruits local processing to add up the value of the products which in turn will raise the majority Tanzanian communities to engage in the production and enhance maximum utilization of the endowed land suitable for fruits

production. Provided there are no many fruits processing industries in Tanzania, small local processing units can be established within the production areas so as to rescue the massive destruction of fruits due to unreliable market for fresh fruits.

Concerning fruits processing in Makete District, very few has done empirically. Most of the efforts have been on sensitization people to engage in fruits/apples production but have been done on training and establishing processing units within the district. For example, the priority of Makete district council through DAPS in 2012/13 was on apples and sunflower production (MDC, 2012). Different fruits which are produced in Makete include; peaches, Prams, oranges, but most of the fruits have been rotting due to unstable market and they have been used fresh without been processed. Fruits processing technology is currently an ideal strategy to promote fruits production in Makete.

According to MDC (2011), three groups in Makete District were preliminarily sensitized and trained on fruits processing industry. It is almost 6 years since they were encouraged to unit and establish their fruits processing unit at Makete District but nothing has been done to date. This has been contributed by various factors including inadequate fund to facilitate these groups to purchase simple processing machines which could have been installed at their production areas, and lack of seriousness from the group members themselves.

The training provided to three groups (Iniho, Bulongwa and Kipagalo) resulted to only one apple producer from Iniho Village to managed to utilize the knowledge acquired from the training (by District horticultural officer). Experience show that, the farmer (Kambarage) despite been using simple processing tools, he has managed to rescue much of his fruits which were about to be rotten due to uncertain market by making jam, juice and wine. The production is so minimal so the market for his processed fruits to juice and

wine is within the village and few outside the village for different travellers. However, he has been not able to produce much due to lack of advanced tools for fruits/apples production.

The installation of apples processing machine project which is planed to be installed at Iniho Village, comply the revised Agriculture and Livestock Policy of Tanzania of 2006 under the horticulture development. The project is also in hand to hand with Millennium Development Goals (MDG) 2015, the *MKUKUTA II* under the section of poverty reduction. *MKUKUTA II* builds on the predecessor Strategy (*MKUKUTA I*), it is oriented more towards growth, and enhancement of productivity, with greater alignment of the interventions towards wealth creation as way out of poverty (URT, 2010:2).

It also in line with the Tanzania five years Development plan (2011/12-2015/16) as well as the Nation Development vision 2025, focusing on poverty reduction through agriculture reduction. However, with Kilimo kwanza, which focus on increasing production and market availability for the products, the planned project is hereby as a driving force towards successful realization of the envisaged poverty reduction goals through those strategies.

3.4 Policy Review

3.4.1 Agricultural Policy of 1997

Agriculture policy of 1997 which was revised in 2006 to produce Crop Policy and Livestock Policy has depicted clear efforts on horticulture development. Under crop policy, horticulture development has been emphasized so as to increase fruits and vegetable production in Tanzania. The implementation of horticulture policy has been developing faster in recent years whereby majority of the farmers engaged in horticultural production. The agriculture marketing Policy of 2008 intend to ensure reliable and

sustainable market of the agriculture produce and Seed Policy which ensure quality seed production for agriculture development. These policies have been translated and reinforced to Agricultural Sector Development Strategy (ASDS) and its implementation framework, Agricultural Sector Development Programme (ASDP); Kilimo Kwanza resolve, the Tanzania Agriculture and Food Security Investment Plan (TAFSIP) and Southern Agricultural Growth Corridor of Tanzania (SAGCOT). These frameworks mainly guide the production process (TAHA, 2012). Under the implementation of horticulture Policy, Makete District Council has decided to establish and construct irrigation schemes which will ensure development and sustainability of the fruits and vegetable production.

The overall objective of the horticulture policy as analysed by Tanzania Horticulture Association (TAHA), is to promote the horticulture sector in Tanzania to become more profitable, sustainable and participate more effectively in development of the country. Its vision is a vibrant prosperous and sustainable horticulture production in Tanzania. To make the crop production and horticulture policies effective, different stakeholders should engage into serious execution of the underlined strategies.

3.4.1.1 Importance of Horticulture in Tanzania

TAHA (2012) indicates that; Horticulture industry holds a tremendous to the agriculture sector economy. The records show that presently, “the industry earns the country about US \$ 380 million; which is equivalent to 40% of the total export economy of the agricultural sector and about 9 percent of the country’s total export value. Growth of the industry is recorded at about 9% percent per year, which is one of the fastest growing sectors of the economy” (Ibid). Therefore promoting horticulture production which among others includes fruits production will simultaneously help poverty reduction at

rural areas where farming is taking place and to the national economy growth through exportation.

3.4.2 Other Policies on Horticultural Development

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. The envisioned status of Tanzanians is substantially developed one with a high quality livelihood. Under this vision, by 2025 abject poverty will be a thing of the past. Reinforcement on promotion of agriculture including horticulture development put in place under the Kilimo kwanza policy which intends to prioritize agriculture in the county plans (TNBC, 2009).

MKUKUTA II builds on the predecessor Strategy, it is oriented more towards growth, and enhancement of productivity, with greater alignment of the interventions towards wealth creation as way out of poverty .This orientation thus opens space for reorientation of subsequent medium term strategies.

Under implementation of the crop production policy, Makete District Council has constructed the first phase of Luwumbu irrigation scheme worth Tsh. 390,000,000 funded by the District Irrigation Development Fund (DIDF). However, National Strategies; ASDP/DADPS and TASAF have helped different groups in crop production including horticulture development in Makete District. In the Financial year 2011/12 DADPS injected more than Tsh. 358,000,000 in crop production and livestock development in 7 villages in different 7 wards in Makete. Provided efforts on sensitizing horticulture production are in place it is therefore an ideal time to look on market promotion to

accommodate the expected massive horticulture product which are envisaged to be realized in the District, among others, promotion of fruits and vegetable processing industry is the useful strategy.

Another policy focus on horticulture development has been established under the Horticultural Council of Africa (H.C.A). This is a network established by member Country national associations to address different constraints facing the region in maintaining competitiveness in the horticultural export market, especially in the European markets. The vision for horticultural Council of Africa has been developed to connect all members' national horticulture associations with a common aspiration and purpose. The H.C.A vision is: A united and internationally competitive regional horticulture industry while its mission is: Promote growth of horticultural sector in the East, Central, and Southern Africa Region through information sharing, collaborative research/technology, environmental stability, and collective bargaining. All these efforts intend to promote horticulture production in Africa (HCA, 2012). With all these laid down policies, horticulture products sustainability can therefore be ensured but if and only if will be well executed.

The national horticulture Policy of Kenya has depicted the overall objective which is to accelerate and sustain growth and development of the horticultural industry in order to enhance its contribution towards food security, poverty reduction, and employment and wealth creation, while among the Policy specific objectives is to facilitate increased production of high-quality horticultural produce RK (2010). This shows how different countries focus on promotion of horticulture development.

Successful horticulture development depend on various factors including, Political willingness on the established Policies, periodic review of the policies according to the

situation prevailing in specific time and the clear commitment from both service providers/deliverers and community themselves in engaging into productive horticulture development. However, community commitment on information accessibility pertaining horticulture development is of profound valuable. On the other hand, the demonstration farms and seedling nurseries for fruits production in Makete District should then go hand in hand with establishment of the fruits processing units in different villages for sustainable production and adding products values. The instalment of fruits processing Machines at Iniho is an ideal strategy towards fruits production promotion in Makete District for it will give chance for other products from fruits rather than depending on selling fresh fruits.

3.5. Literature Review Summary

Deliberate and conscious effort by Tanzania to alleviate Poverty to her people, was effectively shown in 1990s whereby it established Poverty Reduction Strategy Paper. There is distinction of poverty incidences between rural and urban poverty being 24.1 and 37.6 respectively (URT, 2010:5). The evaluation of implementation of MKUKUTA I which called the extension for MKUKUTA II registered low progress in income poverty reduction at house hold level to majority Tanzanian. Both MKUKUTA II and Five years Development Plan show the economic growth to be 6-7% as opposed to income poverty reduction which has been for an average of just 2%. This show that, factors and areas contributed at the economic growth at such particular period have not touched majority who are rural dwellers with their main economic activity being agricultural. Therefore, for the economic growth to have impact in economic development, agricultural development should be the priority.

Enormous studies indicate that policies and strategies put in place for horticultural development have been well designed in part/theoretically but few have been done in

practical. They showed most of the problems facing fruits and vegetable producers but not came up with practical solution on the revealed problems under horticultural development.

Unreliable Market, lack of fruits and vegetable processing industries, unsatisfactory capital to run horticultural products processing and un clear Political willingness in horticultural development has seen to be acute impediments to horticultural processing industry. Some of the solutions and efforts made by DADPS and TASAF to develop horticultural in Makete district have mainly being in theoretical because it touches little on post harvest precaution to farmers. At large efforts concentrated on just selling fresh product abstaining processing strategies which has resulted into demoralized to most of fruits producers as the saw most of their fruits to rote.

Effective community participation into various solutions to the problems pertaining at their areas has not been fully applied. Most of the participatory approach applied have been consultative approach in which target group is just been involved at implementation stage. The need for problems solving emerged and rooted from the community in question by coming up with practical solution can help the community to attain the desired development. This mainly results from the Community Needs Assessment (CNA) which is the case of this study. This study therefore intends to come up with the Installation of Fruits Processing machine for income poverty reduction at household level. It will come up with product diversification as opposed to single product (Fresh selling alternative).

CHAPTER FOUR

4.0 PROJECT IMPLEMENTATION

4.1 Introduction

This chapter narrate 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.

Among the commitment made are from the Makete District Council through Constituency fund which provided Tsh. 4,500,000.00 which facilitated to purchase fruits processing machine, Iniho Village Council contributed Tsh. 700,000.00 for transportation and installation cost, other commitment includes DALDO Makete who contributed other accessories for processing task which are processing and storage tools. Training and follow up from Makete district council.

The fruits processing project planned to commence on March 2013 due to delay accessing the ideal machine for the project. It was preliminarily planned to start on February, 2013 but the Horticultural officer who vested the task to find the machine reported not to access the machine so he ordered it from TEMDO-Arusha. Therefore the project implementation schedule was adjusted accordingly.

Different outputs from the project intervention include; installation of fruits processing machine, juice processed from apples and other fruits available within the area which

include prams, peaches and peas, trained people on how to process and packing the processed juice and availability of tools apart from processing machine for executing smooth processing activity.

The anticipated goal of the project is increased income for fruits producers of Iniho Village community members, hence household income poverty reduce. Horticultural development and economic development sustainability for the fruits producers will then contribute in poverty alleviation as a whole. Due to delay in installation of processing machine some of the output will be well measured in May 2014 because the good fruits harvest period is January to March (Peas, peaches and Apples) while for the case of prams the ideal period is on late November to December.

4.2 Project Outputs

The project expected outputs were as follows;

- i. 250 Iniho community members sensitised on Fruits/apples processing project by 2013
- ii. 40 apples producers equipped with knowledge and skills on how to manage and run the fruits/apples processing project by March 2013.
- iii. A sum of Tsh. 5,200,000.00 accessed for Fruits processing Machine procurement.
- iv. To increase by 60% of apples producers accessed reliable market by April 2013.

4.2.1 Project Activities

In order to realize the goal of the project which is the promotion of apples/fruits production for household income poverty reduction some activities were planned and successful executed. Some of the activities which were not accomplished include; inauguration of the fruits processing project and the annual evaluation of the project

implementation which have not yet executed but they will be undertaken once the project took off. The planned activities were as it is indicated in Table 17.

Table 17: Planned Project activities

Objectives	Outputs	Activities
1.To sensitize 250 Iniho Community members on apples processing project by 2013	1.1One campaign conducted	1.1.1Disseminate adverts
		1.1.2 To organise a Village apples day
	1.2: 200 community members attended the meeting	1.2.1.Outsource experts
		1.2.2.Conduct sensitization meeting
2.Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013	2.One training on how to run processing machine conducted	2.1.1Prepare budget for training
		2.1.2Organise training
	2.2. Twenty apples producers attended the training	2.2.1Outsource experts
		2.2.2Conduct training
3. Facilitate accessibility of Fruits processing equipments	3.1. one meeting for stakeholders conducted	3.1.1 To identify stakeholders
		3.1.2 Organize stakeholders meeting
	3.2. A sum of 5,200,000 collected	3.2.1 To prepare project budget
		3.2.2 To collect fund
	3.3 400 juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan collected.	3.3.1 To identify the needed fruits Processing tool/Equipments
		3.3.2 To consult different stakeholders to contribute
	3.4 One Fruits processing machine installed	3.4.1 Arrange procurement procedures
		3.4.2 To procure processing machine
		3.4.3 To consult the expert for machine installation
	4. To increase by 60% of apples producers access reliable market by April 2013	4.1 Twenty Radio adverts broadcasted
4.1.2 Select members to participate in the live broadcast		
4.2 One premises and business license obtained.		4.2.1 To acquire quality premises
		4.2.2 Solict funds for license fee
4.3At least two wholesale buyers contracted		4.3.1 Identify large scale apple buyers
		4.3.2 Negotiate with products buyers
		4.3.3 Signing contracts with buyers
4.4 A fruits processing project inaugurated		4.4.1 Selecting and appointing invitees
		4.4.2 Prepare brochures describing the project
4.5 Participatory Project M&E Report		4.5.1 Prepare M&E plan
		4.5.2 Appoint M&E team
		4.5.3 Conduct M&E

Table 17 show planned activities which were to be undertaken in respective of their output and Objectives planned to be achieved. Under objective 4 the inauguration of the project has not yet been done so the project has not yet took off. The mentioned outputs and activities will be implemented after the project commenced typical execution.

4.2.2 Project Implementation plan

The plan for project implementation prepared. The work plan and schedule showing activities to be implemented output and objectives prepared. Resources both material and human resources indicated well. However, the schedule on when to implement a specific activity by using months also indicated. The process of planning and implementing the project participated and involved different stakeholders who contributed at large in successfully implementation of the project. Under this project implementation the host organization (Iniho Village Council) leaders and the apples producer's group leaders participated fully from the planning phase to the implementation of the project at every activity. The implementation executed under the implementation plan as it is well indicated in Table 18.

The implementation task participated and involved apples producers, Iniho village leaders, and extension officers with their expertise relevant to the project mainly from Makete District Council. The main activities under the implementation were coordination of activities, supervision as well as monitoring and evaluation. Project monitoring allowed the project flexibility on the undertaken activities to ensure smooth implementation of the project and that activities are done as per plan. Evaluation process has been ensuring whether or not the planned interventions are carried out under the right track. In general the plan helped at large in realizing the set objectives and built the cohesion among the project implementers and other stakeholders.

Project implementation should ensure that activities are carried out according to the pre-prepared plan without many diversions. Following the plan stipulated under Table 18, Logical Frame work in Table 19, project budget in Table 20 and the gant chart which is shown in Table 19 among the major activities in project implementation include coordination of project activities; ensure enhanced community participation in project intervention and undertaking participatory monitoring and evaluation for the smooth implementation of the project.

The project implementation resources contributed by various stakeholders including; Makete District Council (Iniho Village government inclusive), DALDO Makete and Individuals. Apart from materials resources, Makete District council provided project professional for training and follow ups on the project implementation. However, apples/fruits producer's members contributed a sum of Tsh.700, 000.00 labour force and human resource for daily execution of the project.

The MCED student contribution was in facilitating trainings and advice in project management, planning, collaboration with various development partners, implementation, and ensured participatory monitoring and evaluation of planned activities.

Table 18: Project Implementation Plan

Objective	Output	Activities	Project Implementation										Resources needed	Responsible Person		
			1	2	3	4	5	6	7	8	9	10				
1.To sensitize 250 Iniho Community members on apples processing project by 2013	1.1One campaign conducted	1.1.1Disseminate adverts	█											Stationery	Host organization leaders	
		1.1.2 To organise a Village apples day		█										Human ,Fund	Host organization	
	1.2 At least one hundred and fifty community members attended the meeting	1.2.1.Outsource experts		█										Funds	Host organization, DALDO,	
		1.2.2.Conduct sensitization meeting		█										Materials, Human	DALDO Host organisation	
2.Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013	2.1 One training on how to run processing machine conducted	2.1.1Prepare budget for training			█									Human, Funds Time, stationery	Host organization Horticulture officer	
		2.1.2Organise training			█									Funds , stationery	Host organization Horticulture officer	
	2.2 At least twenty apples producers attended the training	2.2.1Outsource experts			█									Human, Funds Transport,	Host organisation, Horticulture officer	
		2.2.2Conduct training			█	█								Human, Time, Fund, Stationery	Host organisation, Horticulture officer	
3. Facilitate accessibility of Fruits processing equipments	3.1. one meeting for stakeholders conducted	3.1.1 To identify stakeholders		█										Human, &Time	Host organization DALDO	
		3.1.2 Organize stakeholders meeting			█									Human, Funds, Transport &Time	Host organization DALDO	
	3.2. A sum of 5,200,000 collected	3.2.1 Prepare project budget			█									Human , Stationary	Host organisation	
		3.2.2 To collect fund			█									Human, Time	Host organisation	
	3.3 At least 400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan collected.	3.3.1 Identify the needed fruits Processing tool/Equipments					█								Human, Transport & Time	Host organisation, horticulture officer
		3.3.2 To consult different stakeholders to contribute					█								Human, fund and time	Host organization and DALDO

	3.4 A Fruits processing machine installed	3.4.1 Arrange procurement procedures																Human , time	Host organization, horticulture officer,	
		3.4.2 Procure processing machine																	Human, fund	Host organization, horticulture officer
		3.4.3 To consult the expert for machine installation																	Electricity/Generator, human, fund	Host organization, horticulture officer
4. To increase by 60% of apples producers access reliable market by April 2013	4.1 Twenty Radio adverts broadcasted	4.1.1 Prepare adverts																Human, Funds Stationery	Host organization Horticulture officer	
		4.1.2 Select members to participate in the live broadcast																	Human, fund	Host organization Horticulture officer
	4.2 One premises and business license obtained.	4.2.1 To acquire quality premises																	Human, Funds Transport	Host organization, DHO, horticultural officer
		4.2.2 Solicit funds for license fee																	Human, Fund	Host organisation
	4.3 At least two wholesale buyers contracted	4.3.1 Identify large scale apple buyers																	Funds and Transport	Host organization Horticulture officer
		4.3.2 Negotiate with products buyers																	Human , fund, stationery	Host organisation, Trade officer
		4.3.3 Signing contracts with buyers																	Time Personnel	Host organization District horticultural officer
	4.4 A fruits processing project inaugurated	4.4.1 Selecting and appointing invitees																	Human, Fund Transport	Host organization trading officer,
		4.4.2 Prepare brochures describing the project																	People, fund, project dev. report	Host organization, Horticultural officer
	4.5 Participatory Project M&E Report	4.5.1 Prepare M&E plan																	Human, Funds Stationery	Host organization
		4.5.2 Appoint M&E team																	time	Host organization Horticultural officer
		4.5.3 Conduct M&E																	Human, M&E plan, funds	Host organization Horticultural officer

4.2.2.1 Logical Framework

Logical Framework is an analytical tool which is used to plan, monitor, and evaluate projects. Its name have been derived its logical linkages/relationship set by the planner in order to bring about connection between project means and its ends. The Logical Framework which has been used here is a logic Matrix. A logical Framework as a Matrix has a standard form in its representation. The format which has been used in this framework is sometimes known as a four by four Matrix. It consist a vertical logic which show the hierarchy of objectives, some times it is known as Narrative summary. It describes arrangement of objectives logically. It starts with Goal followed by objective, then Outputs and activities. The matrix allow the planner to arrange objectives in logical order by asking simple questions such as; what objectives are needed to achieve this goal? What output are expected to realize objectives? And then what activities should be done to realize the outputs? After the question on output the last variable which not necessarily to be within the matrix is what inputs are needed to undergo the planned activities?

The horizontal logic shows the progress against each objective. It clearly shows indicators and its means of verification as well as external factors which might hinder the fulfilment of the concerned objectives (Assumptions). In planning for the assumptions killer assumptions have been evaded and encouraged positive assumptions to show that the objective can be achieved. It is advisable that once there is killer assumptions nullify or change the project before committing resources. Under this project Goal, Objectives, Output and activities and Assumptions have been well indicated in Table 19.

Table 19: Project Logical Frame Work

Hierarchy of Objectives	Objectively Verifiable Indicator (OVI)	Means of Verification (MOV)	Assumptions
Goal (Impact): household income poverty reduced and standard of living improved to fruits producers	Apples producers household income poverty status	Annual sales report Survey and observation reports	Willingness of the people to disclose their economic status while inquiries
Objective 1: To sensitize 250 Iniho Community members on apples processing project by 2013			
Output 1.1: One campaign conducted	A campaign conducted	Meeting report	Positive response from the community
Output 1.2: 150 community members attended the meeting	150 community members sensitized on the fruits processing project	Project progress reports	Community members positively respond to the meeting
Activities			
1.1.1 Disseminate adverts	Two adverts disseminated through hamlet leaders	Project progressive report	Hamlet leaders disseminate adverts to the members timely
1.1.2 To organise a Village apples day	One Village apples day organized to sensitize community members on the fruits processing project	Project progressive report	Community members will attend at the sensitization meeting
Objective 2: Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013			
Output 2.1 One training on how to run processing machine conducted	20 apples producers trained on fruits processing project	List of participants of the training	Apples producers will attend the training
Output 2.2: At least twenty apples producers attended the training.	20 apples producers acquired knowledge and skills on project running and management	List of participants attended the training	Selected apples producers successful imparted knowledge and skills on the project
Activities.			
2.2.1 Outsource experts	Expert from Arusha and Makete District council executed the training	Training report	Selected members will attend the training
2.2.2 Conduct training	20 apples producers and 2 Village leaders attended the training	Training report	Village leaders and apples producers group members will attend the training
Objective 3: Facilitate accessibility of Fruits processing equipments			
Output 3.1: one meeting for stakeholders conducted	3 stakeholders attended the meeting (DED, DALADO under DADPS and Iniho Village leaders	Stakeholders meeting report	Positive response from the stakeholders to attend the meeting.
Output 3.2: A sum of 5,200,000 collected for processing machine	Tsh. 4,500,000 facilitated by Makete District council while 700,000 contributed by host organization	Funds soliciting report	Project partners will contribute fund to the project
Output 3.3: At least 400 Juice bottles, 2 knives, Camping machine, one	400 juice bottles, camping machine, 2 plastic drums, 4 mental pan and 100 jam	Project equipment report	Project stakeholders will contribute fruits processing equipment

generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan collected	bottles contributed by DALDO Makete while 4 glass jags, 4 buckets contributed by host organization		
Output 3.4: 4 A Fruits processing machine installed	A fruits machine installed at Iniho Village	Project progressive report	Fund for purchase and installing fruits processing machine available
Activities			
3.1.1 To identify stakeholders	Number of stakeholders consulted and funds collected	List of stakeholders supported the project	Positive willingness from the stakeholders to contribute to the project
3.1.2 Organize stakeholders meeting	3 stakeholders attended the meeting	Stakeholders meeting report	The meeting will be conducted successful
3.2.1 Prepare project budget	A budget of Tsh 5,200,000 prepared	Project budget report	Budget will be successful prepared
3.2.2 To collect fund	Tsh. 5,200,00 for processing machine procurement collected	Fund soliciting report	Required fund will be collected successful.
Objective 4 To increase by 60% of apples producers access reliable market by April 2013			
Output 4.1 Twenty Radio adverts broadcasted	A total of 20 Radio adverts on fruits processing products broadcasted	Products advertisement report.	Fruits producers will effectively use the processing machine to add value of their fruits
4.2 One premises and business license obtained.	A premises accessed at Iniho Village Business license acquired	Project progress report	Fund for business licence and the project premises will be obtained
4.3 At least two wholesale buyers contracted to procure farmers apples	2 whole buyers one from Makete town and one from Bulongwa contracted	Product market report	Positive response from large scale buyers
4.4 A fruits processing project inaugurated	Number of people who will attend the event	Project inauguration report	Positive response from invitees
4.5 Participatory Project M&E Report	2 Participatory M&E conducted	M&E Report	Positive Response from M&E members
Activities			
4.1.1 Prepare adverts	20 adverts describing the project prepared	Project progress report	Adverts will be successful prepared
4.1.2 Select members to participate in the live broadcast	5 members selected to participate in live broadcast	Product advertisement report	Positive response from the selected members
4.2.1 To acquire quality premises	One premise with 4 rooms acquired at Iniho Village	Project progress report	Availability of the premises within production area
4.2.2 Solicit funds for license fee	Tsh. 70,000 collected	Project progress report	Fund for business license accessed
4.3.1 Identify large scale apple buyers	2 large scale buyers have been identified	Product market report	Large scale buyers will be successful identifies
4.3.2 Negotiate with products buyers	Negotiation with 2 product buyers done	Products market reports	Negotiation will be successful done
4.3.3 Signing contracts with buyers	2 contract with 2 whole buyers signed	Products market report	Positive willingness from large scale buyers
4.4.1 Selecting and appointing invitees	The MP, DC Makete, DED, DALDO, Trading officer, Horticultural officer and	Project inauguration report	Invitees will attend at the event.

	Iniho Villagers have been appointed as invitees in the inauguration event		
4.4.2 Prepare brochures describing the project	100 brochures prepared and distributed	Project progress report	Fund for brochures preparation accessed
4.5.1 Prepare M&E plan	A Monitoring and Evaluation plan prepared	M&E Report	Selected members participate at the M&E plan preparation
4.5.2 Appoint M&E team	4 M&E members appointed	Number of members appointed	Positive response from the selected members
4.5.3 Conduct M&E	2 Participatory M&E conducted	M&E Report	Effective participation from the M&E Members

4.2.3 Inputs

In order to ensure project smooth implementation, various inputs were employed including human and material resources. These inputs have been indicated in Table 19. For the case of human resources Makete district council officials, TEMDO experts, apples/fruits producer's group leaders, Iniho Village Leaders, Iniho ward leaders and horticultural experts contributed in the project. The sources of material resources were Makete District Council (Fund for fruits processing machine and officers transport), DALDO Makete (Equipments/Tools for processing, Fuel and training cost), Host organisation (Premises, Machine transportation, generator and part of training cost).

4.2.4 Staffing Pattern

The project is managed by the Iniho Village council under the supervision of the apples/fruits producer's leaders. The premises are located within Iniho Village so the guardian is from the Village Council and is paid by the Village Council.

However, the implementation to a great extent was and will be assisted by committee members, with assistance of the District horticultural officer apples fruits processing group leadership comprise of the chairperson, Secretary, and treasurer. Table 20 show the staff and their respective roles.

Table 18: Project Staffing Pattern

Project Staff	Roles
Project Manager	Overall overseer of all project intervention
Project Secretary	Supervise execution of all the planned activities
Project Treasurer	Safe custody of funds and project equipments

4.2.5. Project Budget

The estimated project annual budget for the project was Tsh. 8,106,000.00. A sum of Tsh. 4,500,000 was facilitated by Makete District Council under (Constituency Catalyst Fund). Other contributions were from the host organization which include; premises, Tsh. 700,000 for processing machine transportation, installation and practical training cost for the selected members. The detailed budget has been shown in Table 21

Table 21: Project Budget

Objective	Output	activities	Resources needed	Quantity	Unity Price Tsh.	Total Tsh.
1.To sensitize 250 Iniho Community members on apples processing project by 2013	1.1One campaign conducted	1.1.1Disseminate adverts	Time	-	00	00
			Stationery,	1 rim	10,000	10,000
		1.1.2 To organise a Village apples day	Per diem	2	35,000	70,000
	Brochures		20 Litres	2,500	50,000	
	1.2 At least one hundred and fifty community members attended the meeting	1.2.1.Outsource experts	Per diem	2 days	35,000	70,000
			1.2.2.Conduct sensitization meeting	Mark pen	10	700
Flip charts				2	20,000	20,000
2.Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013	2.1 One training on how to run processing machine conducted	2.1.1Prepare budget for training	Time	-	00	00
			2.1.2Organise training	Soft drinks and snakes	20	1,500
		Marker pen		10	700	7,000
		Facilitator per diem	3	35,000	105,000	
	2.2 At least twenty apples producers attended the training	2.2.1Outsource experts	Stationery	2	10,000	20,000
			2.2.2Conduct training	Flip chart	2	10,000
		Mark Pens		10	700	7,000
		Fuel (Litres)		10	2,500	25,000
		Per diem		3	35,000	105,000
		Soft drinks and Snacks	20	1,500	30,000	
3. Facilitate accessibility of Fruits processing equipments	3.1. one meeting for stakeholders conducted	3.1.1 To identify stakeholders	Time	-	-	00
			3.1.2 Organize stakeholders meeting	Lunch	10	5,000.00
		Fuel		20 liters	2,5000	50,000
		Brochures	10	500	5,000	
	3.2. A sum of 5,200,000 collected	3.2.1 Prepare project budget	Stationery	Lamp sum	5,000	5,000
			Lunch	10 participants	5,000	50,000
		3.2.2 To collect fund	Fare	2 persons	10,000	20,000
	3.3 At least 400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4	3.3.1 Identify the needed fruits Processing tool/Equipments	Time	-	-	00
			Stationery	2 Printed	500	1,000
		3.3.2 To consult different stakeholders to contribute	Fuel	20 litters	2,500	50,000
Tools apart from	Lump sum		700,000	700,000		

	buckets and 4 metal pots/ pan collected.	equipments	generator			
	3.4 A Fruits processing machine installed	3.4.1 Arrange procurement procedures	Fax cost	8 pages	1,000	8,000
			Tea & battings	8	2,500	20,000
		3.4.2 Procure machine	Money	1	4,500,000	4,500,000
			Transportation	1	300,000	300,000
		3.4.3 To consult the expert for machine installation	Generator	1	350,000	350,000
			Fare	1	75,000	75,000
	Installation cost		1	325,000	125,000	
4. To increase by 60% of apples producers access reliable market by April 2013	4.1 Twenty Radio adverts broadcasted	4.1.1 Prepare adverts	Stationery	1 rim	10,000	10,000
			Adverts fee	20	10,000	200,000
		4.1.2 Select members to participate in the live broadcast	Fare	20	10,000	200,000
	4.2 One premises and business license obtained.	4.2.1 To acquire quality premises	3 rooms house	1	00	00
		4.2.2 Solicit funds for license fee	Money	1	10,000	100,000
	4.3 At least two wholesale buyers contracted to procure farmers apples	4.3.1 Identify large scale apple buyers	Time	-	-	00
		4.3.2 Negotiate with products buyers	Participant allowance	5	5,000	25,000
		4.3.3 Signing contracts with buyers	Contract form	6	1,000	6,000
	4.4 A fruits processing project inaugurated	4.4.1 Selecting and appointing invitees	Fuel	20 litres	2,500	50,000
			Lunch	200	3,000	500,000
		4.4.2 Prepare brochures describing the project	Brochures	200	500	100,000
	4.5 Participatory Project M&E Report	4.5.1 Prepare M&E plan	Time	00	00	00
		4.5.2 Appoint M&E team	Time	00	00	00
		4.5.3 Conduct M&E	Allowance	4	10,000	40,000
		Grand Total	8,106,000			

4.3.1 Project Implementation Report

The project implementation commenced on September, 2012 for undertaking preliminary stages of the project as it is well elaborated in Table 17 which is the project implementation plan and Gantt chart which is Table 21 under these guides the activities were executed sequentially which facilitated the effective realization of the set objectives. The responsible persons for the smooth implementation of the project were the CED student, host organization leaders, and selected members from the apples producers group.

Project implementation executed in a participatory way which involved different stakeholders in order to successfully implement the project. This approach was useful for it gave the way for the participants to get experience from one another on how to undergo successful project implementation. Furthermore, the participatory approach whereby local people are fully involved at every stage of implementation, ensures project sustainability on the side of management and creativity. These concur with Liftin (2001) who revealed that, local people starts as clients of the project as they go on they become clients of the project, ultimately they become managers. This means that as they participate thoroughly throughout the project implementation they become experts on how to run and manage the projects. The main areas in which local people were involved include; identification of the fruits/apples production activity, sensitization of the community on the fruits project, training on the use of different tools which are used in fruits processing process, packaging and selling the fruits processing products.

Other crucial activity was to ensure accessibility of funds for the project equipments. The task was successfully achieved in collaboration with different stakeholders who were and are interested with the project. Under this intervention the ultimate result was liable market accessibility from the apples producers which then planned to contribute into

reducing income poverty at household level. It is obvious that, not only earning from apples/fruits production can effectively reduce household income poverty but will apparently contribute to reduce it in conjunction of other income from other sources. In order for the project implementation to be implemented as it was planned, close monitoring was conducted by the apples/fruits producer's group members in collaboration with the Village leaders. The CED student had to participate in the monitoring exercise in collaboration with the group monitoring team from the starting days to familiarize the group members on the monitoring tasks for the day to day interventions.

Evaluation activities was undertaken in terms of pre-evaluation which helped to detect the project feasibility and viability, intermediate evaluation to see whether the project activities are carried as planned. However, monitoring and evaluation allowed flexibility of activities to suit the prevailed environment of implementation so as to realize the predetermined objectives and goal. Mid and annual evaluation is expected to be conducted soon after the project take off.

The excessive rain experienced since December, 2012 to April, 2013 destroyed the fruits while still young. Some fruits flowers were pruned at their early stages due to heavy and excessive rain experienced at the above mentioned period which led to declined fruits production in the period. On the other hand, the project experienced delay commencing typical processing task due to delay accessing the fruits processing machine. The task for searching the simple fruits processing machine by the CED student in collaboration with the Makete District Horticultural officer commenced in September, 2012 without success until December, 2012 when the TEMDO Arusha promised to make such machine. It was the time when we got a real price of the machine and procurement process started. Though the request to Makete District

Council on funds to purchase the machine sent since June 2012, the price for the machine was not yet known so the MDC promised to release fund from Makete Constituency Fund which was expected to be receive between July and October, 2012.

Distinct with the expectation, the constituency fund from Central government released in March 2013 which delayed the procurement process. However, ultimately, the fruits processing machine was bought in April 2013 after the Iniho apples/fruits producers receive fund from Makete LGA. It took almost two weeks since received fund to purchase, transport, and installs the machine ready for work.

Unfortunately, apart from many fruits being destroyed by excessive rain the installation of fruits was done while few fruits remained because its season was over (early April). Few fruits obtained (Apples) used for practical training to selected group members on how to undergo fruits processing into various products such as wine and juice. In general the establishment of fruits processing machine at Iniho Village will help rescuing fruits which used to rote due to unreliable market. It will also influence more peasants to engage into fruits production having seen assured market of their fellow products.



Figure 12: Village Chair Person Discussing with Apples Producers on the Premises to Install the Fruits Processing Machine



Figure 13: CED Student Discussing with Village Council Representative on how to press order of Machine from TEMDO Arusha

The practical training on how to operate the fruits processing machine which is processing variety fruits was well conducted. The fruits producers have been able to process various fruits for their commercial and consumption. Prior to the five machine operators to be trained the demonstration made to all apples producers who participated the training on how the machine works. Majority were motivated to produce various fruits and keep them well to get good products. Thereafter, five fruits producer's group members were precisely trained on the use of the fruits processing machine. The practical training has been shown in Figures 14 to 16.



Figure 14: Fruits Producers Preparing Fruits for Processing Practical Training.



Figure 15: TEMDO Expert in Practical Training on how to Run Fruits Processing Machine

Figure 15 indicate the TEMDO (Tanzania Engineering and Manufacturing and Design Organization) training the fruits producers step by step on how to run the fruits processing machine, how to clean machine after processed one type of fruits. He insisted to use warm water to pour in the filter to avoid smell of other type of fruits against the new one to be processed.



Figure 16: TEMDO Expert Demonstrating how to Clean Filter After the Processing Task

4.3.2 Project Implementation Gantt Chart

Gantt Chart has been prepared to simplify the intervention process and to indicate series of activities to be performed to ensure that all planned activities are implemented as planned, gantt chart was prepared showing activities and their respective month to be implemented. The gantt chart shows the Objective, expected Output and the concerned activity. However, some of activities were not implemented in time due to delay access of funds. Table 22 indicate the Gantt chart while Table 23 shows actual implementation of the planned activities.

4.3.3 Actual Implementation of the Project

Under actual implementation of the project the following activities were executed;

150 Iniho community members were sensitized on the fruits processing project, and majority are likely to start planting Apples trees .

Twenty apples producers have been equipped knowledge and skills on how to run the apples processing project, among them 5 have been trained o how to run and service the fruits processing machine and minor maintenance. Fruits processing machine have been bought and installed. Processing tools such as 400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan all worth Tsh. 1,050,000 collected.

The project was officially inaugurated on 9th July 2013 by the Prime Minister Hon. Mizengo Kyanza Peter Pinda. Having impressed with the project he provided to the host organization Tsh. 500,000.00 (cash). He promised to increase one more fruits processing machine (it will be purchased from TEMDO- Arusha with the consultation of the Researcher). Participatory monitoring and evaluation have been successful conducted. Annual evaluation will be conducted when the project took off. Although the project has been inaugurated, yet the actual production will commence December which is the fruits season. In this case some of the activities under Objective 4 will be fulfilled during such period. In general most of the planned activities have been implemented which has put the project in good position to be well implemented. Table 23 indicate in depth what have been done.

Table 23: Actual Implementation of the Project

Objective	Output	Activities	Implementation status	Reason for not implementing/deletion from implementation plan
1.To sensitize 250 Iniho Community members on apples processing project by 2013	1.1One campaign conducted	1.1.1Disseminate adverts	Adverts were well disseminated to the concerned people	
		1.1.2 To organise a Village apples day	Village meeting successful organised	
	1.2 At least one hundred and fifty community members attended the meeting	1.2.1.Outsource experts	Experts from District level participated at the meeting	
		1.2.2.Conduct sensitization meeting	The meeting conducted and 200 people participated the meeting	
2.Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013	2.1 One training on how to run processing machine conducted	2.1.1Prepare budget for training	A sum of Tsh. 349,000 for a training prepared	
		2.1.2Organise training	Training organised	
	2.2 At least 20 apples producers attended the training	2.2.1Outsource experts	Expert from Makete DC accessed and conducted the training	
		2.2.2Conduct training	20 participants attended the training	
3. Facilitate accessibility of Fruits processing equipments	3.1. one meeting for stakeholders conducted	3.1.1 To identify stakeholders	Apples producers, Makete DC,	
		3.1.2 Organize stakeholders meeting	Stakeholders meeting organised and conducted	
	3.2. A sum of 5,200,000 collected	3.2.1 Prepare project budget	A budget of Tsh. 5,200,000 prepared	

		3.2.2 To collect fund	A sum of Tsh. 6,200,00 collected	
	3.3 At least 400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan collected	3.3.1 Identify the needed fruits Processing tool/Equipments	400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan all worth Tsh. 1,050,000 identified and collected	
		3.3.2 To consult different stakeholders to contribute	Makete DC, MP and apples producers consulted and contributed the project	
	3.4 A Fruits processing machine installed	3.4.1 Arrange procurement procedures	The fruits processing machine procurement procedures well prepared	
		3.4.2 Procure machine	The machine worth 4,500,000 procured	
		3.4.3 To consult the expert for machine installation	The expert from TEMDO Arusha installed and conducted training on how to use the machine to the Host organization members	
4. To increase by 60% of apples producers access reliable market by April 2013	4.1 Twenty Radio adverts broadcasted	4.1.1 Prepare adverts	Preliminary adverts prepares: Launching the processing activities, stakeholders contribution, and usefulness of the project and market of the products.	
		4.1.2 Select members to participate in the live broadcast	Members have been selected but actual live broadcasting has not yet commenced.	Broadcasting will commence in December, 2013
	4.2 One premises and business license obtained.	4.2.1 To acquire quality premises	Premises prepared	
		4.2.2 Solicit funds for license fee	A sum of Tsh.100,000.00 Prepared for license	
	4.3 At least two wholesale buyers contracted to procure	4.3.1 Identify large scale apple buyers	Two apples buyers identified	

	farmers apples	4.3.2.Negotiate with products buyers	4.3.2.negotiation made	
		4.3.3 Signing contracts with buyers	4.3.3 Signing contracts with buyers is under construction	
	4.4 A fruits processing project inaugurated	4.4.1 Selecting and appointing invitees	The Makete MP, MDC Chairperson, DC, DED, DALDO, the expected 2 products great buyers have been selected and appointed	The Njombe Regional Commissioner influenced the inauguration of the project therefore even Regional Secretariat evidenced the inauguration.
		4.4.2 Prepare brochures describing the project	100 brochures has been prepared	Project inauguration done by the Hon.Prime Minister, Mizengo, P. Pinda on 9 th July 2012
4.5 Participatory Project M&E Report	4.5.1 Prepare M&E plan	The M&E plan has been prepared		
	4.5.2 Appoint M&E team	4 members for M&E appointed		
	4.5 Conduct M&E	Pre evaluation and during implementation has been done. annual evaluation has not yet been conducted	Annual M&E will be conducted after the project take off	

CHAPTER FIVE

5.0 PROJECT PARTICIPATORY MONITORING, EVALUATION AND SUSTAINABILITY

5.1. Introduction

This chapter discusses project participatory monitoring, evaluation and sustainability. 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. 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.

Under this part project progress is determined and it provides chance to the project implementers to see whether the project is in the right track or not. Project flexibility is very important in any project so as to ensure the successful implementation of the project. This is well determined in the monitoring and evaluation exercise. Participatory monitoring and evaluation give opportunity to all participants to be involved in all stages of the project implementation and it make them to be the owners of the project. Once problems and challenges concurred during implementation, with participatory evaluation participants get chance to discuss and resolve the problems and find the way to overcome challenges soon.

This chapter has been divided into eight parts, namely; monitoring information system, participatory monitoring methods, participatory monitoring plan, participatory evaluation plan, performance indicator, participatory evaluation methods, and project evaluation summary as well as the project sustainability.

5.2 Participatory Monitoring

Stone, Chauhan and Lissi (1994: 57) defines Monitoring as the process of routinely gathering information on all aspects of the project. It provides managers with information needed to; analyse current situation, identify problems and find solutions, discover trends and pattern, keep project activities on schedule, measure progress objectives and formulate/revise future goals and objectives, make decision on human, financial, and material resources. Participatory monitoring and evaluation therefore; are extremely important for learning about the achievement/deviation from original concerns and problems faced by local development projects or programs being implemented, so that corrective measures can be taken in time.

Participatory monitoring is the process in which the monitoring task done by involving the respective persons. For the case of apples processing group the members fully participated in the monitoring their daily activities so as to realize the predetermined objectives. The monitoring was undertaken on all activities arranged to be performed in the project. The essence was to determine the progress of the planned activities. Among the activities which were monitored include; sensitization meeting to the Iniho community members on apples production, apples producers, preparation of a place for fruits processing, the process for purchase and installation of the fruits processing machine, collection of fruits for processing, collection of funds for project equipments procurement, safeguard of project equipments, lobbying and probing for fund collection, arrangement of business license, training on how to run fruits processing machine and running fruits processing machine as a whole. Participatory monitoring was a useful tool for it gave opportunity to respective stakeholders to be aware of all activities undertaken in the project and it helped them to make their useful decision in different aspects.

5.2.1 Monitoring Information System

This is in which project activities are collected and reported according to the agreed or planned intervals. The reported information are useful to the project managers to plan, monitor, undergo evaluation on the intervention of the project. The fruits processing project used the Monitoring Information System to establish data bank collected from different planned activities implemented in a certain period. The collected and kept data helped in the smooth run of the project and to find solution of the impediments occurred in the implementation process. Among the information which was needed by the project were; Number of apples producers and their respective number of fruits trees planted. Different information which were required by the project include; equipment requirement, inventory of project equipment, collection of funds and fenders, different project stakeholders, records on produced products, Required staffs for project daily running, training requirements, raw materials collected, market on the products, customers and members of the project. Accessibility of such information helps managers or leaders to arrange good plan for the project implementation, plan for monitoring and evaluation. Under this system, a daily record book/sheet was prepared to enable all information to be entered for the use of different stakeholders including the group members themselves. The assigned apples processing project group members were responsible for recording daily project records for project development and for the preparation of the reports for different intervals. Normal intervals in fruits processing project was monthly, quarterly, and annual reports.

5.2.2 Participatory Monitoring Methods

Different methods and techniques employed to ensure maximum participation of the fruits producer's group members in monitoring the underlined project activities. O&OD and PRA methods were used in participatory monitoring. However, observations on the task in

question, interview, discussion, and documentation tools were well utilized in the participatory monitoring. Under this approach the group members got chance to encourage one to another and other Iniho community members on keeping fruits trees to produce many fruits to feed the processing machine.

5.2.2.1 Key Informants Interview

In the implementation of the project some addition information were needed to some key informants including; District officials (Trade officer, Health officer, DALDO and DPLO), extension staffs (Agriculture extension officer), Ward leaders (WEO and Councillor) Village leaders, and fruits/apples producers members. The information gathered by the researcher in collaboration with apples producer's leaders through interview. Through these interviews and discussions it was agreed that the supervisors of the fruits processing machine should be the fruits/apples producers and that many peasant are to be encouraged to engage in producing apples to increase households income.

5.2.2.2 Observation

Observation was another useful way used by the apples producer's member in collaboration with the researcher, village leaders DALDO and extension officers to see if the planned activities were implemented smoothly as planned. Under observation project equipments procured, premises, fruits fields, training participants, and the sensitization meeting attendants were well observed and justified. Another observation task will include the real project take off and the inauguration activity which are both under construction.

5.2.2.3 Documentation

Different document pertaining the fruits processing project were to be kept in good order. The documents prepared and kept included; important letters from Makete District

Council, Different receipt books and payment vouchers, different minutes for various meetings, daily product records, list of project equipments and project market information. The project funding records was the necessary document to be kept into good custody for successive implementation of the project. In general all transaction done were to be documented and well kept by the respective persons. The group chairperson had to ensure that the group secretary and the treasurer keep all necessary documents for the use of the project members and other project stakeholders. The CED student assisted the group members on the good way of writing and keeping different report in good manner. The CED student in collaboration with district officials, extension officer and fruits processing group members designed and prepared a daily record sheet/book for income received and income generated for the scientific run and sustainability of the project.

5.2.2.4 Participatory Evaluation Methods

The bottom up approach was well employed during the evaluation phase in which two related methods used. These are Participatory Rural Appraisal (PRA) and Opportunity and Obstacles to Development (O&OD). These methods are closely related and they are using the same techniques. The only major different is on the entry point to the concerned population, PRA starts by asking the problems the community is having while O&OD starts by asking what the available opportunities to ensure smooth implementation of the project/activity. Both methods were used according to the environment, available resources, and the kind of activity to be evaluated. These methods helped at large commencing at the preliminary stage of evaluation plan preparation whereby all stakeholders participated fully. By conducting group discussion, preparation of the evaluation schedule, direct observation and making step by step participatory evaluation, PRA and O&OD techniques were well enhanced and utilized.

The participatory evaluation task mainly focused on the whole progress in the implementation of the planned activities so as to realise the predetermined objectives. Among the evaluation areas by the help of readily available work plan was; the extent at which each planned activity is executed, achievement of the set targets and Objectives, project development and success, the impact/outcome of the project and the opportunity for project sustainability. The task was facilitated by the prepared checklist at every component/activity which used as a guideline to attain high level of participatory evaluation. Observation tool was useful in seeing how the community pick their fruits in time before they get rote and collect to the processing centre and how the processing machines works.

During the sensitisation meeting, the community members got chance to air out their views on problems associated with apples production that they fear to engage in producing much because of unreliable market. Most of them proclaimed that they depend market from Mbeya Region which if excessive rain occur they wont access market easily. However, the CED students in collaboration with district agricultural officers, explained to the community members on the importance of diversification of their crops and the importance of fruits production (Apples in particular) for their nutrients and household income earning. They were also notified that once the fruits processing machine installed there will be pretty market for the produced juice, jam and wine for one can be able to store for a certain period and sell it in reasonable price. Ultimately the Villagers were happy of the project and promised to engage into more production of fruits to feed their processing machine.

Under participatory monitoring most of the activities were successful implemented and it builds the cohesion among the actors in the project which ensures the sustainability of the

project after the project time. This is due to the fact that majority of the participants have been aware of many stages of the implementation task and the essence of the project for their future betterment. Discussion on different issues and collective intervention on different activities led to experience sharing among the group members and stakeholders.

5.3 Project Evaluation Summary

Project evaluation was conducted to determine if the projected have been implemented as planned at each stage of implementation. The project evaluation summary based on the extent at which project goals and objectives have been realized. Performance indicators used as a means of verification on the particular variable. The expected outcomes were related by the actual outcomes to see the level of intervention of the particular activity assisted by the predetermined indicators. Many of the planned activities have been implemented as well as realizing some objectives. However, evaluation on inauguration of the project as well as mid and annual evaluation were not done. These will be conducted later. Another important evaluation which has been done is on the nature of the fruits currently produced in Makete, necessitate the project to be seasonal because there are some months without any type of fruit produced. However, the activity is very lucrative and once the massive fruits which have been rotten will be rescued the processed fruits will help the community members to earn more. The details of the evaluated activities have been indicated in Table 24.

Table 24: Project Evaluation Summary

Objective	Output	Activities	Performance indicators	Expected Outcome	Actual outcome
1.To sensitize 250 Iniho Community members on apples processing project by 2013	1.1One campaign conducted	1.1.1Disseminate adverts	1.1 List of adverts	1.1 community members access adverts	1.1 Adverts disseminated to the community members.
		1.1.2 To organise a Village apples day	1.1.2 One apples day organised	1.1.2: One apples day organised	1.1.2 A Village apples day organised and executed
	1.2: 150 community members attended the meeting	1.2.1.Outsource experts	1.2.1 Two experts accessed and attended the meeting	1.2.1 Sensitization conducted	1.2.1 A sensitisation meeting successively conducted
		1.2.2.Conduct sensitization meeting	150 community members attended at the Village apples days	150 community members sensitized on apples processing project	A total of 150 participants sensitized on the apples processing project
2.Equip 40 apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013	2.1 One training on how to run processing machine conducted	2.1.1Prepare budget for training	Tsh. 350,000 prepared	A budget for training prepared	A sum of Tsh. 349,000 collected
		2.1.2 Organise training	2day training organises	2 days training preparation completed	A 2 days training conducted
	2.2 At least 20 apples producers attended the training	2.2.1Outsource experts	2 experts out sourced	2 experts obtained and conducted the training	2 expert from Makete DC conducted the training

		2.2.2 Conduct training	20 participants attended the training	20 apples producers imparted knowledge and skills on how to run and manage the project	20 host organization members trained on how to run and manage the project
3. Facilitate accessibility of Fruits processing equipments	3.1. one meeting for stakeholders conducted	3.1.1 To identify stakeholders	3 Stakeholders identified	3 Stakeholders to be identifies	3 Stakeholders identified and attended the stakeholders meeting
		3.1.2 Organize stakeholders meeting	A Stakeholders meeting organised	Stakeholders willingly contribute to the project	Stake holders contributed financial and material resources
	3.2. A sum of 5,200,000 collected	3.2.1 Prepare project budget	A Tsh. 5,200,000 budget prepared	A budget of Tsh. 5,200,000 prepared	A budget of Tsh. 5,200,000 prepared
		3.2.2 To collect fund	A sum of Tsh. 5,200,000 collected	Stakeholders contribute A sum of Tsh. 5,200,000 collected	A sum of Tsh. 5,200,000 successfully collected by stakeholders
	3.3 At least 400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan collected	3.3.1 Identify the needed fruits Processing tool/Equipments	400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan all worth Tsh. 1,250,000 identified and collected	Required tools identified.	Project tools worth 1,250,00 identified
		3.3.2 To consult different stakeholders to contribute	Makete DC, MP and apples producers consulted and contributed the project	Stakeholders contribute equipments worth 1,250,000	400 Juice bottles, 2 knives, Camping machine, one generator, 100 Jam bottles, 2 Charcoal stove, 2 plastic drums, 2 blenders 4 glass jags, 4 buckets and 4 metal pots/ pan all worth Tsh. 1,250,000 collected from different stakeholders

	3.4 A Fruits processing machine installed	3.4.1 Arrange procurement procedures	invoice form machine sellers received	The fruits processing machine procurement procedures well prepared	Procurement process executed well by the host organisation
		3.4.2 Procure machine	One machine procured	The machine worth 4,500,000 procured	The processing machine procured
		3.4.3 To consult the expert for machine installation	One expert for installing machine consulted	The fruits processing machine installed	The expert from TEMDO Arusha installed the machine and conducted the Host organization members practical training on how to use the machine
4. To ensure 60% of apples producers access reliable market by April 2013	4.1 Twenty Radio adverts broadcasted	4.1.1 Prepare adverts	20 adverts prepared	Adverts for apples promotion broadcasted	Adverts prepared broadcasting will commence in December, 2013
		4.1.2 Select members to participate in the live broadcast	Five members selected	Adverts executed	Members have been selected actual live broadcasting will start in December 2013
		4.2.1 To acquire quality premises	One Premises prepared	Processing machine installed within the premises	Processing machine have been installed within the premises
		4.2.2 Solicit funds for license	A sum of Tsh.100,000.00 Prepared	Business licence accessed	Business licence accessed
	4.3 At least two wholesale buyers contracted to procure farmers apples	4.3.1 Identify large scale apple buyers	Two apples buyers identified	2 large scale buyers identified	2 large scale buyers have been identified
		4.3.2. Negotiate with products buyers	Negotiation documents accessed	2 large scale buyers negotiated	2 large scale buyers have been negotiated
		4.3.3 Signing contracts with buyers	Signing contracts with buyers is under construction	Contract with large scale buyers signed	Signing contracts with buyers is under construction
	4.4 A fruits processing project inaugurated	4.4.1 Selecting and appointing invitees	Invitation letters written	The Makete MP, MDC Chairperson, DC, DED, DALDO, the	Implemented the Jombe Regional Commissioner influenced the activity

				expected 2 products large scale buyers have been invited	
		4.4.2 Prepare brochures describing the project	100 brochures has been prepared	Awareness creation to majority on the project activities	Inaugurated by Hon. Prime Minister, Mizengo P. Pinda
	4.5 Participatory Project M&E Report	4.5.1 Prepare M&E plan	The M&E plan document	M&E plan prepared	Evaluation plan prepared
		4.5.2 Appoint M&E team	4 members for M&E appointed	4 selected members participated in M&E exercise	4 selected members participated in M&E exercise
		4.5 Conduct M&E	M&E Report	Project activities executed successful	Annual evaluation has not been done

5.4 Project Sustainability

Project sustainability refers to the capacity of the project to continue functioning by using its resources. These are the strategies in place which can enable the project to carry on when the project implementation is completed or after the key stakeholders withdrawn. For the case of Iniho fruits Processing Project the sustainability has been translated in their own approach basing on the key factors enable the project to sustain. The IFPP has focused on the human resources, raw materials, and reliable market for the project produce. In order for the project to be sustainable the CED students used the Participatory monitoring and evaluation at every stage of the project implementation to empower the group members to be able to run the project themselves.

5.4.1 Institutional Sustainability

In order for the institution to be sustainable the apples producers' group registration is on process so as to work independently rather than depending on the village council. The extension officer within the area is there to advice the fruits producers to abide in all principles to produce quality products to sustain the project. IFPP group leaders have been trained on how to run the project successful. On the other hand the capacity building to apples/fruits producer's on the processing project will sustain the project. The LGA leaders and officers have accepted the project so the WEO, VEO and agricultural extension officer will keep on sensitizing and influence majority to engaged in fruits production.

The District Agricultural Officer (DALDO) has decided to incorporate the project in its normal budgeting for extension and sustainability of the project.

Provided the fruits producers have been participating from the preliminary stages of the project intervention, they have gained an experience which will suffice them to run the project themselves. The training conducted on how to run the project will facilitate them to undergo various activities concerning fruits processing. Moreover, the use of effective

Participatory Monitoring and evaluation has created the sense of project ownership to all group members which allow them to continue with the project even after the project time finished.

5.4.2 Financial and Materials Sustainability

Fruits will be collected from fruits producers at Iniho Village and neighbouring Villages. The group member has set aside Tsh. 500,000.00 as the starting capital for purchasing fruits for processing. Currently, there is no electricity at Iniho Village, the host organization group members has prepared a Generator worth Tsh. 350,000.00 and Tsh. 100,000.00 (40 liters of petrol) to run the generator. Fuel will be replaced under revolving fund system. For the case of raw materials majority Iniho community have been sensitised and emphasised to plant more apples/fruits trees to produce more fruits.

During inauguration activity, the Prime Minister Hon. Mizengo P. Pinda provided a sum of Tsh. 500,000.00 to support the project which in turn will help enrich the project fund. He also promised to increase one more processing machine for the extension of the project. However, the group Host organization has been opened the Benk Account for sustainability of the project.

The market for processed products will be within the Village, neighbouring wards such as Ipelele who have shown their interest for buying win, Bulongwa ward and Makete town which is 20km long. Provided Iniho Village is located besides Makete to Mbeya road transportation accessibility to Makete is not a problem. The group therefore has prepared a room at Makete for selling their products once they commence producing.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter provides an over view of the fruits processing project to Inhiho Village. It gives the summary of the whole process and steps undertaken since the identification of the project, problem identification up to the project implementation outputs. The areas which have been summarized in this chapter include; Community Needs Assessments (CNA), Problem identification, Literature review, Project implementation, Participatory Monitoring, Evaluation, and ultimately the sustainability of the project. In general, the chapter shows in nutshell what have been discussed in all chapters.

6.2 Conclusions

The struggle to pull out of poverty is the task of every individual. It is a considerable long time since Tanzania started straggling to combat poverty among her people. Inhiho Village is one among the villages affected by income poverty in Makete District. Different strategies have been employed to facilitate community members to pull out of poverty, but still majority are trapped in income poverty.

The Iniho fruits processing project is an ideal strategy which comply the National strategy to alleviate absolute poverty in Tanzania as well describe in MKUKUTA II. It also goes in line with the Tanzania Agricultural Livestock Policy and the Tanzania Horticultural policy which envisage increasing income to the people through production of different crops and horticultural promotion respectively. The CNA conducted by Iniho community members in collaboration with the CED student revealed the prevalence of the fertile land suitable for different fruits production (Apples in particular) which is the opportunity for income earning to the community members, hence economic development.

The participatory assessment conducted at Iniho Village came up with the information which suggests that Iniho population were still in poverty status although they have been producing different crops including fruits production. Under food poverty it was revealed that 50% of the population get only two meals per day while 43.3% got three meals per day which is a standard meal.

For a long time Iniho people were depending on Pyrethrum as the solely cash crop but it came to pass that the price went down, the farmers were demoralized in the production of such crop. Currently fruits production has been one of the cash crops for some Iniho Population. However, fruits producers have been facing different problems including; unreliable market for their produce, rotting of fruits due to lack of fruits processing machines, lack of capital and inadequate knowledge on how to process their fruits.

Poverty has been the problem of many countries in the World. Poverty is classified into income poverty and none income poverty. It is further classified as absolute poverty and relative poverty. Income poverty has said to be aggravating other kinds of poverty to majority people (URT, 2006). Many countries have been straggling to pull their people out of poverty but much has not been done. The house Budget Survey conducted in 2007 and the Millennium Development Goal Report, Midi-way Evaluation from 2000 to 208 show that the poverty status in Tanzania was still high (33.4%). Different effort have been in place to combat the problem including; MKUKUTA I&II, Millennium Development goals and the current KILIMO KWANZA slogan.

National Strategy for Growth and Reduction of Poverty (NSGRP). It has adopted the Millennium Development Goals and established the nation development vision 2025 intend to halve and alleviate absolute poverty by 2015 and 2025 respectively (URT, 2003, URT, 2005, URT, 2006). Other strategies for Tanzania include;. To invest in human capital by

providing equitable access to education, health and social services, Formulation of policies that focuses on investment in productive sectors, promotion of efficient economic opportunities for the poor and agriculture diversification and the current slogan “Kilimo kwanza”

Apples production is one of the lucrative crops in income earning to majority. Many countries including China, South Africa, America, Kenya and Uganda (mentioned a few) have registered tremendous income from apples production for their countries. According to the Tanzania Horticultural Agriculture (TAHA), horticultural industry plays a great contribution to the agriculture sector economy, it has presently contributed US Dollar 380 Million which is 40% of all the agriculture export and about 9% of Tanzania export which is one of the fastest growing sector of the economy. Among the areas which are suitable for fruits production (apples in particular) is Makete district.

The literatures concerning fruits production in Tanzania, unveil the fact that much of the produced fruits have been rotting and some times sold in very low price due to unreliable market and lack of fruits processing industries which could have rescued the situation. Processed fruits into various products can be kept for a long time and be sold in reasonable price which in turn encourage more producers to engage in its production. Absences of fruits processing industries exacerbate poverty among the community members in the respective areas. Fruits producers have been processing their fruits by using simple tools such as small blenders for their consumption and not for sale.

The main problem faces Tanzanian fruits producers is unreliable markets for their produced fruits. Tanzania is endowed with variety fruits but literatures shows that just 10% of the fruits have been processed. Makete is one among the District which has done very little in the fruits processing industry. Unwillingness and delay in decision making on the

establishment of fruits processing machines in different areas producing fruits has been the major cause of jeopardising efforts by fruits producers to produce more.

The Agriculture policy of 1997 which was revised in 2006 to produce Crop Policy and Livestock Policy has depicted clear efforts on horticulture development. Under crop policy, horticulture development has been emphasized so as to increase fruits and vegetable production in Tanzania. The reason behind selection of fruits processing project was to increase the Inihio people income through fruits production (Apples in particular) and creating reliable market for the products for income earning which will contribute to the realize TDV 2025, MKUKUTA and MDG with their intention to reduce/alleviate abject poverty in Tanzania.

In the implementation of fruits processing project some objectives have been fully achieved while few have not been realized. The planned objectives were not changed over the implementation period. Among the objectives which were realized are; Sensitizing the Inihio community members on the apples processing project, Equip the apples producers with knowledge and skills on how to managed and run the fruits/apples processing project by March 2013, Facilitate funds and consultation services to access successful intervention of the project, and to ensure reliable market of the apples products by April 2013 which include the purchase and installing the fruits processing machine.

The objective which was partially implemented is to ensure reliable market of the apples products by April 2013. An activity which has not completed is the inauguration of the project because the processing machine was accessed at the end of the fruits season. Another factor inhibited the activity was the excessive rain which existed for three Months consecutively destroyed many fruits before picking period. Another activity which was not fully implemented is typical processing task due to delay accessing the machine according to the fruits harvesting period.

In order for the project implementation ultimately bring about sustainable economic development, the CED student planned and managed to involved the community members (local people) in this case fruit processing group members, and different stakeholders in the whole process of the project from the preliminary stage of project identification, project planning, project implementation and project monitoring and evaluation of planned activities. A project cycle technique which shows all procedure in project planning and implementation was abided in participatory monitoring and evaluation.

The participatory monitoring and evaluation have been helpful to both fruits processing project group members and the CED student. The CED student learned the importance of participation of local people because they showed great ability in monitoring and evaluation throughout the implementation of the project. On the other hand participatory monitoring and evaluation is very useful for successful project implementation and for its sustainability because it allows local people to participate in all process of the project intervention. It also creates a sense of ownership for the project group members hence, project sustainability.

The projects implementation could have been realised all its objectives if some factors could not happen as they concurred. There are three major factors which led to delay implementing some activities, these are; delay in accessing the processing machine from madders (TEMDO=ARUSHA), Makete LGA to delay releasing fund for assisting procuring the machine and excessive raining experience from January to April, 2013 which destroyed many fruits before harvesting. The absence of these factors would have been enhanced the ability of the CED student to complete all elements of the project.

In the course of project implementation, there was an unexpected excessive rain occurrence which impeded the realization of the objective four which is to ensure reliable

market of the apples products by April 2013. The occurrence led to many fruits to be destroyed before being processed. If the project was successful implemented the inauguration of the fruits processing project would have been done. The major expected outcome which would be achieved is increased price of the produced fruits hence; contribute to household income poverty reduction.

It is therefore expected that the Iniho Village apples/fruits producers will benefit from processing their fruits at fruits processing centre after the project take off. Provided fruits will be processed into different products, it is expected that the products will be sold in high price than before which will lead to increased income of majority apples/fruits producers. The successful implementation of the project will encourage many farmers who are not yet engaged in fruits production together with other neighbouring villages to engage into apples/fruits production.

6.3 Recommendations

Project design and implementation is a crucial and very sensitive activity which need self commitment of the particular person. In order to successful achievement of the project implementation it needs one to abide in all principles of project design and Management. At the project level it is where resources are committed, therefore, it need effective and efficiency utilization of resource. Participatory approach at each level should be well applied from the identification to evaluation stage.

According to the experiences drawn from the implementation of Iniho fruits processing project, it came to be understood that local people (community members) are eagerly engaging in the implementation 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 of profound importance because it creates a sense of ownership of the project to all stakeholders. Currently O&OD is the contemporary approach in any planning and implementation in Tanzania. I would like to recommend that, Participatory Rural Appraisal and O &OD are sound and useful methods in ensuring effective 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 dependent sense while O&OD create independent sense in the implementation of the project (Resources in particular). Another method which is the same as O&OD is Participatory Learning and Action (PLA) which has been broadly used in Uganda but all uses the PRA tools. Therefore, when using PRA a research should be very careful not to create a dependent status especially at the preliminary stages of the project design.

Effective Participatory assessment is very important in order to come up with a real problem which affect majority of the concerned community. In conducting the assessment exercise; accurate, valid, and genuine data are very important and results to sound CNA exercise which lead to unveil 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.

Under project design and implementation it is very important to think of time according to the nature of the project so as to schedule adequate time for the completion of the project.

Some projects need many players to commence. For example food vendors/processing as the case of fruits processing project, it need the permit from TBL which some times take long time to complete the process. Government officials who are vested the task to ensure quality of food produced should executed their tasks timely.

According to available literature review, good policies on how to promote horticultural in Tanzania have been well analyzed but there is no implementation and close follow up on the laid down strategies. However, problems and challenges faces fruits producers in Tanzania including unreliable market have been identified and well analyzed. The government in collaboration with other stakeholders should act on the analysed problems to promote fruits production as one of the horticultural products. Among others the following are to be adhered; to sensitize the establishment of fruits processing industries to rescue over increasing damaged fruits. The government should ensure reliable market for fruits products and to ensure the sustainability of the fruits production.

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.

Under this study the useful strategy which has been helpful in the study is the can process strategy and the participatory approach in the project intervention. The CNA allow the useful information to be drawn from the community at the grassroots level where also in

most cases become the project area. This creates the sense of ownership of the project from the very preliminary stage.

The data collection method which I have found to be useful according to the data collected is interview method in which questionnaire tool was used to depict in-depth information from the community and came up with useful information. The information obtained through questionnaire was simply entered into SPSS and analysed accordingly. In general the method simplified the task of collecting and analysing data. On my opinion interview method according to the nature of the project I undergone was the best method, though other method are also useful such as focus discussion and observation but cannot be applied solely and explore enough information to fulfil the need of the study.

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APPENDICES

APPENDIX I= APPLES PRODUCTION QUESTIONNAIRE

1.0 Personal general information

1.1 Name of respondents.....

1.2 Age

1.3 Gender: 1= Male, 2= Female

1.4 Marital status: Cycle the respective answer

1= Single, 2=Married, 3 = divorced, 4 = Separated, 5 = Widow, 6= Widower,

1.5 Occupation: 1= Peasant, 2= Employed, 3= businessman, 4= Livestock –keeping

1.6 Religion:

a) Christian

b). Islamic

1.7 Education of respondents

a). None, b). Adult education, c). Primary education, d). Form four level,

e). form six level, f). Tertiary

1.8 Ethnicity: cycle the letter of the relevant answer

a) Wakinga, b). Wamagoma, c) Wamahanji, d). Wawanji e) Hehes, f) Benas

1.9 How many are you in your household? 1=1, 2= 2, 3=3, 4= 4-5, 5 = above 5

2.1 How do you define Poverty in your living area?

1= A person without children, 2= No access to housing, food, shelter,

3= Not possessing cattle 4= a person without land, 5= Not possessing any shop

3.0 Awareness on Poverty classification

3.1 Are you aware of poverty classification? Please cycle the respective number of your answer

1=Yes, 2= No

3.2 If Yes which one prevails in your Village? 1= Income poverty, 2= Non income poverty

- 3.3 Which among the two non income poverty affect your family negatively? 1= Education Poverty, 2= Food Poverty
- 3.4 Among the two categories of poverty which affects majority at your area?
1= Income poverty, 2= Non income poverty
- 3.5 Are your family members access basic needs necessities throughout the year?
1= Yes 2= No
- 3.6 How many meals do your family gets a day? 1= 2, 2=3, 3= 4, 4= more than 4
- 3.7 Is your children access education at least to form four levels? 1= Yes, 2= No.
- 3.8 If no at what level do they normally reach? 1=None 2= Standard IV, 3= Standard VII
- 3.9 Do you easily access health services once you need them? 1=Yes, 2= No
- 3.10 What are the social cultural activities enhanced by the community members at Iniho ward?
1=Circumcision ceremonies 2= Funeral ceremonies, 3= Monogamists emphasise due to Christian dominance, 4= deaths associated with witchcrafts, 5= Young people fear engaging in development activities due to witchcrafts beliefs

4.1 Perception of Iniho people on apples production Within Iniho community

Hypothesis	Strongly disagree	Disagree	Un decided	Agree	Strongly agree
4.1 Majority of Iniho community do engage in apples production					
4.1.2 Lack of remarkable market for apples fruits reduces production efforts					
4.1.3 Inaccessibility of apples seedlings in Iniho hinders production efforts					
4.1.4 Majority are not aware of the lucrative of apples production activity					
4.1.5 Lack of processing machines at Iniho have led people prefer apples seedlings to planting apples trees					
4.1.6 Apples production activity is not as lucrative as Pyrethrum					

4.2 How many years have you been producing apples?

1= 0-1 year, 2= 2-5 years, 3= above 5 years

4.3 Which category of apples production are you practicing?

1= Seedling production, 2= Planting apples trees 3= Buying and selling apples fruits

4.4 How many apples trees have you planted? 1= 1-50, 2=51-100 3= 100- 200 4= 200-

300, 5= 400-500, 6= above 500, 7 above 1,000, 8= above 3,000

4.5 Is apple production having any thing to contribute in your income earning?

1=Yes, 2=No

4.6 If yes how much have you earned from apples production in 2012? 1= 10,000-50,000,

2= 51,000.00-100,000.00, 3= 101,000.00- 200,000.00, 4= 201,000.00-500,000.00, 5=

above 500,000.00

- 4.7 have you heard any community member earning much from apples production? 1= Yes, 2= No
- 4.8 Are you selling in retail or whole sale mode? 1= Retail, 2= Whole sale
- 4.9 How much is per piece of apple fruit?
- 4.10 Where do you sell your apples fruits? 1= At homestead, 2= Mbeya, 3=Makambako, 4= Any other
- 4.11 Are you selling your produced apples in time without being distorted? 1= Yes, 2= No
- 4.12 What are the problems associated with apples production? 1= Inaccessibility of market during rain, 2= Lack of market, 3= Low price 4= No problems
- 4.13 What is your opinion on apples production potentials in your income earning? 1= It is very useful, 2= useful, 3= Do not know 4= not useful, 5= Very un useful
- 4.14 What is your opinion on apples production promotion? 1= expanding market through advertisement, 2= Installation of processing machine,
- 4.15 Are you producing any other fruits apart from apples? 1= Yes 2= No
- 4.16 Types of other fruits produced by the respondent 1= Plums, 2= Peas 3= Peaches 4= Plums and Peaches, 5= Plums, Peaches and Peas 6= Plums and Peas, 7= Peas and Peaches 8= Inapplicable
- 4.17.1 Number of Plums trees 1= 1-5, 2= 6-10, 3= 11-15, 4= 16-20, 5= 21-25, 6= 26-30, 7= Above 30
- 4.17.2 Number of Peaches 1= 1-5, 2= 6-10, 3= 11-15, 4= 16-20, 5= 21-25, 6= 26-30, 7= Above 30
- 4.17.3 Number of Peas 1= 1-5, 2= 6-10, 3= 11-15, 4= 16-20, 5= 21-25, 6= 26-30, 7= Above 30

Thank you for your cooperation

APPENDIX 2: APPLICATION LETTER TO THE HOST ORGANIZATION

BURTON SINENE
MAHENGE,

S.L.P 19,

MAKETE.

01/07/2012

MWENYEKITI WA KIJJI,

KIJJI CHA INIHO.

S.L.P 65,

BULONGWA,

MAKETE.

YAH: OMBI LA KUFANYA UTAFITI KATIKA KIJJI CHAKO

Husika na somo la hapo juu.

Mimi ni mwanafunzi ninayesoma Degree ya Uzamili katika Chuo Kikuu huria Tanzania. Baada ya kukamilisha masomo ya ndani sasa ni muda wa kufanya utafiti ili kukamilisha masomo yangu. Kutokana na aina ya utafiti niliouchagua naomba kufanya utafiti huo katika kijji chako cha Iniho. Aidha katika utafiti huo matokeo ya utafiti yatashirikishwa kwenye Halmashauri yako ya kijiji ili kupata ufumbuzi wa mambo yatakayokuwa yameainishwa katika utafiti huo.

Ni matumaini yangu kuwa utalikubali ombi langu,

Ndimi

Sinene, BM

Mwanafunzi.

APPENDIX 3: RESPONSE FROM THE HOST ORGANIZATION

HALMASHAURI YA KIJJI CHA INIHO

S.L.P 65,

BULONGWA,

MAKETE.

05/07/2012

Ndugu;

BURTON SINENE MAHENGE,

S.L.P 19,

MAKETE.

YAH: OMBI LAKO LA KUFANYA UTAFITI KATIKA KIJJI CHA INIHO

Somo la hapo juu lahusika.

Nakiri kupokea barua yako isiyo na Kumbukumbu Namba ya tarehe 01/09/2012. Nafurahi kukujulisha kuwa ombi lako la kufanya utafiti katika kijiji chetu cha Iniho limekubalika. Aidha wananchi wa Kijiji cha Iniho wako tayari kutoa ushirikiano wao katika kufanikisha utafiti wako kwa maslahi ya kijiji chetu kwani tunatambua kuwa utafiti huo kwa namna moja au nyingine utatuhusu sisi wananchi ili kujikwamua katika matatizo mbalimbali yanayotusibu. Karibu sana Iniho.

Nakutakia kazi njema,

ONESMO VANGAMEA

VEO – INIHO

APPENDIX 4: LETTER FROM DED MAKETE TO INIHO VILLAGE GROUP**HALMASHAURI YA WILAYA YA MAKETE***Barua zote ziandikwe kwa Mkurugenzi Mtendaji wa Wilaya*

Dir: + 255 026 2740016 MKURUGENZI
 Fax + 255 026 2740103 MKURUGENZI

P.O. Box 6
MAKETE

KUMB.NA GA./87481/03

07/12/2012

Mwenyekiti wa Kikundi

Kikundi cha kuzalisha matunda Iniho,

S.L.P 65, Bulongwa,

MAKETE.

**YAH: OMBI LA THS. 5,000,000 KWA AJILI YA KUNUNUA MASHINE YA
 USINDIKAJI WA MATUNDA**

Husika na somo la hapo juu.

Nakiri kupokea barua yako ya tarehe 21/11/2012 isiyo na Kumb. Na. iliyoshusu somo la hapo juu. Awali natumia fursa hii kuwapongeza wananchi wa kijiji cha Iniho kwa kuitikia kilimo cha matunda aina ya matofaa katika harakati za kujiongezea kipato cha kaya. Naomba juhudi hizo ziendeleo ili kufikia malengo ya kupambana na adui umaskini wa kipato katika Wilaya yetu ya Makete. Kwa barua hii naomba kukujulisha kuwa, ombi lenu limezingatiwa lakini kwa sasa tumeshindwa kupata fedha hiyo kutoka mifuko mingine hivyo kushindwa kulitimiza mara moja hitaji lenu la kununua mashine hiyo. Hata hivyo nakuhakikishia kuwa mara fedha ya Jimbo ikipokelewa mtakabidhiwa fedha hiyo ili kusaidia kuboresha kilimo cha matunda hasa matofaa.

CYRUS KIWASUWASU KAPINGA

KNY MKURUGENZI MTENDAJI (W)

MAKETE

APPENDIX 5: FRUITS PROCESSING PROJECT BUDGET BREACKDOWN

No.	BUDGET LINE ITEMS	QUANTITY	UNIT PRICE	TOTAL
A	INSTALLATION COST			
1	Processing Machine	1	4,500,000	4,500,000
2	Fare for machine	1	300,000	300,000
3	Practical training		400,000	400,000
4	Generator	1	350,000	350,000
5	Tables	2	30,000	60,000
6	Office Chairs	5	15,000	75,000
7	Fixture	2	50,000	100,000
8	Metal pan	4	40,000	160,000
9	Grass Jags	10	20,000	200,000
10	Workers uniform	4 pairs	20,000	80,000
11	capping machine	1pc	20,000	20,000
	SUB-TOTAL			6,245,000
B	PROCESSING RUNNING COST			
1	Juice bottles	4000	100	400,000
2	Charcoal	4 Bags	6,000	24,000
3	Charcoal stove	2	10,000	20,000
4	Plastic drums	2	5,000	10,000
5	Other packaging equipments	Random		600,000
6	Commencing Capital			1,000,000
7	License			100,000
8	Petrol	120 Litres	2,500	300,000
9	Broad casting Fee	12 Months	10,000	120,000
	SUB TOTAL			2,574,000
	GRAND TOTAL			8,819,000

