

**IMPROVED INCOME FOR MELIARA YOUTH GROUP THROUGH HIGH
IRON BEANS PRODUCTION IN BANGATA WARD ARUSHA DISTRICT
COUNCIL**

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

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CERTIFICATION

The undersigned certifies that she has read and here by recommends for acceptance by The Open University of Tanzania a dissertation entitled, *“Improved Income for Meliara Youth Group through High Iron Beans Production in Bangata Ward Arusha District Council”*. In partial fulfillment of the requirements for the aWard of Degree of Master of Community Economic Development of The Open University of Tanzania.

.....

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.....

Date

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DECLARATION

I **Raheli Lemson**, declare that, the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirement for the degree of Master of Community Economic Development of The Open University of Tanzania.



Signature

Date

DEDICATION

This dissertation is dedicated to my beloved family members, my darling husband Stephen Pazzia, sons Stephen (Jr), Stean and daughters Stacey and Stephanie Stephen Pazzia for missing my care during my Masters programme and their encouragement in completing my studies.

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I have put all my efforts to ensure completion of this assignment. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

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ABSTRACT

This report is the result of the research study conducted and the project being implemented on improving income through High Iron Beans production for Meliara Youth Group in Bangata Ward Arusha District Council. Major challenge facing Meliara Youth Group is the income poverty. Project goal aimed at improving economic well-being of Meliara Youth Group and community at large by income poverty reduction among them. Different methods were employed to collect the relevant data supportive to this study such Focus Group Discussion, interview, observation and questionnaire methods. Research tools used were questions, discussion guide, and interview guide. Data were analysed through SPSS version 20 computer software whereby percentages and frequencies were computed. The study revealed that income generating activity need ranked the first among the five needs prioritized and High Iron Beans project was also ranked the first among the five projects enumerated. It was concluded that the production of High Iron Beans has facilitated to the income generation at Meliara Youth Group and community at large. Efforts to increase collaboration of women and men participation in poverty alleviation actions should encourage equal capacity building by providing capital and opportunities that enable them to increase their competitive potentials in community development and policy-making. Furthermore, it is recommended that learning by doing should be experienced based on the success of the project where the project member participated within the project hence sense of ownership is formulated.

Keywords: *Improving income, High Iron Beans production, Meliara Youth Group, Bangata Ward Arusha*

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LIST OF ABBREVIATIONS

ASDS	Agricultural Sector Development Strategy
CBO	Community based organization
CDO	Community Development Officer
CIAT	Centro Internacional de Agricultura Tropical
CIDA	Canadian International development Agency
CNA	Community Need Assessment
CRSP	Collaborative Research Support Programme
FGD	Focus Group Discussion
MCED	Master of Community Economic Development
PNA	Participatory Need Assessment
PRSP	Poverty Reduction Strategy Paper
RDS	Rural Development Strategy
SAGCOT	Southern Agricultural Growth Corridor
SPSS	Statistical Packages for Social Sciences
TANESCO	Tanzania Electric Supplies Company Limited
TDV	Tanzania Development Vision
TDV	Tanzania Development Vision
VEO	Village Executive Officer
WEO	Ward Executive Officer

CHAPTER ONE

COMMUNITY NEEDS ASSESSMENT

1.1 Introduction

Meliara Youth Group refers to group of men aged between 23 to 33 years old and have no opportunity to get income from their horticultural produces. The group started since 2013 and registered in 2016. The focus of the group is to produce marketable horticultural products. Extended Rural Participatory assessment was used to ensure Meliara Youth Group and other stakeholders' participation in identifying resources and real needs of Bangata Ward at large. The assessment was done by using participatory methodologies such as observation, survey, Focus Group Discussions, stakeholders meeting, interviews and questionnaires.

Youth are motivated to start their own business and create their own employment, because the chance of finding jobs in the current labour market is difficult. They lack support on sustainability governed by factors such as, availability of investment capital, risk absorption capacity, knowledge of financial management, enterprises development and market accessibility According to the World Economic Forum, young people count 40% of the unemployed population of the world (Brister, 2013).

Youth in Tanzania still faces major challenges in fighting against unemployment situation and encouraging the employment opportunities for them. According to Juma A. (2007) unsuitable school curricula and poor-quality education that is largely irrelevant to the needs of the labour market still remain a key challenge for the youth now days, and even for most African countries. Now days, many youths in Tanzania

have never obtained more formal and post-primary education and the unfavourable educational systems have largely contributed to the decline in quality of education provided and hence making the youths unable to meet the requirements of labour markets.

In 2013, the Global Entrepreneurship Monitor report (GEM) devoted to the problem of the status of global youth entrepreneurship. The research found that 9.5% of young people aged 18-40 years intend to set up their own business, while 3.6% of young people already have their own business. The retired UN Secretary General Ban Ki-moon stressed the need to solve the problem of rising employment among young people, in connection with the need to encourage and train young people to become entrepreneurs (Kew, 2013). Globally, the ratio of youth to adult unemployment rates hardly changed in recent years, and stands at 2.7 in 2013. Young people therefore continue to be almost three times more likely than adults to be unemployed, and the growing tendency in global unemployment continues to hit them strongly (ILO, 2013).

Youth who complete primary education and those who enter the labour market have no sufficient education and skills to enable them to get employment. However, researches from Tanzania show that, according to young people themselves, the major problem facing them is employment (Helgesson 2006 and RAWG, URT 2007). This information is important to the Tanzanian government, stakeholders and communities when it comes to create jobs for youth and make priorities and design programmes for youth. Unemployment to youth is one of the greatest and most

complex challenges facing Tanzania. Just like other developing countries, Tanzania has been using the fiscal policy framework as a tool to alleviate the high rates of unemployment (Irira, 2014). In Tanzania, youth unemployment and underemployment has now become serious, that it should be observed as a major national development challenge with consequences for economic welfare, social stability and human dignity.

The findings of community needs assessment created a base for identification of needs for Meliara Youth Group and Bangata Ward at large. This information is very important for setting grounds for a successful CED project planning, implementation, management and sustainability. Community needs prioritization has been conducted through pair wise ranking. Five priority needs were noted as follows; High Iron Beans production has be ranked as the first, followed by vegetable production, livestock keeping, selling fruits and lastly will be Petty business.

At this stage represents the findings from the community needs assessment, which was carried out at Bangata Ward. The assessment is a necessary step for any community in its endeavour to assess analytically the economic situation of the community against the resources found in it to use them to bring about social economic development of the community.

The Community Needs Assessment was carried out at Bangata Ward in Arusha DC Arusha Region. The process involved Meliara Youth Group and other stakeholders of community development of Bangata Ward in the process of community needs

assessment. This was done in order to ensure that the youth are fully engaged in the exploration of the needs facing the community and eventually participate in the choice and decision making on the project that would promote development of the society.

The focus of the intervention lies under community economic development strategies, specifically to the concept of developing a strong and sustainable economic activity to create an economic activity to enhance better life for themselves and their families. This strategy was focused on the Meliara Youth Group to create opportunities to assess capital to enhance community economic needs and stop financial leakage encouraging working abilities development in the community economic development.

The researcher chose to work with Meliara Youth Group in Arusha DC Arusha region as it is a well-known community and found that the group has a need to improve its livelihood. She worked with the group of Meliara Youth Group which lost their hope to improve its income and have no opportunity to undertake any other economic activity. The intervention of this project has been very much appreciated by the stakeholders and they provided support to the group.

1.2 Community Profile

1.2.1 Ward Population and Social Services

Bangata Ward is one of the eight (8) Wards in Arusha district council in Arusha region. The Ward capital is town of Bangata village. Bangata Ward is allocated North East. According to the statistics of 2012 up to date the population of Bangata

Ward has reached 9136 (Census 2012) people where 4495 are men and 4641 are women with the number of households 12000. There are three villages in Bangata Ward, these are Bangata, Sasi, and Midawi. There are eight Primary schools and two secondary schools which Sakura, and Bangata. The economic activities undertaken in the Ward are small-scale farming, small shops business, small-scale livestock keeping for basic needs and local beer clubs. Religious institutions within the Ward are Catholic Churches, Lutheran church, Assemblies of God and Church of Apostles. The figure 1.1 below shows the government structure of Bangata Ward in Arusha district council.

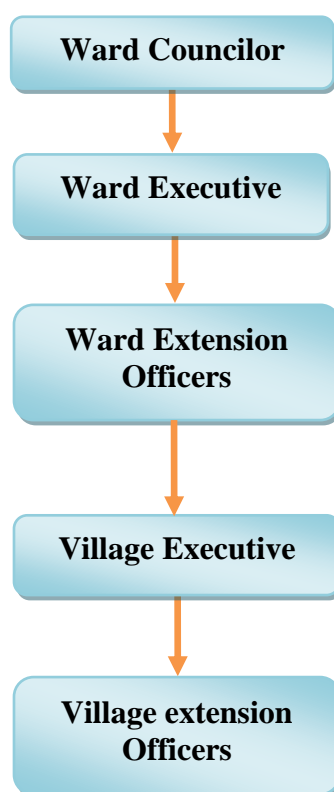
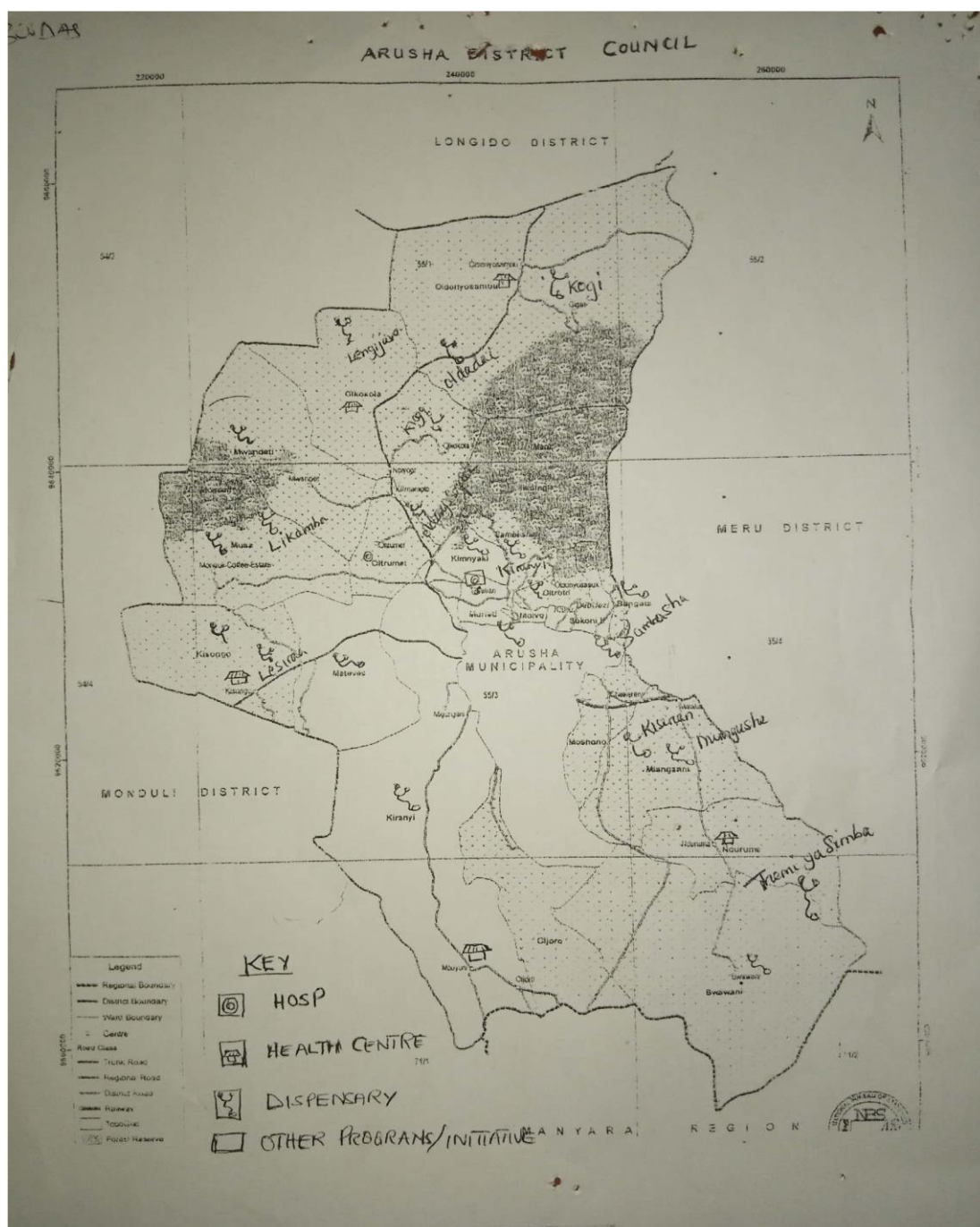


Figure 1.1: Government structure of Bangata Ward, Arusha District Council



Source: Arusha DC (URT 2017)

1.2.2 Social Services

Bangata Ward is accommodated with various social services like health services, education, water service, local market and shop.

1.2.3 Physical Features and Agriculture Activities

Most of the population of Bangata Ward participates in various economic activities especially agricultural that believed to be a backbone of Bangata communities economic. People participate mainly in crop production and Livestock keeping. Others members of Bangata Ward participate on physical activities like small business, welding, and construction. For livestock keeping, few farmers concentrate on maize, cassava, green beans, green vegetables, cattle, goats, sheep, pigs as well as poultry.

1.2.4 Infrastructure

Bangata Ward has paved trunks road from Arusha city via Ngulelo small town and Tengeru town to the local interior of Bangata passes through the different villages. Bangata Ward is also covered with various street roads that accommodate people and their economic activities.

The Ward has rough roads which run from the Ward and nearby villages to Moshi-Arusha Road. Bangata Ward accesses water from natural sources, boreholes and wells. Bangata Ward is privileged to have electricity supplied by Tanzania Electric supplies company limited (TANESCO). However, the Ward lacks enough

dispensaries and clinics. The people in here depend much on Tengeru and Mount Meru Hospitals which are owned by government.

1.3 Participatory Assessment

The participatory assessment was carried out in collaboration with the community with questions to determine the most burning issues that need intervention and to identify varieties of needs, which can be drawn from available resources. The assessment in Bangata Ward was conducted based on the economic activities, community and education assessment.



Figure 1.2: Community members at CNA meeting

1.3.1 Community Needs Assessment

The Target of Community Needs Assessment process was to bring Meliara Youth Group together and carry out objective assessment to what limit the group from having their own stable income within their community. The community Needs Assessment was conducted by the researcher in collaboration with community members through a Focus Group Discussion and the administrative authorities of the group. The

assessment was focused on community socioeconomic welfare in order to identify important community needs. Needs identified were ranked to find out which one will have the priority when opportunities of meeting it are available. The assessment was done in their community arena with a sample of 40 Meliara Youth Group including gender equality, to determine approaches to get enough money to spend on their daily activity needs.

The assessment looked at the activities Meliara Youth Group members are doing within their community and alternatives to generate income for their daily basic needs. The intervention thereafter was designed to focus on strengthening the Meliara Youth Group members so that they become successful farmers and business people to meet the community needs see figure below.



Figure 1.3: Meliara youth members at CNA meeting



Figure 1.4: Meliara Youth in Focus Group Discussion

1.3.2 Overall objective

The overall objective of this study is to determine the economic activity that will bring improvement of the economic status of the Meliara Youth Group of Bangata Ward.

1.3.3 Specific Objectives

The CNA objectives were as follows:

- i) To assess the economic activities undertaken by Meliara Youth Group of Bangata Ward.
- ii) To identify needs of Meliara Youth Group at Bangata Ward.
- iii) To come up with possible intervention to address the identified needs of Meliara Youth Group community.

1.3.4 Research Questions

The rationale of doing Community Need Assessment was to collect information from Meliara Youth Group members about their current economic status and their

economic short time life goals. Basing on this information, the question was whether Meliara Youth Group members of Bangata Ward could identify potential sources of income, determine the economic sustainability of the sources and establish realistic goals for spending their income in local community.

The following are the key research questions;

- i) What are the economic activities undertaken by Meliara Youth Group community?
- ii) What are the needs of Meliara Youth Group community?
- iii) What is the possible intervention to address the identified needs of Meliara Youth Group community?
- iv) What is the possible intervention to address the identified needs of Meliara Youth Group community?

1.3.4.1 Community Needs Assessment Research Methodology

During the selection of research methods, the researcher considered the situation and condition of the subject respondents, time available and the quickest way to obtain data. The following are the methods, which the researcher used as tools and instruments to obtain data.

1.3.4.2 Research Design

Descriptive research design was applied to collect information from Meliara Youth Group members in the community of Bangata Ward by using questionnaires;

conducting meeting, observation, and focus group discussion to identify the economic activities undertaken by Meliara Youth Group members and skills they have so as to intervene with inadequate income facing youth of Bangata Ward.

1.3.4.3 Research Methodology

In this study, both qualitative and quantitative methods were used and involved procedures of describing, explaining and predicting phenomena so as to solve a problem. Primary and secondary data were collected from relevant sources such as Meliara Youth Group community, key informants, other stakeholders' different books, dissertation to help Meliara Youth Group members to create local project concerning agricultural activities in order for them to earn their living. The data about Meliara Youth Group were collected from local government authority through the support of the Ward officer and other data were collected from District Administration Secretary (DAS) office of Arusha District Council.

Questionnaire was another method used to gather information in Focus Group Discussion (FGD) and use administered questionnaires to individuals and tapped the individual's perspectives. When Meliara Youth Group members attended group discussion, they had already been exposed to some questions and they were able to give out more information and express themselves more confidently. The two methods gave the researcher more information with insights about Meliara Youth Group members and share one another. Tools used include; questionnaires, questions and answers, agreed time table and discussion. Stakeholders were identified, interviewed and these were Head of faith Based Institution, Local Government

officer of Bangata, and the DAS's office who have data for the economic status and living standard in Arusha District Council.

1.3.4.4 Sampling Procedure Techniques

The researcher requested and received assistance from the community leaders to organize Meliara Youth Group members' public meeting at the group centre. In that meeting, the purpose of the community need assessment was introduced and presented to the group. Meliara Youth Group members agreed that they were prepared to provide information needed, the probability sampling and simple random sampling was used in selecting the respondents. However, the method was randomized to give free and fair participation. Purposive sampling was used to select key informants such as Ward officer, village council leaders, village religious institutions leaders and key village leaders.

1.3.4.5 Data collection Methods

The method used and applied in this study was observation, stakeholders meeting, and focus group discussion.

Observation: The researcher travelled around the village observed Meliara Youth Group members live with their families in their home place, and often they meet in their local farm to grow vegetables and other products for earnings. Meliara Youth Group members had nothing to do rather than agricultural activities and small-scale businesses. Meliara Youth Group members were seen doing economic activities in small farm around their homes.

Focus Group Discussion: In the Focus group discussion, Meliara Youth Group members were familiarized with the questions in advance and therefore they were active and able to respond to the questions easily, both of them aired out their feelings on how they will be able to generate income if opportunities were open to them. The groups were formed in regard of gender equality and were comprised, and were very useful in assessing the community on distressing aspect. Meliara Youth Group members requested to be taught business ideas if there was any possibility. The focus group discussion was done as follows: Five groups for discussion of each group comprises 8 members with 40 Meliara Youth Group members were formed. Discussion took place at the centre whereby they run their meetings before and after farming. Meliara Youth members participated in giving their opinion and views. In each group discussion there were 8 members. The discussion took two to three hours depending on the activeness of the group. The same questionnaire as used in interviews was used again in focus group discussion. The questions were familiar to Meliara Youth and they had time to think about questions. This allowed for free and open discussion and meanwhile, Meliara Youth Group members agreed that they have to build a very strong economic foundation towards their adulthood. They suggested something should be done so that they can gather money through local small scale projects concerning with farming activities for the improved future development of their children and local community at large.

Interviews Method: Ward leaders together with the community economic development board were interviewed, the DAS office of Arusha District Council together with his team were also interviewed. The method aimed at collecting

information as much as possible in order for the Meliara Youth Group members to give proper information about the project they are going to initiate. Observation allowed for learning by seeing the daily order of life practiced by Meliara Youth Group members. It also gave an opportunity to compare and contrast between the Meliara Youth Group members and other youth working in big offices and shops in Arusha town. Majority of them were roaming around the home place trying to do economic activities in order to generate income.

Stakeholder's meeting: The researcher conducted meeting with the Ward Extension Officer, DAS, DED, Community Development Officer, Agriculture Officer of Bangata Ward. The intention of the meeting was to suggest areas to be identified and areas in the Ward Meliara Youth Group should be encouraged to explore available employment opportunities and available resources. All leaders pin pointed that Meliara Youth Group should be oriented in small scale farming with the major business to deal in the Ward. Most of them are limited in their skills and formal training for small-scale projects ideas and agriculture sciences. Leaders suggested that Meliara Youth Group members should be given opportunity to create new knowledge and skills on the field of agriculture activities.

1.4 Community Need Assessment Findings

A researcher used Qualitative Data analysis Method to obtained findings from the focus groups and meeting conducted and categorized into themes and concepts. relating to assessing income. The need for skills training concerning with the business ideals and agricultural activities and approaches used for income

development, prepare a person to improve his/her income and assuming responsibilities. The first need identified by Meliara Youth Group was that the group had no idea on the alternatives methods to improve income for their livelihood.

Data analysis was performed by SPSS version 20 computer software where by percentages and frequencies were figured. The analyzed data was presented mainly in tables and charts as well as statements. Conclusion was made basing on the presented data. In gathering the information, a researcher prepared 27 questionnaires and managed to administer and collect all of them. The findings from the sex, age, level of education, occupation, which are particulars, skills and small-scale agricultural skills. In addition, findings from the key informants, common activities undertaken in the community, potential and sustainable economic activities that should be practiced, economic impacts on the factors that hindering the growth of High Iron Beans were observed.

1.4.1 Findings on Personal Particulars

In this study, 40 Meliara Youth members were involved in which 30 were males and were 10 were females were engaged and their total percent where 75% and 25% respectively. This means that most of interviewee were males compare to females. A researcher succeeded to get good response from the Meliara Youth Group members (see table 1.1 below).

1.4.2 Sex of the Respondents

Table 1.1 below shows that male members represent 75 % of the total respondents whereas female were 25 %. This indicates that men were more active and willing to

work together in cooperatives than women and hence the explanation of the current men enthusiasm towards households' wellbeing. This reflects that more males by 50% of the respondents interviewed, and this is gender imbalance. However, it also expresses those views were obtained from difference sex to avoid biasness.

Table 1.1: Sex status of the respondents

	Frequency	Percent
Male	30	75.0
Female	10	25.0
Total	40	100.0

Source: Study findings at Bangata Ward 2021

1.4.3 Age of the respondents

Table 1.2 shows that age of the respondents 18-25 years was 60%, where by 26-33 years were 40%. The findings revealed that most of the respondents were aged between 18 – 25 years old of which they are very energetic to work hard to improve their livelihood. The information in here has helped to understand capacity of the Meliara Youth Group members, if they can manage to run project after sensitization and training and the workforce they have for sustainable economic project. The findings also revealed that each member of Meliara Youth Group is responsible to her/his family living with.

Table 1.2: Age status of the respondents

Age	Frequency	Percent
Valid		
18-25	40	60
26-33	16	40
Total	40	100.0

Source: study findings at Bangata Ward 2021

1.4.4 Education Level of the Respondents

The information given in table 1.3 shows that 20% of respondents are not educated at all and have informal education, while 75% have completed primary school and 5% have done secondary level. From this data we can deduce that the majority of respondents know how to read and write, which was good for the researcher while gathering all necessary information from the group. This implies that most of the written material will be effective in training respondents on value addition of crop technology.

Table 1.3: Education level of the respondents

Activity		Frequency	Percent
Valid	Not educated at all	8	20
	Primary level	30	75
	Secondary	2	5
Total		40	100.0

Source: study findings at Bangata Ward 2021

1.4.5 Occupation

Occupations show that the majority of the respondents were farmers and this is due to the facts that the Ward is occupied with many farmers. The occupation status of the respondents shows that 50% were engaged in agricultural activities whereby 20% were cattle keepers (Table 1.4). The 25% of the respondents were engaged in business and the rest 5% engaged in poultry keeping. That means farmers are the majority and they adapt and acquire agriculture skills more effective (see table 1.4).

Table 1.4: Occupation status of the respondents

Activity	Frequency	Percent
Agricultural activities	20	50
Cattle keeping	8	20
Business	10	25
Poultry	2	5
Total	40	100.0

Source: study findings at Bangata Ward 2021

1.4.6 Level of Small Scale Agricultural Skills

The level of small-scale agricultural skills gave a picture that while creating awareness to Meliara Youth Group most of them are very good and were having knowledge and skills concerning small scale agriculture skills. 70 % of the respondents were having small scale Agricultural skills and 30% of the interviewees have no any skills on small scale agriculture (Table 1.9). This means that few interviewees have no Agricultural skills and most of them were having which was helpful to the project (see table 1.5 below).

Table 1.5: Information on small scale agricultural skills

	Frequency	Percent
Valid Yes	28	70
No	12	30
Total	40	100.0

Source: study findings at Bangata Ward 2021

1.4.7 Income Activities of Meliara Youth Group

Economic is concerning with the use and administration of scarce economic resources to attain the maximum fulfilment of societies unlimited wants. The

economic assessment done with Meliara Youth Group was aimed at assessing level of income of the community residents and effects done in empowering people economically through income generating activities. The table 1.6 below shows activities undertaken in Meliara Youth Group community. This study finding shows the common economic activities undertaken in the community. It implies that 50% of our respondents have the agricultural activities, those who live by cattle keeping represent 20% of the respondents, selling fruits represents 12.5% while others live respectively by others economic activities like business represents 12.5% and poultry represents 5%. That means in order to raise majority income in Bangata Ward, efforts should base on farming.

Table 1.6: Common income activities undertaken in Meliara Youth Group

Activity	Frequency	Percent
Agricultural activities	20	50
Cattle keeping	8	20
Business	5	12.5
Poultry	2	5
Selling of fruits	5	12.5
Total	40	100.0

Source: study findings at Bangata Ward 2021

1.4.8 Findings on Impacts of High Iron Beans Production for CED

The researcher requested the respondents to identify the potential sustainable economic activity which led to the project they think can improve their economic status through focus group discussion and other key informant interviews. During this exercise the respondents were delighted and very active in analyzing the availability and reliability of the resources and market. During the exercise the

researcher realized that plan to grow High Iron Beans was considered to be the project that the group could work on.

1.4.9 Finding on Major Community Needs

The researcher was finding the major community needs as seen on the table 1.7 below. It was indicated that 50 % of respondents interviewed revealed that in order to handle their daily life in their community they should improve agriculture production. It was followed by 25% who pinpointed access to fresh and safe water, Food security was mentioned by 12.5%. Respondents, followed by Environmental protection 7.5% and Good health was mentioned by 5.0% respondents. The findings below reflected that income poverty is the major problem of this community in Bangata Ward, which made the community fail to buy enough food. Therefore, through increased income majority can be able to buy enough food, access better health services and improve their livelihood.

Table 1.7: Major community needs

		Frequency	Percent
Valid	Food security	5	12.5
	Access to fresh and safe water	10	25.0
	Good health	2	5.0
	Environmental protection	3	7.5
	Total	40	100.0

Source: Field survey findings 2021

1.4.10 Findings on Major Sources of Community Income

The researcher was finding the major community needs as seen on the table 1.8 below. Table 1.8 below indicated that 65.2 % of respondents interviewed revealed

that the community engaged in farming in order to handle their daily life in Bangata Ward. The findings revealed that those who engaged in Wages only were 12.5% while 7.5% were engaged in Business. That means in order to raise income in Bangata Ward majority of the people should put efforts on farming.

Table 1.8: Major community source of income

		Frequency	Percent
Valid	Farming	25	62.5
	Livestock keeping	7	17.5
	Business	3	7.5
	Wage	5	12.5
	Total	40	100.0

Source: Field survey findings 2021

1.4.11 Average monthly income

In table 1.9 the findings revealed that 45% of the respondents earning an income of between Tshs.40,000-50,000, followed by those earning less than Tshs 30,000 which is about 37.5%. This is an indication that there is lack of viable income generating opportunities. Through this assessment community and other change agent will be in a position to identify viable activities which will increase income to Meliara Youth Group community.

Table 1.9: Average monthly income

		Frequency	Percent
Valid	Less than 30,000	15	37.5
	Tsh. 40,000 – 50,000	18	45.0
	Tsh. 60,000 – 70,000	4	10.0
	More than 70,000	3	7.5
	Total	40	100.0

Source: Field survey findings 2021

1.4.12 Factors Hindering High Iron Beans Production

The factors that led to low production of High Iron Beans are as shown in table 1.10 below. The respondents stated that lack of capital with the 12.5% was the major hindrance High Iron Beans production and establishment of other economic activities. High Iron Beans production was not active due to inadequate water 20% and other factors such as lack of market 37.5% and lack of expert 30%. This speaks a lot to High Iron Beans as it needs to be marketed enough to be well known by customers and stakeholders (see table 1.10).

Table 1.10: Factors hindering High Iron Beans production

		Frequency	Percent
Valid	Inadequate water	8	20
	lack of expert	12	30
	Lack of capital	5	12.5
	Lack of market	15	37.5
	Total	40	100

Source: Study findings in Bangata Ward 2021

1.4.13 Findings From Key Informants

All the key informants were happy with the idea of establishing the High Iron Beans production project. It was observed as the perfect proposal for development of Meliara Youth Group members as their economic solution in their livelihood. Showing up their common interest, the Ward Agricultural development Officer included Meliara Youth Group in small scale agricultural program. The Community Development Officer has supported the project by providing fund to the group and some of the fund will be generated from the group members' contributions. The

Officer from TARI seeds production has provided the training concerning High Iron Beans production with all extension services.

1.4.14 General Thoughts to the FGD and Key Informants

Table 1.11 indicates the prioritization of the needs to be dealt with. This process was done by the Meliara Youth Group members themselves through their pair ranking matrix techniques. As shown in the table below, High Iron Beans production has shown to be the important as they contribute much in the community of Bangata Ward. High Iron Beans production is considered to be the easiest way to embark on generating income and nutritious for their daily needs. The assessment has shown that growing High Iron Beans will be the activity to be well concentrated by the group because it helped them to improve their income and balanced diet.

1.4.15 Community Needs Prioritization

Community Needs Assessment was conducted involved Focus group discussion needs were mentioned and prioritized in order to come up with one most pressing need which required to be addressed through a project which had to be designed by Meliara Youth Group community and other stakeholders. A pair wise ranking was conducted whereby the researcher facilitated Focus group members to compare the mentioned needs and ranked by voting as indicated in the table 1.11 below.

Table 1.11: Pair wise ranking

Need	Access to fresh and safe water	Good health	Improved agriculture production	Environmental protection	Food security	Score	Position
Access to fresh and safe water		Access to fresh and safe water	Improved agriculture production	Access to fresh and safe water	Food security	2	3
Good health			Improved agriculture production	Good health	Food security	1	4
Improved agriculture production				Improved agriculture production	Improved agriculture production	4	1
Environmental protection					Food security	0	5
Food security						3	2

Source: Field survey findings 2021

1.5 Community Prioritization on the Economic Activities for Their Livelihood

During their group discussion the members of Meliara Youth Group requested the Agricultural Development Officer and Community Development Officer to request the best seeds of High Iron Beans from Selian Estate seeds producers for production and other inadequate pesticides services. Meliara Youth Group to be assisted in acquiring knowledge and skills through trainings on farming and proper handling of High Iron Beans and assured reliable and sustainable market. The group has also requested to be assisted by establishing a project that should aim at producing a big quantity of High Iron Beans and seeds to use and sell outside Bangata Ward. This has enabled Meliara Youth Group to be engaged in other social economic activities. Community Needs Assessment was conducted involved Focus group discussion interventions were mentioned and prioritized in order to come up with one most project which required to be addressed and designed by community of Meliara Youth Group and others stakeholders. Prioritization was conducted through pair wise

ranking where researcher facilitate Focus group members to compare mentioned interventions and ranked by voting as indicated in table 1.12 below.

Table 1.12: Prioritization on the economic activities for their livelihood

Intervention	Livestock keeping	Vegetable's production	High Iron Beans production	Selling fruits	Petty Business	Scores	Position
Livestock keeping		Livestock keeping	High Iron Beans production	Livestock keeping	High Iron Beans	2	3
Vegetable's production			Vegetable's production	High Iron Beans	Vegetable's production	4	2
High Iron Beans				High Iron Beans	High Iron Beans	5	1
Selling fruits				Vegetable's production	Vegetable's production	0	5
Petty Business					Petty Business	1	4

Source: Study of findings in Bangata Ward 2021

1.6 Conclusion

Community needs assessment was conducted at Bangata Ward within the premises used by Meliara youth members, which involved Community Development Agenda Countrywide (CDAC) members, and Village officers. Extended Rural Participatory Appraisal was used to ensure community and other stakeholders' participation in identifying resources and real needs of the community. The researcher collected baseline data from District officials Ward and Village officers which helped during Focus group discussion. Information was gathered through research tools which are Questions, Discussion Guide, and Interview guide. Research tools were aiming to answer three research question, through research findings and pair wise ranking was revealed that Improved High Iron Beans production to improve Community

livelihood was ranked as the first, followed by Vegetable's production, Livestock keeping, Petty Business and lastly was Selling fruits. From Focus Group Discussion and survey, it was revealed that all concerns for the Meliara youth members are related to capacity building, lack of access to market, access to funds, and lack of other factors of production, namely, land and incapacity of making an income generating activity.

After analysis and assessment of five major needs identified in the Focus Group, it has been pointed out that the priority for the Meliara youth community is to organize an Income Generating Activity (IGA) in order to make money for everyone and for their group. This CNA showed that the deliberate move to be taken is to address the matter, and the intervention will be provided with farming skills to Meliara Youth Group. This will explore the opportunities and establish micro income generating earnings through selling High Iron Beans through given theory and practical guidance from their sales.

CHAPTER TWO

PROBLEM IDENTIFICATION

2.1 Background to Research Problem

Community Needs Assessment based problem on identification carried by using participatory methodologies such as Focused Group Discussions, interview and observations. Through the process five interventions were obtained and prioritized through pair wise ranking. Five prioritized projects were noted as follows; Improved High Iron Beans production to improve community livelihood was ranked as the first, followed by vegetable's production, livestock keeping, petty business and lastly was selling fruits.

Through improving agriculture production as the major community problem will improve community livelihood since the main economic activity in rural Tanzania is agriculture and it accounts for about 45% of country's GDP and is the main occupation of 70% of the Tanzanian population (FAO 2003). Focused Group Discussions was used to identify the causes, effects, opportunities hence intervention. Arusha city is the most populated area but majority of people come from other parts of the country and occupied in different organizations. Youth in rural area who make a big population are grouped in cooperatives which sometimes are not operational. This causes many problems including the lack of skills appropriate for certain jobs, the lack of funds for initiating an income generating activity, and lack of fertile land for agriculture related activities. The lack of skills for job creation is another serious problem and it is caused by the low level of education whereby youth here are not

able to initiate an independent activity. This led to lack of factors of production as the parents in this Ward have neither enough land nor enough money to give their children to begin their independent economic life. The parents sack their children to move into town to look and conduct their own economic lives as they become burden to the family.

For this case, the government encourages youth to group themselves into economic cooperatives groups where they can receive some support from the government. However, making a cooperative without share capital does not make sense until funds are available for launching some activities. Recently, it is difficult for the youth to access to funds because they have no collateral for bank loans, and when these are offered, it is not always easy to pay back due to lack of experience in the use of bank loan. It is also difficult especially for the youth engaged in farming cooperatives because farming activities are very risky due to inadequate market and climate change.

Other organizations like non-governmental organizations intervene to support socioeconomic life of the youth by provide trainings on the aim of building their capacity. The beneficiaries thought that capacity building is very important to youth; but it is not a developing solution when youth are unemployed and unable to create opportunities for income generation.

2.2 Problem Statement

Unemployment is a serious problem in most of rural communities and lack of job for the youth is another problem in developing world. The creation of cooperatives to

solve economic problems within these communities gives alternatives and opportunities to life however; when the cooperatives are not functioning, the situation becomes worse. Meanwhile, not having a job is frustrating and can lead to many other problems including youth delinquency, drug addiction and theft. According to EDC/Akazi Kanoze (2013) initiatives taken by NGOs and social organizations like churches when trying to find a solution to youth unemployment should include organization of trainings in entrepreneurship, provision of skills for some specific activities, and provision of startup kits when the youth can find an income generating activity.

The capacity building by sole trainings can hardly make a solution to the problem of lack of job for youth even when they are grouped in cooperatives. Therefore, an intervention to make a project for Meliara Youth Group of Bangata Ward was to indicate them and support the launching of an income generating activity of which products should be needed on local market and in accordance with local government development programs. For instance, High Iron Beans project can contribute easily to income generation for Meliara Youth Group of Bangata Ward.

2.3 Project description

The project entitled “Improved Income for Meliara Youth Group through High Iron Beans Production in Bangata Ward Arusha District Council” intends to improve the lives of Meliara Youth Group and communities of Bangata Ward.

2.3.1 Target Community

The project targeted Meliara Youth Group community engaged in small scale

farming in Bangata Ward. These youth are composed of young men and women of different levels of education. The study has revealed that in order for the High Iron Beans production to be promoted, Meliara Youth Group must be facilitated to access reasonable market and enabled them to acquire skills on producing various products from High Iron Beans. High Iron Beans production project is therefore initiated to cater the problem of unreliable and sustainable market.

The High Iron Beans production project harmonizes the Bangata Ward effort to fight poverty within their villages through special campaign on High Iron Beans production throughout Arusha district council. The establishment of High Iron Beans will expand beans market and influence majority to engage in High Iron Beans production hence all beans production promoted. Meliara Youth Group will work under the supervision of their chairperson and Village Executive Officer (WEO) and consultancy of the District Agricultural Officer (DAICO), Community Development Officer in collaboration with TARI extension officer. Successful implementation of the project will help different institutions, organizations and communities to learn the suitability of High Iron Beans production.

2.3.2 Stakeholders

Stakeholders are people who have interest in project activities. These people may be affected by the project or affect themselves the project. They can be individuals, government institutions, NGOs, or community. Subgroups of these organizations may be affected by the project in different ways or may impact of the project than others. Identified stakeholders are Local Government in the villages, Ward, and

District level, National Youth Commission, churches and neighbouring youth cooperatives.

Table 2.1: Roles and expectations of various Stakeholders

No.	Stakeholder	Role of Stakeholders	Expectations
1.	Arusha district Council	Facilitate purchasing High Iron Beans seeds, skills procurement of High Iron Beans production.	Fund released at reasonable time for the preparation of seeds of High Iron Beans.
2.	Local Government Authority	Support and provide of documents	Improved organization of youth cooperatives.
3.	National Youth council	Supervision of cooperatives activity and advocacy	Reports from cooperatives
4.	Churches	Availing avenues for meetings and trainings	Improved welfare of youth and community at large
5.	MCED Student	Providing a study for High Iron Beans project	Implemented project by youth's cooperatives
6.	Adult and local Community.	Being permanent customers and advisors of the youth	Economically independent and occupied youth
7	Meliara Youth Group	Managing the project and consume the produced	Improved welfare and job creation for income generation
8	Neighbouring communities	Providing skilled workforce	Job offering

2.3.3 Project Goal

The Project Goal is the creation of an income generation activity for Meliara Youth Group in Bangata Ward through the High Iron Beans project. The project goal is to improve economic status of the Meliara Youth Group members by income poverty reduction among them for their well-mannered life and benefit nutritional from High Iron Beans.

2.3.4 Project Objectives

The project expected to achieve the following objectives:

- i) To train 20 Meliara Youth Group on High Iron Beans project management by June 2021.
- ii) To equip 20 Meliara Youth Group with knowledge and skills on how to managed and run the High Iron Beans production project by July, 2021.
- iii) To establish High Iron Beans 3 acres farm for 20 Meliara Youth Group in Bangata Ward by August, 2021.
- iv) To ensure Meliara Youth Group access reliable market for High Iron Beans by September, 2021.

2.4 Host Organization

The host organization is TARI which has mandates of:

- i) Sensitizing the Meliara Youth on productive activities and other activities aimed at developing them and the nation,
- ii) Supporting and monitor the functioning of cooperatives, associations and other youth organizations, mobilize the youth on preservation and protection of the environment.

2.4.1 The Vision and Mission of the TARI

The vision and mission of TARI is to facilitate and encourage Meliara Youth to participate in socio-economic development and transformation to a peaceful, prosperous and sustainable society. This mission is in line with the National Vision

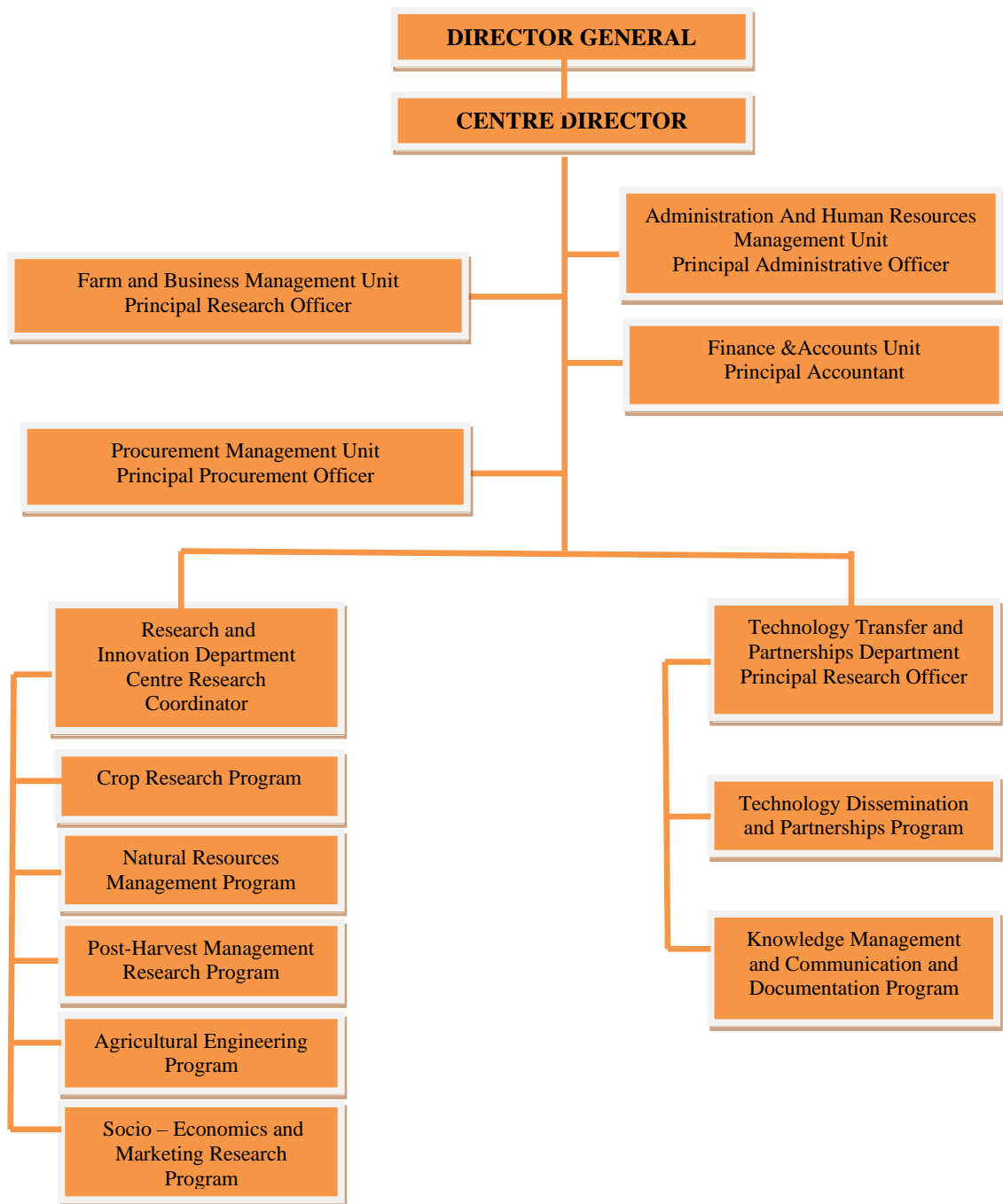


Figure 2.1: Organization Structure of TARI Selian Centre

2.4.2 SWOT analysis of the CBO

Strengths, Weaknesses, Opportunities and threats of the CBO were analyzed in the following table below:

Table 2.2: SWOT analysis of TARI

No	Strength	Weakness	Opportunities	Threats
1.	Big number of young men and young women	Members do not meet very often	Support from government	Organizational decision making
2	Land availed by the	No financial capital	Availability of	Financial management of
3	Infrastructure availed by the local government	Not enough skills	Extending the projects of sector level	Adults to take youth opportunities
4	Cheap work force	Lack of experience	Revenues not submitted to taxes	Regulations obstructing some activities

2.5 The Role of CED Student in the Project

The CED student made the study of the project; organized meetings with authorities and youth representatives for CNA and will follow up the implementation of the project. All activities carried out are summarized as follows:

- i) To sensitize Meliara Youth Group members on the importance of High Iron Beans production 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 market reliability in collaboration with Village and District officers.
- v) To equip Meliara Youth Group members with project management;
- vi) To organize meetings between local authorities and representatives of the Meliara youth;
- vii) To facilitate and ensure participatory Monitoring and Evaluation process of the project.

2.6 The Roles of the Host Organization

- i) To attend and facilitate all required trainings.
- ii) To participate in the community sensitization on the High Iron Beans production project
- iii) To participate in the project product marketing
- iv) To ensure safe guard of all the project tools and equipments
- v) To consult different stakeholders for fund to run the project in collaboration with the MCED students
- vi) To participate in the process of the project tools procurement.
- vii) To sensitize High Iron Beans producers to bring at the processing unit timely
- viii) To ensure administrative activities throughout the project life.
- ix) To ensure the progressive report is provided at every interval needed.
- x) To ensure the project sustainability.

CHAPTER THREE

LITERATURE REVIEW

3.1 Chapter Overview

This chapter presents a review of the literature on the issues pertaining to community livelihood opportunities through High Iron Beans production and project development as documented and conducted by other people. Review of the existing literature, journals and research papers provide essential data was done. Information was gathered from theoretical literature where key concepts have been defined in relation to best practice of High Iron Beans production. The empirical literature review focused the experience of other countries in Africa and Tanzania where these projects implemented and contributed to analysis of existing gaps that need to be addressed by this study, while policy review focused at searching the national level policy review.

3.2 Definitions of Key Terms

3.2.1 Community

Community is defined as a group of people of the same origin, living in the same area with similar occupations or people who are joined by some or all of these elements. In addition, as a result of developments in transport and other communication technologies, almost all communities in the world are so close to one another that they have formed international communities such as United Nations, based on a common belief in culture, equality, peace and universal development (URT, 2006). It also referred to an identifiable inhabitant living in a location with

defined geographical or administrative boundaries and involved in social, economic and political relations that largely take place in the locality (URT/JICA 2005).

3.3 Theoretical Literature

3.3.1 Agricultural Sector Perspective

The main economic activity in rural Tanzania is agriculture and it accounts for about 45% of country's GDP and is the main occupation of 70% of the Tanzanian population. Beans in Tanzania are mainly a subsistence crop use whereby 84% of its total production is utilized as human food, making it an importance food crop. Both roots and leaves of beans are of major nutritional importance in the country. Beans are cultivated and produced in all regions of Tanzania and mainly produced in Ruvuma, Mwanza, Mtwara, Shinyanga, Tanga, Mara Kigoma, Lindi, coast regions and most regions in Zanzibar (FAO, 2003).

3.3.2 Human Capital Theory

Human capital theory conceptualized education as an investment good which allows the learners to acquire knowledge and develop skills that, in turn, serve to improve their productivity as economic production factors. Under this theory, the importance of education is largely assumed to be in the way it increases the production capacity of individuals, thus their earnings in turn, boosts the economic growth of the larger society (Schultz 2001). By regarding education as an investment, this theory considers economic earnings as the main rate of returns to measure this investment 's effectiveness.

This theory emphasizes on investment in human capital through the provision of trainings which has been adopted by many countries and international agencies, such as the World Bank, which saw the importance of human capital in developing not only the individuals, but the nations at large (WB 2001).

In relation to this topic, investing on High Iron Beans production amongst Meliara Youth Group community will help that community to acquire knowledge and develop skills that, in turn, will serve to improve their productivity as economic production factors rather than depending on green vegetables only.

Under this economist theory, payoffs are measured by increase in productivity, higher wages and economic growth of the community. On this basis, the economic rate of returns of minority community education is majorly linked to the educated male/female population 's likelihood to enter the formal labour market, where incomes are higher than those of informal or home-based work (Malhorta et al. 2003).

On this perspective, High Iron Beans production is largely seen to create improved members with better standards of living. This production of qualitative community is assumed to boost positive social change in the society. As a result, under the human capital theory, High Iron Beans production is largely seen as a cost-effective investment with a high-rate return.

An assessment of this theory laid on its assumption that individuals with the same level of education will be able to get jobs at a given wage range, which is higher than

for individuals without education (Bonal 2007). To conceptualize High Iron Beans production as human capital there is a need to minimize the unconstructive perception and attitude to Meliara Youth Group community towards beans production as it has proved the importance to the economic development of many societies.

3.4 Empirical Literature

The common bean (*Phaseolus vulgaris* L.) is one of the principal foods and cash crop legumes grown in the tropical world and most of the production takes place in developing countries (Pachico, 1989). Beans are a major staple in eastern and southern Africa, where they are the second most important source of dietary protein after maize and the third most important source of calories after maize and cassava. Although beans are grown largely for subsistence and mainly by women farmers, about 40% of the total production from Africa is marketed, at an average annual value of USD 452 million (Wortmann et al., 1998). In some parts of Africa, annual per capita consumption is higher than the average for Latin America (Kirkby, 1987). Common beans are also the main grain legume for direct human consumption for the poorer population of Africa and Latin America. Evidence indicates Mesoamerica as the origin of common beans (Bitocchi et al. 2012). At a global scale, this staple crop is an example of international technology spillages. Spillages across geographical areas (countries-to-countries, states-to-neighbouring states) occur when technology develops in one geographic area and transfers benefits to other geographic areas.

For instance, consumption exceeds 50 kg of beans person-1 year-1 in some regions

of Uganda (Wortmann et al., 1998a); however, it is uncertain if current beans production can supply the growing demand because the current population in Uganda is greater than 35 million people and is increasing faster than the rate of bean production (Kilimo Trust, 2012; Ronner and Giller, 2012; Uganda Bureau of Statistics, 2014). There is great concern for the increased pressure and large demand for protein, which increases the importance of continued research on improved beans production practices that address the need for greater use of fertilizers to remedy the nutrient deficiencies in these soils (Bekunda et al., 2002).

Beans are typically produced on a median soil pH between 5.0 and 6.0, however, 23% of bean production in eastern Africa occurs on soil with a pH below or equal to 5.0 (Wortmann et al., 1998). Some of these soils have a strong soil acidity which can cause soluble Al and Mn to become toxic, which negatively affects beans growth and development (Bekunda et al., 2002). When manganese toxicity in an inoculated soil is an issue, research has shown that an application of lime can increase the total N in beans 339 percent, on average. When manganese toxicity is absent, liming may not be needed because nitrogen fixation has been shown to be abundant in acidic soils (Döbereiner, 1966).

Larochelle et al. (2014) examined the impact of improved beans varieties on beans farmers' livelihoods in Rwanda. Their study was based on a comprehensive household survey conducted in 2011/12. Adopters of improved beans varieties were shown to report yield gains of 42 kg/ha compared to households that planted local

varieties. Farmers that grew climbing bean varieties had 28% higher yields than farmers that grew bush beans varieties.

The high protein content of common bean supplements diets based on cereals, root and tuber crops and banana. Beans contain 20–25% protein, mainly in the form of phaseolin. Phaseolin is deficient in methionine but most cereals have adequate levels of sulphur amino acids (although deficient in lysine), and a balanced diet can be obtained if cereals and legumes are consumed in the ratio 2:1 (Broughton et al., 2003). The leaves can be consumed as a green vegetable and in some areas including southern Tanzania; this is an important consideration in the varieties grown.

Beans are the main grain legume crop grown in Tanzania, where they are often intercropped with maize. Cultivation of beans can be seen in most areas of Tanzania, but the crop does not tolerate prolonged periods without rainfall, and to obtain a reliable yield in the drier areas supplementary irrigation is required. The main areas of production are therefore the mid to high altitude areas of the country, which experience more reliable rainfall and cooler temperatures. The most suitable areas for bean cultivation in Tanzania are in the northern zone particularly Arusha Region, the Great Lakes region in the west and in the Southern Highlands. Most of the bean production in Tanzania is carried out by smallholders for their own consumption, with around 20% surplus being marketed. In Arusha and Kilimanjaro regions, where there is a suitable climate for commercial bean cultivation (and access to an international airport), beans are grown for export, either as seed for northern producers, haricot beans for the canning industry, or as fresh green beans. Tanzania

is among the top twenty largest producers of dry beans in the world and the second largest producer in sub-Saharan Africa, after Kenya. In 2004 the country produced 270,000 Mt. There was a large increase in bean production between 1960 when 80,000 Mt were produced, and 1980 when production reached 282,000 tonnes (FAO, 2005). In the same period, the Tanzanian population grew from 11 million to around 20 million and by 2005; the population had reached 38 million. Between 1960 and 1980 therefore, increases in bean production more than kept pace with population increase, but since 1980, total bean production has remained static while the Tanzanian population has almost doubled. These figures are however, disputed by some experts in Tanzania who believe that in some areas such as the Southern highlands there is more local and cross-border trade in beans than there was 20 years ago (C. S. Madata, unpublished). It has also been suggested that since the removal of fertiliser subsidies in the 1990s, there has been a trend for maize to be replaced by beans and cash from the sale of surplus beans to be used to purchase maize required for household food security.

3.4.1 Beans Improvement Programmes in Tanzania

The first bean improvement programme in Tanzania was initiated at Tengeru Agricultural Research Institute (TARI), near Arusha town, in 1959 to produce white haricot beans for the canning industry. The production of navy beans for export in northern Tanzania had started around 1937 and by 1952, 2500 Mt were being exported. As more and inexperienced producers became involved, declining quality began to threaten the viability of the trade. In response, the cv. Michigan Pea was introduced from the USA, but proved to be highly susceptible to rust, unlike the cv. it

replaced, Comptesse de Chambord (Allen et al., 1989). More care was then taken to ensure that introduced material was screened for local adaptability. Mexico proved to have good rust resistance and became one of the most widely grown navy bean varieties in E. Africa. Eighty-two accessions were introduced into the breeding programme at TARI from around the world in 1960/61 (McCartney, 1966). The first varieties to be released from that programme were Tengeru 8 and 16 (T8, T16), both of which were resistant to bean rust. Unfortunately, T8 proved to be highly susceptible to anthracnose (Shao and Teri, 1985).

In the Southern Highlands and Great Lakes regions of Tanzania, landraces of mixed seed types are grown. These are bush types and mainly consumed by the producing households as 'dry beans. Although the yield potential of most of these land races is low, they provide the farmer with a reliable yield under low input adverse conditions. In 1971 the first National Bean Improvement Programme in Tanzania, began breeding to improve the quality and yield of dry beans (Karel et al., 1981). When the Tengeru bean programme ended in 1965, it was several years before the new bean improvement programme was initiated at the Uyole Agricultural Centre (UAC), Mbeya. The main objectives of this programme were to determine the reasons for poor bean yields among smallholders in the Southern Highlands and to select high-yielding cultivars. Disease was identified as the major yield-limiting factor and disease resistance became the main thrust of the programme. By 1975 a total of 1046 germplasm lines had been collected at three centres; UAC in the south, Ilonga Agricultural Research Institute in the Centre and Lyamungu Agricultural Research Institute (LARI) in the north (Karel et al., 1981).

The bean improvement programme was extended in 1975 under the National Grain Legume Research Project, now with Ilonga as the main centre and LARI and UAC as sub-stations. The first improved bean varieties for smallholders, T3 and Kabanima, were released from this programme in 1979/80. Both were resistant to rust and ALS. The national programme was further strengthened when in 1979; the Ministry of Agriculture inaugurated a new phase of bean improvement, based at LARI, with UAC and Ilonga as sub-stations.

From the 1046 accessions that were introduced during the early 1970s, preliminary screening reduced the number to 56 lines that were disease resistant with suitable agronomic and yield characteristics. These were further evaluated at Ilonga and LARI during 1977 and the best 20 lines were evaluated in multi-locational trials in 1978 and 1979. Canadian Wonder (CW) was included as a check and the only variety to significantly out-yield CW was P311-A.L. P113 was fast-growing and disease resistant, but it had a black seed coat colour which was not popular with farmers or local consumers, so it was retained as a breeding line. Lines that performed well during the late 1970s and 80s and have similar seed colour and maturity to CW, were T23, YC-2 and P692-A.

3.4.2 Regional Networks

The national bean research programmes in eastern and southern Africa are now linked through the Pan-African Bean Research Alliance (PABRA) consisting of two networks; the Eastern and Central African Bean Research Network [ECABREN] and the Southern Africa Bean Research Network (SABRN). The networks receive

funding from several government and donor organisations, including the Canadian International Development Agency (CIDA), the Department for International Development (DFID), UK, the Swiss Government, the United States Agency for International Development (USAID) and the Rockefeller Foundation. These networks are members of two regional organisations; the Association for Strengthening Agricultural Research in Africa (ASARECA) and the Southern Africa Development Council (SADC).

3.4.3 International Programmes

In 1980, The Canadian International development Agency (CIDA) established the Selian Agricultural Research Institute (SARI) Centre near Arusha, as part of the Tanzania-Canada Wheat Project. Since 1989 SARI has been designated as the Zonal Headquarters for Agriculture and Livestock Research and Training for the Northern Zone of Tanzania. The National Bean Programme was then moved from LARI to SARI, but UAC continued to be an important sub-station for bean research.

Sokoine University of Agriculture (SUA) was from 1969 the Faculty of Agriculture of the University of Dar es Salaam. It became a fully-fledged university in 1984. SUA has become another centre for research on *Phaseolus* bean and is the Regional Centre for the Bean/Cowpea Collaborative Research Support Programme (Bean/Cowpea CRSP)–East Africa. SUA is also the national centre for improvement of beans suited to low altitude growing areas of Tanzania.

3.5 Policy Review

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

3.5.1 Current Agricultural Policies

The agricultural sector is guided by two main policies. The Agriculture and Livestock Policy of 2013 seeks to ensure that the direction and pattern of development in the agricultural sector meets social objectives and outputs. The policy emphasizes the importance of competitive markets, with the Government providing priority public goods and services and conservation of environment as a rational basis for agricultural development.

Objectives of the Agricultural and Livestock Policy of 2013 are assuring food security for the nation; including improvement of national standards of nutrition improve standards of living in rural areas. Increase foreign exchange earnings, to produce and supply raw materials and expand the role of the sector as a market for industrial outputs, develop and introduce new technologies for land and labour productivity and promote integrated and sustainable use and management of environmental sustainability.

The Cooperative Development Policy of 2013 evolved on the basis of experiences in implementing the Cooperative Development Act of 1991. It marks a change from cooperatives being state controlled institutions to becoming autonomous and

member-controlled private organizations. The policy provides the framework for the restructured co-operatives to operate on an independent, voluntary and economically viable basis and to develop into centres for providing and disseminating agricultural inputs, implements, technologies and information. This has empowered farmers to enhance their bargaining position in the market. The Ministry is currently facilitating consultative meetings among cooperative stakeholders to review the 1997 Policy and the Cooperative Act of 1991 to make them meet the needs of stakeholders even more effectively.

3.5.2 Agricultural Sector Development Strategy

Tanzanian agriculture, like the entire economy, is in a transition from being a command- to a market-based production system. The transition process started in the mid-1980s as part of the economic adjustment and structural reform programmes supported by the development partners. Despite some impressive macroeconomic achievements resulting from the reform programmes, agricultural growth and rural poverty reduction continue to present intimidating challenges. In response to these and other pertinent development issues, the government recently adopted the Tanzania Development Vision 2025 (TDV) to provide broad guidance on the strategic goals of social and economic development in the country. The TDV envisages raising the general standard of living of Tanzanians to the level of a typical medium-income developing country by 2025, in terms of human development. It identifies three priority goals: ensuring basic food security, improving income levels and increasing export earnings. Agriculture is one of the priority sectors for achieving these goals (URT, 2001).

Subsequent to the TDV, Government, with the support of the development partners, has initiated a national strategic policy framework aimed at progressively achieving the Vision's goals in the country. The completion of a Poverty Reduction Strategy Paper (PRSP) in 2000 was a contribution to this. Poverty reduction has become the overarching priority objective in the national economy and the PRSP provides the medium-term national framework for this focus. The PRSP recognises that agriculture is critical to poverty reduction. (URT, 2001:11).

According to the (1991/92) Household Budget Survey in Tanzania, the majority of the poor are found in rural areas, where agriculture is the mainstay of livelihoods. Agriculture has a dominant role in the economy that it is the most critical of the sectors that have been identified as the priority poverty reduction sectors in the PRSP. In the long run, commercializing smallholder agriculture and accelerating its growth rate are critical in pulling the majority of the rural poor out of abject poverty. The ASDS lays the foundation stones for this long run objective but also proposes interventions with a more immediate impact on rural poverty alleviation through diversified and increased production and productivity of smallholder agriculture (URT, 2001).

In the rural sector, these poverty reduction objectives will be achieved through a Rural Development Strategy (RDS) and a complementary Agricultural Sector Development Strategy (ASDS). The RDS will cover the entire rural sector, including agriculture, non-farm economic activities, social services, and economic and social infrastructures (URT, 2001). Globally; Tanzania is a showcase for public-private

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

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

The Government of Tanzania reaffirms its intention to provide the human and financial resources and the mechanisms for dialogue with the private sector, farmers and other stakeholders, and across government ministries that are required for the achievement of tangible and sustainable outcomes, the acceleration of Tanzania’s development, and the delivery of tangible benefits to smallholder farmers, including women (URT, 2012).

3.6 Chapter Review Summary

Common bean is an important source of dietary protein and starch in Africa and a primary staple in parts of the Great Lakes Region. Tanzania remains one of the worlds' major beans producing countries although according to official statistics, production per capita has almost halved in the last 20 years. The main international beans improvement programmes are run by the Centro Internacional de Agricultura Tropical (CIAT) from Colombia and by the Collaborative Research Support Programme (CRSP) co-ordinated by the Land Grant Universities in the USA. CIAT also maintains the world's largest collection of *Phaseolus* germplasm. The National Bean Programme in Tanzania is supported by both CIAT and CRSP. Collaboration between these international programmes and the National Programme has resulted in the release of more than 20 improved bean varieties. The paper reviews the development of bean improvement programmes in Tanzania since 1959, the contribution made by the international programmes and the strategies used to develop high-yielding bean varieties with resistance to pests and diseases and tolerance to some seraphic stress factors.

CHAPTER FOUR

PROJECT IMPLEMENTATION

4.1 Chapter Overview

This chapter express the procedures of the project including planning and intervention of different activities to realize the predetermined objectives and activities. Project implementation plan is a schedule of activities, which indicates period which the activity carried out over the project implementation period. Implementation plan helps to get things done on time and thus get good value for money by enabling the project committed to allocate resources efficiently and within the budget. This chapter presents the products and outputs of the project, details of project planning, project implementation and the implementation report are provided at the end, highlighting on the important activities performed and the results.

Among the commitment made are from the TARI through constituency fund, which provided seeds to facilitate to production. Other commitment includes TARI and Meliara community members contributed other conveniences such as pesticides and trainings. The anticipated goal of the project is increased income for High Iron Beans producers of Meliara members, hence household income poverty reduced. Sustainability of agriculture development and economic development for the High Iron Beans producers will then contribute to poverty alleviation in the community as a whole.

4.2 Project Products and Outputs

4.2.1 Project Products

By the end of the project, Meliara members are expected to earn funds from the project products resulted from the output after implementing the planned activities. The expected products within High Iron Beans project will be transforming into cash by marketing it after being harvesting by the last week of September 2021.

4.2.2 Project Outputs

The project outputs were as follows;

- i) 40 Meliara youth and community members sensitized on High Iron Beans production project by June 2021.
- ii) 20 High Iron Beans producers equipped with knowledge and skills on how to manage and run the project by July 2021.
- iii) Facilitate accessibility to purchase High Iron Beans seeds and other equipments to easy the production by August 2021.
- iv) Increase High Iron Beans production awareness and access reliable market by September 2021.

Table 4.1: Project output

Objective	Output	Activity
1. To sensitize and train 40 Meliara members on High Iron Beans production techniques, entrepreneurial and business management skills by June 2021	i) 48 members attend Meeting	i) To conduct Advocacy Meeting to members of Meliara youth and their neighbourhoods
	ii) Five needs were mentioned and prioritized.	ii) Conducting Community Needs Assessment.
	iii) 20 Community members sensitised	iii) To conduct one day Sensitization Meeting to Meliara youth members
	iv) 20 group members facilitated	Capacity building on beans agricultural best practices and entrepreneurial and business management skills
	v) Participants attended the training.	High Iron Beans growing procedure and demonstration training
2. 2) 20 High Iron Beans producers equipped with knowledge and skills on how to manage and run the project by July 2021.	vi) 1-3 acres farm planted High Iron Beans	Preparation and Planting of High Iron Beans to the farm.
	vii) 3 acres planted	Preparation of farm plots (3acres)
3. 3) Impart High Iron Beans best practice to Meliara youth members and reliable to the Market by the end of September to mid of October 2021	viii) 6 tons of High Iron Beans to harvested	Harvesting of High Iron Beans (TARI) acquires for processing.)
	ix) 5 People participated	Conducting Project Monitoring
	x) 5 People participated	Conducting Mid and Annual Project Evaluation

4.3 Project Planning

Project planning is process which involves Logical thinking of the project members to give responses of the logical thinking to achieve the project goals. In this process some steps were being included like identifying Project objectives with their activities to be implemented, resources mobilization, allocation and utilization. Some resources must be needed because of their potential. Such resources are human resources, land and capital which will help to prepare the staff pattern, inputs, plan and budget.

4.3.1 Project Implementation Plan

The work plan and schedule showing activities to be implemented, output and objectives was prepared. Both material and human resources indicated well and 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 to successfully implementation of the project. The host organization (TARI) leaders and the High Iron Beans producers' leaders participated fully from the planning phase to the implementation of the project at each activity. The implementation executed in the implementation plan as it is well indicated in Table 4.2.

The implementation task participated and involved High Iron Beans producers, Bangata Ward leaders, and extension officers with their expertise relevant to the project mainly from Arusha DC. Their main activities 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 the planned interventions carried out under the right approaches. Therefore, the plan helped at large in realizing the set objectives and built the cohesion among the project implementers and other stakeholders.

Project implementation plan in table 4.2 should ensure that activities are carried out according to the pre-prepared plan without numerous diversions. The plan stipulated in Logical Frame work in table 4.3, project budget in table 4.5 and the Gantt chart which is shown in table 4.6 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 MCED student facilitated trainings and advised management of the project, planning, collaborated with various development partners, implementation, and ensured participatory monitoring and evaluation of planned activities.

Table 4.2: Project implementation plan

Objectives	Outputs	Activities	Project Implementation month											Resource Needed	Responsible person
			6	7	8	9	10	11	12	1	2	3			
1.To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021	i) High Iron Beans campaign conducted	i)Disseminate adverts												Stationery	CBO (TARI)
		ii) Organise a advert for High Iron Beans												Human and Fund	CBO (TARI)
	ii) 20 group members attended the meeting	i) Outsource experts												Finances	CBO (TARI)
		ii)Conduct sensitization meeting												equipment, Human	CBO (TARI)
2.To equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021	i) Trainings on running production of High Iron Beans	i)Prepare budget for training												Human, Funds and stationery	CBO (TARI) CED student Horticulture officer
		ii)Organise training												Funds, stationery	CBO (TARI) CED student Horticulture officer
	ii) 20 High Iron Beans producers attended the training	i)Outsource experts												Human, Funds Transport,	CBO (TARI) Horticulture officer
		ii)Conduct training												Human, Fund and Stationery	CBO (TARI) CED student Horticulture officer
3. To establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021	i) Stakeholder’s meeting was conducted	i)Identify stakeholders												Human	CBO (TARI) Group leaders
		ii)Organize stakeholders meeting												Human, Funds and Transport	CBO (TARI)
	ii) A sum of 200,000 collected	i)Prepare project budget												Human, Stationary	CBO (TARI)
		ii)Collect fund												Human	CBO (TARI)

	iii) 20 hoes, 20 vessels and pieces of rope	i) Identify the needed tools/Equipments for High Iron Beans production												Human and Transport	CBO (TARI) Horticulture officer
		ii) To consult different stakeholders to contribute												Human and fund	CBO (TARI)
4. Increase High Iron Beans production awareness and access reliable market by September 2021	i) Advertisement done by TARI nearby Local markets	i) Prepare adverts												Human, Funds and Stationery	CBO (TARI)
		ii) Select members to participate in the live marketing												Human, fund	CBO (TARI)
	ii) Obtain premises to run business in a nearby local market.	i) Acquire quality premises												Human, Funds Transport	CBO (TARI)
		ii) Solicit funds for license fee												Human, Fund	CBO (TARI)
	iii) At least two wholesale of High Iron Beans buyers contracted	i) Identify large scale High Iron Beans buyers												Funds and Transport	CBO (TARI)
		ii) Negotiate with products buyers												Human, fund, stationery	CBO (TARI) Trade officer
		iii) Signing contracts with buyers												Personnel	CBO (TARI)
	iii Participatory Project M&E Report	i) Prepare M&E plan												Human, Funds Stationery	CBO (TARI)
		ii) Appoint M&E team												human	CBO (TARI) Horticultural officer
		iii) Conduct M&E												Human, M&E plan, funds	CBO (TARI) Horticultural officer

4.3.2 Logical Framework

The logical framework directs the project implementers through intervention logic and Objective Verifiable Indicators on what to do in a logical approach. That means by implementing objective one (To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021), project implementers expect to have the following output; Members of Meliara Youth Group familiarized with the aim of conducting CNA and Project identification. In order to achieve the mentioned output five activities were implemented as mentioned below. The Logical framework helps to track if planned activities implemented at the right way through means of verification.

The horizontal logic shows the progress against each objective. It clearly shows indicators and means of verification as well as external factors which might hinder the fulfilment of the concerned objectives. In planning for the assumption's destroyer assumptions have been evade and encouraged positive assumptions to show that the objective can be achieved. It is advisable that once there is destroyer assumptions change the project before committing resources. Under this project goal, objectives, output, activities and assumptions have been well indicated in table 4.3 below.

Table 4.3: Project Logical Framework

Hierarchy of Objectives	Objectively Verifiable Indicators (OVIs)	Means of verification (MOV)	Assumptions
Goal: Group income poverty reduced and standard of living improved to High Iron Beans producers.	High Iron Beans producer's household income poverty status	Annual sales report Survey and observation reports	Willingness of each group member to reveal their economic status while in meetings
Objective 1: To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021			
Output 1.1 Campaigns conducted	A campaign conducted	Meeting report	Positive response from the community
Output 1.2 Forty community members attended the meeting	40 community members sensitized on the High Iron Beans production project	Project progress reports	Community members positively respond to the meeting
Activities			
1.1.1 Disseminate adverts	Two adverts disseminated through Meliara group leaders	Project progressive report	Group leaders disseminate adverts to the members
1.1.2 To organise a High Iron Beans Day	organized and sensitize community members on the High Iron Beans project	Project progressive report	Community members will attend the sensitization meeting
Objective 2: Equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021			
Output 2.1 Trainings to run production of High Iron Beans conducted	20 High Iron Beans producers trained on fruits processing project	List of participants of the training	High Iron Beans producers will attend the training
Output 2.2: At least twenty High Iron Beans producers attended the training.	20 High Iron Beans producers acquired knowledge and skills on project running and management	List of participants attended the training	Selected High Iron Beans producers successful imparted knowledge and
Activities.			
2.2.1 Outsource experts	Expert from TARI and Arusha District council executed the training	Training report	Selected members will attend the training
2.2.2 Conduct training	20 High Iron Beans producers and officials attended the training	Training report	Officials and High Iron Beans producers group members will attend the
Objective 3: Establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021			

Hierarchy of Objectives	Objectively Verifiable Indicators (OVIs)	Means of verification (MOV)	Assumptions
Output 3.1: stakeholders meeting was conducted	3 stakeholders attended the meeting	Stakeholders meeting report	Positive response from the stakeholders to attend the meeting.
Output 3.2: A sum of Tshs 420,000 collected for equipments and seedlings	Tsh. 300,000 contributed by host organization	Funds soliciting report	Project partners will contribute fund to the project
Output 3.3: 20 hoes, 20 vessels,	The needed tools/Equipments for production identified	Project equipment report	Project stakeholders will contribute production equipments
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	2 stakeholders attended the meeting	Stakeholders meeting report	The meeting will be conducted successful
3.2.1 Prepare project budget	A budget of Tsh 640,000 were prepared	Project budget report	Budget will be successful prepared
3.2.2 To collect fund	Tsh. 640,000 for High Iron Beans production procurement collected	Fund soliciting report	Required fund will be collected successful.
Objective 4: Increase High Iron Beans production awareness and access reliable market by September 2021			
Output 4.1 Advertisement in Local markets	A team of Meliara Youth Group members advertised High Iron Beans in the local markets	Products advertisement report.	High Iron Beans producers will effectively use products to add value of their fruits
4.2 One premises and business license obtained in a nearby local market.	A premises accessed at local market and 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 High Iron Beans farmers	2 whole buyers contracted	Product market report	Positive response from large scale buyers

Hierarchy of Objectives	Objectively Verifiable Indicators (OVIs)	Means of verification (MOV)	Assumptions
4.4 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 marketing advertisement.	8 members selected to participate in live marketing advertisement.	Product advertisement report	Positive response from the selected members
4.2.1 To acquire quality premises	Enough premise with store and sale shop acquired at Local market	Project progress report	Availability of the premises within production area
4.2.2 Solicit funds for license fee	Tsh.30,000 collected	Project progress report	Fund for business license accessed
4.3.1 Identify large scale buyers for High Iron Beans	2 large scale buyers have been identified	Product market report	Large scale buyers will be successful identified
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 Prepare M&E plan	A Monitoring and Evaluation plan prepared	M&E Report	Selected members participate at the M&E plan preparation
4.4.2 Appoint M&E team	4 M&E members appointed	Number of members appointed	Effective participation from the M&E Members
4.4.3 Conduct M&E	2 Participatory M&E conducted	M&E Report	Effective Report delivered

4.3.3 Inputs

To ensure the soft project implementation, various inputs were employed including human and resources. . To fulfil the project goal, some inputs were required. These are financial, human and resources and services necessary for carrying out activities. Human and resources were Arusha district council officials, TARI experts, High iron beans producers group leaders, Bangata ward Leaders and agricultural experts contributed in the project. Host organisation (TARI), Community members and CED student were source of resources and material such as seeds, equipments, tools, training cost, Premises, stationeries and other training resources. Financial resources were used for Capacity building, purchase and haring of project equipments. Normally inputs are supposed to be stated in specific and measurable terms. Details on inputs/resources are as shown on table below.

Table 4.4: Project inputs

Objective	Output	Activity	Resource Allocation	
			Human	Non-Human
1. To sensitize and train 40Meliara members on High Iron Beans production project by June 2021	1.1Conduct interactive sensitization seminar	i) Consult the local authority leaders and Meliara Youth Group informal leadership	Stationery Meliara members Project Leaders	Venue Transport Stationery
		ii) 40 community members attended the meeting	Project Manager Project coordinator	Venue Stationery
	1.2 Trainings on running production of High Iron Beans	i) Outsource experts	Subject matter experts	Refreshments
		ii) Conduct the seminar based on participatory approach	Facilitator CED student	Stationery Venue
2. To equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021	2.1 Training on production of High Iron Beans	i) Prepare budget for the training	Meliara Youth Group leaders Treasurer	Stationery
	2.2One training on the production of High Iron Beans	i) Outsource for the experts from the industry	Facilitator Experts Participants –Meliara group	Stationery
		ii) Conduct training on best practice	Change Agent Experts Participants Meliara group	Stationery Refreshments Venue
3.To establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021	3.1. Stakeholder's meeting conducted	i) Identification of the stakeholders	Project Manager Project coordinator	Stationery Refreshments
		ii) Organize stakeholder's forum for discussion and consensual resolution	Change Agent Experts Participants	Stationery Refreshments Venue Fuel
4. Increase High Iron Beans production awareness and access reliable market by September 2021	4.1Disseminate the project through local public announcements, and media	i) Prepare and fund for the media promotional services	WEO/WDC Participants	Advert costs Sitting Allowances
		ii) Identify and engage	WEO	Advert costs

Objective	Output	Activity	Resource Allocation	
			Human	Non-Human
		individuals/leaders for the media advocacy	VEO	Sitting Allowances Fuel Stationery
		iii) Conduct continuous environmental oversight obligations at local level	Project Environmental Experts	Allowances Refreshments Stationery
	4.2 One premises and business obtained in a nearby local market.	i) To acquire quality premises and solicit funds for license fee	Treasurer Meliara Leadership	Venue Refreshments
		ii) Monitor and evaluate on the best practices for High Iron Beans harvesting among Meliara	Expert Meliara Leadership	Stationery Refreshments Allowances

4.3.4 Staffing Pattern

The project is managed by the TARI under the supervision of Meliara Youth Group leaders. The premises are located within Arusha Central Market and Tengeru local market so the custodian is from the TARI and is paid by the TARI. However, the implementation to a great extent was and will be assisted by committee members, with assistance of the District Agricultural officer, High Iron Beans producers, Meliara youth leadership comprise of the chairperson, Secretary, and treasurer. Table 4.4 show the staff and their respective roles.

Table 4.5: 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

4.3.5 Project Budget

The estimated project annual budget was Tsh. 640,000. A sum of Tsh400, 000 was facilitated by TARI and many other contributions were from the host organization which include; High Iron Beans seeds, premises and practical training cost for the selected members. The detailed budget has been shown in table 4.6. The contribution of the Meliara youth members to the project was Tsh 40,000 and in-kind performance to the project.

Table 4.6: Project budget

Objective	Output	Activities	Resources needed	Quantity	Unit price	Total TZS.
1. To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021	i) One campaign conducted	i) Disseminate adverts	Brochures and posters	50	5,000	250,000
		ii) To organise a Village High Iron Beans day	Flip Chart	1	9,000	9,000
			Marker Pen Box	1	8,000	8,000
			Transport	1	15,000	15,000
	ii) At least Forty (40) community members attended the meeting	i) Outsource experts	Transport	1	15,000	15,000
		ii) Conduct sensitization meeting	Note Book	50	50,000	50,000
			Ball pen	50	50,000	50,000
			Flip Chart	1	9,000	9,000
			Soft drink and Snacks	50	50,000	50,000
			Transport	1	15,000	15,000
2. To equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021	i) Two trainings on how to run production of High Iron Beans	i) Prepare budget for training	A4 Papers	1	10,000	10,000
			Ball pen	1	500	10,000
		ii) Organise training	Soft drink and Snacks	20	1,000	20,000
	ii) 20 High Iron Beans producers attended the training	i) Outsource experts	Transport	1	15,000	15,000
		ii) Conduct training	Note Book	20	300	6,000
			Ball pen	10	200	2,000
			Flip Chart	1	8,000	8,000
			Maker pen	1	5,000	5,000
3. To establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021	i) Two meetings for stakeholders conducted	i) To identify stakeholders	Time	0	0	0
		ii) Organize stakeholders meeting	Lunch	4	3,000	12,000
	ii) A sum of 540,000 collected	i) Prepare project budget	High Iron Beans Seeds	10	14000	140,000
			Manures	1	20,000	20,000

Objective	Output	Activities	Resources needed	Quantity	Unit price	Total TZS.
			Pesticides	1	10,000	10,000
		ii) To collect fund	Fare	2	5,000	10,000
	iii) 20 Hoes, 20 vessels, were bought.	i) Identify the needed Equipments for High Iron Beans	Time	0	0	0
			Stationeries	0	0	0
		ii)To consult different stakeholders to contribute equipments	Fare	2	5,000	10,000
			Hoes	5	2000	10,000
4. Increase High Iron Beans production awareness and access reliable market by September 2021	i)Advertisement in Local markets	i)Prepare adverts	Stationeries	0	0	0
			Adverts Fee	3	10,000	30,000
		ii)Select members to participate in the live marketing	Fare	10	1,000	10,000
	ii) One premises and business in a nearby local market.	i)To acquire quality premises	Hurt	1	10,000	10,000
		ii)Solicit funds for license fee	Money	1	20,000	20,000
	iii) At least two wholesale buyers contracted to procure farmers High Iron Beans.	i)Identify large scale High Iron Beans buyers	Time	0	0	0
		ii)Negotiate with products buyers	Allowances	50	5,000	25,000
		iii)Signing contracts with buyers	Contract Forms	7	1,000	7,000
	iv)Participatory Project M&E Report	i)Prepare M&E plan	Time	0	0	0
		ii)Appoint M&E team	Time	0	0	0
		iii)Conduct M&E	Allowances	2	5,000	10,000
	Grand Total					640,000

4.4 Project Implementation

The project implementation is commencing on June 2021 for undertaking preliminary stages of the project (See table 4.1 above). The project implementation plan in table 4.2 under these guides the activities were executed sequentially which facilitated the effective recognition of the set objectives. The responsible persons for the soft implementation of the project were the CED student, host organization leaders, and selected members from Meliara Youth Group.

4.4.1 Project Implementation Report

The project implementation carried out in a participatory approach which involved different stakeholders such as CED Student in collaboration with target Meliara Youth Group. The Project implementation was done base on three aspects, which is sensitization and training to 40 group members on improved High Iron Beans production techniques, entrepreneurial and business management skills. As the people participate throughout the project implementation, they become experts on how to run and managed the projects Liftin (2001). The main areas in which local people were involved include; identification of the High Iron Beans production activity, sensitization of the community on High Iron Beans project, training on the use of different tools in the growing process and selling High Iron Beans.

Other crucial activity was to ensure accessibility of funds for the project equipments. The task was successful achieved in collaboration with different stakeholders who were interested with the project. The ultimate result was liable market accessibility for the High Iron Beans producers which then planned to contribute into reducing

income poverty at household level. It is obvious that, it will apparently contribute to reduce income in conjunction of other income from other sources. In order for the project implementation to be successful as it was planned, close monitoring was conducted by the High Iron Beans producer's group members in collaboration with the TARI leaders. The CED student had to participate in monitoring exercise, in collaboration with the group monitoring team from the starting days to familiarize the group members on the monitoring tasks for the daily interventions.

Evaluation activities were 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 that suit the prevailed environment of implementation to realize the predetermined objectives and goal. Mid and annual evaluation were expected to be conducted soon after the project take off.

The excessive rain experienced since beginning of March, 2021 to the end of May, 2021 and therefore can't tear down the High Iron Beans while establishment started at the beginning of June 2021. High Iron Beans don't need heavy rainfall at all and therefore its right time to run the project. The task for searching the equipment's and tools for growing High Iron Beans was done by the CED student in collaboration to TARI representative and Arusha District Council, Agriculture extension officer commenced in June 2021 and got success in the same month ready to implement the project. The sensitization and training was done to 40 Meliara youth members and the meeting was conducted to 20 members out 40 members of Meliara Youth Groups

as part of familiarization aimed at conducting CNA and project identification. Community Needs Assessment was conducted with the support of WEO of Bangata Ward. Major task implemented was selection of focus group discussion, collection of basic information data, focus Group discussion and Pair wise ranking where 5 needs were mentioned and prioritized. Project Design and budgeting was done.

Awareness to Meliara Youth Groups on improved High Iron Beans production was done by one day sensitization meeting about the Project where 20 group members attended meeting. Two days training was conducted to 20 Meliara Youth Group on High Iron Beans agricultural best practices and entrepreneurial and business management skill. As per project plan 20 members were trained with assistance from WEO, TARI Officer and CED Student. Training based on High Iron Beans growing procedure and demonstration.

The CED student in collaboration with TARI members and other stakeholders like Tanzania Agriculture Partnership participated in all arrangement of project take off. The daily monitoring was conducted by project committee. The CED student, TARI member, WEO, 3 members of Village council and Chairperson of Project committee conducted monitoring too. Normally Evaluation is meant to measure long term impact and sustainability in terms of achievement of purpose and goal, evaluation was carried during implementation aimed at assessing the progress of project activities and provides information to improve the project.

Project objectives and planned activities were done accordingly expect two activities that is harvesting of High Iron Beans which will be done at September 2021 and Annual Evaluation. All two activities will successful implemented due to skills obtained during training. Training to High Iron Beans producers on best agricultural practices, entrepreneurial and business management skills will contribute to the success of the Project as well as contribution from stakeholders such as TARI and Arusha District Council. The beneficiaries are expected to harvest more 6tons of High Iron Beans of which few of them will be reserved for home consumption and many of them will be sold at Arusha local market out of the project premises and Tengeru local market.

In general the establishment of High Iron Beans production project at Bangata Ward will help rescuing others beans to have a reliable market. It will also influence more peasants in the area to engage into High Iron Beans production having seen assurance of market of their beneficiary products.



Figure 4.1: TARI expert handling high iron beans seeds



Figure 4.2: CED Student Meliara members and TARI representatives on a farm



Figure 4.3: CED Student making demonstration



Figure 4.4: CED student and high iron beans producers identifying beans



Figure 4.5: CED student and TARI expert identifying beans



Figure 4.6: CED student and TARI expert on practical training

The figures 4.5, 4.6, 4.7, 4.8 and 4.9 below indicated TARI expert on training the high iron beans producers to make production step by step. He insisted to use proper manure and well prepared farm to easy the growing of High Iron Beans.



Figure 4.7: TARI expert guiding to plant high iron beans



Figure 4.8: CED student instructing on planting high iron beans



Figure 4.9: CED student instructing on planting high iron beans

4.4.2 Project Implementation Gantt Chart

Gantt chart has been prepared to easy the involvement process and to indicate series of activities to be performed to ensure that all planned activities were implemented as planned. Gantt Chart was prepared showing activities to respective month to be implemented. The Gantt chart shows the objectives, expected output and the concerned activity. However, some of activities were not implemented in time due to delay access of funds. Therefore, the series of activities were well elaborated in table 4.7below.

Table 4.7: Project Implementation Gantt chart

[illegible]

Table 4.8: Actual implementation of the project

Objective	Output	Activity	Implementation Status	Reasons for not implementing/ deletion from implementation plan
1. To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021	i) One campaign conducted	i) Disseminate adverts	Adverts were well disseminated to the concerned community	Implemented
		ii) To organize High Iron Beans day	community successful organized	Implemented
	ii) 40 community members attended the meeting	i) Outsource experts	Experts from Arusha DC participated at the meeting	Implemented
		ii) Conduct sensitization meeting	The meeting conducted and 40 people participated the meeting	Implemented
2. To equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021	i) One/two trainings on High Iron Beans production	i) Prepare budget for training	A sum of Tsh.80,000/- for a training prepared.	Implemented
		ii) Organise training	Training organized	Implemented
	ii) 20 High Iron Beans producers attended the training	i) Outsource experts	Expert from Arusha DC accessed and conducted the training	Implemented
		ii) Conduct training	20 participants attended the training	Implemented
3. To establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021	i) one meeting for stakeholders conducted	i) To identify stakeholders	Meliara youth members, TARI, Arusha DC,	Implemented
		ii) Organize stakeholders meeting	Stakeholders meeting organized and conducted	Implemented
	ii) A sum of 540,000 collected	i) Prepare project budget	A budget of Tsh. 640,000 prepared	Implemented
		ii) To collect fund	A sum of Tsh. 540,000 collected	Implemented
	iii) 20 Hoes, 20 vessels	i) To identify the needed tools/Equipments for High Iron Beans production	20 Hoes and 20 vessels were bought	Implemented
		ii) To consult different stakeholders to contribute	Arusha DC, TARI and High Iron Beans producers consulted and contributed the project	Implemented
4. Increase High Iron	i) Advertisement in Local	i) Prepare adverts	Preliminary adverts prepares: Launching	Implemented

Beans production awareness and access reliable market by September 2021	markets nearby		the production activities, stakeholders contribution, and usefulness of the project and market of the products.	
		ii) Select members to participate in the live marketing	Members have been selected to actual live marketing and yet commenced	Implemented
	ii) One premises and business obtained in a nearby local market.	i) To acquire quality premises	Premises prepared	Implemented
		ii) Solicit funds for license fee	A sum of Tsh.30,000 Prepared for license	Implemented
	iii) At least two wholesale High Iron Beans buyers contracted	i) Identify large scale High Iron Beans buyers	Three High Iron Beans buyers identified	Implemented
		ii) Negotiate with products buyers	Negotiation made	Implemented
		iii) Signing contracts with buyers	Signing contracts with buyers is under construction	Implemented
	iv) Participatory Project M&E Report	i) Prepare M&E plan	The M&E plan has been prepared	Annual M&E will be conducted after the project take off
		ii) Appoint M&E team	4 members for M&E appointed	Annual M&E will be conducted after the project take off
		iii) Conduct M&E	Pre evaluation 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

PROJECT PARTICIPATORY MONITORING, EVALUATION AND SUSTAINABILITY

5.1 Chapter Overview

This chapter explains the participatory monitoring, evaluation and sustainability for the High Iron Beans production in Bangata Ward. The first section covers participatory monitoring which explains as being a systematic and continuous, sometimes periodic collection of data as specified in the related indicator of a specific activity/action planned in a project. Whereas Evaluation is a process of gathering and analysing information in order to determine if the project is implemented according to planned objectives and activities and the extent to which the project has achieved its stated objectives through activities. Without monitoring and evaluation, it is impossible to judge if the work went in the right direction, whether progress and success could be claimed, and how future efforts might be improved. While project sustainability is the ability of the project to generate the required results after the project has come to an end or after the project sponsors have finished their duty of financing or providing technical assistance to the project.

5.2 Participatory Monitoring

The objective of conducting participatory monitoring was to gather information on all aspect of activities that involve Meliara Youth Group in project implementation. Participatory monitoring was done by analysing the current situation, identifying problems and finding solutions to problems, keeping project activities on schedule,

measuring project progress towards success and formulating and making decision. Participatory monitoring method was used as the major tool and approach in all levels of monitoring. It was done using the set indicators in the logical framework matrix in table 4.3. Through monitoring beneficiaries easily identify failure and success of the project.

Monitoring was based on assessing relevance of the project; do the project/activities attend to its broader development objective, effectiveness and efficiency; to prove whether activities of the project have been achieved and within optimum use of the resources and time. Sustainability of the project was assessed; project members plan to have savings and credit services, which will help to increase their income.

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

5.2.1 Monitoring Information System

This section explain a system which was designed to collect and report information on project activities to enable the researcher/supervisor to plan, monitor, evaluate and report the operations and performance of the project. For this project the Monitoring Information System was prepared through a consultative process that involved among other stakeholders; Arusha District Council, Tanzania Agriculture Partnership

and others Ward Agriculture Extension Officer and CED student and TARI. Information required was Work plan/activities, Cost and expenditure, staff and supervisor knowledge, commodities, tools and equipment. Area cultivated application and quantity of manure and finally.

5.2.2 Participatory Monitoring Methods/Tools

Three participatory methods were applied in monitoring the project implementation. These are structured interviews, direct observation, Focus Group Discussion. Structured interviews were used to gather information about area cultivated, application of manure and other information regarding to weeding and cassava treatment. Observation is a classical method of social science inquiry where eyes were used rather than ears in observing and noting how farmers (head of households) prepare their plots, the way cassava grow as well as observing application of manure those issues was recorded accordingly.

5.2.2.1 Focus Group Discussion

Focus Group Discussion was applied by involving a small group of only 5 people in discussing issues related to project performance in detail and were allowed to talk freely. Facilitation skills were applied by CED student that an individual should not dominate the discussion. Participants group were freely talking from their experiences.

5.2.2.2 Interview

In the implementation of the project some addition information were needed to some key informants including; District council officials, TARI, Agriculture extension officer, Ward leaders, Village leaders, and High Iron Beans producers' members. The information was gathered by the researcher in collaboration with Meliara Youth Group leaders through interview.

5.2.2.3 Observation

Observation was another useful way used by the High Iron Beans producers in collaboration with the researcher, village leaders, TARI expert and extension officers to see if the planned activities were implemented smoothly. Under observation project equipments procured, premises, training participants, and the sensitization meeting attendants were well observed and justified by using observation guide.

5.2.2.4 Documentation

Different document pertaining High Iron Beans production project were to be kept in good order. The documents prepared and kept included; 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 transactions done were to be documented and kept well by the respective persons. The High Iron Beans producers' 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 TARI officials designed and prepared a daily record sheet/book for income received and income generated for the scientific run and sustainability of the project.

5.2.2.5 Monitoring tools

The main monitoring tool used in this study was the Project Work-plan, Monitoring Plan (table 5.1) and the Project Budget (Table 4.6). The monitoring exercise was also done through review of reports, which provided relevant monitoring information.

5.2.2.6 Monitoring Findings and Results

Information gathered during the monitoring process was keeping on record book processed, analysed and compared to different responses and information gathered. The data was used to see whether the planned activities of the project were going well and challenges encountered during implementation and what action should be taken to overcome those challenges.

Table 5.1: Participatory monitoring plan

Objectives	Output	Activities	Indicators	Data source	Methods/Tools	Person responsible	Time frame
1. To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021	i) One campaign conducted	i) Disseminate adverts. ii) To organize a Village High Iron Beans day	No of Adverts disseminated. List of attendants	Meliara group members Project progress report	Meeting CED student, Meliara group members and LGA officials	CED student, Meliara group members, LGA Officer	June 2021
	ii) 40 community members attended the meeting	i) Outsource experts ii) Conduct	List of members attended	Meliara group members Project progress	Meeting,	CED student	June 2021
2. To equip 20 Meliara Youth Group with knowledge and skills to manage and run	i) One training on how to run production of High Iron Beans	i) Prepare budget for training ii) Organise training	Budget of training in place, List of 20 farmers trained	Meliara group members Project progress report	Meeting Training	CED student, TARI Officer WEO and Ward Agriculture Extension officer	July 2021
3. To establish High Iron Beans farmhouse to cultivate horticultural crops at households of 20 Meliara Youth Group by August, 2021	i) One meeting for stakeholders conducted	i) To identify stakeholders. ii) Organize stakeholders	Number of stakeholders attended.	Meliara group members Project progress report	Group Discussion.	CED student, TARI Officer WEO and Ward Agriculture Extension officer	August 2021
	i) A sum of 540,000 collected	i) Prepare project budget. ii) To collect Funds	Project budget in place	Project progress report Meliara group	Observation	CED student, TARI Staff Meliara group members, Ward Agriculture	August 2021
	iii) 20 hoes, 20 vessels,	i) To identify the needed tools for High Iron Beans production.	Production tools in place.	Project progress report Meliara group members	Observation	CED student, TARI Staff WEO and Ward Agriculture Extension officer	August 2021
4. Increase High Iron Beans production awareness and access reliable market by September 2021	i) Advertisement in Local markets	i) Prepare adverts. ii) Select members to participate in the live marketing.	Availability of market for High Iron Beans	Project progress report Meliara group members	Observation	CED student, TARI Officer, WEO, Ward Agriculture Extension officer	September 2021

Objectives	Output	Activities	Indicators	Data source	Methods/Tools	Person responsible	Time frame
	i) Two premises and business obtained in nearby local markets.	i) To acquire quality premises ii) Solicit funds for license fee	Quality premises in place	Project progress report Meliara group members	Observation	CED student, TARI and WEO and LGA Officer.	September 2021
	iii) At least two wholesale High Iron Beans buyers contracted	i) Identify large scale High Iron Beans buyers. ii) Negotiate with products buyers. iii) Signing contracts with buyers	Number of High Iron Beans buyers obtained.	Project progress report Meliara group members	Interviews, Observation, Focus Group Discussion	CED student, TARI Officer WEO and LGA Officer	September 2021
	iv) Participatory Project M&E Report	i) Prepare M&E plan. ii) Appoint M&E team. iii) Conduct M&E	M & E plan in place M & E team in place Number of Evaluation	Project progress report Meliara group members	Participatory Evaluation (Group Discussion)	CED student, TARI Officer WEO and LGA Officer,	September 2021

5.3 Participatory Evaluation

Participatory evaluation is the collective examination and assessment of a programme or project by the stakeholders and beneficiaries. Participatory evaluations are reflective, action-oriented and seek to build capacity. Whereas evaluation in general is an assessment at one point in time that concentrates specifically on whether the objectives of the project have been achieved and what impact has been made. In participatory evaluation, stakeholders assume an increased role in the evaluation process as question-makers, evaluation planners, data gatherers and problem solvers. Because evaluation has important capacity development and learning dimensions, decisions about who is involved and to what degree will impact upon the results. In general the greater the level of involvement the more likely it is that evaluative knowledge will be used.

Mid Evaluation and Annual Evaluation were planned to be conducted on September 2021. Mid Evaluation will involve the CED student, TARI Officers, leaders of Project Committee and Officers from Arusha District Council. Evaluation was based to assess the extent to which the project objectives were realized, to assess the extent to which people's expectations were fulfilled and suggest ways for improvement.

5.3.1 Performance Indicators

Indicators are variables that show the extent of change that resulted from the project. They help to measure quality, quantity and appropriateness against what was planned. They measure progress in achieving outputs and outcomes. They show relevance, performance and effectiveness of the project as well as progress to Wards

meeting its outputs and outcomes. Project goals and Project objectives performance indicators were developed as shown in table 5.2 below.

From the performance indicator table below, there are link between Project Objective Output, activities to be implemented, and resources needed. If resources were requested at the right time and used effectively then output will be seen and objective will be achieved. During monitoring and evaluation participants were referring output and performance indicators to check whether they are in track or not.

5.3.2 Participatory Evaluation Methodology

5.3.2.1 Evaluation Methods /Tools Used

Participatory Rural Appraisal will be used during the project midterm evaluation exercise conducted in September 2021; specifically, the following data collection methods were used Structured-Interviews, Participatory Observations, Focus Group Discussions and Documentary and Records Review. While meetings, checklists, effective listening, group discussions, and appreciative inquiry and review of monitoring reports, Project Committee minutes were the major evaluation tools applied during the midterm evaluation exercise.

5.3.3 Project Evaluation Summary

During evaluation four major project objectives were examined using several performance indicators for each objective. Expected outcomes and actual outcomes were also examined and noted in detail during the midterm evaluation exercise which was conducted in September 2021(see table 5.2).

Table 5.2: Project evaluation summary

Objective	Output	Activities	Performance indicators	Expected Outcome	Actual Outcome
1. To sensitize and train 40 Meliara members on High Iron Beans production project by June 2021	1(i)One campaign conducted	i)Disseminate adverts	List of adverts	Ccommunity members access adverts	Adverts disseminated to the community members.
		ii)To organize a High Iron Beans day	One High Iron Beans day organized	One High Iron Beans day organized	High Iron Beans day organized and executed
	1(ii) 40 Meliara members and community members attended the meeting	i)Outsource experts	Two experts attended the meeting	Sensitization conducted	A sensitization meeting successively conducted
		ii)Conduct sensitization meeting	40 community members attended at the High Iron Beans	40 community members sensitized on High Iron Beans production project	A total of 40 participants sensitized on the High Iron Beans production project
2. To equip 20 Meliara Youth Group with knowledge and skills to manage and run the project by July, 2021	2(i)One training on how to run High Iron Beans production	i) Prepare budget for training	Tshs 540,000/- prepared	A budget for training prepared	A sum of Tshs 540,000 was obtained.
		ii)Organize training	One day training organized	One day training preparation completed	One day training conducted
	2(ii) At least 20 High Iron Beans producers attended the training	i)Outsource experts	One expert out sourced	One expert obtained and conducted the training	One expert from TARI and WEO conducted the training
		ii)Conduct training	20 participants attended the training	20 High Iron Beans producers acquired knowledge and skills on running and manage the project	20 community members trained on how to run and manage the project
3.To establish High Iron Beans farmhouse to cultivate horticultural	3(i) One meeting for stakeholders conducted	i) To identify stakeholders	Two Stakeholders identified	Two Stakeholders identified	Two Stakeholders identified and attended the stakeholders meeting
		ii)Organize stakeholders meeting	Stakeholders meeting organized	Stakeholders willingly contributed to the project	Stake holders contributed financial and material resources
	3(ii)A sum of 540,000 collected	i) Prepare project budget	A budget of Tshs 640,000 prepared	A budget of Tsh. 640,000 prepared	A budget of Tsh640,000 prepared
		ii) To collect fund	A sum of Tsh540,000 collected	Stakeholders contribute a sum of Tsh540,000 collected	A sum of Tsh 540,000 successfully collected by stakeholders

Objective	Output	Activities	Performance indicators	Expected Outcome	Actual Outcome
4. Increase High Iron Beans production awareness and access reliable market nnnnnby September 2021	3(iii)20 hoes, 20 vessels,	i) Identify the needed equipments for High Iron Beans production	20 hoes, 20 vessels all worth Tsh50,000/- identified and collected	Required tools identified.	Project tools worth Tshs50,000/- identified
		ii)To consult different stakeholders to contribute	Arusha DC,TARI and High Iron Beans producers consulted and contributed to the	Stakeholders contributed equipments worth Tshs 50,000/-	20 hoes, 20 vessels all worth Tshs 50,000/- collected from different stakeholders
	4(i)Advertisement in Local markets	i)Prepare adverts	40 adverts prepared	Adverts for High Iron Beans promotion distributed	Adverts prepared but not distributed because the harvests has not done
		ii)Select members to participate in the live marketing	Five members selected	Adverts executed	Members have been selected but actual live marketing has not yet commenced
	4(ii) One premises and business obtained in a nearby local market.	i)To acquire quality premises	Two premises prepared	Tables were put within the premises	Tables were set within the premises
		ii)Solicit funds for license	A sum of Tsh.20,000/- Prepared for license	Business license accessed	Business license accessed
	4(iii) At least two wholesale High Iron Beans buyers contracted	i)Identify large scale High Iron Beans buyers	Two High Iron Beans buyers identified	Two large scale buyers identified	Two large scale buyers have been identified
		ii)Negotiate with products buyers	Negotiation documents accessed	Two large scale buyers negotiated	Two large scale buyers have been negotiated
		iii)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(iv)Participatory Project M&E Report	i) Prepare M&E plan	The M&E plan document	M&E plan prepared	Evaluation plan prepared
		ii)Appoint M&E team	2 members for M&E appointed	2 selected members participated in M&E exercise	2 selected members participated in M&E exercise
		iii)Conduct M&E	M&E Report	Project activities executed successful	Annual evaluation has not been done

5.4 Project Sustainability

Sustainability refers to durability of positive project results after the termination of the technical cooperation channelled through that project. It is the ability of the project to generate the required results after the project itself has come to end or after the project sponsors have finished their duty of financing or providing technical assistance. Therefore, a sustainable project is one that can deliver benefits to the target group for an extended period of time after the main assistance from a donor has come to end. Sustainability means more than just development activities that are environmentally sensitive, it implies that the project would lead to improvements that will persist and spread beyond the project boundary and time span and not create dependency. However, it is very important for CBO to develop own definition of sustainability, the organisation link of its own context, focus and the state of affairs.

5.4.1 Institutional Sustainability

The sustainability of High Iron Beans project is most likely to be sustainable since human resources Project committee, Head of Meliara Youth Group and Arusha LGA staffs are available ready for implementation. The beneficiaries have agreed to contribute 20% of their income after sold High Iron Beans which will be used to buy material next season. Capacity building done on High Iron Beans production techniques entrepreneurial and business management skills which help beneficiaries to improve production as well as to be committed of what they are doing being the case project sustainability. In view of that it is expected that the project will get full support of the Community members bearing in mind that they are the primary beneficiaries of project. In addition, community participation in identifying,

planning, implementation, Monitoring and Evaluation is the key issues that create sense of ownership that leads to sustainability of the project.

5.4.2 Financial /Economic Sustainability

The project started by support from Arusha DC contributed Tsh. 140,000/= and TARI of Tsh. 300,000/=. Next season expenses, project will not depend from the above-mentioned institutions, the growing demand of High Iron Beans is an obvious positive indicator of the project sustainability. Income from the project will ensure sustainability of the project because the income will finance different project material such as manure and pesticides.

5.4.3 Political Sustainability

The Councillors of Arusha District Council, Management team, Meliara Youth Group leadership including chairperson; WEO and VEO collectively support the project as it would be the source of helping the community in Bangata Ward. However, Tanzania Agriculture Partnership supported the project because the project supports National Strategy for Growth and reduction of Poverty II.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the conclusion and recommendations and the way forward to the project being undertaken by CED student Via TARI at Bangata Ward in Arusha District Council. This conclusion summarizes the findings of the participatory needs assessment, literature review, reasons which guided the choice of the project, the report on the project implementation. This chapter shows the summary of the findings of the project participatory monitoring, evaluation and the sustainability plan and description of the outcomes that may be expected if the project is successfully completed.

6.2 Conclusion

Participatory Needs Assessment conducted in June 2021 at Bangata ward, Arusha DC whereby Community Needs Assessment was carried by using participatory methodologies such as focused group discussions, interview and observations. The research tools used were questions, and interview guide. The findings of community need assessment created a base for identification of problems facing Meliara youth group community. This information is very important in setting grounds for a successful CED project planning, implementation, management and sustainability.

Community needs prioritization was conducted through pair wise ranking. Five priority needs were noted as follows; A High iron bean production was ranked as the

first, followed by vegetables production, livestock keeping, petty business and lastly was selling fruits.

From the literature review it was learned that in some African countries, beans is being more perceived as a raw material for various types of industries and the best source of number of nutrients. High Iron Beans can be converted into a large number of products ranging from traditional and novel food products, to human and livestock feeds, ethanol and starch and its numerous derivatives.

However, in Tanzania High Iron Beans is still perceived as a food security crop rather than a raw material for other industries. Moreover, for countries where majority of the people still live below the poverty line as Tanzania (ASDS, 2001), High Iron Beans could be used to bridge the income poverty gap.

The reasons which guide the choice of the project are findings of community needs assessment and result of community needs prioritization where High Iron Beans production to address the income poverty was ranked as the first. Therefore the project chosen is improving Community livelihoods through High Iron Beans production.

Actual execution of the project started in June 2021 by the CED Student in collaboration with targeted Meliara Youth Group and TARI members having prepared the process as it can be seen in the Project Plan. The Project implementation was done base on three aspects, which is sensitization and training to 40 community

members on High Iron Beans production techniques, entrepreneurial and business management skills.

The project was implemented successfully, whereby all project objectives and planned activities were done accordingly except two activities that is harvesting of High Iron Beans which will be done starting from September, 2021 and Annual evaluation. All two activities will successful implemented due to skills obtained during training. Training to Meliara Youth Group and some of the community members on High Iron Beans production, entrepreneurial and business management skills will contribute to the success of the project as well as contribution from stakeholders such as Arusha District Council and TARI. The beneficiaries are expected to harvest 6 tons of High Iron Beans of which some will be reserved for home consumption and others will be sold to TARI and community members.

Monitoring was conducted to every second week of the second month basing on monitoring method, tools developed and verifiable indicators. Three participatory methods were applied in monitoring the project implementation. These are structured interviews, direct observation, Focus Group Discussion. Verifiable indicators used are number of meetings held, number of Community Needs Assessment meetings held with the community, number of trainings, type of training and number of participants who attended, area cultivated, application and quantity of manure, Cost and expenditure and equipment received.

Evaluation was conducted September 2021 (mid way) and Annual Evaluation were planned to be conducted October 2021. Mid Evaluation were involved The CED

student, TARI Officers, leaders of project committee and Arusha District Council Officers. Evaluation was based to assess the extent to which the project objectives were realized, to assess the extent to which people's expectations were fulfilled and suggest ways for improvement.

So far, no unexpected occurrences which could greatly affect the ability to complete the project and achieve the overarching goal and the specific project objectives. However, the project anticipates achieving specific objectives on successful completion of High Iron Beans production project.

6.3 Recommendations

The following were recommendations concerning the experience gained out of conducting the project titled "Improved Income for Meliara youth group through High Iron Beans Production in Bangata ward Arusha DC." Participatory assessment should be conducted before undertaking any development project. It was realized that participatory methodologies and research tools used effectively, and then community or beneficiaries create sense of project ownership, togetherness, and cooperation. Participatory assessment also creates a room for local people and stakeholders to plan together.

Community needs prioritization was conducted through Pair wise ranking for the sake of identifying the community needs. Through community needs prioritization five priority needs were noted as follows; A High iron beans production was ranked as the first, followed by vegetables production, livestock keeping, petty business and

lastly was selling fruits. High iron beans production has not been practiced by the community due to number of problems caused by many factors such as lack of skills for appropriate farming implements, planting material, capital and small area of cultivation. Therefore, all stakeholders are called upon to support high iron beans production project so that it would be capable to improve Meliara youth group livelihood and community at large and maximize profit and maintain health among community members.

In order to create project vocation to the community and beneficiaries, the project design should be done immediately after prioritizing the community need starting with stakeholder analysis, logical framework analysis and project implementation which involves activity planning and shows who will do what, when to do and types of inputs needed. Literature review shows that government recognise High Iron Beans as a food security crop, but little or no effort has been done to commercialize it. As a result, High Iron Beans production in Arusha DC is generally characterized by low yields and low marketable surplus. In order to improve this situation, the government should do the following;

- i) Promote groups or individual small-scale High Iron Beans farmers and policy directives so that they can be able to produce High Iron Beans in large quantity.
- ii) The government should create market opportunities and give High Iron Beans priorities in that market.
- iii) The government should invest into High Iron Beans micro-processing as well as encouraging both small and large-scale processing industries.

- iv) Direct involvement in the promotion of High Iron Beans subsector and sometimes policy directives enhance development of High Iron Beans.
- v) The government should invest to research institutions to investigate more varieties and improved vines for High Iron Beans in order to increase yield and encourage more farmers to engage in the crop.

The researcher used four methods during data collection. All methods applied were most appropriate as they assisted the researcher and community members to easily identify the community need that led to project design and implementation. Among the best methods used include Interview and the Focus Group Discussions. Using interview, it was easier to cross check answerers by twisting question. Focus Group Discussions is the best since members of the group can challenge themselves and rich to consensuses through facilitation skills.

There should be establishment of Agriculture training centres in rural villages whereby people should get knowledge and skills on the economic solution in an easiest way for their forecast of their potential's movement.

Stakeholders such as TARI, Arusha DC and Local Village Government leaders should make closer supervision to these groups on advising, encouraging and lead them to find economic solution programs and educational development as the evidences of their success within their communities.

There should be in-depth studies on the types of farming trials, diseases, and parasites occurring in the study area will help much to enhance High Iron Beans production.

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.

Under this study the useful strategy which has been helpful in the study is the CNA 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.

REFERENCES

- Allen, D.J., M. Dessert, P. Trutman & J. Voss, (1989). Common beans in Africa and their constraints. In: H.F. Schwartz & M.A. Pastor Corrales (Eds.) *Bean Production Problems in the Tropics.*, Cali, Colombia: CIAT Publications, pp. 9–31.
- Bekunda, M.A., Nkonya, E., Mugendi, D., Msaky, J.J., 2002. Soil fertility status, management, and research in East Africa. *East Afr. J. Rural Dev.* 20: 94–112.
- Bitocchi, E., L. Nanni, E. Bellucci, M. Rossi, A. Giardini, P. S. Zeuli, G. Logozzo, et al. (2012). “Mesoamerican origin of the common bean (*Phaseolus vulgaris* L.) is revealed by sequence data.” *Proceedings of the National Academy of Sciences*, 109 (14): 788–796.
- Blench R., Chapman R., Slaymaker, T. (2003). A Study of the Role of Livestock in Poverty Reduction Strategy Papers. PPLPI Working Paper No.1. Pro-Poor Livestock Policy Initiative (PPLPI), FAO, Rome.
- Bonal, X. (2007). On the global absences: reflections on the failing in the education and poverty relationship in Latin America. *International Journal of Education Development*, 27(1): 86-100.
- Broughton, W.J., G. Hernandez, M. Blair, S. Beebe, P. Gepts & J. Vanderleyden, (2003). Beans (*Phaseolus* spp.)—model food legumes. *Plant and Soil* 252: 55–128.
- FAO, (2005). FAOSTAT. Retrieved on 12th January, 2020 from <http://faostat.fao.org/faostat/collections?subset=agriculture>.

- ILO, (2013). Employment trends for youth: A generation at risk. International labor office Geneva, Switzerland. Retrieved on 27th November, 2019 from <https://www.ilo.org/wcmsp5/groups/public/>.
- Karel, A. K., Ndunguru, B. J., Price, M., Semuguruka, S. H. & Singh, B. B. (1981). Bean production in Tanzania. In: Potential for Field Beans in Eastern Africa, Proceedings of a Regional Workshop, Lilongwe, Malawi, March 1980. Cali, Colombia: CIAT Publication. pp. 140– 154.
- Kilimo Trust, (2012). Development of Inclusive Markets in Agriculture and Trade (DIMAT): The Nature and Markets of Bean Value Chains in Uganda. Retrieved from <http://www.undp.org/content/dam/uganda/docs/> on 17th December, 2019.
- Larochelle, C., Alwang, J., Norton, G., Katungi, E. & Labarta, R. (2014). “Crop Improvement, Adoption, and Impact of Improved Varieties in Food Crops in Sub-Saharan Africa.” In *Crop Improvement, Adoption, and Impact of Improved Varieties in Food Crops in Sub-Saharan Africa*, edited by T. S. Walker and J Alwang, 314–337. Cali, Colombia: CIAT Publication
- McCartney, J. C. (1966). The selection of haricot bean varieties suitable for canning, *E African Agric Forest J* 32: 214–118.
- Mmbaga, M. T. & Steadman, J. R. (1992). Nonspecific resistance to rust in pubescent and glabrous common bean genotypes. *Phytopath* 82: 1283–1287.
- Nangale, G. (2012). The role of the state in economic development: employment challenges in Eastern Africa – Tanzania. A country paper presented at the fried rich Ebert Stiftung (FES) Eastern African conference on employment policies in Nairobi, Kenya. Dar es salaam, Tanzania.

- Pachico, D. (1989). Trends in world common bean production. In: H. F. Schwartz & M. A. Pastor-Corrales (Eds.), *Bean Production Problems in the Tropics*. Cali, Colombia: CIAT Publications. pp. 1–8.
- Ronner, E., Giller, K. (2012). Background information on agronomy, farming systems and ongoing projects on grain legumes in Uganda, pp 1-34. Retrieved from <https://www.n2africa.org/sites/n2africa.org/> on 27th January 2018.
- Schultz, T. P. (2001). "Why Government should Invest More to Educate Girls", Economic Growth Centre, Yale University, Discussion paper No. 836. Retrieved from <http://www.econ.yale.edu/~pschultz/GovtEducatingGirls.PDF> on 21st June, 2019.
- Shao, F. M. & J.M. Teri, (1985). Yield losses in *Phaseolus* beans induced by anthracnose in Tanzania. *Trop Pest Manage* 31: 60–62.
- Uganda Bureau of Statistics, (2014). National Population and housing Census 2014. Provisional results, 1–65. Retrieved on 17th December, 2019 from <http://www.ubos.org/onlinefiles/uploads/ubos/NPHC/NPHC%202014%20PROVISIONAL%20RESULTS%20REPORT.pdf>.
- URT, (2008). National employment policy, Ministry of Labour, Employment and Youth Development. Dar es Salaam, Tanzania.
- Wortmann, C. S., Kirkby, R.A., Eledu, C. A. & Allen, D. J. (1998). *Atlas of Common Bean in Africa*. Cali, Colombia: CIAT Publication.

APPENDICES

APPENDIX 1: Structured Questionnaire

Questionnaire Respondents

I am Rachel Lemson a student at Open University of Tanzania pursuing a Masters Degree in Community Economic Development. To fulfil the requirements of this degree, I'm undertaking a study entitled *“Improving income through High Iron Beans production for Meliara Youth Group in Bangata Ward Arusha District Council Arusha region.”* I kindly request you to fill in this questionnaire that will enable me to achieve the objectives of the study. All information you provide shall be treated with ultimate confidentiality.

Section A; Background information

1. Sex: 01) male () 02) female ()
2. Age:
 - i. 18 - 25 years ()
 - ii. 26 - 33years ()
3. Level of education:
 - 01) Not educated at all ()
 - 02) Primary education ()
 - 04) Secondary education ()
4. Occupation
 - 01) Agriculture () 02) Cattle keeping() 03) business ()
 - 0) poultry

5. What kind of business you think is potentially, sustainable and economically feasible?
 - 01) Agricultural activities ()
 - 02) Cattle keeping ()
 - 03) business ()
 - 04) Poultry ()
 - 05) selling of fruits ()
6. Common activities undertaken in the community.....,
7. What is **your** monthly income in the community?
 - i) Less than TZS. 30,000 ()
 - ii) TZS.40, 000 - 50,000 ()
 - iii) TZS. 60,000-70,000 ()
 - iv) More than TZS.70, 000
8. Assessing whether the High Iron Beans production can have an impact on community economic empowerment.....,,,
9. Factors that hindering High Iron Beans production.....,,
10. Findings from key informants.....,,,

11. What are the General opinion to the FGD and key informants of the interviewee.....,,,,,,,
12. Where do you market your High Iron Beans?
- i. Local Market ()
 - ii. In the farm ()
 - iii. I match with High Iron Beans around the village ()
13. What are the market barriers for your products?
14. Do you have other income generating activities apart from green beans production?
- i. Yes ()
 - ii. No ()
15. Among those activities, which one do you spend most of your time in performing it?
16. What is the differences before growing High Iron Beans and after on the accessibility of education services.....

Thank you very much for your cooperation

APPENDIX 2: Interview Guide for Key Informants

Introduction

I am Raheli, a student at Open University of Tanzania pursuing a Master's Degree in Community Economic Development. To fulfil the requirements of this degree, I'm undertaking a study entitled ***"Improving income through High Iron Beans production for Meliara Youth Group in Bangata Ward Arusha District Council Arusha region."*** I kindly request you to fill in this questionnaire that will enable me to achieve the objectives of the study. All information you provide shall be treated with ultimate confidentiality.

1. What is the trend of High Iron Beans production in recent years?

.....

2. Where did the High Iron Beans producer get market?

.....

3. Which income activities in your area earn more income?

.....

4. What is the income from other activities?

.....

5. What ere the effects of High Iron Beans production on household income

.....

6. What are the effects of High Iron Beans production on income generation?

.....

.....

7. Is there any effect of High Iron Beans production on income?

i. Yes

ii. No

8. If the answer in question 9 is yes, what are the effects of High Iron Beans production before and after producing vegetable?

.....

.....

9. What are effects of High Iron Beans production on accessing loans from sources?

.....

.....

10. 13. What are the challenges these small farmers face when producing High Iron Beans?

.....

.....

Thank you very much for your cooperation

APPENDIX 3: Ethical Documents

Rahel Lemson,

S.L.P 6070,

ARUSHA .

14/05/2021

MWENYEKITI WA KIKUNDI CHA VIJANA MELIARA,

HALMASHAURI YA WILAYA YA ARUSHA,

KATA YA BANGATA,

S.L.P 87.

Duluti

ARUSHA.

YAH: MAOMBI YA KUKUTANA NA WANAKIKUNDI CHA MELIARA.

Kichwa cha habari hapo juu cha husika.

Kwa barua hii nawasilisha maombi rasmi ya kukutana na wanakikundi wote wa Meliara.

Madhumuni ya kukuatana ni kupata fursa ya kujadilliana na kubadilishana maarifa katika suala zima la kuleta maendeleo ya kiuchumi miongoni mwa wanajamii na kikundi kwa ujumla.

Majadiliaono yatafanyika kwa muda wa masaa mawili kutemeana na ushiriki wa wanakikundi.

Majadiliano hayo yananatarajiwa kuibua, kuimarisha na kutatua chngamoto za kiuchumi zinazojitokeza katika jamii yetu.

Iwapo ombi langu litakubaliwa naomba kujua siku na tarehe itakayo pangwa .

Wako katika ujenzi wa Taifa,



Rahel L. Mkondya

Mwanafunzi Chuo Kikuu Huria – Kituo Arusha.

Kitivo cha Maendelo Ya Jamii na Uchumi.

MELIARA GROUP

S.L.P 87

DULUTI

ARUSHA

18/05/2021

NDUBU RAHEL LEMSO
S.L.P 6070
ARUSHA

MELIARA GROUP
S.L.P 87
DULUTI
TAR.....

YAH:

KUKUBALIWA KUKUTANA NA KIKUNDI CHA MELIARA

Husika na Kichwa cha Habari hapo juu.

Napenda kukujulisha kwamba umehusishwa kaji kukutana na kikundi cha Meliara kwa ajili ya maendeleo ya jamii na kikundi cha Meliara kama ulivyoomba.

Kikundi cha Meliara na viongozi wake wapatayari kutoa ushirikiano wa hali na mali pamoja kwa faida ya jamii na kikundi kwa ujumla.

Kwa kutanikisha zoezi hili langozi wa kikundi umeomba ufike siku ya tarehe 28/05/2021.

Nakutakis kila isikharu katika kutekeleza majukumu yako ya ujuzi wa Taifa


ELIPHEAS H. MBLE
MELIARA GROUP
S.L.P 87
DULUTI
TAR.....