

**SMALL SCALE HONEY PROCESSING TOOLS FOR PASTORALISTS ECONOMIC
DEVELOPMENT IN NABERERA WARD IN
SIMANJIRO DISTRICT, MANYARA REGION TANZANIA**

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

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CERTIFICATION

I, the undersigned, **Dr. Deus D. Ngaruko** certify that I have read and hereby recommend this project for acceptance by The Open University of Tanzania in partial fulfillment of the requirement for the Degree of Master in Community Economic Development (MCED).

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Date

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DECLARATION

I, **Loishiye, Philemon Simon** 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 in Community Economic Development (MCED).

Signature

Date

DEDICATION

This work is dedicated to my family, especially my beloved wife and children for their tired less of my absence at home all the long period of undertaking this study. My friends who really missed my company for a long time and whose care and untold support with encouragement propelled me to accomplish my studies.

Lastly, I dedicate this work to my entire family, specifically to my loving wife; Gladness Robert, my daughter Dorcas and my two sons Noel and Joseph for their encouragement and tolerance during my studies.

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ABSTRACT

In rural areas of Tanzania honey sub sector is among of the potential enterprises that accommodate most of farmers/pastoralist and small scale producers it is one of the potential and reasonably subsectors which can generate income for the poor household. That potential notwithstanding, the sub sector is facing several production constraints that have limited its potentials for contributing to poverty reduction. The constraints include poor tools of honey processing, poor packaging of honey products, poor marketing system and lack of appropriate knowledge on honey processing skills. As a result most of honey producers in rural and small town in Tanzania feel disappointed by large and big honey industries which apply its resources and catch both internal and external honey market. Poor tools are the major constraint and in particular honey processing equipments which causes low production of honey products, poor processing. Despite the mentioned constraints honey sub-sector is found in almost all pastoralist households in the rural areas and sub-urban which confirm that its potentials is yet to be utilized. That situation is an indication that honey sector is an economic opportunity of which pastoralist can learn easily the entrepreneurial skills required for making honey sub sector a reliable source for income generation and household food security. Thus, through capacity building and supply of improved honey processing equipments producers can develop the necessary attitude, knowledge and skills for developing the sector (honey sub sector) as an economic enterprise.

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CHAPTER ONE

1.0 PARTICIPATORY NEEDS ASSESSMENT

1.1 Introduction

Tanzania is among of countries in the world with a high production of bee products especially honey and beeswax. The high production of bee produces in Tanzania is mainly due to presence of a high population of bee colonies that are estimated at 9.2 million, and also due to presence of high number of vegetation that are preferred by bees in many areas of the country (Kihwele *et al.*, 2001; Latham, 2001; Mbuya *et al.*, 1994). The presence of miombo trees (*Brachystegia*, *Julbernardia*, *Isoberlina*, *Combretum*, *Terminalia* spp etc) also contributes significantly to the high production potential of bee products in the country. Tanzanian honey is known all over the world due to its organic nature compared to honey from other countries (MNRT, 1998).

Due to its organic nature, Tanzanian honey has received a high demand in many countries in Europe (e.g. Germany, Holland, England, and Belgium) and other countries in the world. Due to an increasing concern from consumers for no or little chemicals in food products, it is expected that the demand for organically produced honey will be even more in the future. Based on statistics of 1998, the annual capacity of Tanzania for honey and beeswax production are 138,000 and 9,200 tones respectively (MNRT, 1998). However, the country is currently producing 4,860 tones of honey and 324 tones of beeswax per year, which represents only 3.5% of the annual production potential of the country. Beekeeping in Tanzania is mainly rural-based practiced by local beekeepers in villages.

The present of low production potential might be due to poor market and demand of honey and beeswax. Market options include farmers markets, health food stores, roadside stands, agritourism sites, and booths. Honey can be marketed in several forms. Comb honey consists of chunks of honey- filled combs taken direct from the hive. Extracted honey, which is generally preferred by most consumers, is that liquid portion once it has been separated from the comb. Lack of market does not mean only the external market, but also the internal market that is more important and easily accessible for local bee farmers.

The lack of a potential reliable market for honey and beeswax has been the main obstacle for farmers to rely on beekeeping in order to increase household income and food security, efforts that can contribute positively toward poverty reduction. From the fact that lack of market is the main cause of reduced production of bee products and their profitability, and that little is known on market of bee products in Tanzania; this study was initiated to assess market situation of bee products, especially honey, within Tanzania. Results from this study will contribute towards designing rational and sustainable measures to increase the market of bee products in Tanzania. Such measures will enable the beekeeping industry to contribute significantly towards poverty alleviation through increased household income and national development in general.

Beekeeping in Tanzania plays a major role in socio-economic development and environmental conservation. It is a source of food (e.g. honey, pollen and brood), raw materials for various industries (e.g. beeswax candles, lubricants), medicine (honey, propolis, beeswax bee venom) and source of income for beekeepers. It is estimated that the sector generates about US\$ 1.7 million each year from sales of honey and beeswax

and employ about 2 million rural people. It is an important income generating activity with high potential for improving incomes, especially for communities living close to forests and woodlands. Beekeeping also plays a major role in improving biodiversity and increasing crop production through pollination.

At the same time beekeeping in Tanzania is carried out using traditional methods that account for 99% of the total production of honey and beeswax in the country. Approximately 95% of all hives are traditional including log and bark hives. Others are reeds, gourds, pots etc. During the colonial and early independence period the production of bee products was higher than what we have now and was among the important non-wood products from the forests with a higher contribution to the national GDP and international trade (Kihwele, 1991). However, today the industry has declined in exports to an insignificant level despite of its high potential. Tanzania (i.e. then Tanganyika) was an important source of beeswax during the Germany colonial period (Ntenga, 1976). The production of beeswax from Tanzania increased from 320 to 905 tons during 1906 to 1952. Honey was estimated at an annual average production of 10,000 tons; all consumed locally (Smith, 1958). Following independence in 1961, a marketing organization of honey and beeswax was formed. According to Ntenga (1976), Tanzanian exports averaged 368 tons of beeswax and 467 tons of honey. During the 1996/97 period, the annual exports dropped to 359 tons of beeswax and 2.46 tons of honey (Tanzania Customs) Department, 1997).

According to Seegeren (1996), in 1984 world honey export totaled 270 000 tonnes of which 60% came from the tropics. Prices varied between US \$ 0.7 and 2.5 kg-1. Beeswax, which, among other things, is used in the manufacture of cosmetics, candles, foundation sheets for hives, medicines and polishes, had a good and very stable market.

In 1990 world market prices varied between US\$ 2 and 3 kg-1. Beeswax production varies from 0.2 to 0.5 kilograms hive-1 year-1 when frames are used and 0.5 to 2 kilograms hive-1 year-1 when the honey is pressed and all combs are melted. In Tanzania traditional beekeeping is credited for almost all production of honey and beeswax.

Best locations for beekeeping investments and size of potential in Tanzania. The clearest type of honey is found abundantly in the regions of Iringa and Singida. The Western Zone of Tanzania including the regions of Tabora and Shinyanga has the largest reserves of bee products averaging 52,000 metric tons per year other emerging Regions such as Manyara, Arusha is also named for honey production.

The local rural market has traditionally been the largest for raw honey absorbing over 60% of all honey produced nationwide. The urban market in Tanzania is growing fast and the demand for honey is expanding rapidly. Current supplies do not meet the demand in urban areas.

1.2 Community Profile

Community profile is crucial part to be caught up since it gives information regarding the targeted area hosting the project. To obtain clear image of the beneficiaries who will be affected by the project, this section present a community profile of Naberera ward in Simanjiro District of Manyara region which a Maasai area.

1.3 Simanjiro District.

Simanjiro district is one of the five (5) administrative districts in Manyara Region of Tanzania. It is bordered to the north by Arusha Region, to the north east by Kilimanjaro Region, to the south east by Tanga Region, to the south by Kiteto District, to the south

west by Dodoma Region and to the west by Simanjiro District the district (Simanjiro) receive at least 400 and 600mm of rain per year.

1.3.1 Population

The region is inhabited by various ethno linguistic groups and communities. The latter include the [Assa people](#), [Gorowa](#), [Kw'adza](#), [Mbugwe](#), [Datoga](#), [Maasai](#) and [Barabaig](#). Naberera ward is one of the 12 wards at Simanjiro District it has 9,650 population. Naberera Honey producer group is one of the emerging Maasai honey producer small groups at Simanjiro District. This group is basically comprising for pastoralist basically Maasai who have decided to diversify their source of income. There are 7 groups comprise of 63 members (9 members each group) of which 22 are female and 41 are male all are small scale pastoralist at Naberera ward. The group owning it own honey farms and currently the average of honey production is ranging from 1,920-2,500kg per season while 40 to 50kg production per person is produced per season. The group is technically oriented by different partners including District Council, IOPA these organizations offer trainings on technical issues related to honey production.

1.3.2 Social cultural system

Social cultural system is a society's infrastructure (or material base) is its system of production and reproduction, which is determined by a concatenation of ecological, technological, environmental, and demographic variables of the hosting area.

1.3.3 Ethnic group pattern

Maasai society is strongly patriarchal in nature, with elder men, sometimes joined by retired elders, deciding most major matters for each Maasai group. A full body of oral law covers many aspects of behaviour. Formal execution is unknown, and normally

payment in cattle will settle matters. An out of court process called 'amitu', 'to make peace', or 'arop', which involves a substantial apology, is also practiced.

1.3.4 Topography

The topography varies from plains to scattered ridges or row of hills. Most of flood plains have black. Cotton soils, while hills are covered with fragile soils prone to erosion, acacia commifora woodland, Bush lands, bushed grasslands and thickets which cover most of the northern and southern parts of the district. Most of the vegetation is highly adapted to dry conditions and periodic droughts.

1.3.5 Climate

Simanjiro district is semi- arid with an average annual rainfall of 500mm. It has dual periods of unreliable rainfall comprising of short rains in November- December and long rains in March- April. The cold months are May- July while hot months include August- February and the temperature ranges between 13°C to 30°C.

1.3.6 Mission of the Beekeeping Group

The Naberera Honey Producer Group is aiming at creating a sustainable development while focusing on environmental conservation by introducing environmental friendly interventions to alleviate poverty.

1.3.7 Vision

Well developed pastoralist community by using the available resources sustainably. The group is also involving traditional leaders in order to ensure that the whole community is respecting the project and protect it from cattle and other destruction may occur. The group comprising of leadership system of which currently it has chairperson, secretary and project manager who is technical person. It has an active

constitution of which every member is liable to follow the constitution and ensure that it is enhanced all over the group.

1.3.8 Pastoralist Profile in Naberera ward

Pastoralist can be defined as “member of caste or ethnic group with a strong traditional association with livestock-keeping, where a substantial proportion of the group derive over 50% of household consumption from livestock products or their sale and where over 90% of animal consumption is from natural pasture or browse and where households are responsible for the full cycle of livestock breeding. Pastoralists in Naberera like pastoralist from other places in East Africa are people who live mostly in dry, remote areas. Their livelihoods depend on their intimate knowledge of the surrounding ecosystem and on the well-being of their livestock.

Livestock keeping face many challenges including diseases due to presence of wild life which share same natural resources in the whole area. Pastoral systems take many forms and are adapted to particular natural, political and economic environments. The types of livestock kept by pastoralists in Naberera vary from other livestock according to climate, environment, water and other natural resources, and geographical area, and may include; cattle, goats, sheep, and donkeys.

Pastoralist use mobility as a key strategy that qualifying pastoralism as a viable livelihood. The pastoralists at Naberera ward are termed nomadic because of their mobility due to constant drought in Simanjiro. Pastoralists in Naberera habit parts where the potential for crop cultivation is limited due to low and a highly variable rainfall condition, in Simanjiro rainfall ranges between 400mm to 600mm only per annum. Off course a small number of pastoralists about 8% grow beans and maize as a compliment to livestock keeping. Pastoralist in Naberera is 95% of the total population. Although

human activities have increased in Naberera ward including mining, farming and tourism activities, population growth among pastoralist and competition for land and other natural resources, pastoralism remains a viable natural resource management system toward poverty alleviation initiative to pastoral communities.

1.4 Community Needs Assessment (CNA)

Needs assessment is one of the critical stages in the project development process. Systematic needs assessment is comparatively a new phenomenon in the development panorama. There is a growing consensus among development practitioners to consider needs assessment as a process to identify and measure gaps between “what is” and “what should be” prioritize the gaps, and determine the way to bridge them. Development projects require accurate, reliable and usable information that reflect the needs of a specific community. Needs should emerge directly from ideas articulated by representative groups of the target population and other stakeholders in a community. Project ideas and objectives should be based on such needs. Needs assessment conducted with the participation of the target population strengthen community commitment also enthusiasm for the identified project. Besides igniting project ideas, community needs assessment generates data to develop indicators for evaluation; furthermore needs assessment helps in creating sustainability and community ownership in a project. It is an effective and efficient system of inquiry that provides information to help decision makers.

During this stage of need assessment different actors in the community were given opportunity to review and give comments on the identified needs and come up with the critical list and priorities. The exercise was done in participatory approaches where

group members positively participated in all discussions to identify their needs. The purposes of this need assessment lie on the fact that the project life cycle begins with a needs assessment. Before a successful project is established, it is important to have a good understanding of the project setting based on the community needs assessment. Needs assessment was conducted to identify a broad range of problems within a targeted community and decide which a project need will be addressed. Various methods and techniques need to be used to collect information on the community needs assessment to identify the community needs and find possible solutions to their problems. Information for situation analysis and problem definition is collected with the involvement of the community members and other beneficiaries using a variety of data collection techniques. This ensured valid, reliable and comprehensive information about the community and its problems.

Simanjiro District in Manyara Regional selected as a pilot study to host activities conducted by the CBO. Since situation analysis involves the identification and definition of the characteristics and problems specific to particular categories of people in the community, it was done by collecting information necessary to understand the community as a whole and individuals within the community. Situation analysis is very important before any attempts to solve the problem because it provides an opportunity to understand the dynamics of the community; helps to clarify social, economic, cultural and political conditions. Situation analysis also provides an initial opportunity for people's participation in all project activities and enables the definition of community problems and solutions.

1.4.1 Objectives of Community Needs Assessment

1.4.1.1 The overall objective

The overall objective of this project is to generate information that can be used to draw-up measures and means to enable the beekeeping groups to add values on their honey products to enhance its contribution towards poverty alleviation initiative at Naberera ward of Simanjiro district, in Manyara region.

1.4.1.2 The specific objectives of the study

Specific objectives of CNA are;

- (i) To create group awareness on honey production and processing tools
- (ii) To increase availability and accessibility of honey processing tools and domestic markets
- (iii) Improve the pastoralist traditional livelihood and identify other sources of income

1.4.3 Research Questions

- (i) Is there any relationship between low quality honey and the use of tools in honey production and processing?
- (ii) What are the tools regularly used in the honey processing in the community?
- (iii) Is there any market access for honey produced in community?
- (iv) Are there challenges and opportunities available in the honey sub sector?

1.4.4 Research Methodology

This section describes the study area and research methodology employed in the carrying out of the community needs assessment study. The study methodology focuses on the study design, sampling procedures and data collection techniques

1.4.4.1 Research Design

The study employed a cross section design survey to pick the sample. The cross sectional research design allows data to be collected at a single point in one time and used in descriptive study and for determination of relationship of variable (Bailey, 1998); the design provides a snap shot of variables in the study at one particular point of time.

As a result of cross section the study was cheap and taken in a short time it also allowed effective interaction between researcher and respondents. The study focus on finding the information on high pressing needs of group members and come out with priorities based on the existing problems.

1.4.4.2 Sampling Techniques

The study employed a cross section design survey to pick the sample of 66 respondents. The cross sectional research design allows data to be collected at a single point in one time and used in descriptive study and for determination of relationship of variable (Bailey, 1998); the design provides a snap shot of variables in the study at one particular point of time. As a result of cross section the study was cheap and taken in a short time it also allowed effective interaction between researcher and respondents. The study focus on finding the information on high pressing needs of women in the group and come out with priorities based on the existing problems.

1.4.4.3 Data Collection Methods

1.4.4.3.1 Data collection and methods

The participatory assessment for Naberera honey producer group was carried out, using participatory methodologies in gathering the information especially in the community

level. The participatory method and tools were adopted when carrying out this exercise. The combination of some of the participatory tools has adopted in order to get the reliable information relevant to the assessment.

The first method is gathering information about the community from a variety of source, included the district reports and investment profile, national population and housing census of 2002, beekeeping reports, local organization NGO, district extension staffs, and documents. The second method developed a structured questionnaire, Focus Group discussion and key informants interview involved meeting with both staff and local network leaders also local organizations within the community area. In this assessment 66 members were interviewed, 2 ward extension officer, 2 NGO staffs and 1 being IOPA as a facilitator on technical issues.

In the joint meeting the community (Honey producer group), through Participatory Rural Appraisal (PRA) method were able to identify some problems and prioritized them and came up with the various options of solving their social and economic situations. The use of this method was based on its appropriateness in encouraging community participation in solving their development social and economic issues.

1.4.4.3.2 Questionnaire

Structured questionnaire is a primary data collection method that was used to collect more information to from different targets who could not attend a meeting in a particular day. Questionnaires and interviews methods are most commonly used instruments in the survey. They consist of questions and instructions and they make sense only in the context of sampling and design, data processing and analysis, plot testing, response rate and reporting of results. This technical was mainly used to

acquire information related to honey production and background information of each individual ranging from social to economic information.

1.4.4.3.3 Observation

In this method an individual can gather first hand information on programs, processes or behaviors being studied without having an interviewer as one of the players. The purpose of observation is to study the behavior of the respondents regarding the group. This is a qualitative data gathering method that requires direct observation of an activity behavior, relationship, phenomena network or process in field. According to Kajembe and Luoga (1996), curiosity and willingness to learn are tools in the new surrounding environment. In this study the processes of participant observation has been of great assistance in the field and through interpretation and linkage of data obtained from other methods. Under this technique field visit were made to assess activities and meetings conducted by the group. This enabled people to see and make their own value decision about improved management system of organizing social groups and relevance to their situation.

1.4.4.3.4 Focus group discussion

During the study focus group discussion employed to collect some data which were very crucial in conducting the need assessment activity. The participants discussed their needs in small groups and interactions are highly encouraged during discussions. Each group responded the same questions which were in the check list to keep them on track during the discussion.

1.4.4.4 Data Analysis Methods

Descriptive analysis was used in the survey that involved describing the common underlying characteristics of data (Arlene et al 1985). In quantitative research, descriptive analysis involves arranging the data into a frequency distribution in groups

each value into categories from low to high. If it is a normal distribution, then most of the values will fall towards the center of the distribution and decrease in frequency further out from the center.

Qualitative research attempts to broaden and deepen our understanding of how things came to be the way they are in our social world. Qualitative research tends to focus more on how people can have different ways of looking at reality and it also study behaviors in natural settings and it has no manipulation of variables. In my research I will mainly use qualitative research designs which include the following different types of qualitative research as described by Trent RDSU (2007); ethnography. This is one of the qualitative forms of research design which can be used to investigate the Maasai culture, traditional structures, age set and clans to describe cultural behaviour in relation to pastoralism economy. Ethnography is good as it is a good technique with some background in anthropological point of view. With ethnography, the study obtained in depth information through face to face contacts with individuals, and ensured good use of a case study and data analysis. The study was able to tell the lessons learned from the perspective of the Maasai systems.

. Another tool in qualitative, method is phenomenology. This form of qualitative research design helped the study to describe pastoralism and changes occurring in Maasai livelihood within and beyond Tanzania and the link between those changes and similar global changes affecting pastoralism and was able to look at the individual's impacts on pastoralism as a way of life. The third tool is Grounded theory which is a form of qualitative research design helped to look beyond data collection and analysis and rather looked at the existing local and modern knowledge and ideas that facilitate

generation of new knowledge and new theories, principles, and ideas about my topic using grounded theory as expressed by Charmaz (1983).

1.5 Community Needs Assessment Findings

About 50 % of the respondents are aged between 30-45 of which according to adoption theory the younger the respondents the higher the adoption rate (Ashimogo et al,2009). This imply that, most of Honey Producer Group are owned by male old ages. In relation to this age also it has an implication on decision making. The older the person the time spend on decision making of which it has also an implication on business management. It was noted that most of the respondents are not experienced on business management since with 30 years old an average years of business ownership is about 2 years this means they always join the Honey Producer Group (HPG) at late ages.

TABLE 1.1: Sex of respondents

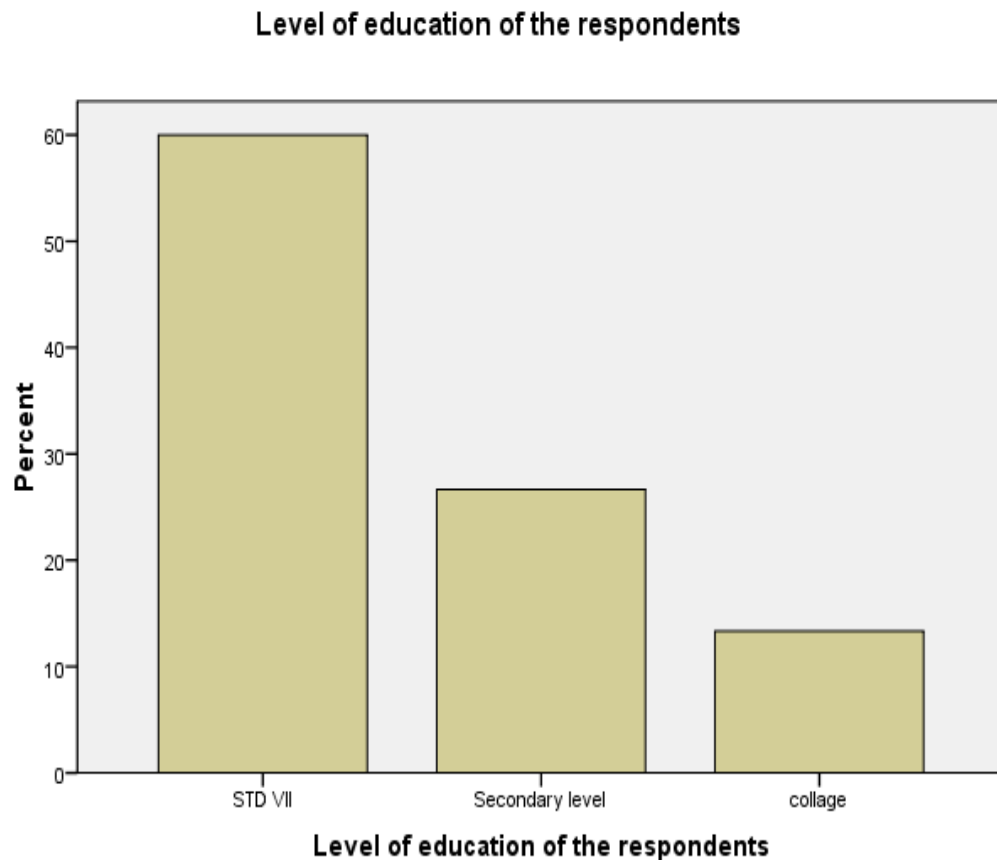
Variable	Men	Women
Sex of the respondents	70%	30 %

Source: Survey data 2012

During the findings it t was noted that over 70% of the respondents are men while only 30% respondents are women this has its implication on honey producer group development it seems that most of honey producer group belong to men and women are few who engages themselves on SMEs. This is supported by research findings from (FAO, 2006) which depicted that women are mostly employed at informal sector. It is therefore recommended that promotion of women to engage on formal business is of high concern compared to men.

Data in table 2 shows respondents age in grouping, whereby age ranged from 18 years old respondents to 30 years old which is 20 percent of total percentage of respondents filling questionnaire; and 46 percent is age group of 30 to 45 years old, 33 percent is 45 age and above.

TABLE 1.2 : Level of education of the respondent



Source: Survey data 2013

According to respondents 58% were found to hold primary education which is a basic education. These imply that with their level of education can lead a small enterprise but it was found to have some challenges especially when it comes to Honey Producer

Group management and development of honey producer group policy or any other factors such as inflation which may in one way or another need high level of business management. This level of education was found also to affect decision making for example most of the respondents although they are using beekeeping rules and policy but they were found to know nothing about its implication on their business development. The level of education has implication on decision making and project management. Only 15% of respondents were found to have secondary education and this is a recommended education for at least doing a business in a very competitive environment especially on language since in some areas English speaking is important for bargaining and sometime in marketing environment. Only 10% of diploma holder engage on honey producer group this findings depict that the more educated the less people engage in small business and this might be one the fact that the so called SMEs in Tanzania perform less comparing to other East Africa - countries since the business owners lack most of the important basics of business management and policy set up.

TABLE 1.3 : The use appropriate tools honey production & processing

Variable	Yes	No
Use of appropriate technology	35%	65 %

Source: Survey data 2012

The results depict that only 35% of the respondents use improved tools .The use of poor tools both on honey processing and production it has an implication on quantity and quality. The result of low tools shows that the produced honey does not meet the standards on market especially at the supermarket where the different users are coming with their standards this will hinder the hope to export the honey to international market. It is also leading to low production since the tool which is used is very low and

an appropriate to the extent that most of the producers spends more time in producing little honey.

It was realized that there was inadequate family income to meet family basic needs such as medical cost, food security, shelter and education for children. The reason behind was identified as dependency on subsistence agriculture and pastoralism as a viable livelihood alone and at the same time using poor farming methods and hence resulting into low produce, and also due to new demands on their prime pastoral lands following globalization and unfriendly investment policies Naberera ward like other rural communities is engaged in subsistence agricultural production. The main food crops include; maize being the major crop, pigeon-peas and beans. An agricultural practice has been traditional to many peasants or and small holders' farmers and hand hoe is used as the means for cultivation. Livestock is done as their main activity where animal keeping like cattle, goat is mainly done by men mainly free range. As a result it leads to very low production hence makes them to experience low family income; thereby they fail to meet their family basic needs and improvements of their living conditions. Other problem which was associated with the later was poor food storage, inadequate knowledge of honey processing, food management, and poor farming methods practices as well as poor cattle keeping methods. Women were mostly affected because of domestic duties, and they supply labor power. The situation was even worse to single mothers, widows and elderly women who were not able to move out from affected areas. The rise of beekeeping projects seems to bring hope to women since its control is mostly equally of which women also are engaged into production and sales of honey products it is one of the income diversification means whereby women while have an opportunity to decide

TABLE 1.4 : Knowledge on income generation

Variable	Yes	No
Respondents with Knowledge on IGA	30%	70 %

Source: Survey data 2012

Formal education was one of the more significant institutions to shape the viability of income generating activity. Currently the school curriculum at all level does not address the issue of equipping young people with relevant skill and practical knowledge. This ranges from basic life skill to analytical skills, including book keeping and other business related skills and vocational skills. This situation resulted from inadequate knowledge in managing income activities which leads to failure of income generating groups.

Access to financial capital was also associated with this situation as majority of group and communities has low knowledge on business skills hence would not make a profit to repay the loans under the current strict conditions and policies among financial institutions based in urban areas. Many members had entered into the entrepreneurship without proper training in business skills; as a result they fails to make profit, and sometimes they initiate viable projects.

1.5.1 Other community needs

Objective 1:

To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.

1.5.2 Lack of enough extension services

It was also identified that extension services to pastoralist is poorly provided as the extension staff do not have necessary skills and knowledge on beekeeping and if has the project is situated at rural far where most of the extension staff do not prefer to stay. However the whole ward has only 2 agriculture extension staff, who were not motivated and which is cumbersome for them to provide service to all community and worse enough none of them has background on beekeeping. Due to this fact then most honey produces and even livestock produce have been practicing poor methods. These contribute too much lack of effective beekeeping techniques, poor honey production and poor honey harvest techniques resulting from adequate information and relevant trainings.

Objective 2: To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2014

1.5.3 Livestock diseases in the area

It was observed in the assessment that as a means of gaining economic wellbeing of community in Naberera ward are trying to practice mass cattle keeping however their efforts are hampered by occasional disease such as anthrax, Malignant Catarrhal Fever (MCF) and foot and mouth disease (FMD) especially when it is wet, and other diseases throughout the period have been for example; East Coast Fever (ECF), Contagious Bovine Pleuropneumonia (CBPP), Contagious Caprine Pneuropneumonia (CCPP), Rift Valley Fever (RVF), and Lumpy skin disease (LSD) to mention few.

The influx of animal diseases have influx of animal diseases has been due to the presence and interactions between wildlife and livestock which share the same water points and grazing. Also the problem of continue practicing mobility as a coping

mechanism when there are no water around pastoralist bomas (homesteads), and limited grass which force to move from one place to another was realized as one ways of spreading diseases and create conflicts with other groups using the same scarce resources.

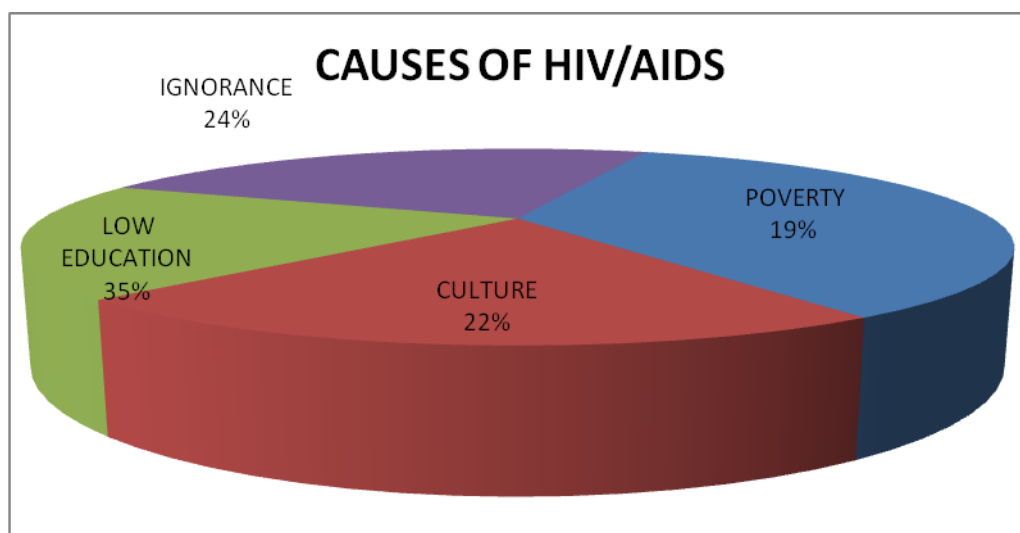
1.5.4 Undetermined Road Infrastructure

Transport is the key toward accessing markets and information in order to get connected to markets for any product communication and transport means are of paramount importance. Naberera ward depend on the weather road connected to Arusha. However this was identified as the problem especially during rainy season the transport become very cumbersome because the road is severely eroded which deny the buses to reach the villages easier. This also hinders those who travel by motorcycles to reach to small town easily compared to other seasons. Honey producer are doing business but customers are situated in Simanjiro town or Arusha city also fill the pinch as it affects their business and income as well. It also prevents the potential buyers to visit the area as they wish. This not only affect selling but also affect the stockiest who fail to open shops in the area for livestock medicines and beekeeping tools due to uncertainties in travelling using the said road. Other aspects of poor infrastructure; unreliable telephone communication- low coverage for Airtel and Vodacom which makes the areas not favorable for investors.

1.5.5 Prevalence of HIV/AIDS

HIV/AIDS is a national wide pandemic; the HIV/AIDS infection rate affects economic development of the country and community at large. A lot of manpower (young warriors) is affected with the disease hence resulting into the community use most of their time in taking care of affected people instead of engaging themselves in economic activities. Medical costs incurred for the seek people is a burden to the family take into

consideration the existing poverty at the family level. Women are most vulnerable to the situation due to the existing culture that exposed them to the risk of affection such as polygamy, pre-marriage test, safe sex decision and heritage of widows. Many women are unable to negotiate safe sex with their partners who are themselves unwilling to take responsibility for their own health and that of their beloved ones. Domestic violence prevents many women from advocating for safe sex in pastoral community. They fear divorce or abuse and that is why most of them do not engage into any decision on safe sex neither number of children as well as domestic issues. Migration of young Maasai from rural to urban areas seeking for employment was discussed to be a major problem out of many putting the Maasai community (which used to be closed community before) under high risk of HIV and AIDS following increased of abject poverty and inadequate of households' income. There is a need to empower women and young people economically so that they feel free to advocate safe sex thereby protecting themselves from HIV and AIDS.



Source: Survey data 2012

1.6 Community needs prioritization

As shown on table 5 and as per CAN findings, community needs prioritization indicates clearly the needs and problems to be addressed through intervention. Table 5 below illustrates the needs and prioritization as discussed under CAN findings in part 1.3.

TABLE 1.5: Community needs prioritization

Community needs	Advanced tools on honey	Improvement of household Income to meet basic needs	Capacity building on honey value addition techniques and processing	Capacity building on HIV/AIDS pandemic diseases.	Extension services on honey production	Reliable road and Infrastructure	Access to soft loans and capital	Score
Advanced tools on honey		Advanced tools on honey	Advanced tools on honey	Capacity building on HIV/AIDS pandemic diseases	Advanced tools on honey	Reliable road infrastructure	Advanced tools on honey	9
Improvement of household Income to meet basic needs	Advanced tools on honey		Capacity building on honey value addition techniques and processing	Improvement of household Income to meet basic needs	Extension services on honey production	Extension services on honey production	Improvement of household Income to meet basic needs	4
Capacity building on honey value addition techniques and processing	Advanced tools on honey	Capacity building on honey value addition techniques and processing		Capacity building on honey value addition techniques and processing	Capacity building on honey value addition techniques and processing	Reliable road & Infrastructure	Access to capital	8
Capacity	Advanced	Improvement	Capacity building		Extension	Reliable	Access to	2

Community needs	Advanced tools on honey	Improvement of household Income to meet basic needs	Capacity building on honey value addition techniques and processing	Capacity building on HIV/AIDS pandemic diseases.	Extension services on honey production	Reliable road and Infrastructure	Access to soft loans and capital	Score
building on HIV/AIDS pandemic	tools on honey	of household Income to meet basic needs	on honey value addition techniques and processing		services on honey production	road & Infrastructure	capital	
Extension services on honey production	Advanced tools on honey	Extension services on honey production	Capacity building on honey value addition techniques and processing	Extension services on honey production		Extension services on honey production	Extension services on honey production	7
Reliable road infrastructure	Advanced tools on honey	Reliable road infrastructure	Capacity building on honey value addition techniques and processing	Reliable road infrastructure	Extension services on honey production		Access to capital	6
Access to soft loans and capital	Access to capital	Improvement of household Income to meet basic needs	Access to capital	Capacity building on HIV/AIDS pandemic diseases	Access to capital	Reliable road infrastructure		5

Source: Survey data 2012

1.7 Chapter Conclusion

The major findings of the study was that the group had poor processing and production technology of honey as well as lack of relevant and appropriate knowledge on business and income generating activities amongst the Maasai people. There is a need for intervention to honey processing and production tools to improve this option of livelihood among others.

Based on the survey findings it is obvious that it's difficult for honey producer to improve the productivity of honey without improving tools and the honey management system. There are many factors affecting productivity in the study area. This can be justified by the following information lack of appropriate infrastructure, lack of appropriate extension services, age of the CBO member which seems to be so old compared to what they are expected to deliver and due to the fact traditionally beekeeping and honey production is done by elderly people. Other critical challenges on the beekeeping sub sector which is HIV prevalence in the area where pastoralists do not access adequate information as well strong cultural practices. Livestock disease is another negative factor which affects the pastoralist development. Livestock is as the main source of pastoralist livelihood has been affected poor infrastructure and additionally, the presence of wildlife in the area. All in all the production of honey and increase of market demands on honey, the volumes of the produced honey will depend much on the use of modern tools to add value on the products and therefore increase individual's income.

CHAPTER TWO

2.0 PROBLEM IDENTIFICATION

2.1 Background to Research Problem

This chapter reviews the identified community problems where the project intends to address. According to the participatory assessment which was conducted in Naberera ward in Simanjiro District in Manyara region, various stresses and their causes were identified during which one among others led to the core problem to be intervened by implementing a project.

This chapter reviews the problem of absence of small scale honey production and processing tools that help to increase income at house hold level to improve the living standard hence poverty reduction at house hold among pastoralist honey producer group at Naberera of Simanjiro district.

2.2 Problem statement

Beekeeping in Tanzania plays a major role in socio-economic development and environmental conservation. It is a source of food (e.g. honey, pollen and brood), raw materials for various industries (e.g. beeswax candles, lubricants), medicine (honey, propolis, beeswax bee venom) and source of income for beekeepers. It is estimated that the sector generates about US\$ 1.7 million each year from sales of honey and beeswax and employ about 2 million rural people. It is an important income generating activity with high potential for improving incomes, especially for communities leaving close to forests and woodlands. Beekeeping also plays a major role in improving biodiversity and increasing crop production through pollination.

However, today the industry has declined in exports to an insignificant level despite of its high potential. Most of the local honey processors lack appropriate tools and proper tools and adequate facilities to produce quality honey products for export and local consumption. Lack of improved honey processing tools, lack of relevant training for small scale honey processors is always the key challenge toward growth of honey subsector in Tanzania.

2.3 Project description

The project description is its designed took into account some important principles, including; equity participation, community building, cooperation and collaboration, self-reliance and community control, integration, interdependence, and capacity building, diversity, and the use of appropriate indicators.

The project is targeted to Naberera Honey Producer Groups (NHPG) in Simanjiro district council as direct beneficiaries but in the course of project development other beneficiaries such as; villages honey suppliers, town vendors, honey input suppliers will also be affected indirectly by the project and community at large. The project on the “Small scale honey processing tools for pastoralist economic development” intends to establish small honey processing industries, as well as establishment of market economy for honey products produced locally in Simanjiro town council under Naberera Honey Group in order to increase the volumes and capacity of honey processed and introduce other products as the by-products from quality raw honey. The project aimed to work with existing Honey Cooperatives, strengthening capacity to engage into project work, as well as increase community participation in a meaningful way. The selected group (Naberera Group) constitute of women and men living in a destitute life because their daily earning is low but with this project, income in their family is expected to increase and therefore to improve the standard of living.

The mentioned above will be given relevant skills –gaps to enhance information sharing at all levels, implementation, action research and monitoring, and engagement of various informal and formal groups through sharing of relevant information and knowledge of locality.

An increase in food production as a result of increased honey produce increases equitable distribution of food in the house hold as it is attributed by improved honey processing industries. This will therefore increase awareness of bio-regionalism and ecology through sustainable planning for environment, reduce exploitation of both human and material resources by effective use of appropriate tools and local committees.

There is need of introducing appropriate honey projects for pastoralist because pastoralist are more resourceful in managing honey industries and therefore their involvement in development programs increases production efficiency. A stakeholder contribution is very vital in the process of the promoting honey sub sector development for the group. This project will strengthen the Maasai cultural economy and set up a skill arrangement like learning tour by valuing their traditional undertakings and supporting cultural diversity and development at large.

2.3.1 Target Community

The target community of this project is the Maasai ward known as Naberera in Simanjiro rural district; Naberera is ward and village in Simanjiro district about 146 km from Arusha City in Tanzania. The ward has approximately 9.650 inhabitants. The population in the area is Maasai pastoralists who regularly gather in the village for its shift market where livestock, clothes, and domestic utensils are sold. Among the

Maasai, people never live in the same house all their life, unless they die when young. They are built by women, and their construction typically takes four to eight days.

2.3.2 Stakeholders Analysis

During the study the researcher undertook stakeholder analysis where by the relevant stakeholders were interviewed to offer their views on the intended intervention and opinions. Two types of stakeholder were involved in this project; the 29 direct project beneficiaries and indirect project beneficiaries. The direct project beneficiaries are the group members of Naberera honey Naberera group dealing with processing of honey produce. The direct beneficiaries will benefit from better living standard through income generation from the improved honey products. The main road passing from Arusha to Simanjiro is under Tan-Road and it is an opportunity for beekeeping activities in Naberera community.

Simanjiro town which would be proud of the project outcomes which are in line with government poverty reduction strategies and the millennium development goal number one and two. The indirect stakeholder involved in this project is SIMANJIRO DISTRICT by contributing to capacity building of the Naberera group members in terms of technical training and provision of improved honey cattle. Simanjiro district (TALDO's office) responsible for providing extension services to the entire area. The skilled people/stakeholders herein mentioned above are potential providers of a substantial support to the Community Based Organization.

The stakeholders that were jointly identified by the group are:- i) agriculture and Livestock Extension Officers, ii) Honey Consumers, iii) IOPA/ OMASI Ltd, and

iv) Simanjiro District Council (SDC). Others stakeholders include; v) Stockiest (Agricultural input suppliers), Community Animal Health Association (WAMIJA), and last but not least Naberera Honey Producer Group (NHPG).

TABLE 2.6 : Stakeholders analysis

Stakeholders	Awareness on the Project	Roles on the project
Agriculture and Livestock Extension Officers	Well involved in the project design and implementation	They are technical advisor on honey production
Honey Consumers	Informed during the design of the project and participate fully in the honey harvesting periods	These are market center of the honey produced
IOPA/OMASI Co Ltd	Key players as they own honey factory in Simanjiro and will give technical support	Provide us with equipments and training on the honey processing
Simanjiro District Council (SDC)	Participate during project design and implementation, as well as technical backstopping	Play the role of networking the honey producer with government authorities in the areas of production standards such as TBS,TRA, honey processing agencies
Stockiest (honey input suppliers)	Participate during project design and implementation	These help and provide honey producer groups with inputs

Source: Survey data 2012

2.2.3 Project Goal (s) in CED Terms

The goal of the project is to contribute towards income poverty reduction and livelihood improvement at household level through honey sub sector. Before the commencement of the project Naberera honey producer group were not practicing

improved method for honey processing. They were processing honey through local equipments and they had no a system of honey products marketing on place. In the past there were experiencing losses due to poor honey processing which now is improved through this project, thus community have realized the importance of improved honey processing equipments.

2.2.4 Project Objectives

2.2.4.1 Main objective

The project aims at promoting the use of small scale honey processing tools to increase income at house hold level to improve the living standard hence poverty reduction at house hold among pastoralist honey producer groups. Currently the group is processing honey but at a very low level with low quality due to lack of appropriate skills and necessary tools. The honey market is currently sounding competitive even locally due to technological advancement this competition is leading weaken those local producers and processors who cannot afford to purchase those advanced machines to deliver the quality products.

2.2.4.2 Specific objectives

There are three (3) main objectives that lead to achieve the main goal of this project which focus on awareness creation on honey production and processing tools to the 7 target groups, increase access to domestic and regional market to group members, and improvement of pastoral traditional livelihood by identifying additional sources of income for pastoral communities.

- (i) To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.

- (ii) To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2013 To determine the challenges and opportunities in the honey production sub sector, and
- (iii) To improve the pastoralist traditional livelihood and identify additional sources of income during the project implementation period.

2.3 Host Organization Profile

Traditionally the Maasai at Naberera economy is purely pastoral, striving to survive off the products of their herds of cows, goats and some sheep. However, the combination of a significant growth in population over the past 55 years and a decline in their cattle holdings has forced them to seek other supplemental forms of livelihood. Some have attempted to grow crops, while many young men have migrated for at least short periods to cities to seek wage work. Many work in Arusha's city capital, Dar es Salaam, as watchmen, while it is also popular to go to shift market places sell spears and beaded ornaments. Naberera Maasai in the area constitute 95% of the population, and only 5% are mixed farming population where in small scale farming they grow; maize, beans and petty trading (SDC reports 2002). Naberera village is registered village under the local government Village Land Act 1999.

Among the 12 wards of Simanjiro District Council, Naberera ward is one the fast growing community- economically, politically, and development in general. Naberera ward is governed by formal local leaders according to the local government local leadership structure who cover a total of 3 villages which are sparsely scattered in large plains that favor wild animals and livestock. Naberera is among the game controlled area (GCA) where tourism activities are being practiced and there is an element of multiple land use where one can see wild animals share resources together

with large number of livestock, and during the evening times wild animals are seen around the Maasai homesteads for security purpose. Traditionally, Maasai never hunt for wild life rather they protect them.

Naberera honey producer group is one of the emerging Maasai honey producer small groups at Simanjiro District. This group is basically comprising for pastoralist basically Maasai who have decided to diversify their source of income. Naberera ward suffer from lack of adequate annual rainfall which range between 400mm to 600mm. Most of the vegetation is highly adapted to dry condition and prolonged droughts. Naberera is characterized by pastoralist by 95% and that contributes to lack of other tribes in this area, and most of the people in Naberera lack access to formal schooling and healthcare. A total 83% of youths who complete primary education remain at home without any access to secondary education due to income poverty, ignorant and poor family situation.

2.3.1 Mission of the Beekeeping Group

The Naberera honey producer group is aiming at creating a sustainable development while focusing on environmental conservation by introducing environmental friendly interventions to alleviate poverty.

2.3.2 Vision Statement

Simanjiro District envisions a poverty free and decent society living in healthy environment.

2.3.3 Mission Statement

Simanjiro District is committed to improve the standards of living of community through their empowerment and emphasizing on sustainable use of resources. Current projects which are integrated in nature funded by the Simanjiro district at Naberera

ward include honey projects, honey projects, agricultural input supply project, health project, environment conservation and education projects .Beneficiaries are small scale farmers with outcomes ranging from improved farming practices, increased production of honey products, dairy, maize and sunflower. The district is also involved in improving the honey subsector as they have a specific department for Beekeeping activities. On HIV/AIDS component Simanjiro District has carried activities with the support of Regional Facilitating Agency program (RFA) in collaboration with other institutions to organize VCT, trainings on behaviour change and communication to youth, women, men and other focused groups like farmers, livestock keepers and small entrepreneurs.

2.4 Chapter Conclusion

This chapter presents the main problem that contributes to other existing problems in Naberera community. Poor access to small scale honey processing tools for pastoralist and economic development in Naberera ward is the key problems out of many identified by its people. The Researcher therefore advised the Maasai to promote small scale honey processing tools for value addition to their efforts using CED strategic plan as a mechanism for their local organization achieving their development processes.

CHAPTER THREE

3.0 LITERATURE REVIEW

3.1 Introduction

Literature Review is defined as gathering relevant information by wide reading of; books, and e-journals and hard copies journals about the topic. This chapter reviews literature related to local community economic development. The chapter is divided into four parts namely; Theoretical Literature Reviews, Empirical Literature Review, Policy Reviews, and the fourth part deals with Literature Review Summary. Literature review in this study has been divided into three mainly parts including theoretical review, empirical and policy review. In theoretical reviews, the emphasis is to describe the theory behind local beekeeping sub sector. In empirical review, the objective is to narrate on work done by others on similar project elsewhere, detailing on the approach used, outcomes, experiences and lessons learnt and their similarity and relevance to beekeeping industry. The last chapter ends by analyzing policy issues as they impact the project. Concomitantly books, professional journals, reports from livestock departments and institutions, Internet sites and personal experience were used in gathering information.

3.2 Theoretical Literature

3.2.1 Internal market

This part of literature review, look after to explore the works done by other authors, who wrote about Honey, Honey products and Beekeeping activities at different levels locally and internationally. According to (Mapoluz, 2005), the internal markets for honey and beeswax are not well established. Demand for honey as food and as an authentic ingredient in various foods and as a product with healing qualities is

increasing. About 50% of honey produced is sold locally for honey beer and honey wine production and about 10% of honey produced are consumed locally as industrial honey in confectioneries and pharmaceutical industries.

At the beekeepers gate, 1 kg of honey is selling between 0.6 US\$ and 0.9 US\$ while in cities like Dar-es salaam, Arusha, Moshi etc the price of honey is between 1.0 US\$ and 2.5 US\$ per kg. The potential unexploited markets are large towns, hotels, airlines and tourist centers if packed in proper packaging materials. Only very small quantities of beeswax are consumed locally in candle making and batiks. The price of 1kg of beeswax is selling between 1.5 US\$ to 2.5 US\$. In the domestic market, the key players are beekeepers, private traders, processors, associations and honey beer brewers.

3.2.2 International market

Demand for honey and beeswax in the world market is very high and the demand for Tanzania honey and beeswax exceeds supply. The international markets for Tanzanian honey and beeswax are highly competitive in terms of quality. In 1991, Tanzania honey won by 100% the quality test for "organic honey" in UK. However, quality control in terms of other factors such as "HMF", color, taste, viscosity and aroma, needs legal directives that will have to be adhered to all people handling the honey before it reaches the consumer (URT, 1998).

3.2.3 Policy implementation

The major constraints that hinder beekeeping development in Tanzania as stipulated in the policy can be grouped in three categories as follows:-

3.2.3.1 Poor quality of bee products

Inadequate skills/knowledge to apply improved tools. Use of inappropriate tools in harvesting, processing, storage and packaging. For example the use of traditional methods which severely damage the end products, poor processing equipments also contribute to poor quality honey and honey products.

3.2.3.2 Low production of bee product

One of the causes that contribute to low production of bee products including; poor use and access to improved production tools, increased loss of beekeeping areas due to deforestation, farming and over grazing activities, inadequate and ineffective extension services in rural setting including school infrastructure, water system facilities, health services, roads and communication in general. The other factor is inadequate statistical information to guide plans and operations. This has lead to poor community participation and lack of priority during planning period and policy formulation.

3.2.3.3 Inadequate market for bee products

Inadequate market for bee products has been caused by a number of factors including; inaccessibility to local and international markets and this problem lead to another problem where people waste a lot of time and resources to find where they can access market for their produces. I good example of this trend is seen in pastoralist districts namely; Monduli, Kiteto, Simanjiro, and Ngorongoro just to mention are few where pastoralists track their livestock to Kenya to get better prices through illegal routes. By so doing them do not pay taxes following the core/ root cause of the problem which is poor access to market. Another factor which contributes to inadequate market is unreliable transport to and from remote places due to poor communication such as roads.

Other contributing factor is lack of market information from different sources to people live in remote places. It is hard to find a new paper or leaflets with agriculture, and livestock marketing information. This forced peasant and livestock keepers to rely on indigenous knowledge for their survival in remote areas. Meetings and seminar could help as alternatives but there is poor participation of local people into development meetings. An inadequate entrepreneurship skill among beekeepers is another problem area that it affects market for bee products. Pastoralist by nature they are attached to livestock and for those livestock is everything they value and therefore entrepreneurship skills become one of the core activities to be addressed so as to provide knowledge to pastoral beekeepers as an alternative way of life. There is a need to link beekeepers with financial institutions which can provide soft loans to honey producers to be able to buy modern hives and many other tools which are expensive to poor communities.

3.2.3.4 Marketing improvements

According to Ngaga (2005), there are opportunities for improving marketing practices and efficiencies exist in Tanzania for both domestic and international markets.

3.2.3.5 Domestic markets

Domestic Markets is a market that takes into consideration the local needs and demand on a particular product or service. Domestic market is the opportunities which include; Improve awareness of the uses of bee products: Awareness for the uses of honey and its products have been carried out through mass meetings, seminars and study tours to successful beekeeping and honey uses areas like Sikonge in Tabora, Kibondo in Kigoma as well as Bukombe in Kahama district.

Increasing outputs per head per beehive: Domestic markets can be improved by increasing skills, improve use of tools for productivity and the volume of harvest and yield per individual as well as per one single beehive. About 1,400 beekeepers (662, are female, and 738 are male practitioners) were trained already on beekeeping appropriate tools and this activity will continue as necessary e.g. relevant tools on use beehive equipments, as well as improve access for protecting gears to beekeepers.

Creating sustainable bee reserves: This part targets that all initial preparations including; project planning, project design, implementation and evaluation process should have a meaningful participation of the beneficiaries and all key stakeholders to enhance ownership and sustainability of the intended project by the people themselves. In collaboration with Forest Officer, Environmental impact assessment is a key area to reserve the forest which vital on beekeeping activities have been done and it will continue every now and then.

Enabling entrepreneurs, beneficiaries and stakeholders to perform efficiently: Here the concept is to improve the capacity of honey and beekeeping producing groups and other stakeholders for effective engagement and efficient in their business in the market. Relevant trainings, seminars and touring visits to honey producing groups as well as appropriate tools are essential for stakeholders to be effective and more efficient.

Increasing the availability information to all stakeholders and beneficiaries: Naberera Honey Producer Groups have been supplied with relevant information on Beekeeping and Honey Products and markets demand. Such information where delivered in a form of; meetings, dialogues, and written. Market information will be supplied on

continuous basis to update honey producer groups on necessary information that helps them to meet the average market requirements throughout the harvest season.

Developing market centers in strategic locations for collecting and storing bee products and providing solutions to beekeepers needs and problems: Naberera ward is a bit widely scattered and from one Honey Producer Group to another is around 1.5 KM radius. For this reason therefore, it was agreed that in every 1KM there should be a one collection center to help group members during collection of raw honey and access to relevant information on problem solving and group management.

Improving access to support services from private, government; and international agencies: Linkage and collaboration has been practiced and due to its importance it will continue at all stages of project development. At the initial stages, collaboration and linkages with different players shown some immediate impacts which include; access to beekeeping harvesting equipments, and protecting gears at TAWIRI Arusha, access to beekeeping policies through the Simanjiro District Council, visits by Honey and Beekeeping experts from IOPA/ OMASI Ltd, Simanjiro District Council, and Prime Minister Office at different period of time.

3.2.3.6 International Market

International marketing opportunities include; collection and dissemination of market information, knowledge of demand, supply delivery requirements, improvements in market accessibility (e.g. reduction in restrictive, productive and preventive trade practices and regulations quality control, etc.); improvement in export prices, packaging; and lastly increases in trade development.

3.3 Policy Review Summary

The Government with the support of donors, private sector and NGOs has initiated several interventions to support beekeeping development through improvement of quantity and quality of bee products in Tanzania.

3.2.1 Government budgets

The Government in its annual budget sets fund for beekeeping activities such as training of extension workers, surveying and demarcation of bee reserves, extension services and quality control of the products.

3.2.2 Beekeeping Development Project in five Districts

The Government of Norway through NORAD is cooperating with the Ministry of Natural Resources and Tourism (MNRT) in supporting beekeeping in five potential Districts (Handeni, Manyoni, Kondoa, Kibondo and Tabora) through the Beekeeping Development Project (BDP). BDP was formed as a strategy to implement the National Beekeeping Policy (1998). BDP is implementing sub programme of Beekeeping Development Programme of the NBKP, 2001.

3.4 Major achievements

3.4.1 Establishment of Bee Reserves

The National Beekeeping Policy (1998) envisages setting aside sufficient forest cover as bee conservation area for the purpose of providing areas for production of bee products; conservation of biodiversity; source of packaging bees etc. The villages in these five districts have proposed an area of 82,931 ha as bee reserves. Out of these 20,732 ha (25%) have been surveyed and demarcated.

3.4.2 Training of extension agents

The project has already trained 1,400 beekeepers in appropriate beekeeping tools where by 662 are women and 738 are men. The trained beekeepers are the trainers for other beekeepers.

3.4.3 Production of extension materials

Publishing a book, Beekeeping in Tanzania (Swahili and English Versions). The sales of the books are expected to generate Tshs 82,500,000 that will be a contribution to Beekeeping Development Fund (BEDF). Several leaflets and brochures have been produced and disseminated to the stakeholders.

3.4.4 Average honey production increase

The average production of honey per trained beekeeper has increased from 3.7 tons in the year 1999 to 6.5 tons in the year 2003 in Manyoni District.

3.4.5 Average income

During the period 2003/2004, the price of honey increased from Tshs 15,000 per 30kg container in June 2003 to 18,000 Tshs by June 2004. In Manyoni district for example, beekeepers accrued an average income per beekeeper of Tshs 574,403.20. Beekeepers therefore, accrued the highest income as compared to others.

3.4.6 Training of beekeepers on processing of bee product

About 1400 beekeepers were trained on appropriate beekeeping practices including processing, packing and marketing of bee products. As a result of quality control and monitoring of bee products about 100 tons of export quality honey was purchased from the project area by several companies for export.

3.4.7 Intervention to be supported by the Government of Belgium

The government is expecting to receive support from the Government of Belgium. This support will specifically focus on the development and improvement of processing, packaging, and marketing of honey beeswax and other bee products. The project is expected to work on three districts of Rufiji, Kibondo and Kigoma. The government in collaboration with the Government of Belgium has prepared an identification study, which was submitted to the Belgian Government in July 2004.

3.5 Empirical literature review

This part is looking at literature review on previous project/research studies done in the past in relation to Naberera Honey Producer Group project. In Tanzania traditional beekeeping is credited for almost all production of honey and beeswax (Mwakatobe, 2001). Besides playing wider domestic roles in the bees and bee-products industry in Tanzania, beekeeping is also a good source of foreign exchange earnings. The information currently available indicates that during the year 1996/1997, Tanzania exported 359 tons of beeswax and 2.46 tons of honey worth US\$ 1 019 020 and US\$ 2 058 respectively (BDP, 2005; Tanzania Customs Department, 1997). Several authors (Kihwele & Bradbear, 1989; TFAP, 1988; Mlay, 1997) have estimated that the production of bee products could increase by 50%, if its potential could be optimally exploited.

Tanzania has increased the amount of honey produced from 4,860 tons (2001) to 9,380 tons of honey in 2012 with a value of TZS 49.76 billion (USD 30,160,000). This is an increase of 93%. Likewise, the amount of bee wax produced increased from 324 tons (2001) to 625 tons of honey in 2012 with a value of TZS 6.08 billion (USD 3,687,500). This is also a 92% increase. These quantities are only 7% of the existing potential in the beekeeping industry. Tanzania has the potential of producing 138,000

metric tons of honey and 9,200 metric tons of bee wax with a estimated potential value of respectively TZS 133.3 billion (or US\$ 80,787,878.78) and TZS 35.5 billion (or US\$ 21,515,151.51) annually. More than half of honey produced in the country is consumed locally as food.

The prices in the rural areas range from USD 1.5 to 2.5 per kg. In cities, range from USD 2.7 to 4.2 per kg. Bee wax is only for a small fraction consumed locally. In the rural areas 1kg of beeswax is selling between 2.5 to 3 USD. The main buyers of Tanzania's honey are EU, Oman, UAE, Kenya, Rwanda, Uganda and Iran. The main buyers of beeswax are Japan, USA, and Germany. The prices of honey for export range from US\$ 1.8 to 2.5 per kg (TZS 2970-4125/kg). The price of beeswax for export range from US\$ 4.5 to 5.1 per kg (TZS 7425-8415/kg)

In Tanzania traditional beekeeping is credited for almost all production of honey and beeswax (Mwakatobe, 2001). Besides playing wider domestic roles in the bees and bee-products industry in Tanzania, beekeeping is also a good source of foreign exchange earnings. The information currently available indicates that during the year 1996/1997, Tanzania exported 359 tons of beeswax and 2.46 tons of honey worth US\$ 1 019 020 and US\$ 2 058 respectively (BDP, 2005; Tanzania Customs Department, 1997). Several authors (Kihwele & Bradbear, 1989; TFAP, 1988; Mlay, 1997) have estimated that the production of bee could increase by 50%, if its potential could be best exploited.

3.6 Policy Reviews

3.6.1 The National Beekeeping Policy, 1998

The Government of Tanzania developed the National Beekeeping Policy (NBP) in 1998. The overall goal of the National Beekeeping Policy is to enhance the

contribution of the beekeeping sector to the sustainable development of Tanzania and the conservation and management of its natural resources for the benefit of present and future generations. NBP encourages active participation of all stakeholders in establishment and sustainable management of bee reserves and apiaries, promoting beekeeping-based industries and products and promoting sustainable management of beekeeping in cross sectoral areas for ecosystem conservation and management.

3.6.2 National Beekeeping Programme

The National Beekeeping Programme (NBKP, 2001) is an instrument designed to put into practice the NBP with emphasis on stakeholders' participation in the planning, management, ownership and sustainable utilization of bee resources for poverty eradication, improved biodiversity development and environmental conservation. The programme has three sub programmes including Beekeeping Development Programme, Legal and Regulatory.

3.6.3 The Beekeeping Act No. 15, (2002)

The Beekeeping Act No. 15 of 2002 was enacted by Parliament in April 2002. Its main objectives are: (i) To make provisions for the orderly conduct of beekeeping; (ii) To improve the quality and quantity of bee products; (iii) To prevent and eradicate bee diseases and bee pests, and (iv); To improve revenue collection.

3.6.4 National Forestry Policy, 1998

The National Forestry Policy Provides opportunities for beekeepers to practice beekeeping in forest reserves.

3.6.5 Wildlife policy of Tanzania, 1998

Beekeeping activities are encouraged to be carried out in Wildlife Management Areas (WMA) by involving local communities. With special permission from the Director of

Wildlife beekeepers are allowed to carry out beekeeping in game reserves and game controlled areas.

3.7 Literature Review Summary

Many researchers have been done in the Beekeeping sub sector however small scale or local/traditional honey producers have not been researched most. However most of the researches were related to bee products marketing, challenges and opportunities and increase production of honey, little or no more have been done to promote small scale tools for pastoral honey groups to generate more income. Therefore this project is purposely done to minimize the information gap for beekeeping sub sector particularly in promoting honey processing tools, create good access to markets for honey and honey products, capacity development for user groups to generate income from selling honey and honey products.

3.8 Chapter Conclusion

In this chapter, the literature, theoretical, and policy empirical reviews have been well illustrated. Theoretical reviews details on various ideas on the works done by other authors about Honey and Beekeeping activities at different levels, while empirical reviews carry practical experience about previous works done. However, policy reviews analyzes a number of policies related to Naberera Honey Producer Group project with collaboration with other players.

CHAPTER FOUR

4.0 PROJECT IMPLEMENTATION

4.1 Overview

This chapter explains the project implementation and what has actually been implemented by focusing on the products and output from the project, activities undertaken to achieve the objectives, responsible persons, resources required and time frame for accomplishment. The chapter also highlights on the tentative budget. The group had already received training in honey processing. It was anticipated that by the end of December 2014, the project would have accomplished all planned activities except monitoring and evaluation of the ongoing activities. The anticipated project product was improvement honey processing equipments, availability of honey market information and training as a result improved livelihood of group members through income from the honey sector.

TABLE 2.7 : PROJECT OUTPUTS AND ACTIVITIES

Objective	Output	Activities
To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.	Increased awareness among group members on honey production and processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Carry out mobilization meetings to community members on the importance of honey processing tools/ equipments
		Organize 2 learning tours visits to 3 potential places namely; Kibondo Honey Cooperative Groups, Bukombe Honey Processors, and Tabora Beekeeping Groups
		Prepare operational guide to host organization that indicates relevant honey processing equipments and tools
		Identify, purchase and distribute honey processing equipments and tools to group members
To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2013	Increased access among group members to domestic and regional markets	Carry out a SWOT analysis on different local and regional market outlets
		Discuss market needs and demands with group members
		The group members are trained on the marketing skills
		Establish networking and collaboration with different honey dealers for information sharing and planning
To improve the pastoralist traditional livelihood and identify other sources of income during the project implementation period	Project groups realized and able to use sources of income in addition to pastoralism	Identify limitations of pastoralism as the only traditional livelihoods and discuss other options of livelihoods
		The group members are trained on entrepreneurship skills and leadership
		Carry out capacity building of training of trainers (ToTs) who will conduct site training during project period

4.2 Project outputs

The expected outputs of the honey project were to acquire improved honey processing tools/ equipments, improve market system, and train members on best practice on honey processing industry, training skills in entrepreneurship, honey production and marketing skills so as to enable the project produce according to the market demand. The project planned to achieve up to mid Jan 2015 the following outputs; small scale honey processing equipments bought from TAWIRI Arusha Tanzania 14 pairs of honey tools (2 for each group), group members trained in entrepreneurship skills, honey production and marketing skills in honey sector with support from Beekeeping and Honey experts from Kibondo and Simanjiro District Council, and accessible and reliable sustainable market for honey products and hence in 2013 they produced 1,950Kgs of honey after using better tools. In collaboration with IOPA/OMASI ltd in Simanjiro, Prime Minister Office and District Council there are already number of markets for Honey products in place.

All these outputs provide opportunity for Naberera community to implement small scale processing tools on self reliance basis through diversifying funding. The pastoralist community will have capacity and skills to implement small scale honey processing tools for the benefit of the people while house hold income will increase and hence pastoralist will have diversified their livelihood by engaging into honey production and processing.

4.3 Project planning

Project planning is the core part in the project development process. The project planning involved the following major steps; identification of activities and

sequencing activities as necessary, developing timeframe for activities, assigning responsibilities for carrying out the activities, assessing facilities equipments, budget preparation and preparation of monitoring and evaluation tools.

4.4 Implementation Plan

During implementation process, the project planned to involve mainly six key stakeholders namely; Simanjiro District Council (Agriculture, Beekeeping, Forest and Livestock Department), Community Economic Development (CED) student, and IOPA/OMASI Ltd development organizations. The roles of each stakeholder are described in the table below. Resources to be used were contributed by the District office, IOPA/OMASI Ltd and Honey Group members. IOPA/OMASI Ltd and the district contributed funds for purchase of small scale honey equipments such as n honey cooling machine, bicycle for honey supplier, training cost, The CBO member was responsible for facilitating trainings and advice in project management, leadership, group dynamics and conflict management. CBO member participated in planning, implementation, and monitoring of these elements. These activities were geared towards accomplishing a number of objectives. Core activities included meeting with Group and Opinions leaders for projects action plan conducted familiarization with host organization and the target group; community needs assessment.

TABLE 4.8 : Implementation Plan

Objective	Output	Activity	Input	Responsible	Time frame
To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.	Increased awareness among group members on honey production and processing tools	Carry out mobilization meetings to community members on the importance of honey processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Funds, Transport facilities Writing materials	Group members, and opinion leaders	1 st week to 4 th week of April 2013
		Organize 2 learning tours visits to 3 potential places namely; Kibondo Honey Cooperative Groups, Bukombe Honey Processors, and Tabora Beekeeping Groups	Transport, Funds, Stationery	Group members, and trainer	1 st week of April 2013
		Prepare operational guide to host organization that indicates relevant honey processing equipments and	Transport, Funds, writing materials	Group members and Trainer	4 th week April 2013

Objective	Output	Activity	Input	Responsible	Time frame
		tools			
To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2014	The Group has accessed to reliable and sustainable domestic and regional markets	Carry out a SWOT analysis on different local and regional market outlets	Transport, funds, and consultant	Group members	3 rd week July 2013
		Discuss market needs and demands with group members	Funds, transport, Stationery	Group members	3 rd week of August 2013
		The group members are trained on the marketing skills	Funds, transport and 2 trainers	Group members and Trainer	3 rd week of October 2013
		Establish networking and collaboration with different honey dealers for information sharing and planning	Transport, funds and stationery	Group members	The first week of May 2014
To improve the pastoralist traditional livelihood and identify other sources of income during	Project groups realized and able to use other sources	Identify limitations of pastoralism as the only traditional livelihoods and discuss other options of livelihoods	Transport, and funds	Group members and Consultant	Continuous throughout the project period

Objective	Output	Activity	Input	Responsible	Time frame
		The group members are trained on entrepreneurship skills and leadership	Funds, trainer, & transport	Group members and Consultant	3 rd week of July 2013, and May 2014
		Carry out capacity building of training of trainers (ToTs) who will conduct site training during project period	Trainer, funds and transport	Group members, Trainer	November 2013 and July 2014

Source: Survey data 2012

TABLE 4.9 : Project Log Frame

Hierarchy of objectives (HO)	Objectively verifiable indicators (OVI)	Means of verifications (MOV)	Assumption
GOAL (Impact): Increased income at house hold level to improve the living standard hence reduced poverty	Average household income amongst honey group members	Survey and survey report at beginning and end of project	People are aware, open and honest about their income-status
Objective 1: To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.	Community groups engaging into honey production and processing using improved tools	Awareness campaigns report	Community members are willing to engage into honey production and processing using new tools
Output: Increased awareness among group members on honey production and processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Community members voluntarily engaging in honey production and processing using better tools	Group members report	Community members are supportive to the project
Activities:			
Carry out mobilization meetings to community members on the importance	Genuine participation of community members into awareness meetings	Project report	Community members are willing and supportive to the

Hierarchy of objectives (HO)	Objectively verifiable indicators (OVI)	Means of verifications (MOV)	Assumption
of honey processing tools/equipments			project
Organize 2 learning tours visits to 3 potential places namely; Write a proposal to host organization that indicates relevant honey processing equipments and tools	Lessons gained by group members from the 3 sites of; Kibondo, Bukombe and Tabora	Learning tour report	Group members at tour sites are willing to share information with project groups
Identify, purchase and distribute honey processing equipments and tools to group members	Genuine list of relevant honey tools and equipments given to group members	Purchase and distribution reports	Suppliers are willing to support and relevant tools are accessible and available
Objective 2: To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2014	Availability of reliable domestic and regional markets to the targeted groups	SWOT analysis report on domestic and regional markets outlets	Markets users are willing to cooperate and share
Output: Increased access among group members to domestic and regional markets	Group members are active in domestic and regional markets	Group reports on members using domestic and regional markets	<ul style="list-style-type: none"> • Group members are willing to learn • Market outlets satisfy the project needs

Hierarchy of objectives (HO)	Objectively verifiable indicators (OVI)	Means of verifications (MOV)	Assumption
Activities:			
Carry out a SWOT analysis on different domestic and regional market outlets	Genuine list of domestic and regional markets available to group members	Group report	<ul style="list-style-type: none"> • Relevant market outlets are available • Information on domestic and regional markets is accessible to members
Discuss market needs and demands with group members	Final list on market needs and demands is analyzed and understood to group members	Group report	<ul style="list-style-type: none"> • Group willingness to learn • Needs priority list approved by members
The group members are trained on the marketing skills	Number of group trained members using marketing skills	Training report	<ul style="list-style-type: none"> • Group willing to learn • Availability of a Trainer
Establish networking and collaboration with different honey dealers for information sharing and planning	Functioning networks on honey dealers	Network report	<ul style="list-style-type: none"> • Network members are willing to support the network • Availability and use of networking procedures
Objective 3: To improve the pastoralist traditional livelihood and	Number of community members who are engaging into other options of life	Report on the list of different options	Group willingness to adapt to new

Hierarchy of objectives (HO)	Objectively verifiable indicators (OVI)	Means of verifications (MOV)	Assumption
identify other sources of income during the project implementation period		of life used by community groups	livelihoods system
Outputs: Project groups realized and able to use sources of income in addition to pastoralism	Number of group members who access to different sources of income	Group report	Group members willingness and support
Activities:			
Identify limitations of pastoralism as the only traditional livelihoods and discuss other options of livelihoods	Number of pastoralist shifted from traditional livelihoods to other options of life	Analysis report	Pastoralist are willing to support the project
The group members are trained on entrepreneurship skills and leadership	Number of trained members applying entrepreneurship skills in daily work	Training report	Group members are willing to learn
Carry out capacity building of training of trainers (ToTs) who will conduct site training during project period	The number of ToTs conducting onsite training	ToTs reports	ToTs willingness to learn

Source: Survey data 2012

4.4.1 Project Inputs

Inputs employed during the project implementation included; human resources, financial resources and materials. Human resources were group members, district team, and government personnel such as Ward Agriculture, Beekeeping/Forest and Livestock Officers, partners from different institutions local organizations, NGOs as well as local government leaders were of great support for their will and advice on policy related issues on marketing, organization, and training. Financial resources which were used for capacity building and during consultation were contributed by the MCBO member, district and groups members.

TABLE 4.10 : Project inputs

Description of item	Inputs required	Estimated cost	Budget
Data Collection	Transport, funds and stationery	2prs x 20,000 x 6 sessions	120,000
Conduct awareness meetings among the village and ward level leaders, and community groups on honey processing tools	Facilitation materials, funds and transport.	10,000x 4 times x 2 sites	80,000
Carry out meetings with Pastoralist Honey processing groups and facilitate selection of pastoralist honey processing groups committees and leadership	Facilitation materials, funds, transport and Consultant	10,000x 4times x 3 sites	120,000
Conduct training on participatory methodologies, leadership, reporting, management, resources mobilization/utilization, and budgeting	Consultant, training materials, funds and transport	20,000x 3 x 3 sites	120,000
Facilitate strategic plan awareness among to the committees members	Consultant, training materials, funds and transport	50,000 x 3times x 2 sites	300,000
Organize advocacy meetings with pastoralist communities on community strategic planning with other actors including; the district council, NGO/CBO etc.	Consultant, facilitation materials, funds and transport	80,000 x 2 times x 3sites	660,000
Facilitate establishment of networking and collaboration to pastoralist honey processing groups and other development actors doing similar works	Funds, Transport and stationery	60,000x 3times x 3 sites	360,000
TOTAL INPUTS:			1,580,000

Source: Survey data 2012

4.4.2 Staffing Pattern

The Group so far has no technical person due to its inability or rather low capacity to recruit, pay and maintain technical staff. However, the implementation to a great extent was assisted by group member themselves using their traditional ethics, partner organization district and the CBO member. The group leaders comprise of the chairperson, vice chairperson Secretary, treasurer, and advisers. Moreover, the group is also assisted by several technocrats who are based at the grass root level and work in collaboration with development groups such as beekeeping and honey groups/dealers.

TABLE 4.11 : Staffing Pattern

S/N	Role of the organization (HPG) based on the objective	Position	Supervisor role/ leader
1	Building capacity of PHPG on use of small scale honey processing tools for better income and earn more income	PHPG committee management	PHPG established and functioned
2	Organizing pastoralist communities to prepare CED strategic plan by 2014	PHPG committee management	Ensure that strategic plan document is prepared and used
3	Strengthen capacity of PHPG committee on resources mobilization and utilization by 2014	PHPG committee management	PHPG committee is capacitated with leadership skills, resources mobilization and utilization

Source: Survey data 2012

4.2.3 Project Budget

The total project budget was TSH 3,121,000 but the actual used budget was 5,121,000, the additional 2 million more was contributed by partner organization operate in the area. All resources and inputs necessary to implement the project were itemized accordingly. Costing of items and contribution by different stakeholders was done in collaboration with group leaders and members, and local leaders. IOPA/OMASI Ltd and district paid the training costs, bought honey processing equipments and facilitation allowances to all members.

TABLE 4.12: Project budget

Objectives	Outputs	Activities	Resources and inputs	Unit per price	Quantity	Amount in Tshs
To assess group awareness on honey production and processing tools and equipments	Group members acquired better honey processing equipments and tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Identify the required honey processing tools/ equipments	Transport, funds	15,000	10	150,000
		Write a proposal to host organization on the need of the identified honey processing equipments and tools	Transport, Consultant, funds	10	10	100,000
		Purchase and distribute honey processing equipments and tools to group members	Funds and transport	20	45	90,000
To assess availability and accessibility of domestic and regional markets tools and domestic markets	The Group has accessed to reliable and sustainable domestic and regional markets	Identify different local and regional market outlets	Transport, funds, and stationery	8,000	12	96,000
		Discuss market demands with group members	Training materials, transport and trainer	8,000	30	240,000
		The group members are trained on the marketing skills	Transport, funds	10,000	20	200,000
		Conduct training on participatory methodologies, leadership,	Training materials, funds and	12,000	20	240,000

Objectives	Outputs	Activities	Resources and inputs	Unit per price	Quantity	Amount in Tshs
		reporting, management, resources mobilization, use & budget	transport			
To determine the challenges and opportunities in the honey production sub sector	Functioning stable local honey producer groups at all levels	Identify and analyze current problems facing honey processor and discuss available opportunities	Transport, funds, stationery	10,000	30	300,000
		Discuss possible opportunities and prepare action plan for honey groups	Transport, funds,	8,500	30	255,000
		Train groups members on honey production and processing	Transport, & funds	8,000	30	240,000
To assess the pastoralist traditional livelihood in relation to other sources of income	Group members have access to reliable and sustainable local and regional markets	Identify pastoral traditionalist livelihoods challenges and discuss other option of livelihoods	Transport, & funds	10,000	20	200,000
		The group members are trained on the honey processing skills	Transport & funds	5	8,000	40,0000

Source: Survey data 2012

4.5 Project implementation report

According to implementation plan, implementation of the project was scheduled to come to an end by 2015. However, the project has been progressing well at satisfactory level. The project had three major implementation areas namely; community capacity building, honey processing sub sector and marketing of honey products produced. Preparation of training materials for honey production has been accomplished leading to partly achievement of some objectives. The rest of the objectives will be achieved during the year 2013 since most preparations of the key items have been done. The members have been equipped with relevant skills to run the honey project. The group have sold some honey processing tools/ equipment and the demand is higher than supply of honey products. This has motivated the group to solicit resources and buy more improved equipment and tools. All these achievements are based on an evaluation which was done in December 2013 as shown on the above table.

TABLE 4.13 : Project implementation report

Project Objective	Planned activities/target	Main achievement	Failure/under performance	Plan to improve under performance
To assess group awareness on honey production and processing tools and equipments	Identify the required honey processing tools/ equipments	<ul style="list-style-type: none"> • Five (5) groups identified and formalized in addition to existence of two (2) groups before this project • The 5 groups have started using new tools in honey production and processing 	Two groups not yet reached	More sensitization meetings are taking place at community levels
	Write a proposal to host organization on the need of the identified honey processing equipments and tools	<ul style="list-style-type: none"> • Proposal on securing honey tools approved and in use • Copied of proposal/ plan distributed to group members • More community groups are using better tools for honey processing than before 	Nil	More awareness needed
	Purchase and distribute honey processing equipments and tools	<ul style="list-style-type: none"> • Capacity needs assessment to 12 people per group has 	12% of the targeted group	The remaining 32% target will be trained

Project Objective	Planned activities/target	Main achievement	Failure/under performance	Plan to improve under performance
	to group members	<p>attended 3 days training at ward level. 88% is complete</p> <ul style="list-style-type: none"> • Adequate number of community leaders are promoting use of better tools 	members not yet trained	in the 4 th quarter of 2014
To assess the pastoralist traditional livelihood in relation to other sources of income	Identify pastoral traditionalist livelihoods challenges and discuss other option of livelihoods	Two networking forums held in July and August 2013 among to 3 players in the area	One more forums was not conducted	1 forum will be held in 1 st week of November 2014
	The group members are trained on the honey processing skills	12 Group members have been trained in 3 training out of 5 sessions	2 sessions not done yet	2 more sessions will be conducted in Nov 2014

Source: Survey data 2012

TABLE 4.14 : Project implementation gantt chart

Objectives	Outputs	Activities	Implementation Period 2013 to 2014 in Months																								Resource required	Responsible
			Jan – Dec 2013												Jan – Dec 2014													
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013	Increased awareness among group members on honey production and processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Carry out mobilization meetings to community members on importance of honey processing tools/ equipments																									Funds, and Transport,	Group members
		Organize 2 learning tours visits to 3 potential places namely; Kibondo Honey Cooperative Groups, Bukombe Honey Processors, and Tabora Beekeeping Groups																									Funds, and Transport,	Group members
		Write a proposal to host organization that indicates relevant honey processing equipments and tools																									Funds, and Transport	Group members and Trainer
		Identify, purchase and distribute honey processing equipments and tools to group members																									Transport, Funds, Training materials	Group members and Trainer
To increase accessibility of domestic and regional	Increased access among group members to domestic	Carry out a SWOT analysis on different local and regional market outlets tools																								Transport, Funds and trainer	Group Members, Consultant	
		Discuss market needs and																								Transport	Group	

Objectives	Outputs	Activities	Implementation Period 2013 to 2014 in Months																								Resource required	Responsible
			Jan – Dec 2013												Jan – Dec 2014													
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
markets to 7 community groups at Naberera ward by June 2014	and regional markets	demands with group members																								rt, Funds	members and Trainer	
		The group members are trained on the marketing skills																								Transport, Funds	Group members and Expert	
		Establish networking and collaboration with different honey dealers for information sharing and planning																								Transport, Funds, Training materials	Group members and Trainer	
To improve the pastoralist traditional livelihood and identify other sources of income during the project implementation period	Project groups realized and able to use sources of income in	Identify limitations of pastoralism as the only traditional livelihoods and discuss other options of livelihoods																								Transport, funds	Group members and Consultant	
		The group members are trained on entrepreneurship skills and leadership																								Transport, and funds	Group members and Consultant	
		Carry out capacity building of training of trainers (ToTs) who will conduct site training during project period																								Transport, and funds	Group members and Consultant	

Source: Survey data 2012

Figure 4.1 : Informal Discussion between CED Student and some Traditional Elders

Figure 4.1 showing informal discussion between CED student and some traditional elders after a day session on traditional livelihood in relation to other option of livelihoods and the Meeting was also attended by ward leaders. The leads elder clarifying a point with CED student



Source : project progress report 2013

Figure 4.2 : Trainer Discussing the use of Topbar-HIVE to Participants

During a two days training session in April 2013, a Trainer is demonstrating of a topbar hive to group participants on a flip chart in comparison from traditional ones.



Source : project progress report 2013

Figure 4.3 : Pastoral lady selling a dry piece of honeycomb.

The pastoral lady, is part local honey processor before receive a formal training. she is selling a dry piece honeycomb at the rate of Tshs 6,000 to 9,000/ kg. Inside the local basin/bucket she is keeping others with a cover of tree leaves are honey comb.



Source : project progress report 2013

Figure 4.4 : Youth elder sharing a point on benefits resulting from other options of

livelihoods during a training session.



Source : project progress report 2013

Figure 4.5 : Assessment of traditional of apiaries sites along the river

Visiting traditional sites where traditional hives are fixed along the river, CED student with beekeeping officer are crossing the river for assessment of apiaries sites. On the left are photos of traditional hives with capacity to collect up to 60kg of honey



Figure 4.6 : CED student with a Consultant facilitating a local meeting at local village

A two days training on entrepreneurship and leadership skills. With red shirt sitting is CED student and Consultant is rising a point for discussion at a veterinary local office.



Source : project progress report 2013

CHAPTER FIVE

5.0 PROJECT PARTICIPATORY MONITORING, EVALUATION AND SUSTAINABILITY

5.1 Introduction

This chapter gives the participatory Monitoring, Evaluation and Sustainability of the Project which is a vital part of the project implementation as it clearly trace and measure the performance and sustainability process of the project in each stage. Monitoring is a continuous process that is geared towards looking at the way the day to day activities are implemented and make necessary improvements in order to achieve the desired goal.

This section tries to focus on how regularly gather the information required to maintain the project on schedule; anticipate problems, formulate the solutions, measure the progress and evaluate the project success. It also indicates the need to review the project to enhance that its capacity in terms of human and none human resources function well as planned regardless of internal and external pressure and or changes including funding opportunities.

5.2 Participatory monitoring

Participatory monitoring is the systematic recording and periodic analysis of information/issues that has been chosen and documented by insiders with support from outsiders. It uses various participatory methods including different stakeholders. Its purpose is to help all the people involved in the work to take appropriate decisions as planned. It must also be a communication system, in which information flows in different directions between all the people involved. In this context, the stakeholders were; Simanjiro District Beekeeping Officer, District Forestry Officers, Ward Executive Secretary, Ward Development Committee, Village Leaders, NGO and CBOs doing similar activities in the area such as OMASI Co. Ltd and IOPA, Honey Group members, CED researcher and Naberera local leaders.

Participatory monitoring is the continuous assessment of the progress of the project towards achieving the desired goal and objectives. The monitoring exercise focused; the project activities implementation, project outputs and project outcomes. In the monitoring process information were collected throughout the process and feedback was provided on monthly basis. Monitoring process involved the following areas; pre-implementation monitoring aimed at keeping the project planned activities running well by ensuring that the inputs required made available and stakeholders will to implement the project, monitoring was done during implementation level to ensure that every activity is done as planned in the activity schedule, and lastly but not least is post monitoring which will be conducted after the first quarter of 2015 when the implementation process come to an end in order to realize project achievement.

5.2.1 Monitoring Information System

Naberera honey group members are the owners of the project. The group members desired a better life that could be obtained through reduction of income poverty. In order to reduce poverty, honey processing was a project of their choice. The CBO member together with local government's extension Officers and IOPA/OMASI Ltd field Officers facilitated the group on activities, processing machine in place in establishing the honey processing industry. They were assisted to identify indicators for showing achievement of set targets and also for seeing if the activities planned are achieved as planned (time frame). It was also agreed on who will be gathering the information and how often should that information be shared with others thus giving feedback .In addition, the process developed for monitoring included mechanisms designed to show how individual group members could identify successes and challenges emanating from their organization.

5.2.2 Participatory monitoring methods

During monitoring process the checking of ongoing implementation of project conducted by using documentation; through comparing the planned activities in the work plan alongside with the implementation in a given period of time, comparing the budget and see if the process of planned activities were progressing well as expected. The project has planned to conduct summative evaluation in 2015. The approach in data gathering will be through semi structured questionnaire, focus group discussion and onsite support and observation. Indicators for assessment include increase on honey sales, little processed and produced by the honey producer group also number of improved honey processing equipments on place. Other supportive indicators will be availability of furniture, clothes, beddings; type of food eaten and number of meals; improvement in housing etc. These indicators have been discussed by group members and some of the information is being collected continuously. The evaluation process will be participatory in nature involving all the stakeholders. Analysis will be both qualitative and

quantitative and results will be presented using tables, charts and narration for all the participants to understand.

5.2.3 Participatory Monitoring Plan

According to participatory monitoring plan the project has planned to conduct summative evaluation in the first week of 2015. The approach in data gathering will be through semi structured questionnaire, interviews, and site observation. Indicators for assessment include improvement in honey produce increase in income as the result of sales from honey products, improvement in participants' livelihood which will be reflected by improvement in household such as furniture, clothes, beddings; type of food eaten and number of meals; improvement in housing, ability to pay school fee etc. These indicators have been discussed by group members and some of the information is being collected continuously.

The evaluation process will be participatory involving all the stakeholders. Analysis will be both qualitative and quantitative and results will be presented using tables, charts and narration for all the participants to understand. After discussion and agreement on the monitoring and evaluation plan the members agreed to meet once per month every 1st day of each month. During the meeting, the secretary reads the agenda of the last meeting; discuss problems and solutions and the way forward, the CBO member and the extension Officer attend meetings and respond to any technical issues and challenges as experienced by members as well as reviewing the group's plan. The CBO member and the extension Officer were responsible for analyzing the data and reporting to the group members for discussion.

To ensure active participation of the honey producer group members in monitoring and evaluation of the project, project objectives and corresponding indicators have been defined in a participatory manner during the planning. Responsibilities and duties were assigned and agreed upon. As part of monitoring the project, all group members agreed to keep honey sales records

from each member, sales of packed honey produces at each center. This information was formally recorded and the records formed the bases of the study's household survey data. A record entry data table was designed and shared by the participants and it was explained on how to fill in the information was compiled after every 3 month and analyzed both qualitatively and quantitatively.

The CBO member and the extension officer were responsible for analyzing the data and reporting to the group members for discussion. To ensure active participation of the honey producer group members in monitoring and evaluation of the project, project objectives and corresponding indicators have been defined in a participatory manner during the planning. Responsibilities and duties were assigned and agreed upon.

TABLE 4.15 : PARTICIPATORY MONITORING PLAN

Objectives	Outputs	Activities	Indicators	Source of data	Methodology	Responsible	Time frame
To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.	Increased awareness among group members on honey production and processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Carry out mobilization meetings to community members on the importance of honey processing tools	Increased number of community members engaging into honey processing	Group activity report	Interview, & observation	Group members	1 st week to 4 th week of April 2013
		Organize 2 learning tours visits to 3 potential places namely; Kibondo Honey Cooperative Groups, Bukombe Honey Processors, and Tabora Beekeeping Groups	The number of group members practicing lessons learned	Group tour report	Interview	Group members and consultant	1 st week of April 013
		Write a proposal to host organization that indicates relevant honey processing equipments and tools	Availability of genuine honey tools to group members	Proposal document	Interview and observation	Group members	End of April 2013
		Identify, purchase and distribute honey processing equipments and tools to group members	Number and names of group members received tools	Group report	Observation	Group members and trainer	4 th week April 2013
To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward	Increased access among group members to domestic and	Carry out a SWOT analysis on different local and regional market outlets	List of local and regional markets	Honey producer group report	Interview	Group members	3rd week June 013
		Discuss market needs and	List on market	Honey	Interview	Group	May to June

Objectives	Outputs	Activities	Indicators	Source of data	Methodology	Responsible	Time frame
by June 2014	regional markets	demands with group members	needs and priorities	producer group report		members	2013
		The group members are trained on the marketing skills	Available stable markets	Group reports		Group members and trainer	3 rd week of June 2013
		Establish networking and collaboration with different honey dealers for information sharing and planning	Number of other actors supporting the group members	Group reports		Group members	The first week of June 2013
To improve the pastoralist traditional livelihood and identify other sources of income during the project implementation period	Project groups realized and able to use sources of income in addition to pastoralism	Identify limitations of pastoralism as the only traditional livelihoods and discuss other options of livelihoods	Findings report shortcomings facing the pastoral people and how to address their concerns	Group reports	Interview, and discussion	Group members and Consultant	Continuous throughout the project period
		The group members are trained on entrepreneurship skills and leadership	Training report	Group reports	Discussion and lectures	Group members and consultant	August 2013
		Carry out capacity building of training of trainers (ToTs) who will conduct site training during project period	Capacity building report	Trainer report	Lectures, group discussion & Group tasks	Trainer	October 2013

Source: Survey Data 2012

TABLE 4.16 : PARTICIPATORY MONITORING REPORT

Project Objective	Output	Planned Activities	Major Achievement	Failure/under performance	Plan to improve
To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013	Increased awareness among group members on honey production and processing tools such as; bee smoker, honey extractor, bee glove, bee hives, brushes, and harvest gear	Mobilization meetings to community members done on honey processing tools	Three (3) awareness meetings on participatory monitoring conducted in 2 village and participation was 75%	One street in 1 village to be reached in future	1 street in 1 village will be reached in 3 rd week of October 2013
		Organize 2 learning tours visits to 3 potential places namely; Kibondo Honey Cooperative Groups, Bukombe Honey Processors, and Tabora Beekeeping Groups	Two (2) learning tour visit carried out to 3 sites earmarked	Nil	To organize 1 refresh site trainings end of 2014
		Write a proposal to host organization that indicates relevant honey processing tools	Proposal written and distributed to group members for reference	Nil	Nil
		Identify, purchase and distribute honey processing	A total of 14 sets of honey tools and equipments were selected, purchased and	Nil	4 sets to be purchased and distributed to 2 new groups

Project Objective	Output	Planned Activities	Major Achievement	Failure/under performance	Plan to improve
		tools to group members	distributed to group members		
To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2014	Increased access among group members to domestic and regional markets	Carry out a SWOT analysis on different local and regional market outlets	3 local markets places indentified and 3 at regional level (Kenya, Rwanda and Burundi)	More markets to be indentified at regional level	In 1 st week of October 2014
		Discuss market needs and demands with group members	4 training sessions and group discussion done	2 more visit regional markets	2 visit regional Markets in Nov 2014
		The group members are trained on the marketing skills	5 sessions in at 2 different places held	1 more session to be done	1 more session to Take place in Nov 014
		Establish a networking and collaboration with different honey dealers for information sharing and planning	5 networks local established and 1 at the region (Kenya)	2 more networks needed	2 networks to be identified in Oct 014
To improve the pastoralist traditional livelihood and identify other sources of	Project groups realized and able to use sources of income in	Identify limitations of pastoralism as the only traditional livelihoods and	3 planned meetings held targeting 23 elders in the ward	Nil	1 more meeting in October 2014

Project Objective	Output	Planned Activities	Major Achievement	Failure/under performance	Plan to improve
income during the project implementation period	addition to pastoralism	discuss other options of livelihoods			
		The group members are trained on entrepreneurship skills and leadership	Two training held with 4 sessions each	Nil	1 Review meeting will be held in Dec 014
		Carry out 3 capacity building of training of trainers (ToTs) who will conduct site training during project period	Two capacity building meetings organized to 14 ToTs (1 from each group)	Nil	I more ToTs training will be implemented in November 2014

Source: Survey Data 2012

According to participatory monitoring report, the project was planned to achieve one main objective which is to ensure that group members are aware on use of honey production and processing tools. The strategy to achieve the above objective was throughout participatory monitoring where all key actors in the monitoring chain who are, the District Beekeeping Officer, Ward Executive Director, Honey groups and CBO member were involved at all stages of collecting and analyzing project information. Discussion, brainstorming, and interviews methods were used to gather relevant information.

The main achievements from participatory monitoring activities among others are; in close collaboration with district Beekeeping Officer, ward Officer and village leaders, the project managed to organized three (3) awareness meetings on participatory monitoring conducted in 2 villages. During this meeting, participation of the targeted audience was generally satisfactory for about 75% attendance. The project also managed to conduct two (2) training sessions for 3 groups as planned. Each group was represented by 2 members who will work as training of trainers (ToTs).

In close collaboration with TAWIRI Arusha, the project managed to purchase all relevant honey tool and equipments which were identified and distributed to group members during pre-monitoring period. Capacity building sessions carried out at 3 villages where a total of 12 members out of 15 (3 from each group) received skills on honey processing tools. Naberera Honey Group planned to identify other actors in the area for networking and coloration. During implementation period, the project identified 3 organizations namely; OMASI Co Ltd and IOPA identified in Simanjiro district, Naberera ward.

Exchange visits were organized among different players for learning and experience sharing on issues related to beekeeping and honey production and processing. Some of the Indicators among other for monitoring assessment include; improvement in honey produce increase in income as the result of sales from honey products, improvement in participants' livelihood which will be reflected by improvement in household such as furniture, clothes, beddings; type of food eaten and number of meals; improvement in housing, ability to pay school fee etc.

5.3 Participatory Evaluations

Evaluation is defined as systematic investigation of the worth or merit of an object (Joy, 2002). This definition centers on the goal of using evaluation for a purpose. Accordingly, evaluations should be conducted for action - related reasons, and the information provided should facilitate deciding a course of action. Therefore evaluation provides information to help improve a project. It also provides information for communicating to a variety of stakeholders including external donors of the project. It forms one of the most important parts of the project life cycle. It is the outcome of the evaluation that gives clue to recasting, planning and modification of project.

Participatory evaluation gives evidence and guidance as to whether funding should continue for that particular project (Joy, 2002). The Honey producer group members were involved in the discussion as to why evaluation will be conducted and what comprises evaluation. Both formative and summative evaluations will be conducted. The project indicators for monitoring to be used to monitor the project were developed and the indicators will be used as the benchmark to see if project objectives are being

met and to what extent.

Formative evaluation seeks to strengthen or improve a program or intervention by examining amongst other things, the delivery of the program, the quality of its implementation and the organizational context, personnel, structures and procedures. As a change oriented evaluation approach, it is especially attuned to assessing in an ongoing way , any discrepancies between the expected direction and outputs of the program and to what is happening in reality, to analyzing strengths and weaknesses, to uncovering obstacles , barriers or unexpected opportunities, and to generating about how the program could be implemented better. Formative evaluation pays special attention to the delivery and intervention system, but not exclusively. In formative evaluation, the evaluator also has to analyze the intervention logic, the outcomes, the results and impacts.

Formative evaluation activities include the collection and analysis of data over the lifecycle of the program and timely feedback of evaluation findings to the program actors to inform ongoing decision making and action. It requires effective data collection strategy, often incorporating reutilized monitoring data alongside more tailored evaluation activities. Feedback is primarily designed to fine tune the implementation of the program although it may also contribute to policy making at the margins through piecemeal adaptation.

5.3.1 Performance indicators

Performance indicator 1: Group awareness on Honey project and improved tools.

A total of 3 awareness meetings were held to raise group awareness on honey production and processing using improved tools and equipments. Among others, the group conducted a shop list of honey processing tools and equipments and later

purchased 2 sets of tools and equipments per group. This was followed by groups meetings to hand over the tools to group members by group trainer for use and keep them as required.

Performance indicator 2: Proposal for potential tools and equipments for the group members.

The group under the leadership of the CED student with support of a group trainer, through discussion they initiated an idea to prepare a mini proposal that contained all the potential tools and equipments necessary for honey production and processing and the group members accepted the idea. The next step was to visit all potential places including TAWIRI in Arusha Tanzania, Honey Cooperative Society in Kibondo, Bukombe Honey Group in Kahama to familiarize with basic tools and equipments according to demand in the market. From the three potential places, the CED student took lead the group members and a proposal was prepared that shows all potential tools and equipments necessary for honey production and processing. Each group has been given a copy a proposal for reference and guidance.

Performance Indicator 3: Purchase and distribute basic tools and equipments.

Every group member contributed one goat to have initial funds or purchase of potential tools. After receiving all contributions, the goats were sold and a total of Tshs 7,200,000 were collected from 60 goats which were used to purchase initial tools and equipments and distributed to members equally. New members who joined the groups were later asked to pay their initial contributions from sales of honey and honey products and all members have finished their contribution for the honey tools. They were responsible for keeping them, doing cleanliness and washing them.

Performance indicator 4: Access to domestic and regional markets.

The group members started to prepare themselves to produce quality honey through use of improved tools and equipments and as per skills gained from various trainings. They were supervised by the district Beekeeping Officer during preparation of apiary/ plots and protected the apiary sites from fire and livestock- grazing, and wild life. They visited local markets and honey international shows held in the country and learned about market requirements. At least from June 2013, half of the group member started harvesting their first harvest and managed to sell their honey and honey products into the local markets including ferry the honey to national exhibition shows held in the country. From the shows where the assessment was done by team from the Prime Ministers' office two group members were awarded third winner which added a lot of value to other group members.

Marketing and quality of their products and produced a progress report; group members improve on marketing their products, they produce quality and better honey products which were of high standard. Many middlemen and people bought their products in and they supply them to the nearby markets, Dar es Salaam city and big supermarket in cities.

Performance indicator 5: Functioning and stable honey producer groups.

There are various signs which show that the group members have at least established and became a bit stable in dealing with honey project. The money accumulation and opening of the bank account as instructed by the group strategic plan is one of the great indicators that the group is now stable and a sense of seriousness is demonstrated by a majority. From their first harvest one got 1,050,000/= from the sales of raw honey

and bee wax. Other members started to admire them and soon they got 11 new members to join them with the entrance fee 20,000 each new member.

Performance indicator 6: Identify and realize limitation of traditional livelihoods in relation to other formal options of livelihoods.

The group members after some sensitization meetings became concerned in looking at pastoralism as a viable livelihoods and that what they get from pastoralism in comparison with engaging into honey project. When the project started, the majority of the community members thought the few group members got lost and in fact they were nicknamed “the confused ones” in Maasai “*iltaanack loilomate*” which of course gave them group members a tough moment. However, after the first harvest when other community members saw how much each individual got from honey sale in a very short time, they started a different story against the group members. As a result 15 new members registered themselves and a need for local training was organized for newcomers. The majority of community members have realized by seeing that pastoralism alone cannot sustain their life rather they need to engage themselves into other options of livelihoods like honey project.

TABLE 4.17: PERFORMANCE INDICATORS

SN	Evaluation Questions	Key indicators	Information source	
			Where	Tool used
1	How many people involved in the awareness campaigns and the formation of Naberera Honey Producers Group as founding member(s)	<ul style="list-style-type: none"> • Number of group members registered in membership book • Number of community members attended awareness meetings 	<ul style="list-style-type: none"> • NHPG office • Ward office • District Beekeeping Officer office 	NHPG register book
2	How did the local community participated in preparation of NHPG strategic plan and proposal for potential honey tools	<ul style="list-style-type: none"> • The actual number of people attended • Number of group members participated into proposal writing 	NHPG office & Village office	NHPG register book
3	a. How many training and workshops conducted and for NHPG and its group members b. How many group members received improved honey tools	<ul style="list-style-type: none"> • Number of trainings conducted • Number of targeted group attended training sessions • Number & names of group members received the tools 	NHPG office	NHPG records
4	How many group members are using existing domestic and regional markets	<ul style="list-style-type: none"> • Number of market outlets • Number of group members actively accessing the identified market outlets 	NHPG office	NHPG records
5	How many pastoralists joining NHPG per harvesting season	Number of application for new members registered	<ul style="list-style-type: none"> • NHPG office • Village office 	<ul style="list-style-type: none"> • NHPG records • Village records

Source: Survey data 2012

5.3.2 Participatory Evaluation Methods

The purpose of progress evaluation is to assess progress in meeting the goal of the project. It involves collecting information to learn whether or not the benchmarks of participants' progress were met. It determines the impact of the activities and strategies on the goal. It is like an annual evaluation. A method developed by Heifer Project International (HPI) known as Participatory Self-Review and Planning (PSRP) will be used as part of formative evaluation. This evaluation will take place annually and the information will be used to improve the project. PSRP as a formative method gives room for participants to self assess to see what went wrong, areas of weaknesses and opportunities.

Progressive reports from the project will be used during summative evaluation. The approach is based on Strength, Weakness Opportunities and Threats (SWOT) analysis and giving room for project components to be analyzed ranked and reasons given to its success or failure. All these methods are geared towards group sustainability so that when the CBO member, supporting CBO (Honey Honey producer group) leave, the group can continue with its activities.

Participatory Self Review and Planning tool for formative evaluation was chosen because it is a methodology that allows all participants of the project to actively assess the progress of their project. They will be able to identify weak and strong points of the project and give reasons for the weak and strong points. With this method group members review the project objectives and indicators set for the objectives. After discussion and agreement on the objectives and indicators, a voting process follows where every group member votes against a given objective and its set of indicators, the voting is based on the extent to which a particular objective has been achieved.

A growing tree is used to depict achievement level and the levels are in four stages. Pictures of the growing tree are used to ensure that even those who cannot read can participate through seeing. Voting is done and averages calculated and results are presented to the group. After presentation of the results, the members are asked to ascertain the results and have a consensus. This is to triangulate the results to see all the participants have common understanding. Then the participants are asked to give reasons for the objectives that scored low points and on the objectives that scored higher points.

After giving the reasons, the group puts up an action plan on how to address the issues that lead to low points in given objectives. The plan shows objective, activities, when to be done, who does it, where, resources required and any remarks. In a nut shell, this method involves focus group discussion and voting PSRP has been planned to be conducted in November 2013. The results obtained so far are based on the weekly meetings of the group where group discussion was conducted and reports were presented and reviewed. In these meetings challenges are discussed and possible solutions suggested.

5.3.3 Project Evaluation Summary

Project evaluation summary, is a list of major achievements in short form. The valuation summary indicates that the followings have been accomplished. For example; group members have been trained in Honey production, processing and entrepreneurship at large, group constitution and formalization has been improved, monitoring and evaluation tools and plans have been developed and being used by group members, marketing committee formed for each group, and 10 group leaders were trained in leadership and group management and entrepreneurships. The purpose

of summative evaluation is to assess a mature project's success in reaching its stated goals. Summative evaluation (sometimes referred to as impact or outcome evaluation) frequently addresses many of the same questions as a formative evaluation, but it takes place after the project has been established and normally at the end of the project. It collects information about outcomes and related processes, strategies activities. It is an appraisal of worth or merit. Usually, this type of evaluation is needed for decision making.

TABLE 4.18 : EVALUATION SUMMARY

Narrative Summary	Performance Indicator	Expected Outcomes	Actual Outcome
GOAL (Impact) Increased income at household level to improve the living standard hence reduced poverty	Established and functioning small scale honey producer groups	Established and functioning Naberera Honey Producer Group	Established and functioning Naberera Honey Producer Group
Objective 1: To create group awareness on honey production and processing tools through mobilization meetings and learning tour by end of April 2013.	Number of members joined the groups and registered	92 people registered as founding members	61 members registered
Objective 2: To increase accessibility of domestic and regional markets to 7 community groups at Naberera ward by June 2014	Number of group members attended	<ul style="list-style-type: none"> • 54 people attended 3 days training • 96 people to attend the approved training 	<ul style="list-style-type: none"> • 32 attended 2 days training • 72 attend approved training
Objective 3: To improve the pastoralist traditional livelihood and identify other sources of income during the project implementation period	Number of markets Accessible by group members	<ul style="list-style-type: none"> • At least 96 people Accessed the markets • 110 people to markets 	<ul style="list-style-type: none"> • 60 people accessed potential markets • 90 people have access to potential markets
Group members have been trained in entrepreneurship, honey production, processing and marketing	Number of trainings done, number of group members who attended training sessions	<ul style="list-style-type: none"> • 54 people attended 3 days training • 96 people to attend the approved training 	<ul style="list-style-type: none"> • 32 attended 2 days training • 72 attend approved training

Source: Survey data 2012

5.4 Project sustainability

Commonly, project sustainability is defined as the capacity of a project to continue functioning, supported by its own local resources (human, material and financial) even when external sources of funding have ended. However, in a different context, money alone is not a justifiable element for sustainability. It has implications for many other aspects of the organization /project including the services it provides. It is important for every CBO/NGO; or rather project to develop its own definition of sustainability, the links between these and the organization's own context, focus and circumstances. The honey processing project for Simanjiro women honey producer group is honey producer group is likely to be sustainable both financially and institutionally. To a large extent the project uses the locally available resources to implement the project. As pointed earlier on by different literature and evidenced by survey during CNA, honey is found in most of household. Moreover, pastoralist have been using traditional methods on beekeeping and honey harvesting without any external support, without application of equipments /tools or rather new tools although we are not saying adaptation to new tools is bad, but the issue here is the attitude and the spirit of self reliance and self discipline demonstrated by local groups in the past can be complimented with new skills and tools to do better. To continue such spirit, it makes the project to take off easily without depending much from external source. The availability of farmers who are trained on honey cattle keeping is another sustainability factor as they cannot depend on extension officers who visit them occasionally.

Sustainability in this research report, is built on a meaningful involvement and participation of the primary beneficiaries, key stakeholders and community at large in all stages of project design, implementation, and monitoring and evaluation through contribution in kind and labour. The above reality is based also on the functions of

CBO member which include coordination and strategies employed to engage the local people and honey group members in particular. Sustainability also involved gender equity, and empowerment of marginalized groups to participate. In this project, sustainability is possible when considering three areas during implementation process as discussed in the following paragraph.

5.4.1 When there is no too much political intervention.

When there is no intervention by the politicians to the project implementation, with local government authorities' support, then CBO member and Honey Groups will be able to run smoothly and achieve their vision and set goals of project as planned. Major changes on relevant policies of the legitimate of the local government may always affect the project implementation especially economically, socially, as well as culturally.

5.4.2 Social intervention

Development of honey project through CBO member is viable if the public (primary beneficiaries, key stakeholders, technocrats and pastoral communities) is genuinely given realistic opportunity to participate and own implementation processes.

5.4.3 Financial aspect of sustainability

It is obvious that no project that is financially independent, people contribution in terms of material and human contributions are the key elements of project sustainability. Among others, in managing projects implementation team need different kinds of tools for implementation including; human expertise, knowledge, tools, capacity development, funding and policy support.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

6.0 Overview

Chapter six provides conclusion of every aspect performed in this project report, experienced issues for recommendation for other researcher who may have concerns in undertake research studies which are similar this one. It was anticipated to have well organized and advanced honey processing system by providing improved honey processing inputs, training and marketing system so to increase production for income generation to all group members. Currently, the plan is functioning and the Host Organization has supported the group with little honey processing machine with providing training on honey processing and marketing system. We hope that full goal attainment will be attained in the year 2015 as targeted. The rest of activities planned were successfully completed as they were shown in the work plan.

Achievement of the project objectives is half way. These will continue contributing to achievement of the project objectives and goal. Significant income is yet to be realized as group has increased production of honey products. With the current level of poverty in the country especially in rural areas where the majority Tanzanians lives, coupled with the increasing environmental degradation for survival of ruminants, honey sector remains the mostly likely alternative source of income and protein to most populations in Tanzania.

The honey produce has all the features for farmer's groups' societies to start as a project.

6.1 Conclusion

Honey farmers Groups societies in Tanzania could play a major role in providing supplementary food, extra income and employment for rural population. There is a need to improve the honey sub sector. It can therefore be concluded that village group societies play a major role in poverty alleviation and that the benefits are likely to be realized with increased support from government and non-governmental organizations (NGOs).

Conclusion on the findings of participatory assessment. The major findings of the study was that the group had poor processing and production tools of honey as well as lack of relevant and appropriate knowledge on business and income generating activities amongst the Maasai people. There is a need for intervention to honey processing and production tools to improve this option of livelihood among others. Based on the survey findings it is obvious that it's difficult for honey producer to improve the productivity of honey without improving tools and the honey management system.

There are many factors affecting productivity in the study area. This can be justified by the following information lack of appropriate infrastructure, lack of appropriate extension services, age of the honey producer group member which seems to be so old compared to what they are expected to deliver and due to the fact traditionally beekeeping and honey production is done by elderly people. There is also a critical challenge on the beekeeping sub sector which is related to HIV prevalence in the area and livestock disease which is affecting the livestock keeping as the only viable livelihood and hence as a key source of income at the house hold. All in all the production of honey and increase on market demands and volumes of the produced

honey will depend on the employed tools to add value on their products and therefore increase individual's income. On literature review, many studies have been done in the beekeeping sub sector however small scale honey producers have not been researched most. However most of the researches were related to bee products marketing, challenges and opportunities and increase production of honey, little or no more have been done to promote small scale tools for pastoralist honey producers groups in order to generate more income from beekeeping sector. Therefore this project is purposely done to minimize the information gap for beekeeping sub sector particularly in promoting honey processing tools for pastoralist societies to generate income from beekeeping and bee products.

There are several reasons which guided the choice of the project. From the major findings of the study, we have seen a number of community needs among others; was that the group had poor processing and production tools of honey as well as lack of relevant and appropriate knowledge on business and income generating activities amongst the Maasai people. There is a need for intervention to honey processing and production tools to improve this option of livelihood among others. Based on the survey findings it is obvious that it's difficult for honey producer to improve the productivity of honey without improving tools and the honey management system.

There are many factors affecting productivity in the study area. This can be justified by the following information lack of appropriate infrastructure, poor extension services, age of the group members which seems to be so old compared to what they are expected to deliver and due to the fact traditionally beekeeping and honey production is done by elderly people. There is also a critical challenge on the beekeeping sub sector which is related to HIV prevalence in the area and livestock disease which is

affecting the livestock keeping as the only viable livelihood and hence as a key source of income at the house hold. All in all the production of honey and increase on market demands and volumes of the produced honey will depend on the employed tools to add value on their products and therefore increase individual's income.

Report on project implementation. The project implementation had three major implementation areas namely; community capacity building, honey processing sub sector and marketing of honey products produced, and preparation of training materials for honey production.

Most of the ground work preparation has been accomplished leading to partly achievement of some objectives. The rest of the objectives will be achieved during the year 2013 since most preparations of the key items have been done. The members are skilled to run the honey project. The group have sold some honey processing equipments and the demand is higher than supply of honey products. This has motivated the group to solicit resources and buy more improved equipments as follows; training of group members in honey processing and production, designing of marketing system for honey produce, preparation of monitoring and evaluation tools and plans, purchase of 1 honey processing equipments, training on the importance of working in the group, set up and train a marketing committee, training on conflict management and resolution, training on honey cattle management and, training on leadership and management skills.

The summary of the findings of participatory monitoring, evaluation and the sustainability plan. Participatory monitoring is monitoring that involves the community in monitoring of their program's activities and resources. Monitoring covers a wide variety of techniques and methods and applies to the management and

progress of program activities and the way the activities are carried out. A participatory monitoring system is a system for collecting and using information about the progress of a piece of work. Its purpose is to help all the people involved in the work to take appropriate decisions. It must also be a communication system, in which information flows in different directions between all the people involved.

On project evaluation stage, group members have been trained in; honey processing and entrepreneurship, group constitution has been improved, monitoring and evaluation tools and plans have been developed and being used, marketing committee formed, and about 10 group leaders trained in leadership and group management. The purpose of summative evaluation is to assess a mature project's success in reaching its stated goals. Summative evaluation (sometimes referred to as impact or outcome evaluation) frequently addresses many of the same questions as a formative evaluation, but it takes place after the project has been established and normally at the end of the project. It collects information about outcomes and related processes, strategies activities. It is an appraisal of worth or merit. Usually, this type of evaluation is needed for decision making.

The decision alternatives may include dissemination to other sites or agencies, continue funding, increase funding, continue on probationary status, modify and or discontinue the intervention. It addresses questions like; to what extent has the project met the stated goals for change or impact, can the program be sustained, is the program replicable and transportable, which components are the most effective and which components are in need of improvement.

Despite the efforts made to implement the project, there are some unexpected occurrences that greatly affected ability of project staff to achieve set goal. To mention

just a few; political interference. Political interference by the politicians and some local people slow a bit down implementation of the project. E.g. local government support withdrawn at Naberera ward in 2012 due to the fact the area is dominated by the opposition individuals, and therefore CBO member and Honey Groups faced tough moment at start to gain consensus of the public although towards the end it became clear after people understood the mind of the local politicians will be able to run smoothly and achieve their vision and set goals of project as planned. Another factor is social intervention. Development of honey project through CBO member is viable if the public (primary beneficiaries, key stakeholders, technocrats and pastoral communities) is genuinely given realistic opportunity to participate and own implementation processes, due to the first factor- political intervention. At the initial stages of this project, people were hesitant to participate into debates and discussion fearing the other group supported by politicians.

The other factor is financial aspect: Due to socio-economic situation of several families, it was difficult for the local people to contribute in terms of material and human contributions due poverty. Among others, in managing projects implementation team need different kinds of tools for implementation including; human expertise, knowledge, tools, capacity development, funding and policy support. Poor financial condition of the people at the beginning slow down financial contribution of the primary targeted group toward sustainability and ownership of the project.

Another occurrence which is still in place is culture and gender inequality. Beekeeping and honey processing was seen as 'men's duty and it is a taboo, that women are not allowed to venture into such business. Moreover, honey business was perceived as a

traditional symbol for conducting reconciliation activities and not something that can generate money.

The expected output of the honey project was to acquire improved honey processing equipments, improve market system, and train members on best practice on honey processing industry, training skills in entrepreneurship, honey production and marketing skills so as to enable the project produce according to the market demand and capture a reliable and sustainable market for the honey project products. The project planned to accomplish the following outputs; small scale honey processing equipments bought, group members trained in entrepreneurship, honey production and marketing skills in honey sector, and accessible and reliable sustainable market for honey products.

6.2 Recommendations

Beekeeping Groups in this part, I have recommended possible things to be done by other researchers to improve the welfare of Naberera and Simanjiro. This would include; improvement of honey processing tools, improved market system and well structured group management system opens up further opportunities for improvement of honey group societies that until now were not feasible or worth undertaking. There are many improvements offering substantial benefits, which can be achieved by farmers from within their own resources without cash expenditure or external assistance, except for appropriate extension advice and networking. Examples would include measures for promoting subsidies honey inputs, improved honey market system, and improved group management. This situation presents a very attractive opportunity to enhance the benefits of improved honey processing industry by developing suitable extension programs, supply of subsidies honey inputs to promote

honey group societies.

The result of the survey indicated that the socio-economic benefits obtained from beekeeping in the areas are food, medicine, income and local brewery, in Maasai “engotoroki”. Beekeeping is also complementary to biodiversity conservation. As it was observed in several survey areas beekeeping could be integrated in to agroforestry practices and organic farming (horticultural and crop production) thereby it plays a mutual role in increasing crop yield and quality besides the income generation from beekeeping.

From the above analysis, the following Recommendations were made; the honey group societies should be supported by improved honey processing inputs either by subsidy system, training in general honey sector management. Alternatively, the Financial Assistance Policy (FAP) scheme should be extended to rural honey group societies in the future. This will allow the group to be conversant with financial management and cross margin calculation in their business. Inter-sectoral coordination, this will reduce duplication of services offered to the same beneficiaries by different organization. This was revealed during the study that there are different organizations dealing with honey sub sector but with different approach, though targeting the same farmer. The government also through its programs including District Agricultural Development Plans (DADPs) lack coordination with private sectors hence perpetuating in duplication services which could be avoided by sharing resources and serve many farmers than doing it individually.

6.3 Areas for further research

This research study made a community assessment on Local Beekeeping group at Naberera in Simanjiro District and thus through participatory assessment a number of

problems were identified. Nevertheless, this study addressed the problem of poor processing and production tools of honey as well as lack of relevant and appropriate knowledge on business and income generating activities for the Maasai pastoralist. Therefore, I recommend that other researchers may study areas such as; i) sustainable forest reserve in Simanjiro, ii) weak efforts in providing water for domestic and wild animals, iii) the role of social and cultural practice on local development.

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APPENDICES**Appendix 1 : Letter of Introduction**

Appendix 1: Letter of Introduction

24th June, 2011

Kwa Mtendaji wa Kata

Kata ya Naberera

S. L. P 1282

Simanjiro, Manyara.

Ndugu,

YAH. KUFANYA YA KUJITOLEA NA WANANCHI KATA YA NABERERA

Nachukua nafasi hii kujitambulisha kwako. Mimi ni mwanafunzi kutoka katika kwenye chuo kikuu Huria (Open University of Tanzania) Dar es Salaam. Kama sehemu ya masomo yangu ya shahada ya pili katika uchumi wa jamii, tunatarajiwa kufanya kazi pamoja na wananchi kata ya Naberera ili kusaidiana nao katika kuboresha mradi wa uzalishaji wa asali.

Ili kufunzu masomo yangu, ninapashwa kufanya kazi kwa kujitolea katika kusaidia jamii kuboresha shughuli ambayo wao wanafanya tayari.

Nategemea ushikiano wako wakati wote wa zoezi hili.

Wako katika ujenzi wa taifa,


Simon Philmon Loishiye

Kiongo wa utafiti- Chuo Kikuu Huria Tanzania

Nakala kwa: **Watendaji wa vijiji 3 vya kata ya Naberera/DED, na wenyevikiti wa vitongoji husika na kituo cha polisi cha kata**

Appendix 2 : Letter of Acceptance**APPENDIX 2: LETTER OF ACCEPTANCE****JAMHURI YA MUUNGANO WA TANZANIA
HALMASHAURI YA WILAYA YA SIMANJIRO**

MKOA WA MANYARA,
Telegram: SIMANJIRO COUNCIL
Telephone Office 027 2660084
Home 027 2660124
Telefax: Office 027 2660311



OFISI YA MKURUGENZI MTENFAJI
P. O. Box 1284
SIMANJIRO
MANYARA.

Kumb. Na. SDC/PF/D. 59/56

30/08/2011

NDUGU SIMON P. LOISHIYE
C/o S. L. P. 12785
ARUSHA

Ndugu,

YAH: BARUA YAKO YA KUFANYA KAZI KWA KUJITOLEA KATA YA NABERERA

Tafadhali husika na kichwa cha somo hapo juu.

Ofisi ya Mkurugenzi Mtendaji imepokea barua yako ta tarehe 24 Juni 2011 ya kuomba kufanya kazi ya kujitolea katika kata yetu ya Naberera. Baada ya kupokea barua yako, tulijadili na kupitisha kwamba unaruhusiwa kuendelea na ombi lako la kuwasaidia wananchi kata ya Naberera katika kuboresha mradi wao wa uzalishaji asali. Kutokana na nia yako ya kutaka kuwasaidia vikundi vinavyojihusisha na shughuli za asali, ofisi ya wilaya inakuunga mkono na kazi hiyo njema.

Ofisi pia inakuomba iwapo kuna msaada wowote utahitaji ili kuboresha zaidi kazi yako, usisite kutuarifu. Tunashukuru na tunakutakia mafanikio,

Wako katika kulijenga Wilaya yetu ni,


k.n. Mkurugenzi Mtendaji Wilaya ya Simanjiro
A. R. KITOMARI

Nakala: WEO- Naberera/ Watendaji wa vijiji vyote Kata ya Naberera

Appendix 3 : Needs Assessment

Key issues: Community, Economic, Environment, Entrepreneurship

Current situation	Causes factors	Possible solutions	Strengthens/ Opportunity
Poor skills on entrepreneurship	-Strict traditions around livestock keeping and the values associated -Lack of research on small business -Limited number of CBOs in the area	-Establishment of NHPG as a local CBO, -Encourage more research studies	Human capital , Enhance capacity of the local people
Low awareness on gender issues	-Low level of education -Poor infrastructure, i.e. Road networks -Low security on investment -Strict cultural values	Introduce on job trainings, encourage self help spirit, carry out advocacy on building infrastructure, Presence of NHPG	Better use of MKUKUTA policy, establish networking among dev players
Strong traditions	-Low education on other options -Poor school infrastructure and roads	-Improve infrastructure i.e. road/schools, -encourage schooling	-National policy -Human capital -Natural resources
Decline of self help spirit	-Poor governance -Decline social relationship	-Improve democracy -Strengthen peoples' power on human rights	-Human capital -Natural resources -Encourage better policies
Top down planning	-High level of corruption -Poor governance -Weak division of labour	-Educate on civil rights -Encourage peoples' centered leadership	-MKUKUTAN policy -Participatory dev methods -Encourage local debates
Poor infrastructure	-Poor governance -Unfriendly policies -High selfishness	-Civil rights education -Encourage local debates on dev & safety	-Policy and laws -Human capital -Natural resources

Current situation	Causes factors	Possible solutions	Strengthens/ Opportunity
Poor access to relevant information	-Low priorities -Lack of accountability -Poor perception	-Encourage demand driven at local level -Advocacy on dissemination of news	-Resources -Human capital -Availability of media
Conservativeness And ethnocentrism element	-Lack of education -Poor perception	-Enhance information sharing, -encourage public education	-Human capital, -Resources -Social values
Weak community leaders	-Lack of clarity on one's human right -Poor policy formulation	-Encourage civil rights -Implement local debates	-Human capital -Policy on leadership ethics -Public accountability
Poor social services	-Poor governance -Lack of accountability on public funds -Poor priorities and poor planning	-Advocacy on human rights -Formulation of friendly policies	-Resources -Human capital -MKUKUTA policy
Low awareness on HIV/AIDS	-Poor priorities on public campaigns -Poor governance on resource allocation -Lack of education -Strong traditions and culture	-Advocacy on use of resource -education on beliefs	-Policy Health facilities -Human capital
Livestock Diseases	-Limited knowledge on livestock diseases in the are -Poor policy-wildlife & livestock -Limited family income	-More education -Capacity building -Subsidies policies	-Human capital -Resources -Good targets community

Appendix 4 : NHPG 3 Years Strategic Plan

**SMALL SCALE HONEY PROCESSING TOOLS FOR NABERERA HONEY
GROUP DEVELOPMENT IN NABERERA WARD IN SIMANJIRO DISTRICT**

STRATEGIC PLAN FOR THE PERIOD OF 2013 – 2016

PREPARED BY NABERERA HONEY PRODUCER GROUP (NHPG)

March 2014

1.0 Introduction

Naberera Honey Producer Group Development is one of the important strategies for strengthening community initiatives towards poverty alleviation through economic empowerment for pastoral community.

In order to achieve group objectives CED strategic plan is an essential development tool to be used to analyze various development activities as it carries out consecutively and used all the activities necessary for improving the life of the poor and marginalized groups which is the core task of NHPG.

The CED strategic plan consists of various sections which include; Organizational meaning, the vision and mission, organizational objectives, stakeholders analysis, approaches and strategies to be applied and specific activities within the action plan.

1.1 Definition of NHPG

Naberera Honey Producer Group (NHPG) development is an essential pastoralist group living in which has shown commitment to use this important strategy for strengthening community initiatives towards poverty alleviation through economic empowerment for their local development. It is a complete new feature in Maasai village with aim to represent and focuses on diversification of pastoral traditional livelihood system to enhance economic development. It will promote whatever the community needs and seeks for individual and household enhancement, business development and overall rise community income at family level.

1.2 NHPG Vision and Mission Statement

1.2.1 Vision

The Naberera Honey Producer Group is aiming at creating a sustainable development while focusing on environmental conservation by introducing environmental friendly interventions to alleviate poverty.

1.1.8 Mission Statement

Well developed pastoralist community by using the available resources sustainably. The group is also involving traditional leaders in order to ensure that the whole community is respecting the project and protect it from cattle and other destruction may occur. The group comprising of leadership system of which currently it has chairperson, secretary and project manager who is technical person. It has an active constitution of which every member is liable to follow the constitution and ensure that it is enhanced all over the group.

2.0 Group objectives

2.1 General objective

The project aims at promoting the use of small scale honey processing tools to increase income at house hold level to improve the living standard hence poverty reduction at house hold among pastoralist honey producer groups.

2.2 Specific objectives

2.2.1 Strengthen 7 Group of Naberera (9 members each group)) on improved honey products and use of improved tools to improve honey produces

2.2.2 Construction of honey outlets sheds at the group level

2.2.3 To strengthening the Naberera group on self sustainability and management skills

2.2.4 By the end of 2014 the Naberera group access reliable market for honey products.

2.2.5 Establish better system for management of the revenues from group members

3.0 Project Activities

During implementation process, the Naberera Honey Producer Group planned to work closely with other key stakeholders namely; Simanjiro District Council (Agriculture, Beekeeping, Forest and Livestock Department), Community Economic Development (CED) student, and IOPA/OMASI Ltd development organizations.

Resources to be used will be mobilizing locally at District level, IOPA/OMASI Ltd and Honey Group members themselves. IOPA/OMASI Ltd and the district will contribute funds for purchase of small scale honey equipments and tools such as n honey cooling machine, bicycle for honey supplier, training cost, The CBO member will continue giving technical support and facilitates trainings and advice in project management, leadership, group dynamics and conflict management. CBO member will be participating in planning, implementation, and monitoring of these elements. These activities are geared towards accomplishing a number of objectives. Core activities will include; meeting with Group and opinions leaders for projects action plan at every stage to work and promote the host organization and the target many other groups in the community and needs.

Specific activities which will be implemented during implementation of strategic plan are;

- a) Awareness meetings with group members
- b) Identify the required honey processing equipments/tools
- c) Identify capacity gaps among group members
- d) Write a proposal to host organization on the need of the identified honey processing equipments/tools
- e) Identify necessary tools and equipments for the groups
- f) Promote the use of improved honey processing tools
- g) Conduct trainings on the entrepreneurship skills
- h) Conduct trainings on record keeping for honey sales
- i) Conduct monitoring and evaluation
- j) Opening a bank account for the groups
- k) Prepare revenue monitoring mechanisms and tools.

4.0 Strategy and approach

Naberera Honey Producer Group will be using various participatory methods including different stakeholders. Its purpose is to help all the people involved in the work to take appropriate decisions as planned. It must also be a communication system, in which information flows in different directions between all the people involved. In this context, the stakeholders were; Simanjiro District Beekeeping Officer, District Forestry Officers, Ward Executive Secretary, Ward Development Committee, Village Leaders, NGO and CBOs doing similar activities in the area such as OMASI Co. Ltd and IOPA, Honey Group members, CED researcher and Naberera local leaders.

5.0 Evaluation

Evaluations will be conducted for action - related reasons, and the information provided should facilitate deciding a course of action

Appendix 5 : Survey Questionnaire**QUESTIONS ON MAASAI TRADITIONAL LIVELIHOOD, FAMILY
INCOME, AND DEVELOPMENT****Part A: Introduction** (Tick on the correct item only)

1. Age
 - a. 18 – 30
 - b. 30 – 45
 - c. 45 and above
2. Sex
 - a. Male
 - b. Female
3. Education level
 - a. Primary level (STD VII)
 - b. Secondary school and
 - c. College
4. Technology used in honey processing
5. Knowledge on income generation
6. The status of social services
7. Livestock diseases
8. Infrastructure
9. HHIV/ AIDS

Part B: Please answer the following questions in under to show the social conditions in the area.

1. Please explain the main day to day economic activities in the community
 - a. Only pastoralism as a viable livelihood ()
 - b. Honey production and processing ()
 - c. Small scale farming and livestock keeping ()

2. Who make decision on use of family resources including livestock, crops and others
 - a. Both parents ()
 - b. Elders- male ()
 - c. Women ()

3. If the answer for question 11 is item “b” then explain the way which are used to discuss, plan and make decisions family resources
 - a. Decisions are made in the family meeting ()
 - b. Decisions is made by a man/ head of the family ()
 - c. Women do not make decisions ()

4. If the answer to question 12 is c, please explain and give reasons for women failure to participate in decision making at family level
 - a. Women lack motivating skills and techniques, not aware ()
 - b. Poor planning at family level, a women never attend family meeting ()

5. In Naberera ward, are there some culture and traditions that hinder the fight against poverty and therefore engage into different options of life?
 - a. On education boys are more targeted than girls ()
 - b. Poor participation of women in development meetings ()
 - c. Planning process does not consider young people ()

Part C: Please answer the following questions to explain economic conditions in the ward

1. Please list down 3 economic activities conducted in the ward
 - a. Small scale business and honey processing ()
 - b. Agriculture and livestock keeping ()
 - c. No any economic activities ()
2. Which among the above mentioned economic activities does well than others in providing income to the family for day to day needs
 - a. Agriculture and livestock ()
 - b. Small business and honey processing ()
 - c. None ()
3. Explain if there is availability of soft loans for small business and honey processing in Naberera ward.
 - a. Yes, it is easy ()
 - b. Not available ()
4. Are there some jobs and or any other economic activities which give more income than normal living conditions expenses?
 - a. Yes ()
 - b. No ()
5. If the answer to question 18 is Yes, tick one among the followings;
 - a. Constructions works ()
 - b. Piggery units ()
 - c. Small business ()
 - d. Honey processing ()
6. Does beekeeping and honey production bring sufficient profits? Tick the correct answer
 - a. Yes ()
 - b. No ()
7. What should be done to improve economic conditions in the community?
 - a. Provide skills and education on business ()
 - b. Provide loans to groups ()
 - c. Form economic groups ()

8. Please explain the kind of income generation activities found in the area.
 - a. Selling of agriculture produces ()
 - b. Investing into small business ()
 - c. Beekeeping and honey processing ()
 - d. Keeping livestock ()
9. Is the answer to question 22 is c, what can be done to improve the quality and add more value to honey to earn better income?
 - a. Provide more capital ()
 - b. Improve access to markets ()
10. What kind of natural resources are found in Naberera ward?
 - a. Minerals ()
 - b. Gas ()
 - c. Forest ()
 - d. Wild life ()
 - c. Form more groups ()
11. Is there any government initiative in providing support to honey producers?
 - a. Yes ()
 - b. No ()
12. What can be done to use the unused resources to create employment?
 - a. Carry out need assessment to analyze available natural resources ()
 - b. Implement community mobilizations on natural resources ()
 - c. Build capacity of the community on use of natural resources ()
13. Can the available natural resources be sustained for the coming generation?
 - a. Yes ()
 - b. No ()
14. What can be done to bring total transformation of this (Naberera) area from the current conditions of poverty into better economic conditions?
 - a. Development actors to bring changes to the community ()
 - b. Get sponsors to provide aid ()
 - c. Help the community to work and bring changes ()

I thank you all respondents for their valuable contribution.

Appendix 6 : Focus Group Discussion Report

6.1 Findings from Focus Group Discussion

The following findings are from a series of two (3) focus groups conducted with Honey Producer Group members of the Naberera ward general population. Participants in Namalulu village, Narakauwo village and Kimokouwa village were recruited for two-hour discussions. Evaluations of NHPG new Strategic Plan were captured through group discussion and through worksheet analysis.

Participants in all groups had difficulty thinking beyond livestock when considering resources associated with beekeeping industrial and its mandate. A lot were mentioned on sex of the honey harvesting groups, poor knowledge among the honey extractors, lack of better tools for honey harvesting, lack of IGAs skills, HIV/AIDS pandemic was also another concern among women and youths in particular especially, poor social services and poor infrastructure and communication in general.

6.1.2 Sex of the honey producer groups:

From the two focus dicssions, gender (sex) of the group members was raised by most group members. From the the two discussions, about 50 % of the respondents are aged between 30-45 of which according to adoption theory the younger the respondents the higher the adoption rate (Ashimogo et al,2009). This imply that, most of Honey Producer Group are owned by male old ages. In relation to this age also it has an implication on decision making. The older the person the time spend on decision making of which it has also an implication on business management. Although it was noted that most of the respondents are not experienced on business management since with 30

years old an average years of business ownership is about 2 years this means they always join the Honey Producer Group (HPG) at late ages.

6.1.3 Level of education

Repeatedly, it came more often from group discussion that education on business skills was lacking. According to respondents 58% were found to hold primary education which is a basic education. These imply that with their level of education can lead a small enterprise but it was found to have some challenges especially when it comes to Honey Producer Group management and development of honey producer group policy or any other factors such as inflation which may in one way or another need high level of business management. This level of education was found also to affect decision making for example most of the respondents although they are using beekeeping rules and policy but they were found to know nothing about its implication on their business development. The level of education has implication on decision making and project management. Only 15% of respondents were found to have secondary education and this is a recommended education for at least doing a business in a very competitive environment especially on language since in some areas English speaking is important for bargaining and sometime in marketing environment. Only 10% of diploma holder engage on honey producer group this findings depict that the more educated the less people engage in small business and this might be one the fact that the so called SMEs in Tanzania perform less comparing to other East Africa - countries since the business owners lack most of the important basics of business management and policy set up.

6.1.4 Use of better technology

During focus the two Group Discussions it was reported loudly that the use of local tools for honey harvesting is one leading factor which is affecting the quality of honey and therefore the sales. The results depict that only 35% of the respondents use improved tools. The use of poor tools both on honey processing and production it has an implication on quantity and quality. The result of low tools shows that the produced honey does not meet the standards on market especially at the supermarket where the different users are coming with their standards this will hinder the hope to export the honey to international market. It is also leading to low production since the tool which is used is very low and an appropriate to the extent that most of the producers spends more time in producing little honey.

6.1.5 Poor market access

From the two group discussions, it was resolved by group members following long discussion on the same that, Internal market According to Mapolu (2005), the internal markets for honey and beeswax are not well established. From the two group discussions, demand for honey as food and as an authentic ingredient in various foods and as a product with healing qualities is increasing and thus about 50% of honey produced is sold locally for honey beer and honey wine production and about 10% of honey produced are consumed locally as industrial honey in confectioneries and pharmaceutical industries. At the beekeepers gate 1 kg of honey is selling between 0.6 US\$ and 0.9 US\$ while in cities like Dar-es salaam, Arusha, Moshi etc the price of honey is between 1.0 US\$ and 2.5 US\$ per kg. The potential unexploited markets are large towns, hotels, airlines and tourist centres if packed in proper packaging materials.

Only very small quantities of beeswax are consumed locally in candle making and batiks. The price of 1kg of beeswax is selling between 1.5 US\$ to 2.5 US\$ across the region that is in Kenya, Uganda, Rwanda, Burundi and DRC. In the domestic market, the key players are beekeepers, private middlemen traders, processors, associations and honey beer brewers (pastoralist themselves).

6.1.6 Family income as another problem

It was realized that there was inadequate family income to meet family basic needs such as medical cost, food security, shelter and education for children. The reason behind was identified as dependency on subsistence agriculture and pastoralism as a viable livelihood alone and at the same time using poor farming methods and hence resulting into low produce, and also due to new demands on their prime pastoral lands following globalization and unfriendly investment policies Naberera ward like other rural communities is engaged in subsistence agricultural production. The main food crops include; maize being the major crop, pigeon-peas and beans. An agricultural practice has been traditional to many peasants or small holders' farmers and hand hoe is used as the means for cultivation. Livestock is done as their main activity where animal keeping like cattle, goat is mainly done by men mainly free range. As a result it leads to very low production hence makes them to experience low family income; thereby they fail to meet their family basic needs and improvements of their living conditions. Other problem which was associated with the later was poor food storage, inadequate knowledge of honey processing, food management, and poor farming methods practices as well as poor cattle keeping methods. Women were mostly affected because of domestic duties, and they supply labor power. The situation was even worse to single

mothers, widows and elderly women who were not able to move out from affected areas. The rise of beekeeping projects seems to bring hope to women since its control is mostly equally of which women also are engaged into production and sales of honey products it is one of the income diversification means whereby women while have an opportunity to decide.

6.1.7 Livestock and wildlife diseases

Livestock have a great value to the Maasai pastoralist than any other wealth. However, during focus group discussion members from time to time discussed on the need to treat their livestock than engaging in other economic activities. The reasons given among many were that due to presence of wildlife, domestic animals are greatly affected by diseases from wildlife. it was observed in the assessment that as a means of gaining economic wellbeing of community in Naberera ward are trying to practice mass cattle keeping however their efforts are hampered by occasional disease such as anthrax, Malignant Catarrhal Fever (MCF) and foot and mouth disease (FMD) especially when it is wet, and other diseases throughout the period have been for example; East Coast Fever (ECF), Contagious Bovine Pleuropneumonia (CBPP), Contagious Caprine Pneuopneumonia (CCPP), Rift Valley Fever (RVF), and Lumpy skin disease (LSD) to mention few.

The influx of animal diseases have influx of animal diseases has been due to the presence and interactions between wildlife and livestock which share the same water points and grazing. Also the problem of continue practicing mobility as a coping mechanism when there are no water around pastoralist bomas (homesteads), and limited grass which force to move from one place to another was realized as one ways of

spreading diseases and create conflicts with other groups using the same scarce resources.

6.1. 8 HIV/AIDS pandemic

Although there is a misconception that HIV/AIDS is a town disease, it came more often that HIV/AIDS is one the health problem in the area which need some interventions. The HIV/AIDS infection rate affects economic development of the country and community at large. A lot of manpower (young warriors) is affected with the disease hence resulting into the community use most of their time in taking care of affected people instead of engaging themselves in economic activities. Medical costs incurred for the seek people is a burden to the family take into consideration the existing poverty at the family level. Women are most vulnerable to the situation due to the existing culture that exposed them to the risk of affection such as polygamy, pre-marriage test, safe sex decision and heritage of widows. Many women are unable to negotiate safe sex with their partners who are themselves unwilling to take responsibility for their own health and that of their beloved ones. Domestic violence prevents many women from advocating for safe sex in pastoral community. They fear divorce or abuse and that is why most of them do not engage into any decision on safe sex neither number of children as well as domestic issues. Migration of young Maasai from rural to urban areas seeking for employment was discussed to be a major problem out of many putting the Maasai community (which used to be closed community before) under high risk of HIV and AIDS following increased of abject poverty and inadequate of households' income. There is a need to empower women and young people economically so that they feel free to advocate safe sex thereby protecting themselves from HIV and AIDS.

6.2 Recommendations

Recommendations emerging from focus group discussion include:

- 6.2.1 Women and young people should be encouraged to engage into honey processing
- 6.2.2 Honey Producer Groups and general community be educated on the use of better tools
- 6.2.3 Build the capacity of honey producer groups and other community members
- 6.2.4** Initiate some interventions on prevention and control of HIV/AIDS disease in the

Appendix 7 : Example of NHPG Monthly Reporting Format

Beekeeping quarterly information sheet from collection centers

Name of BK centre	Name of BK Group	No of Beehives in use		Production (Kg)			Remarks
		Traditiona l Beehives	Group beehive s	Traditio nal Beehiv es (raw honey)	Improve d Beehive s (raw honey)	Beesw ax	
e.g. Naberera	Namunya k	1,500	40	20kgs	70kgs	5kgs	- <i>Collection done a late at selling sheds - 2gs of honey lost on the way</i>

Note: Other problems related to beekeeping project to be reported here (*e.g. politics, conflicts, corruption, failure to adhere to procedures*)

1:

2:

3:

4:

Appendix 8 : Tanzania Wildlife Research Institute

Njiro Wildlife Research Centre

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E-mail: nwrc@habari.co.tz or tawiri@habari.co.tz

Price Listfor Honey Tools – Effective from June 2011

(Prices are liable to change at any time when necessary)

Item	Cost in Tshs
A) Protective equipments/tools	
Bee gloves	15,000/=
Bee veils	18,000/=
Bee smoker	15,000/=
Overalls	32,000/= (Light material) 40,000/= (Thick material)
Gum boots	15,000/=
Straw hat	5,000/=
Hive tool	3,500/=
B) Bee Hives	
TTBH Unpainted	40,000/=
TTBH Painted	50,000/=
TTBH for self assembly	45,000/=
TCG with frames	53,000/=
TCH with wired frames	60,000/=
Stingless bee hive	25,000/=
Observation hive	40,000/=
Frame	2,500/=
Wired Frames	3,000/=
Top Bar	1,200/=
Feeder for TTBH	12,000/=
Queen excluder	8,000/=
TCH feeder	8,000/=
Honey Press (Stainless steel) without jack	290,000/=
Honey Press without jack	110,000/=
Jack ½ tones	30,000/= (made in Korea)

Item	Cost in Tshs
	45,000/= (made in UK)
Binding wire 1Kg	7,000/=
C) Bee Product:	
Raw honey 1Kg own container	9,000/=
Raw honey ½ Kg	4,000/=
Raw honey 1Kg (customer's container)	8,000/=
Raw honey ½ Kg (customer's container)	4,500/=
Raw honey ½ Kg our container	3,500/=
Honey of stingless 330ml	7,000/=
Cough raw honey with herbal oil ½ Kg in bottle	4,500/=
Combo honey 1Kg	10,000/=
Combo honey 100g	2,000/=
Pure beeswax 1Kg	15,000/=
Beeswax ointment 100ml	1,000/=
Beeswax liniment 100ml	1,000/=
Wax candle large	2,000/=