

**ESTABLISHING INDIGENOUS ORGANIC POULTRY AS AN
INTEGRATED ALTERNATIVE SUSTAINABLE LIVELIHOOD TO
PASTORALISTS AT MELA VILLAGE IN TANZANIA**

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

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CERTIFICATION

I, the undersigned, certify that have read and hereby recommend for the acceptance by the Open University of Tanzania a project entitled, ‘Establishing Indigenous Organic Poultry as an Integrated Alternative Sustainable Livelihood to Pastoralists at Mela Village in Tanzania’ in partial fulfillment of the requirements for the degree of Master of Community Economic Development of the Open University of Tanzania.

.....

Dr. Magreth S. Bushesha

(Supervisor)

.....

Date

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DECLARATION

I, Vincent Manoni Mhangwa, do hereby declare that I am the original author of this dissertation, and that it has not been submitted for a similar degree award in any other University.

.....

Signature

.....

Date

DEDICATION

To my father Manoni Kabi Shija who brought me up and made me as I am; may the Almighty God continue to rest him in peace. Special gratitude to my mother Limi Shita Galila , my wife Ashura Neema Maluli and my kids Limi Beata Mhangwa and Manoni Fortunatus Mhangwa who ceaselessly prayed for my success.

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I hereby extend my sincere gratitude to all organizations and/ or people who, in one way or another, contributed to successfully completion of this work. Special thanks should go to Mela village council chaired by Mr. Ngeke Sakati. The council was a good host organisation in my efforts to execute this project with the community altogether. The host organisation in collaboration with traditional leaders gave me the keys to open and enter Mela pastoral community by accepting me to work in their community. I am also grateful for support I received from pastoralist men for allowing their wives or/and daughters to participate in this project.

Nonetheless, many thanks should go to my project supervisor, Dr. Magreth Bushesha of the Open University of Tanzania who was closely monitoring my work and providing all necessary support. Lastly but equally important, I express my innermost appreciation to my employer (CARE International in Tanzania) and specifically Mr. Blastus Mwizarubi (Director of Technical Unit for Girls Education and Leadership), for allowing me to pursue this study.

ABSTRACT

This dissertation was mainly meant to assess the influence of integrated alternative sustainable livelihoods on pastoral communities' economic development in Mvomero District, Morogoro in eastern Tanzania. The development objective of this initiative was to contribute to increased community alternative socioeconomic opportunities especially to pastoralist young women and young men through establishment of indigenous organic poultry farm. As a result, the establishment of a poultry farm has increased social and economic opportunities for pastoralists especially young women and young men. Findings from community needs assessment show that, pastoralists can adapt to other different occupations as integrated alternative sustainable livelihoods (IASL) despite their heavily dependence on livestock keeping as their main source of livelihood. Moreover, findings have revealed that pastoralist girls and women are more marginalized than boys and men. As such, this study concludes that integrated alternative sustainable livelihoods approach is the best way for pastoralist communities' efforts to combat poverty and vulnerability.

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LIST OF ABBREVIATIONS AND ACRONYMS

CARE	:	Cooperative for Assistance and Relief Everywhere, Inc.
CEDPA	:	Centre for Development and Population Activities
CNA	:	Community Needs Assessment
CPAC	:	Community Project Advisory Committee
DFID	:	Department for International Development
GoT	:	Government of Tanzania
HH	:	Household
HO	:	Host Organisation
IASL	:	Integrated Alternative Sustainable Livelihoods
ICSP	:	Integrated community Sustainability Plan
IBRD	:	International Bank of Reconstruction and Development
IDS	:	Institute of Development Studies
IOP	:	Indigenous Organic Poultry
IUCN	:	World Conservation Union
LGA	:	Local Government Authority
MIS	:	Monitoring Information System
MMCC	:	Mela Milk Collection Centre
MVC	:	Mela Village Council
NGO(s)	:	None-Government Organisation (s)
NR	:	Natural Resources
OBIA	:	Object-Based Image Analysis
OUT	:	Open University of Tanzania
PE	:	Participatory Evaluation
PM	:	Participatory Monitoring

PM&E	:	Participatory Monitoring and Evaluation
PRA	:	Participatory Rural Appraisal
PWR	:	Pair Wise Ranking
SAWA	:	Safina Women's Association
SIDA	:	Swedish International Development Cooperation Agency
SL	:	Sustainable Livelihoods
SLAs	:	Sustainable Livelihoods Approaches
SMEs	:	Small and Medium Enterprises
SPSS	:	Statistical Package for Social Sciences
SUA	:	Sokoine University of Agriculture
SWOC	:	Strengths, Weaknesses, Opportunities and Challenges
SWOT	:	Strengths, Weaknesses, Opportunities and Threats
TZS	:	Tanzanian Shillings
UK	:	United Kingdom
UNDP	:	United Nations Development Programme
VEO	:	Village Executive Officer
WCS	:	Wildlife Conservation Society

CHAPTER ONE

1.0 PARTICIPATORY NEEDS ASSESSMENT

1.1 Background Information

Pastoralists are among marginalized, underserved and most vulnerable populations in Tanzania. They are highly mobile mainly in remote and rural villages; predominantly depend on livestock-based livelihoods (Kilemile, 2011:1). Girls and women face more socio-economic barriers as compared to boys and men in pastoralist communities. In collaboration with Mela Village Council (MVC) which was the Host Organisation (HO) and with support from the Open University of Tanzania (OUT), I conducted a community needs assessment (CNA) for Mela village, “the community”.

The study intended to look at the influence of integrated alternative sustainable livelihoods on economic development in pastoral communities in Mvomero district, Morogoro region, in Tanzania. Nonetheless, the CNA also aimed to examine the demographic characteristics of pastoral communities, their socio-economic livelihoods and identify their needs.

1.2 Community Profile

Mela pastoral community is among the 101 villages of Mvomero District, Morogoro region in eastern Tanzania. It is located in southern part of Morogoro town about 45 kilometres away. Formally, this community was merely a hamlet; it was formally registered as a village in 2005 separated from its mother village Melela. This is because Melela became a large village and its population increased. Additionally, there erupted conflicts between agriculturalists and pastoralists living in the then Melela big village. As one of options to resolve conflicts, Mela separated from Melela and became an independent pastoralist community with however, a few agriculturalist remainders who

were not happy with decision to divide the village. The current estimated population of Mela pastoral community is 622 whereby 305 male, and 317 female.

Mvomero District is geographically located at north-eastern part of Morogoro Region in the eastern Tanzania. It lies between 8° 00 " and 10° 00" Latitudes south of equator, and between 37° 00" and 28° 22" Longitudes (Mhango, 2008). Administratively, the District is divided into 4 Divisions, 17 Wards, 101 villages and 577 hamlets and the estimated population for Mvomero District in 2006 was 280,475 (GoT, 2007:3, 6).

Table 1: Distribution of Administrative Units in Mvomero District

No	Division	Wards	Villages	Hamlets
1	Mvomero	4	31	154
2	Turiani	5	27	158
3	Mgeta	4	22	156
4	Mlali	4	21	109
Total		17	101	577

Source: Mvomero District Council (2002) in Mhango (2008)

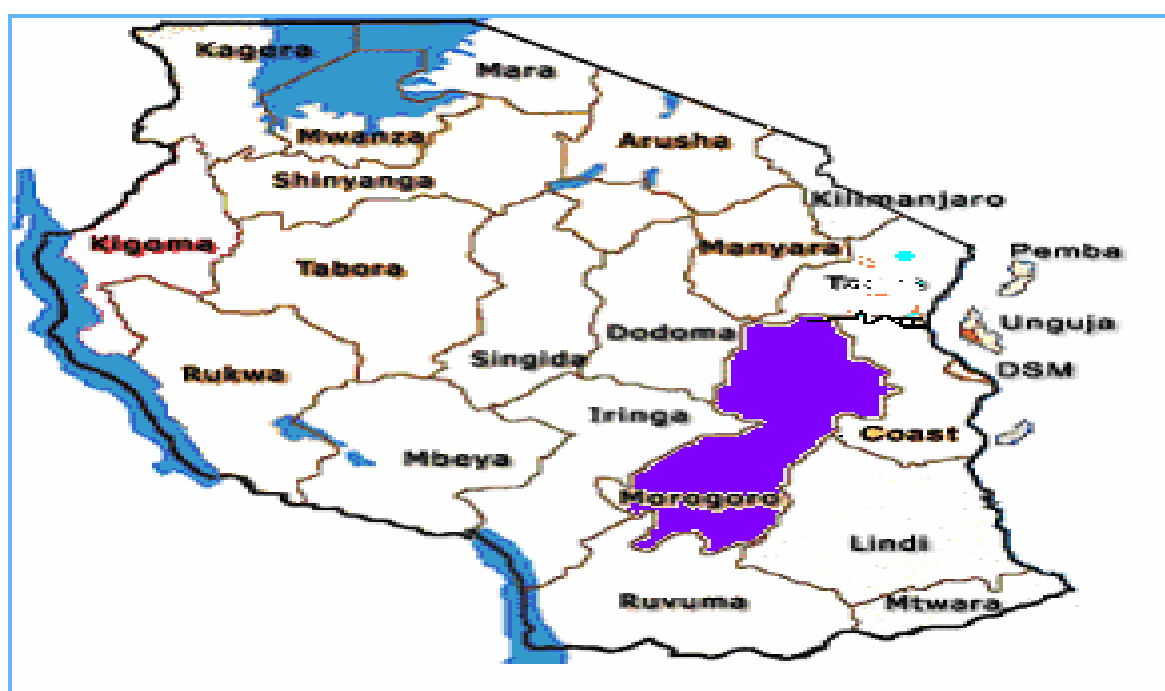


Figure 1: Map of Tanzania Illustrating Morogoro Region

Source: GoT (2007), Morogoro region profile

Nonetheless, the main livelihood for Mela community is pastoralism whereby livestock is their main resource. In addition to livestock keeping, other resources this community has access to include poultry, water, cooking fuel, education services (primary school), and some cash saving at their homes. Since they heavily depend on livestock, community members have to sell livestock to get money to buy food stuffs.

However, this community is challenged with lack of market for milk of which mostly women depend on. Nonetheless, even the livestock market located at Kibaoni village about 12 kilometres away is not stable. The community is also experiencing an acute shortage of health services especially dispensary or clinic for safe delivery. The community members are compelled to travel for 15 kilometres to the nearest dispensary at Melela. Additionally, the community has no SMEs; nor credit services available for economic gains.

There are also no shops; only one small kiosk serves the whole community. Likewise, community members have to travel about 15 kilometres to access a shop. Moreover, the community has no road to the nearest villages and towns which is passable throughout a year. With regards to human resources, over 99 per cent of the population in this community has no other livelihood skill apart from pastoralism and 70 per cent did not attend school at all. On the other hand, the community is very positive to adapt to other alternative sustainable livelihoods such as poultry and agriculture alongside their traditional livestock keeping.

1.3 Community Needs Assessment (CNA)

CNA is a community-based appraisal used by project managers, designers, and other stakeholders to discover the root cause of community's problems. It is a process of

identifying community assets in order to determine which project suits better to address the real community needs. According to CDPA (1994) community needs assessment approach helps managers to effectively address community's needs and avoid designing projects based on assumptions which usually results to community's rejection of a project.

1.3.1 CNA Objectives

The overall objective of this CNA was to examine the influence of integrated alternative sustainable livelihoods on economic development in pastoral communities in Mvomero district, Tanzania. This broad objective is further categorized into the following specific objectives:

- a) Examine social and economic livelihood options in the study area
- b) Identify and prioritise needs of the community to determine major problems the community is facing.

1.3.2 CNA Questions

From the above objectives this assessment highlights couple of questions to be used as guide throughout CNA as follows:

- a) Have pastoralists access to livelihood assets such as social and financial capital?
- b) Does overdependence of pastoralists on livestock keeping alone make them become marginalised from accessing social, political and economic opportunities?
- c) Can pastoralists adopt other livelihood strategies alongside their traditional livestock keeping?

1.3.3 Community Needs Assessment Methodology

This study employed various research methods ranged from research design to data

collection and analysis methods. As such, this section describes research design, sampling techniques as well as data collection and analysis methods.

i) Research Design

Basically this study used descriptive research applying cross-sectional survey study methodology in which respondents were major source of information. This methodology enabled the study to collect both primary and secondary standard data. This study principally intended to cover all pastoralists in Tanzania. However, for the CNA approach this study placed Mela pastoral community which is in Mvomero District at the centre of study.

ii) Sampling Techniques

In principle this study covered the population of pastoral communities in Mvomero district in Tanzania. The survey population was pastoralists at Mela village from which this study extracted sample population amongst youth aged between 15 and 24 years and adults aged from 25 and above. From sample population the study established a sampling frame. The Tanzanian Youth Development Policy (1996) defined youth as a person aged between 15 and 24. This study deliberately used age and gender technique to examine the extent of vulnerability between youth and adults and women and men respectively. Youth is among the vulnerable groups especially as far as employment aspect is concerned. For instance, unemployment rate among youth aged 15-24 years in Tanzania was 14.9 per cent in 2006 (GoT, 2008), which is very high.

The assessment involved every eligible member amongst selected households as a population unit and interviewed a sample size of 30 individuals of the estimated total population of 622 of the community. Moreover, this study used probability sampling

method to select the sample size from the sampling frame. Coupled with simple random sampling in which every member in the sampling frame was involved, this research applied a stratified sampling approach to emphasize age and gender mainstreaming in survey participation.

iii) Data Collection Methods

This survey mainly used quantitative method of data collection supplemented by qualitative method to collect information. The study employed semi-structured questionnaire to collect primary data. This study applied mainly single research method- semi-structure questionnaire in order to have conformity of data collected and to avoid having inconsistent and contradictory data that may result in to a contradictory conclusion. With the use of multiple data sources “at times, data are not simply inconsistent but are actually contradictory, leading the researcher to incommensurable propositions” (Mathison, 1988:16).

The semi-structured questionnaire gave respondents opportunity to supply additional information relevant to the study. Every questionnaire had two types of questions. The first one gave out categorical variables (ordinal or nominal) in which respondents were just required to circle the suitable answer. The second type gave out scale variables whereby the respondents had to write numbers in the questions. Data collectors pre-tested the developed questionnaire to host organisation members, prior to the real field work. As such, all necessary improvements were made to the questionnaire before conducting the actual survey. There were three data collectors who dispersed in the three selected hamlets within Mela community. They distributed the questionnaires to eligible respondents in their (data collectors) presence. The data collectors' role was to assist respondents

understand the questions and circle or write the appropriate answer (considering illiteracy rate in the pastoral communities). Data collectors marked each questionnaire with a number from 1 to 30 and entered information they collected into computer for analysis. This study used Statistical Package for Social Sciences (SPSS) to enter the collected data. The first step was to transform questions into variables in which over 80 variables were formed and entered. These included scale, ordinal and nominal variables.

iv) Data Analysis Methods

This study intended to examine the influence of integrated alternative sustainable livelihoods on economic development in pastoral communities; assessing community's access to assets and their needs. The analysis of the collected data used quantitative data analysis methodology. This involved testing hypotheses using SPSS. During data analysis this study used frequencies with pie and bar charts to analyse categorical variables. It also used *descriptives* which are most suitable for scale variables. Nonetheless, the study used *cross tabulation* method in comparison of two categorical variables.

1.4 CNA Findings

This sub-chapter presents a couple of findings resulted from the CNA. They range from demographic characteristics to community needs. It also displays findings on socio-economic livelihoods, community source of income, and on alternative sustainable livelihood activities.

1.4.1 Community Demographic Characteristics

The CNA findings show that of all research respondents 56.7 per cent were male and 43.3 per cent were female. Moreover, 63.3 per cent of them were adults aged 25 and above, while 36.7 per cent were youths aged between 15 and 24 years. Furthermore, the findings

show that 50 per cent of respondents were married, 40 per cent were not married and 10 per cent were widowed. Tables 2, 3 and 4 show respondent sex, age and marital status respectively.

Table 2: Respondent Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	17	56.7	56.7	56.7
	Female	13	43.3	43.3	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

Table 3: Respondent Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-24	11	36.7	36.7	36.7
	25 and above	19	63.3	63.3	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

Table 4: Respondent Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	15	50.0	50.0	50.0
	not married	12	40.0	40.0	90.0
	widow/widower	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

Additionally, as far as occupation of respondents is concerned findings illustrate that about 83.3 per cent of respondents had engaged in livestock keeping as their main occupation. Moreover, 3.3 per cent of them were agriculturalists, also 3.3% were employed, and 10 per cent were pupils. Figure 2 shows occupations of respondents.

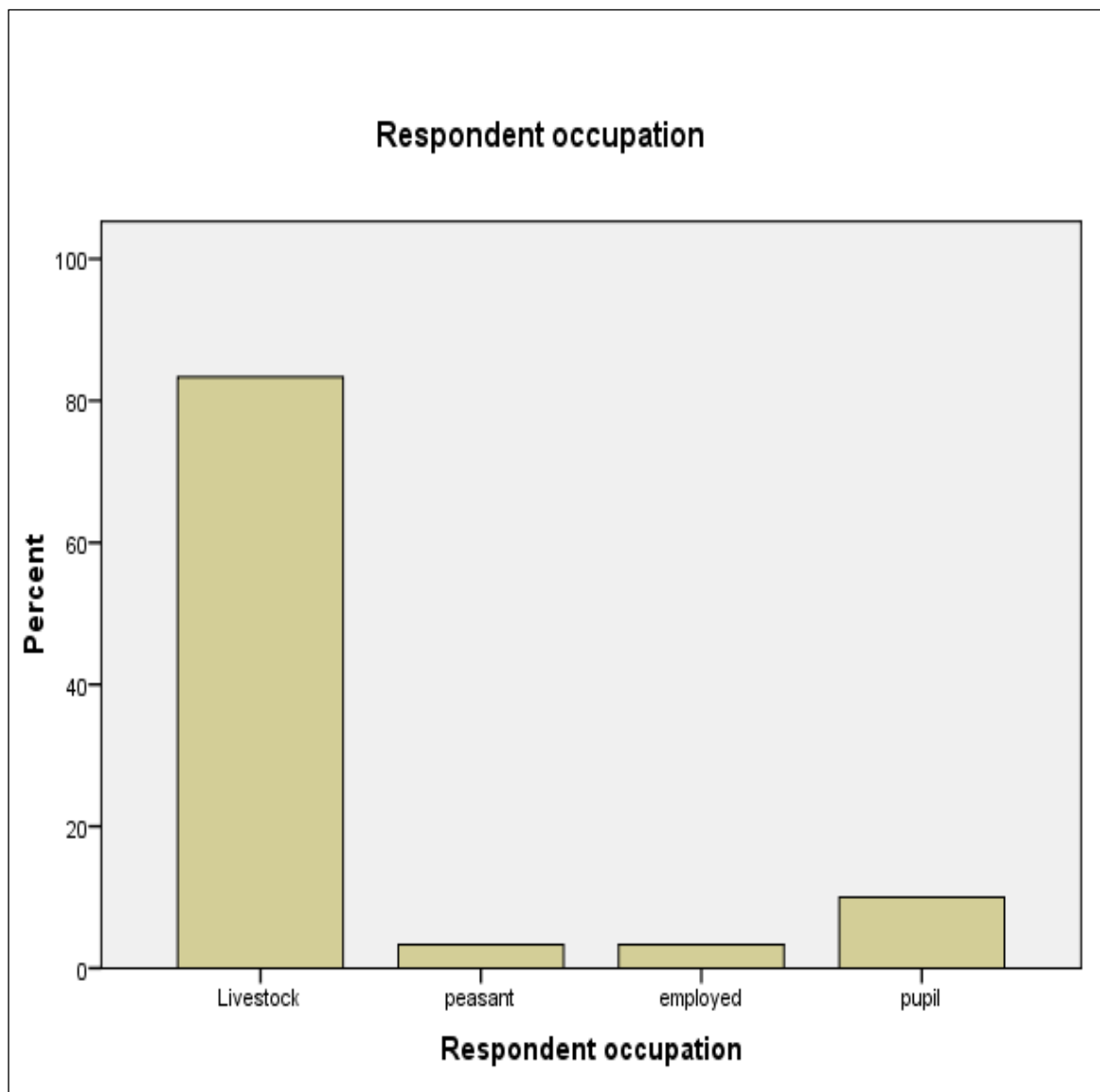


Figure 2: Occupation of Respondents

Source: Research findings at Mela Pastoral Community (2012).

Furthermore, about diversification of livelihood activities findings show that 23.3 per cent of pastoralists also engaged in agricultural activities alongside livestock keeping. Again,

about 76.7 per cent of pastoralists also engaged in poultry as their source of livelihoods. As far as business is concerned, only 6.7 per cent of respondents said to engage into small business such as milk, tobacco and beads selling for earning income as compared to 93.3 per cent were depending solely on livestock for their livelihoods. Table 5 shows percentage of respondents engaged into small business such as selling of milk, beads and tobacco.

Table 5: Respondent Engaged in Small Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	6.7	6.7	6.7
	No	28	93.3	93.3	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

In aspect of education level, about 70 per cent of respondents had never gone to school at all. Only 30 per cent of respondents had gone to school. Nonetheless, 73.3 per cent of respondents had no other vocational skill for potential self or wage employment apart from their traditional livestock keeping. Statistics shows that averages of 8 people (about 4 adults and 4 children) were living in a household at Mela community, and that they had lived in this community for an average of 8 years.

1.4.2 Socio-economic Livelihoods in Pastoralist Communities

This study tracked socio-economic livelihoods of Mela community based on three main aspects namely, financial, physical and social assets. Under this topic various types of assets are examined.

i) Community Access to Financial Assets

In one hand, findings revealed that young people are economically more marginalized as compared to adults in pastoralist communities. For instance, only 26.7 per cent of youths had access to cash saving at home, while 73.3 per cent of all adults have access to cash saving at home.

Table 6: Respondents Access to Cash Saving at Home by Age

Count		Whether respondent has access to cash saving at home		Total
		Yes	No	
Respondent age	15-24	4	7	11
	25 and above	11	8	19
Total		15	15	30

Source: Research findings at Mela Pastoral Community (2012)

On the other hand, the study revealed that girls and women were more marginalized than their counterparts, boys and men in terms of access to financial assets. For example, statistics displays that only 26.7 per cent of girls and women have access to cash saving at home as compared to 73.3 per cent of boys and men. Moreover, only 27.3 per cent of girls and women can easily access livestock asset as compared to 72.7% of boys and men.

One should bear in mind that the Maasai pastoralist traditional practices do not favour women and girls to have access to assets including livestock; only men and boys have assurance of it. However, some women can access assets including livestock when they struggle for; it is not an easy opportunity. For short, there is difficulty for pastoralist women and girls to access to assets for their livelihoods. In one hand, table 7 shows respondents' access to cash saving at home. On the other hand, table 8 illustrates respondents' access to livestock asset.

Table 7: Respondents Access to Cash Savings by Gender

Count		Whether respondent has access to cash saving at home		Total
		Yes	No	
Respondent sex	Male	11	6	17
	Female	4	9	13
Total		15	15	30

Source: Research findings at Mela Pastoral Community (2012)

Table 8: Easiness to Access Livestock Asset

Count		Easiness to access livestock asset			Total
		very easy	Moderate	not easy	
Respondent sex	Male	16	1	0	17
	Female	6	1	6	13
Total		22	2	6	30

Source: Research findings at Mela Pastoral Community (2012)

ii) Community Access to Physical Assets

Findings on community access to physical assets such as water supply, cooking fuel, health services, roads, education services, toilet facility and houses stands as follows: Of all respondents 83 per cent said they had access to borehole as opposed to 17 per cent who said they had no access to borehole. Either, only 3.3 per cent of them said they had access to a well as compared to 96.7 who responded to have no access to this service. Also, 20 per cent had access to a dam for livestock consumption as opposed to 80 per cent who said to have no access to a dam.

Moreover, all respondents (100%) said they had access to firewood as source of cooking fuel. Nevertheless, 100 per cent of respondents said they had no access to any health services such as dispensary or health centre.

In addition to health services, 96.7 percent of respondents said they had no access to road to the next hamlet within their community as compared to 3.3 percent who said had access to. Again, 70 per cent said they had no access to road to the next village and 57 per cent said they had no access to road to the nearest town as compared to 30 and 43 percent respectively.

Table 9: Respondents Access to a Dispensary

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Source: Research findings at Mela Pastoral Community (2012)

Table 10: Respondents Access to a Road to the Next Hamlet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	3.3	3.3	3.3
	No	29	96.7	96.7	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

On education services 100% of respondents said they had a primary school, while 83.3 per cent said they had no secondary school. An international NGO namely CARE International was supporting this community to construct a secondary school. Four classrooms with two offices embedded to the classrooms were constructed by then. With regards to toilet facility all (100%) of respondents said they had no any kind of latrines in

the community. A physical observation also justifies this finding. Additionally, 53.3 per cent of respondents said they did not own a house.

Table 11: Households Access to Latrine

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Source: Research findings at Mela Pastoral Community (2012)

iii) Community Access to Social Assets

According to CNA findings pastoralist community members had no access to social capital. For instance, of all respondents, 100% had no access to youth group, women group or savings and credit group. Only 3.3% of respondents said they were engaged into religious group.

Table 12: Respondents Access to Credit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	100.0	100.0	100.0

Source: Research findings at Mela Pastoral Community (2012)

1.4.3 Community Source of Income

In one hand, findings show that the main source of income for this pastoralist community is livestock whereby 73.3 % of all respondents said they depended on selling livestock as a source of income. Nevertheless, 26.7% of them engaged in agriculture, small business like selling of tobacco and beads and others were students. The findings still revealed that about 66.7 % of respondents said that they sold an average of one livestock in a month as compared to 33.3% who had completely no access to livestock and depended only to their husband or parents. This study found that 60% of respondents said to earn an average of

below TZS 400,000 in a month from livestock selling as compared to 40% who said to earn above 400,000. 50 per cent of respondents said that livestock market is stable as opposed to 23.33% and 26.67% who said a little bit stable and completely unstable respectively. Figure 3 illustrates this.

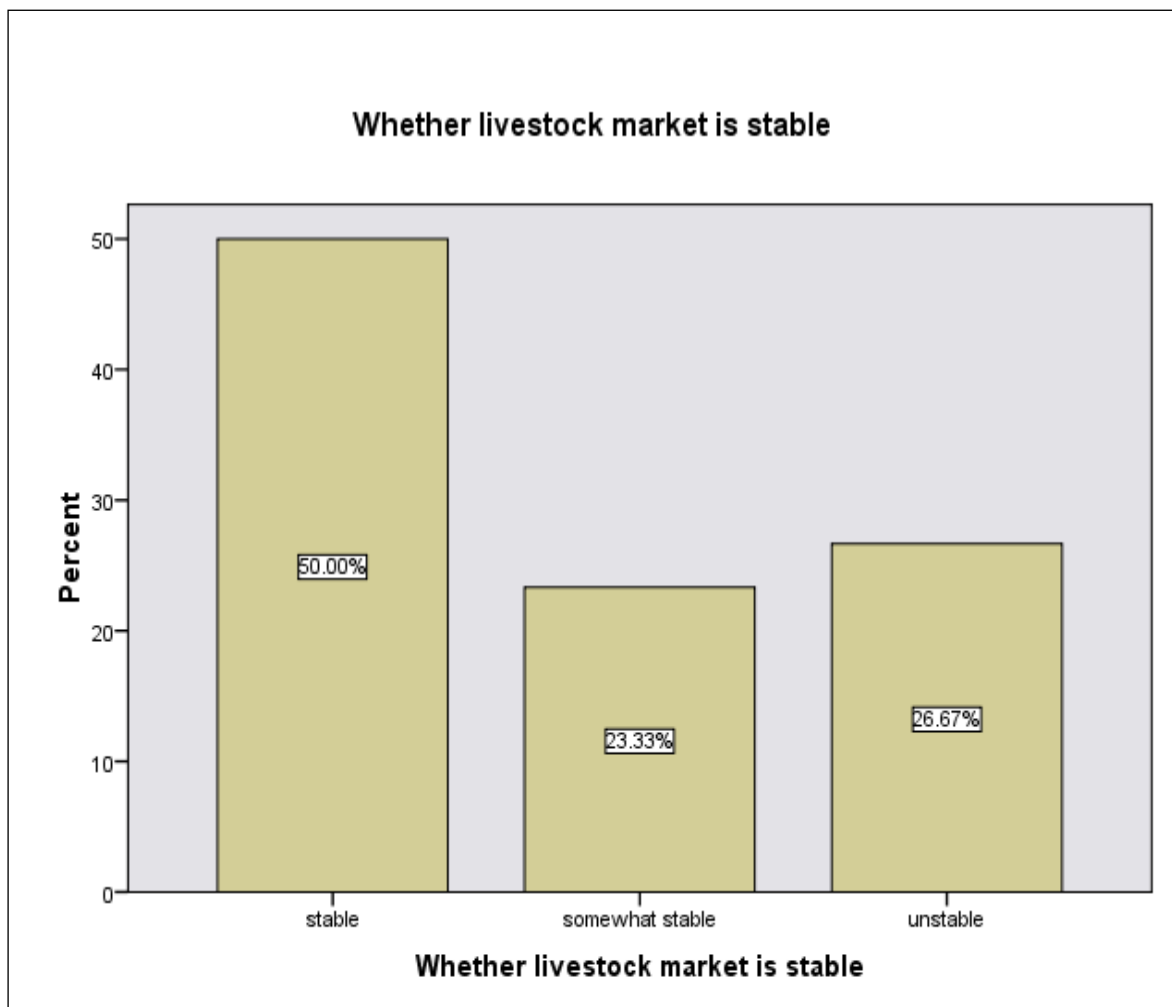


Figure 3: Stability of Livestock Market

Source: Research findings at Mela Pastoral Community (2012)

Nevertheless, the findings illustrate that only 6.7 per cent of respondents said to engage into milk selling as a source of income. Additionally, only 3.3 per cent said they had sold an average of 500 litres of milk in a month whilst the 96.7 per cent had not sold a. Moreover, about 93.3 per cent of respondents said the milk market was unstable.

Table 13: Respondents Average Sales of Milk Per Month

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	3.3	3.3	3.3
	No	29	96.7	96.7	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

On the other hand, findings show that these community respondents had engaged in other livelihoods such as agriculture, transport services *bodaboda* meaning motor cycle transport services, wage employment and tailoring. For example, 13.3 per cent of respondents had engaged in agriculture in addition to livestock, 16.7 per cent in tailoring activity, 6.7 per cent in wage employment, and 3.3 per cent in *bodaboda* services.

1.4.4 Alternative Sustainable Livelihood Activities

According to CNA findings over 80 per cent of pastoralists depend on livestock keeping for their livelihoods. Research results also show that pastoralists can adopt other activities as alternative sustainable livelihoods alongside livestock keeping. For instance, about 76.7 per cent of respondents said that they could engage into poultry as an integrated alternative sustainable livelihood. Nonetheless, 23.3 percent of them were not ready to engage into this kind of livelihood. Of all respondents, 84.6 per cent girls and women showed more readiness to engage into poultry as compared to 15.4 per cent of boys and men. Not only poultry but also agriculture was seen to be suitable for most of pastoralists. For example, about 76.7 per cent of respondents said they could engage into agriculture in conjunction with livestock keeping as compared to 23.3 who were not ready to adopt this livelihood activity. Table 14 illustrates this.

Table 14: Respondents Readiness to Engage into Poultry Activity as Integrated Alternative Livelihood

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	76.7	76.7	76.7
	No	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

Source: Research findings at Mela Pastoral Community (2012)

1.4.5 Community Needs

According to CNA findings Mela community population was in high need of milk market service, health services, and a dam for livestock. Other identified needs include livestock market, water supply, roads, electricity, livestock dip and financial capital and savings and credit service. For example, of all practical research respondents 93.3 per cent said the most important needs for them were milk market and health (especially dispensary) services. However, 3.34 percent said milk market was important while 3.33 said it was unimportant to them. Figure 4 illustrates this.

Nevertheless, of all respondents, 100 per cent of women and girls said they needed a dispensary and milk market, while 88 per cent of men said they needed a dispensary and milk market. Table 15 shows respondents' perception on the importance of health service, while table 16 illustrates respondents' perception on the importance of milk market.

Moreover, about 73.3 per cent said they were in need of a dam for their livestock, 70 per cent mentioned about livestock market, and 63.3 per cent said they needed water supply. Furthermore, 50 per cent of respondents said they needed roads, while 46 per cent mentioned about electricity need.

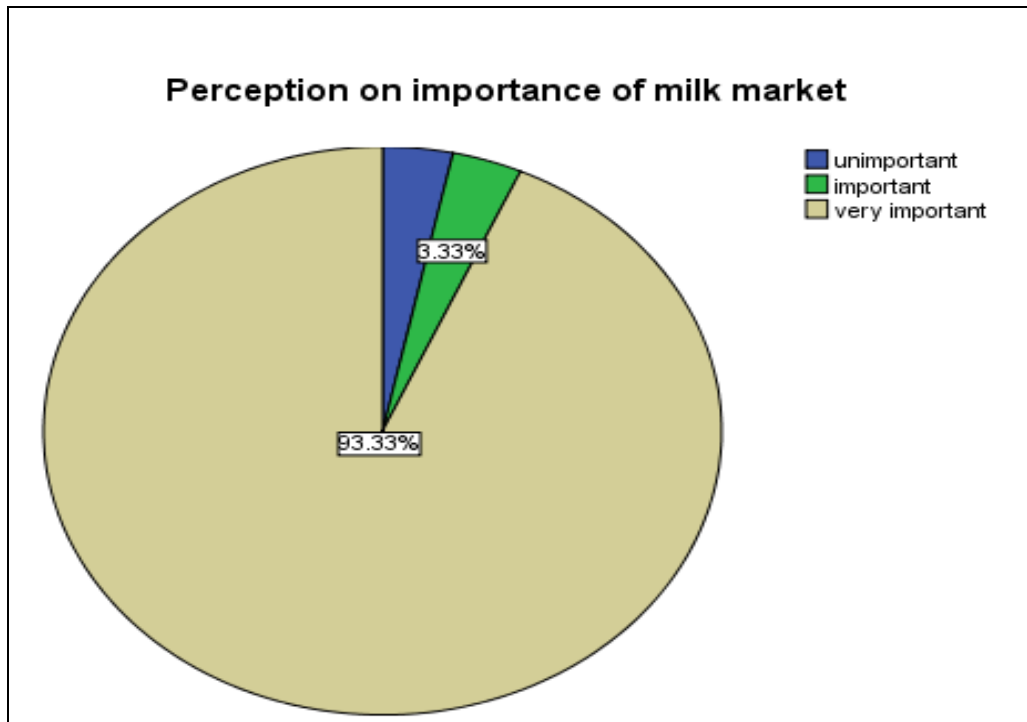


Figure 4: Perception on Importance of Milk Market

Source: Research findings at Mela Pastoral Community (2012)

Table 15: Respondents Perception by Sex on Importance of Dispensary

Count		Perception on importance of dispensary		Total
		Important	very important	
Respondent sex	Male	2	15	17
	Female	0	13	13
Total		2	28	30

Source: Research findings at Mela Pastoral Community (2012)

Table 16: Perception on Importance of Milk Market

Count		Perception on importance of milk market			Total
		unimportant	Important	very important	
Respondent sex	Male	1	1	15	17
	Female	0	0	13	13
Total		1	1	28	30

Source: Research findings at Mela Pastoral Community (2012)

1.5 Community Needs Prioritisation /Levelling of Needs

With reference to CNA findings Mela pastoral community identified couple of needs to be addressed. However, it is illogical that all needs have equal weight and as such a need to prioritise them. This study uses Pair Wise Ranking (PWR) method to level the identified community needs. This method, as Russell (2001) puts it, aimed to rank lists of needs or problems to help communities decide which needs or problems are the most important to be dealt with first. For example, is livestock market more important than health service? Or is water supply need more important than milk market? These kinds of questions can easily and dominantly be answered by powerful people in the community unless a strategic prioritisation method is used. However, PWR gave all people opportunities to participate and to be heard equally in ranking community's needs or problems based on their age, gender and diversity. With PWR each item of a need on a list was systematically compared with each of the other needs.

In this case for example, a need for livestock market was compared first with a need for milk market. The community found that milk market was more important than livestock market. Thus, a number "2" (two) was placed in the cell of "*milk market*" row under the need number "1" (one)-"*livestock market*". The same process was repeated with the next need "*livestock dip*". In this case "*livestock market*" was the more important need than "*a livestock dip*" and thus '1' (for "*livestock market*") was placed in the "*livestock dip*" row under number 1 ("*livestock market*"). This exercise repeated until all identified community needs were compared firstly with problem need number one ("*livestock market*"), and later on with all the rest needs.

The community decided the most important need by looking at a number that appeared most times in the matrix. For example, there were eight ("8") number "2s" and "10s" as

compared to zero (“0s”) for credit service, capital for business and electricity in the matrix. Therefore from PWR method Mela pastoral communities most prioritised needs were “*milk market*” and health services (“*dispensary*”).

Table 17: Pair Wise Ranking of Needs

No	Need	Needs/problem number										Score	Rank
		1	2	3	4	5	6	7	8	9	10		
1	Livestock market		2	1	1	1	1	1	1	1	10	7	3
2	Milk market			2	2	2	2	2	2	2	2	8	1
3	Livestock dip				4	5	3	3	8	9	10	2	6
4	Dam					4	4	4	4	4	10	5	4
5	Water supply						5	5	5	5	10	4	5
6	Credit service							7	8	9	10	0	8
7	Capital for business								8	9	10	0	9
8	Roads									8	10	1	7
9	Electricity										10	0	10
10	Dispensary											8	1

Source: Adapted from Rietbergen-MacCracken and Narayan-Parker (1998) and Russell (2001) Pair Wise Ranking made easy

1.6 Chapter Conclusion

From the above findings one can conclude that pastoralists are the most socially and economically marginalized and vulnerable group heavily depend on livestock for their livelihoods. Findings show that girls and women are more marginalized than their counterparts, boys and men in terms of access to financial assets. Nevertheless, it has been learned that although over 80% of pastoralists are engaged in livestock keeping as their main occupation, they can adopt other activities as alternative sustainable livelihoods together with livestock keeping. As such, integrated alternative sustainable livelihoods are highly possible in pastoral communities. Furthermore CNA findings show that pastoral communities are in high needs of market for livestock products particularly milk. Specifically, Mela pastoralist community needs milk market and health services. They also need livestock market, water supply, roads, electricity, livestock dip, livestock dam, financial capital and savings & credit service.

CHAPTER TWO

2.0 PROBLEM IDENTIFICATION

2.1 Background to the Research Problem

Findings from CNA have revealed that pastoralists are among the most marginalized and underserved populations in Tanzania as far as social and economic development are concerned. Moreover, findings have further revealed that girls and women are more marginalized than boys and men in terms of access to financial assets. Additionally, the study has shown that young people are economically more marginalized as compared to adults in this community. Their mobility characteristic in remote rural areas makes them more vulnerable to poverty than other groups. Pastoralist communities exclusively depend on pastoralism as their main means of livelihood.

Specifically, Mela pastoral community is challenged by several problems ranging from social to economic barriers. The community has no access to social capital such as youth groups, women groups or savings and credit groups. Furthermore, this community has very limited access to financial asset and physical assets. With reference to human capital, the community has a very limited access to education and training. Most community members have inadequate livelihood skills. The study shows that pastoralists can adopt other activities such as agriculture and poultry as integrated alternative sustainable livelihoods in conjunction with their traditional livestock keeping. Of all community members, girls and women show more interest to engage into poultry as compared to boys and men.

2.2 Statement of Problem

Mela pastoral community is facing socioeconomic barriers especially limited access to cash caused by sole dependence on one livelihood activity. This community faces various

subsequent adverse effects of depending exclusively on livestock keeping. These include market seasonality for livestock and its related products and social conflicts between them and agriculturalists over land use. This socio-economic problem is more serious amongst young people. For example, only 26.7 per cent of all youths have access to cash saving at home.

If all these socioeconomic barriers persist there is a danger for the community's income to become poorer. Subsequently, the community capacity to access to quality health services and facilitate their children's education will be jeopardized. There is therefore a need for economic intervention to support community members to liberate themselves from economic prison, and hence increase their income. Establishment of indigenous organic poultry will contribute to increasing socioeconomic opportunities particularly access to cash.

2.3 Project Description

This project introduces an integrated alternative sustainable livelihood approach by establishing Indigenous Organic Poultry. The IOP project will be implemented at Mela village. This is a pastoral community located in Mvomero District, about 42 kilometres away from Morogoro Municipality. The project aims to establish an IOP farm that will serve as a pilot for the community's replication to their respective households. This project will be owned and managed by a group of young women and young men who have shown interest in indigenous organic poultry as one of their integrated alternative sustainable livelihood strategies. This project is meant to promote socioeconomic opportunities amongst pastoralist community members. Community members especially young women and young men will be organized into social and economic groups. These groups will increase access to social and financial assets. Subsequently, the community

will increase income and hence improving their wellbeing. Nonetheless, indigenous organic poultry scheme will act as an instrument for women empowerment and source of employment for young women in this community. The project will be implemented under support of the Host Organisation namely Mela Village Council.

2.3.1 Target Community

The target community for this intervention is a group of pastoralist young people who will be the key players for its designing, implementation, monitoring and evaluation. In one hand, young women are the primary target because they are more marginalized than boys as far as access to financial, social, and physical assets is concerned. Despite the fact that Mela pastoralist community solely depends on livestock livelihoods women and girls have very limited access to livestock.

Moreover, study shows that women and girls are more interested in poultry project than their counterparts, men and boys. Women and girls have confidence that the proposed integrated alternative sustainable livelihood would significantly contribute to their economic emancipation. On the other hand, young men will join their counter parts, young women in the struggle for economic liberation as secondary target group. They will play a significant role in supporting this intervention. Experience shows that involvement of pastoralist men is a critical path for any women targeted project to be successful. They have power to license women's and girls' participation. In this project, however, young women and men will merge and form one group that works together.

2.3.2 Stakeholders

Various stakeholders are involved in this intervention. One of the immediate stakeholders is the village council. Mela Village Council has a significant role in ensuring the project is

successful. It will be involved in the day to day project implementation. This council will need to be aware of each project step made in efforts to execute the planned activities. In other words, the MVC will be involved in all steps towards realization of the project objectives. These include monitoring of the project implementation and its evaluation. Furthermore, Mvomero District Council has also a stake in this project and has major role to play. The District through its Community Development Department is responsible for people's development within area of jurisdiction. Additionally, civil society organisations such as CARE International, SAWA, World Vision, just to mention a few have also a significant stake towards this intervention. Their financial and/or material or moral support towards realizing economic improvement in this community will be valuable. Besides, such institutions like Sokoine University of Agriculture (SUA) will also have a significant contribution in this project. The project will heavily utilize expertise related to poultry from SUA to impart skills and knowledge to project participants about effective indigenous organic poultry.

2.3.3 Project Goal

Mela is one of the most marginalized communities in Mvomero District, Morogoro in Tanzania. Its community members solely depend on livestock keeping as means of livelihood. This community is facing various socioeconomic barriers. The community is also vulnerable to poverty as far as climatic change issues especially drought is concerned. The community has a very limited access to financial and social assets. This project is meant to address social economic constrains of this community. Therefore, the overall objective of this project is to increase community alternative socioeconomic opportunities especially to pastoralist young women and young men at Mela village in Tanzania by establishing indigenous organic poultry as one of integrated alternative sustainable livelihood strategies.

2.3.4 Project Objective

In order to achieve the above stated goal various activities will be deployed, and therefore, the objective of this project is to increase community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.

2.4 Host Organisation Profile

In this project, Mela Village Council (MVC) is taken as a community based organization that hosts this project. It is the project host organization. This organization is located at Mela village in Mvomero District, about 42 kilometres away from Morogoro Municipality in eastern Tanzania. The organization started in 2005 when Mela village got an official recognition as a village. It comprises of five hamlets namely, Kisangali, Mkwajuni, Sadala, Kilimahewa and Matangani.

2.4.1 Organizational Structure

The MVC is a community based organization that hosts this project. It consists of 25 members including 19 men and 6 women. The organization has a chairperson who is a spokesman of the council. It has also a village executive officer who is responsible for day to day activities of this organization. The VEO receives assistance from hamlet chairpersons who report all issues happening in their respective hamlets. Administratively, hamlet chairpersons report to the VEO.

2.4.2 Roles and Responsibilities

One of the major roles of this organization is to safeguard Mela pastoral community interests including security and community development programmes. Development activities for this community include livestock keeping, education and health services. The organization is also responsible for emergency, as well as hazard management.

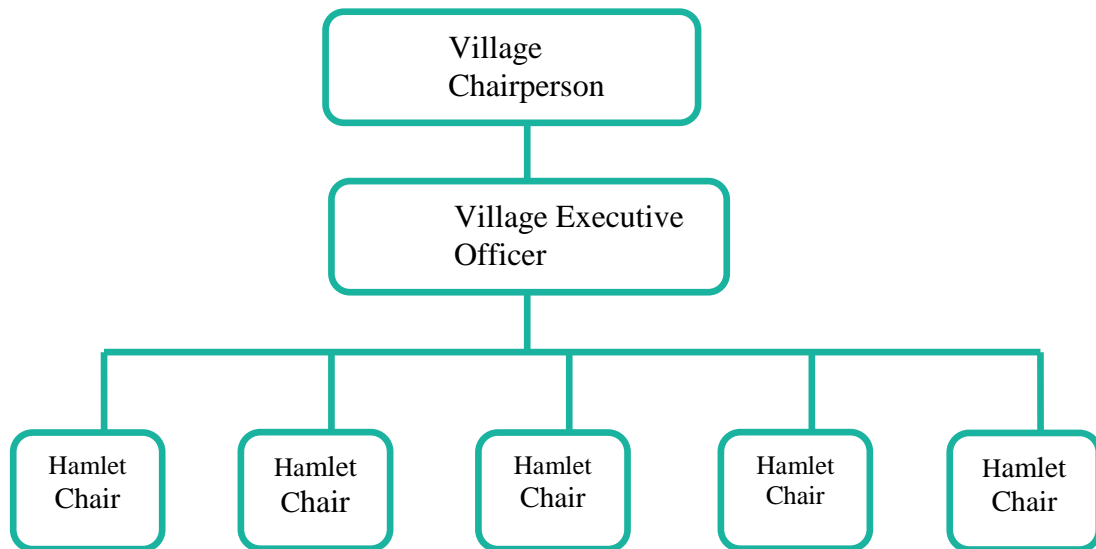


Figure 5: Mela Village Council Organogram

Source: Mela Village Executive Office (2012)



Photo 1: A Cross-section of Mela Village Council Members in one of Meetings with the Project Adviser

2.4.3 Activities

The host organization performs several activities within its jurisdiction. These include holding monthly meetings as per Mvomero District Council schedule. During these

meetings, the MVC receives reports from its grass root organizations namely, hamlets. Usually these reports are in terms of minutes which contain resolutions, declarations, and recommendations for the way forward for the problem solution. Moreover, from hamlets reports, the MVC extract agenda for its monthly meetings. All minutes produced from these meetings are submitted to the higher organ, namely, the Ward Development Council (WDC). The WDC is responsible for reporting all development related issues including problems to the local government authority (LGA). In this context, the LGA is Mvomero District Council. The organization also receives complains raised from the community. All complains are discussed and resolutions provided in the monthly meetings.

2.4.4 SWOT Analysis

Mela Village Council as a host organization has strengths, weaknesses, opportunities and threats for its development. Table 18 shows SWOT analysis for the organisation.

Table 18: SWOT Analysis for the Host Organisation

	POSITIVE	NEGATIVE
	Strengths/Strong points	Weaknesses/Weak points
INTERNAL/PRESENT	<ul style="list-style-type: none"> ○ Good organization structure that facilitates a free flow of information ○ Organisation's adequate staff in all key positions-VEO, ○ MVC members are aware of their roles and responsibilities ○ MVC members meet regularly ○ Have source of funds-CARE ○ Community members' contribution towards developmental activities ○ Awareness of its future resource needs 	<ul style="list-style-type: none"> ○ Lack of organisation's vision and mission statements ○ No building for MVC office ○ Lack of long-term and short-term plans ○ Staff limited confidence to clearly describe their roles and responsibilities. ○ Lack of trainings for members. No training needs assessment conducted
EXTERNAL/FUTURE	Opportunities	Threats
	<ul style="list-style-type: none"> ○ Market for livestock/poultry and its products for community's contribution towards development ○ Political stability enables MVC to mobilize community's contribution towards development activities ○ Leadership support from local government. 	<ul style="list-style-type: none"> ○ Customers may refrain from accessing livestock/poultry from the community due to long distance ○ Multiparty political leadership change ○ Rise of conflicts between pastoralists and farmers may consume time for resolution ○ Enlarging class structure: the haves and the non-haves.

Adapted from Hay and Castilla (2006) and Smawfield (2007)

CHAPTER THREE

3.0 LITERATURE REVIEW

3.1 Introduction

This review of related literature is mainly tailored to comprehending ‘sustainable livelihoods’ concept. This includes understanding its approaches, and framework for effective poverty alleviation. This review will further look at various livelihoods assets, strategies, outcomes and factors affecting people’s livelihoods. In addition, the literature review will briefly describe the terms ‘integrated’ and ‘alternative’ in relation to sustainable livelihoods. Nonetheless, this section will also explore policy related to integrated alternative sustainable livelihoods. Finally the process of reviewing literature identifies the knowledge gaps of which this project seeks to bridge.

3.2 Theoretical Literature

This sub-chapter introduces a concept of integrated alternative sustainable livelihoods, sustainable livelihoods approaches and framework. It also describes factors that affect sustainable livelihoods. These include vulnerability context, livelihood assets, legal frameworks, livelihood strategies and outcomes.

3.2.1 Conceptualisation of ‘Integrated Alternative Sustainable Livelihoods’

The concept of *integrated alternative sustainable livelihoods (IASL)* is drawn from the development approach of ‘*sustainable livelihoods*’ (*SL*). This approach gained its prominence in 1990s when different scholars were philosophising over famine and food insecurity experienced in 1980s, and according to Carney (2003:11) the actual discussion of SL approaches started in 1998. The Brundtland World Commission on Environment and Development firstly introduced this idea; and the 1992 United Nations Conference on

Environment and Development expanded the concept, advocating for the achievement of sustainable livelihoods as a broad goal for poverty eradication (Krantz, 2001:6).

Additionally, according to Chambers and Conway (1991:5), the World Commission for Environment and Development put forward the first definition of sustainable livelihoods as follows: *Livelihood is defined as adequate stocks and flows of food and cash to meet basic needs. Sustainable refers to the maintenance or enhancement of resource productivity on a long-term basis.*

Further then, Chambers and Conway (Ibid) modified this definition and proposed what they called a working definition of sustainable livelihoods. This states that:

A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.

Nevertheless, most scholars and institutes drew their definitions of sustainable livelihoods from Chambers and Conway's (1991) livelihoods definition. Later on, DFID (1999:1) improved Chambers and Conway's (1991) definition as follows:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

Nonetheless, Ireland (2004:18) believes that '*alternative livelihoods*' approach is an effective way of combating poverty in communities. Ireland (Ibid: 19) understands the term *alternative* as 'a way of describing livelihoods that exist outside of the traditional or established activities for a given area'. It is all about livelihoods diversification-multiple income sources (alternatives). So, '*alternative sustainable livelihoods*' can be referred to as diverse choices available, whether traditional or non-traditional, for people to combine their capabilities, skills and knowledge with the assets at their disposal to create activities that will enable them to make a living (Ireland, 2004:7). It is a diversification of sustainable livelihoods without leaving behind their old livelihood activities.

However, in development prose, 'sustainable' has replaced 'integrated' as a versatile synonym for the term 'good' (Chambers and Conway, 1991:4). In this study, the term *integrated* is literally used to mean 'being part of'. It builds on the idea that communities particularly pastoralists should adopt other livelihood strategies hand in hand with their traditional livelihood activities.

Therefore, '*integrated alternative sustainable livelihoods*' in pastoral communities refers to as the diversification of sustainable livelihoods while keeping the existing traditional livelihoods. This is meant to increase access to assets especially for young women who are the most socially and economically marginalized groups amongst pastoralists. It is an approach that advocates for having additional livelihood strategies in pastoral communities.

3.2.2 Sustainable Livelihoods Approaches

Sustainable livelihoods approaches (SLAs) are a way of putting people and their priorities they identify at the centre of development. They are a way of thinking about objectives,

scope and priorities for development (DFID, 1999:1). According to Ashley and Carney (1999), the benchmark for SLAs' success is whether sustainable improvements in people's livelihoods have taken place. These approaches have developed within research institutes such as the Institute of Development Studies, UK; NGOs particularly CARE and Oxfam; and donors mainly DFID and UNDP. In the UK, the Government's *White Paper on International Development*, published in 1997, marked a period of changing thinking and renewed emphasis on poverty elimination (Ashley and Carney, 1999:5). Sustainable livelihoods approaches were rooted from the need to have *alternative approaches* towards poverty eradication after the traditional approaches had brought inadequate success. The traditional approaches did not consider other vital aspects of poverty such as vulnerability and social exclusion (Krantz, 2001:6). Instead, they perceived poverty mainly in terms of low income. Nonetheless, the traditional approach has been focusing on resources and facilities (water, land, clinics, infrastructure) or on structures that provide services (education ministries, livestock services, NGOs), rather than people themselves (Ashley and Carney, 1999:5).

3.2.3 Sustainable Livelihoods Framework

Sustainable livelihoods framework is an instrument for enhancing and increasing our understanding of people's livelihoods with emphasis to the poor. According to DFID (1999) the sustainable livelihoods framework is meant to enable practitioners in development interventions understand and analyse the livelihoods of poor people and assess the existing joint efforts used to alleviate poverty within their context.

Building on earlier work by the Institute of Development Studies, the Sustainable Rural Livelihoods Advisory Committee developed this framework. This framework views people as operating in the context of vulnerability in which they have access to certain

assets or any other poverty alleviation instruments. Like sustainable livelihoods principles, the sustainable livelihoods framework is people-centred. It describes the main factors which affect the livelihoods of the poor people. The framework helps in the identification of appropriate entry points for support of livelihoods. Figure 6 illustrates this concept of sustainable livelihoods framework. From the above framework, one should note that sustainable livelihoods framework does not necessarily suggest that vulnerability context must be a starting point when analyzing livelihoods. However, according to DFID (1999), a people-centred approach is likely to start its livelihoods analysis with assets, outcomes and strategies. The framework is intended to be a resourceful instrument for use in planning and management.

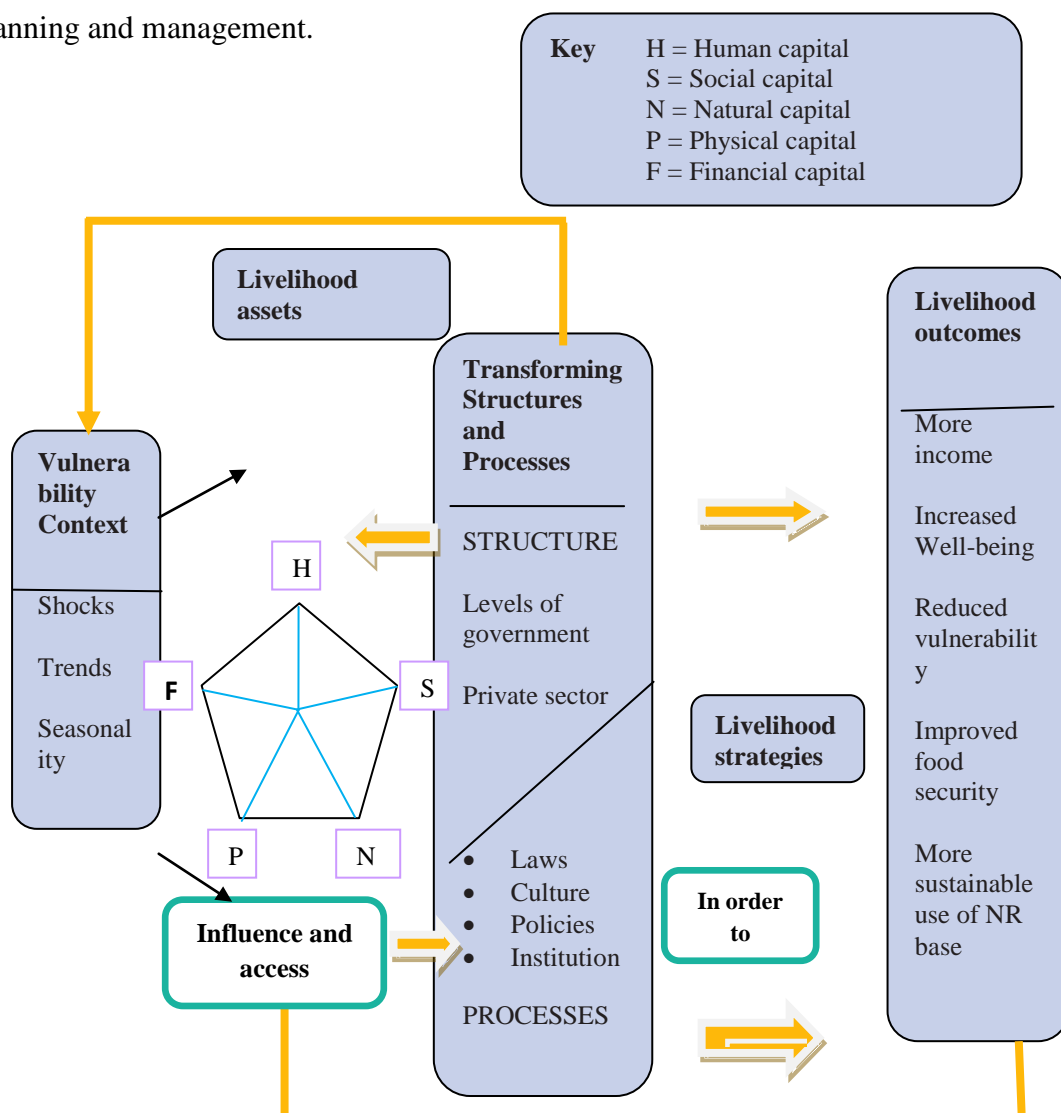


Figure 6: Sustainable Livelihoods Framework

Source: DFID (1999), *Sustainable Livelihoods Guidance Sheets*.

3.2.4. Factors Affecting Sustainable Livelihoods

The sustainable livelihoods framework consists of FIVE composites that significantly affect livelihoods of poor people. These are:-

i) Vulnerability Context

With reference to DFID (1999) sustainable framework, the vulnerability context refers to shocks, trends and seasonality that affect people's livelihoods. These factors cannot be easily controlled by local people themselves. As such, there is a need to identify ways of minimizing the adverse effects of the vulnerability context. These may include but not limited to improving overall livelihood security as the DFID (1999) puts it:

It is important to recognise that vulnerability or livelihood insecurity is a constant reality for many poor people, and that insecurity is a core dimension of most poverty. The sustainable livelihood approach seeks to militate against such insecurity through building up resilience.

It is important to understand the factors that constitute the vulnerability context because they have a direct impact upon people's asset status and on the options that may have beneficial livelihood outcomes. The following are briefly described factors with examples:

a) Shocks such as human health shocks, natural shocks, economic shocks, conflicts, crop/livestock, and can destroy assets directly (especially in the case of floods, storms, civil conflicts, etc.). They can as well compel people in the vulnerability context to abandon their homes including assets such as land. Natural shocks may have a more adverse effect on agricultural activity than on urban employment. Different types of conflicts can have profound adverse effects on the livelihoods of the poor where people suffer from lawlessness and physical damage (DFID, 1999:3).

- b) **Trends** such as population trends, resource trends, national/international economic trends, trends in governance (politics), and technological trends have influence on rates of return (economic or otherwise) to chosen livelihood strategies.
- c) **Seasonality** of prices, production, health, employment opportunities, and food availability are one of the greatest and most continuing sources of suffering for poor people in developing countries including Tanzania. According to DFID (Ibid), seasonality is usually linked to rural economies. However, it can be equally challenging for poor people dwelling in urban areas, especially when these people spend most of their income on foodstuffs, which prices may be very unstable.

ii) **Livelihood Assets**

Since livelihoods approach is a people-centred, then it is obvious that they should be placed at the centre of livelihoods assets. This approach does this and by so doing it tries to understand the strengths of the people in terms of assets or capital. It also seeks to find out how people transform these assets into positive livelihood outcomes such as more reduced vulnerability, increased income and improved wellbeing. The approach is founded on a belief that people require a range of assets to achieve positive livelihood outcomes (DFID, 1999:26).

Nevertheless, the sustainable livelihoods framework identified five core categories of assets or types of capital through which people make their livelihoods as put forward by the DFID (Ibid) in the asset pentagon. Figure 7 shows categories of assets. According to DFID (Ibid), the asset pentagon was developed to enable information on people's assets to be visually presented so as to see the inter-relations between the assets and the variation in people's access to assets. The pentagon lies within the vulnerability context where poor

people are found. For DFID (Ibid), the idea is that the centre point of the pentagon where lines meet represents zero assets. As you go outer wads people's access to assets increases.

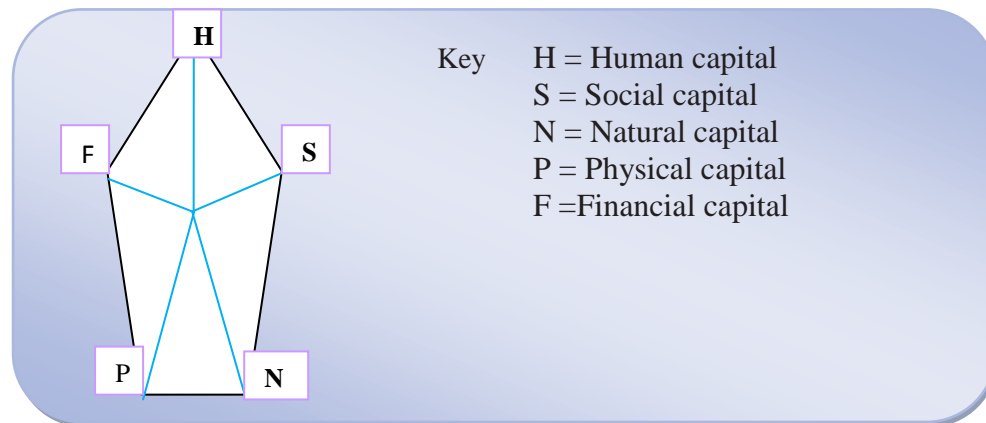


Figure 7: The Asset Pentagon

Source: DIFD (1999), *Sustainable Livelihoods Guidance Sheets*.

The following is the brief description of the livelihoods assets with reference to the DFID (Ibid):

- a) **Human capital:** this refers to skills, knowledge, ability to work and good health that together enable people to pursue different livelihood strategies and achieve their livelihood outcomes. Human capital plays a significant contribution to achieving positive livelihood outcomes through the use of any of the four other types of assets.
- b) **Natural capital:** refers to natural resource stocks such as land, forests, marine/wild resources, water, air quality, erosion protection, waste assimilation, storm protection, biodiversity degree and rate of change through which people make their livelihoods. There is a close relationship between natural capital and vulnerability context. For instance, shocks are natural phenomena that destroy natural capital such as fires that

destroy forests, floods and earthquakes that destroy agricultural land. Seasonality relates to the changes in the value and/or productivity of natural capital over the year.

- c) **Financial capital:** in this context, this means financial resources that people use to achieve their livelihood objectives. Financial capital can be viewed in two aspects: available stocks or savings (this can be in the form of cash, bank deposits or liquid assets such as livestock and jewellery); and regular inflows of money (including pensions, and remittances). Financial resource is said to be the most resourceful of all other assets. For example, it can be directly used to achieve livelihood outcomes such as reduce food insecurity by purchasing food.

- d) **Physical capital:** mainly refers to basic infrastructure (such as roads, rails and telecommunications; shelter and buildings; water supply and sanitation; energy supplies, and access to information), tools and equipment that are needed to support livelihoods and better production.

- e) **Social capital:** in the context of sustainable livelihoods this term is conceived as the social resources upon which people draw in pursuit of their livelihood objectives (DFID, 1999:9). According to DFID (Ibid) social resources are developed through networks and connectedness that help to increase the ability of people to work together and expand their access to wider institutions. Social capital is said to be the most closely connected to transforming structures (policies, institutions) and processes in the vulnerability context.

iii) Structures and Processes

Within livelihoods framework, transforming structures and processes refers to the institutions, organisations, policies and legislation that shape livelihoods (DFID, 1999:17).

The DFID (Ibid) contends that these structures and processes operate at all levels and spheres—from the household to the international level; and from the most private to the most public. Most importantly, they determine access to livelihood assets, strategies and to decision-making bodies, the markets. As such, a clear understanding of governance structures and processes and their effects is critical for the health of people’s livelihoods.

iv) Livelihood Strategies

Livelihood strategies include set of activities such as productive activities, investments, income generating activities that people choose to help them achieve their livelihoods objectives. The DFID (Ibid) holds that livelihoods approach seeks to promote choice, opportunity and diversity. It also pursues to understand factors behind people’s choice of livelihood strategies; reinforcing positive aspects and mitigating the adverse influences. It is believed that people’s access to assets is the major influence on their choice of livelihood strategies as the DFID (1999:23) puts it:

The more choice and flexibility that people have in their livelihood strategies, the greater their ability to withstand – or adapt to – the shocks and stresses of the Vulnerability Context.

Nonetheless, transforming structures and processes underpin positive choices by facilitating mobility in labour markets and increase the efficiency of investment. Conversely, they can act as barriers to choice, restricting access to reducing the mobility of goods and labour.

v) Livelihoods Outcomes

This livelihood outcomes component of the framework refers to the achievements of livelihood strategies. From point of view of the DFID (Ibid) livelihoods outcomes are increased income, increased well-being, reduced vulnerability, improved food security,

and more sustainable use of the natural resource base. On the aspect of more income it is obvious that people seek to see increase in their pocket as the outputs of their livelihood strategies and activities they pursue.

Increased well-being includes people's health status, access to services, their self-esteem, sense of control and inclusion, physical security of household members, and the like. Reduced vulnerability to poor people simply refers to the opposite increasing the overall social sustainability of their livelihoods. Likewise, improved food security refers to reducing food insecurity (vulnerability). Above all, more sustainable use of the natural resource base refers to the wise utilization of environmental asset for our long-term benefits.

3.3 Empirical Literature Review

This study has reviewed various related researches whereby this section has cited three research papers by different authors. In their study, Bee et al (2002) in one hand, analysed and identified ways of strengthening the changing livelihood and employment situations among the pastoral communities in Tanzania. This study identified three villages of Simanjiro District to be used for an in-depth study. These villages are Naisinyai, Lengasit and Kambi ya Chokaa.

Moreover, in their research work, Bee et al (Ibid) employed Sustainable Livelihoods framework in data collection and analysis (Bee et al, Ibid). The SL framework emphasizes on poverty elimination. The study used focus group-interviews approach and managed to interview youth, elderly people, and women. The study also consulted businessmen, miners, farmers, government officials and NGOs staff members. On top of primary data, this study also employed secondary information available in the form of literature and records.

The study observed that pastoral communities are in major crises; they are socially, economically, and politically marginalized and most of them depend on livestock keeping for their livelihoods. This situation is a reflection of inadequate government pastoral development policies, discouragement of the pastoral mode of production, competition in use of the available natural resources, lack of bargaining power and inadequate formal education and training among the pastoral societies (Bee et al, 2002:vii).

This study therefore concluded that pastoralism was still the most important source of livelihood among the pastoral communities though faced by various factors including drought, hence its fall. However, following the decline of livestock livelihoods many pastoralists are now engaging into alternative livelihoods. These include agriculture, business (small and medium scale- selling of traditional medicine, running of restaurants/shops, buying and selling of minerals, selling milk and milk products by women, embroideries), and urban wage employment (Bee et al, 2002:viii).

On the other hand, in their study, Mung'ong'o and Mwamfupe (2003) analysed how pastoralists, the Maasai migrants have adapted themselves into new ecological conditions and the impact of such adaptation on their livelihoods. The study revealed that some pastoralists, Maasai in tribe from Arusha have adapted to other economic occupations in addition to livestock keeping. According to Mung'ong'o and Mwamfupe (Ibid) this adaptation to other economic activities is manifested in different parts of Tanzania including the then Morogoro district and Kilosa district.

This study explains that pastoralists adapt to non-pastoral economic activities as alternative means of livelihoods due to decline of pastoralism. The main reasons for this change in livelihood include loss of grazing land due to several geographical factors and political marginalization; and prolonged drought.

Nevertheless, the study applied the DFID Sustainable Livelihoods Approach to understand the changes of livelihoods among the Maasai pastoralists in Kilosa and Morogoro (now Mvomero and Morogoro rural) districts (Mung'ong'o and Mwamfupe, 2003). The study used a sample of four villages; two from each district namely, Kambala and Dakawa in Morogoro district (now Mvomero) and Dumila and Milama in Kilosa district and covered 160 households.

Moreover, the data was collected both from primary and secondary sources whereby the former included the heads of households, village leaders, and key informants at the village level and the latter obtained from government and research reports. The data collection methods employed included library research, questionnaire interviews and PRA. Furthermore, the study used quantitative and qualitative data analysis methods to analyse data whereby the former used the *SSPS* statistical programme while the qualitative data was analysed manually.

This study revealed that pastoralists, particularly Maasai have been in deep crisis, particularly with regard to the management of their pastures and livestock (Mung'ong'o and Mwamfupe, 2003:16). However, the study concluded that agriculture and livestock keeping would continue to be the core livelihoods for the nomadic Maasai as viable economic pursuits (Mung'ong'o and Mwamfupe, 2003:34).

Nonetheless, indigenous organic poultry is a source of income for family wellbeing. Although currently there is a big move towards commercial poultry, indigenous fowls enjoy the privilege of superiority over exotic birds due to its distinguished characteristics as laid down by various scholars including Singh (2005). The term '*organic*' refers to the way livestock and agricultural products are raised and processed, avoiding agrichemicals

such as synthetic pesticide and fertilizers. Furthermore, it should be noted that in organic poultry production systems, birds are raised without cages in housing that allows outdoor access, are fed organic feed and managed with proactive practices and natural treatments (Fanatico, 2008).

As far as indigenous organic poultry production is concerned Knueppel et al (2009) conducted a case study on improving poultry production for sustainability in the Ruaha Landscape in Tanzania. The study was meant to assess how vaccination of fowls affects the economy of household and to test whether increased livestock productivity could reduce illegal hunting for bush meat (Knueppel et al, 2009: 4). As such, the purpose of this study was to assess the socioeconomic impact of the Newcastle disease vaccinations on households in the project villages. The study covered three control villages namely, Luganga, Magozi, and Iloilo Mpya. The study deployed key informant interviews and household surveys as data collection methods.

In their findings, Knueppel et al (Ibid) revealed that vaccinations increased production of chickens and eggs and meat consumption. According to Knueppel et al (Ibid) findings revealed that indigenous chickens and eggs are primarily used for sale, for household consumption, and at other times, are given as gifts. Households that vaccinated their poultry sold more eggs and chicken (Knueppel et al, 2009:18).

Furthermore, respondents that sold chickens or eggs reported that income earned from these sales in the past six months was used for buying salt, matches, kerosene, clothes, food, school fees, and medicine. As such, the study concluded that Newcastle vaccination has the potential to increase households' chicken holdings, and potential protein availability (Knueppel et al, 2009:18).

3.4 Policy Review

Apparently, Tanzania has not yet developed a policy that specifically addresses livelihoods of its people. As such, this paper calls upon the government of Tanzania to formulate an integrated sustainable livelihoods policy. The policy will have a role to determine people's especially youth access to assets, strategies and markets. However, the Tanzania 2025 Development Vision projects to have citizens with high quality livelihoods, putting people at the centre of development.

Nevertheless, there are other related policies to livelihoods such as agriculture and livestock policy, beekeeping policy, fisheries policy, micro-finance policy, mineral policy, small and medium enterprise policy to list but a few. Since this study pursues to explore various alternative sustainable livelihood opportunities for young women and young men then, this sub-section mainly focuses on youth policy.

The Tanzania youth policy is a multi-sectral intending to cover all necessary sectors for young people including lands, agriculture, fisheries, health, education (skills and knowledge), natural resources/ minerals, and finance among others. Nevertheless, the policy touches all major issues that concern young people. These include economic empowerment for young women and young men, employment crisis mitigation, youth participation; health issues especially HIV & AIDS, adolescent reproductive health, and gender issues.

Tanzania developed its first youth policy in 1996 (GoT, 2007:1), and its main objective was to promote the lives of youth, female and male, by developing them in the areas of economy, culture, politics, responsible parenthood, education and health, and for them to participate in the struggle to bring about national development. However, the

implementation of this policy faced many challenges, hence a need for the new policy- *Sera ya Taifa ya Maendeleo ya Vijana 2007*-‘The National Development Youth Policy 2007’.

The Tanzanian Youth Development Policy 2007 defines youth as a person aged between 15 and 35 (GoT, 2007:11). The policy stipulates that 65% of Tanzanian workforce is the youth and mainly engage into agriculture, fishing, mining, animal husbandry and small scale industries especially in carpentry, tailoring, etc as means of earning their livelihoods.

The policy highlights several problems young women and men face including unemployment. Unfortunately, young people lack necessary skills (technical knowhow) to enable them compete in the labour market. Other problems that face youth especially when trying to pursue their livelihood activities include lack of capital and equipment. Of all its strengths, the policy acknowledges the importance of contribution of young women and young men towards national economic development; thus plans to involve youth, both boys and girls in economic, social and cultural activities. This includes assistance in establishing their self-employment projects. It also provides opportunities for promotion of labour market especially in the informal sector, skills training, and plans for youth health, an engine for youth livelihoods.

3.5 Literature Review Summary

The above literature review managed to make clear the concept of sustainable livelihoods, its approaches, and framework for effective poverty alleviation. Moreover, this section explored the policy related to the study-its strengths and weaknesses. Furthermore, the section reviewed three related researches by Bee et al (2002), Mung’ong’o and Mwamfupe (2003), and Knueppel et al (2009). Both researches concluded that livestock

and agriculture are the two significant livelihoods for nomadic pastoral communities. They also emphasized in the importance of alternative sustainable livelihoods to pastoral communities.

Although these researches have done good job they have not dealt enough with other alternatives for sustainable livelihoods such as poultry for pastoral communities. This research report revealed that integrated alternative sustainable livelihoods can contribute to reduction of communities' vulnerability and poverty alleviation. Therefore, this project intends to increase alternative socioeconomic opportunities to Mela pastoral community especially young women and men by establishing indigenous organic poultry as one of integrated alternative sustainable livelihood strategies.

CHAPTER FOUR

4.0 PROJECT IMPLEMENTATION

4.1 Introduction

This chapter highlights various project implementation modalities which range from expected outputs to actual implementation. It also underlines various inputs used to facilitate activities which in turn transformed inputs into outputs. It delineates project planning including implementation plan, actual implementation and reporting. The chapter displays various project matrixes including logical framework, implementation Gantt chart, and budget. This is a very significant chapter as it is where participatory needs assessment, problem identification and literature review are actually transformed into practical work. For short, the previous three chapters acted as way pavers towards the real work-project implementation.

4.2 Products and Outputs

This project expected to realise two main outputs during its implementation. Nevertheless, each bigger output has minor outputs which contribute to the main ones as follows:

- a) One Indigenous Organic Poultry farm established and actively functioning at Mela pastoral community after securing one hectare of land. A total of 110 fowls including 100 hens and 10 cocks purchased and kept in the poultry farm for further production. The farm acts as a pilot for other community groups and/or households to emulate for their improved economic development. Moreover, two poultry farm attendants deployed for effective overseeing of the farm.
- b) 30 pastoralist young women and young men engaged into socioeconomic groups and indigenous organic poultry groups in particular. These community members would be knowledgeable and skilled in IOP having attended training in improved indigenous

organic poultry and in importance of equal access to social and financial assets between women, girls, men and boys. The trained community members would have adopted indigenous organic poultry with their families as an integrated alternative sustainable livelihood strategy to complement their traditional pastoralism.

4.3 Project Planning

A process of planning for a project involves several activities including development of project implementation plan, inputs, and the logical frame work. It also involves staffing pattern and project budget. This sub-chapter describes these processes in detail.

4.3.1 Implementation Plan

This sub-section presents a project implementation plan which serves as an effective way of project supervision, funds allocation and for monitoring & evaluation purpose. The plan contains five major parts; objectives, activities, person responsible for each activity, necessary resources and time frame indicated in months.

4.3.2 Inputs

The project plans to deploy various inputs in order to facilitate implementation of activities. These include construction materials, human resources such as trainers, poultry farm attendants; meals, transport, accommodation, poultry feeds, feeding utensils and medics. Table 20 displays these inputs:

4.3.4 Project Staffing Pattern

The indigenous organic poultry farm will be staffed mainly by project group members. Nonetheless, the leadership pattern of project group members will consist of the chair person, secretary, and the treasurer. The group chairperson will be the overall in charge of the project

		fence.														materials-Water, Fence materials	Project advisor (student). HO.
		Procure supplementary feeds and feeding containers														Funds	Project advisor (student).
		Deploy Poultry farm attendant														Initial financial capital	Poultry farm group members.
		Obtain 110 indigenous chickens as initial capital														Funds	Group members. Project advisor (student).
		Secure poultry local medics and vaccination														Time Funds	Poultry farm group members.
		Poultry production														Manpower	Poultry farm group members.
		Poultry treatment														Manpower	Group members.
	30 pastoralist young women and young men are engaged into socioeconomic groups and	Create awareness through meetings on importance of social and economic														Meeting venue. Transport means. Meals.	Project advisor (student). Host Organisation.

indigenous organic poultry groups in particular.	groups to community development																		
	Train community members on importance of equal access to social and financial assets between women, girls men and boys																	Training venue. Transport means Meals. Training materials. Accommodation.	Project advisor (student). Host Organisation.
	Organise community members especially young women and young men into socioeconomic groups especially IOP																	Meeting venue. Transport means. Meals.	Project advisor (student). Host Organisation.
	Monitoring and Evaluation																	Transport means. Meals.	Group members. Project advisor (student). HO.

Adapted from CEDPA (1994:46)

Table 20: Project Inputs

S/n	Input	Quantity	Measure
1.	Manpower (trainers, masonry technicians, attendants).	6	Persons
2.	Equipment (computer, printer)	Lump sum	Lump sum
3.	Training materials	Lump sum	Lump sum
4.	Meeting venue	1	Room/ open space
5.	Transport	4	Trips
6.	Meals	45	Persons
7.	Accommodation	6	Persons
8.	Construction materials; locally available and shopped ones (chain links)	Lump sum	Lump sum
9.	Local chickens	110	Pieces
10.	Poultry feeds and feeding containers (for start-up)	Lump sum	Lump sum
11.	Poultry local medicine (for start-up)	Lump sum	Lump sum
12.	Time allocation	Lump sum	Lump sum

Source: Project planning data (2012)

4.3.3 Project Logical Framework

Table 21: Integrated Organic Poultry Project Log frame

Objective Hierarchy (OH)	Objectively Verifiable Indicators (OVIs)	Means of Verification	Assumptions and Risks (A&R)
<p>Goal Increased community alternative socioeconomic opportunities especially to pastoralist young women and young men at Mela village in Tanzania by establishing indigenous organic poultry.</p>	<p>Number of integrated alternative sustainable livelihood strategies</p>	<p>Project report. End of project evaluation report.</p>	<p>Active community participation and adherence.</p>
<p>Outcome Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.</p>	<p>% of pastoralist young women and young men accessed social and financial assets.</p>	<p>Project report. End of project evaluation report.</p>	<p>Community acceptance of the project</p>
<p>Output 1 One Indigenous Organic Poultry farm established and actively functioning at Mela Pastoral Community. Activities: 1.1 Organize community meetings. 1.2 Develop a training plan. 1.3 Develop a training manual 1.4 Organize training to pastoralist young women and men in improved IOP. 1.5 Securing land, identifying and clearing site for constructing a poultry hut. 1.6 Mobilize construction materials. 1.7 Construct an IOP hut and a fence. 1.8 Procure supplementary feeds and feeding containers. 1.9 Deploy Poultry farm attendant. 1.10 Purchase 110 indigenous chickens as initial capital. 1.11 Secure poultry local medics and vaccination. 1.12 Poultry vaccination/treatment (mainly using herbs).</p>	<p>Number of poultry farm established and actively operating</p>	<p>Physical observation. Project progressive report.</p>	<p>Community acceptance of the project</p> <p>All allocated resources will be used according to the planned activities.</p> <p>There will be no drought during project implementation.</p> <p>Poor participation of CBO and individuals.</p> <p>Community social issues and events like attending funeral, Scarce resources.</p>

<p>Output 2 30 pastoralist young women and young men are engaged into socioeconomic groups and indigenous organic poultry groups in particular.</p> <p>Activities: 2.1 Create awareness through meetings on importance of social and economic groups to community development. 2.2 Train community members on importance of equal access to social and financial assets between women, girls, men and boys. 2.3 Organise community members especially young women and young men into socioeconomic groups especially IOP.</p>	<p>Number of pastoralist young women and young men engaged into socioeconomic groups.</p>	<p>Observation and Project progressive report.</p>	
<p>Inputs: 1. Manpower (trainers, masonry technicians, attendants). 2. Training materials. 3. Transport means. 4. Meals and accommodation. 5. Construction materials. 6. Local chickens. 7. Poultry feeds and feeding containers (for start-up). 8. Poultry local medicine.</p>			

Source: Adapted from CARE (2007:8)

Among other specific roles and responsibilities she or he will convene and chair meetings and sittings according to schedule or any time when a need arises. She or he will be the group's spokesperson in all issues concerning leadership, production and sales of products.

The secretary will be responsible for ensuring all poultry project records are properly documented. She or he will be the group's minute taker in all legitimate meetings. Nevertheless, the project treasurer will be a key person as far as financial records is concerned. She or he will ensure all financial transactions are properly recorded and kept.

Nonetheless, poultry farm group members will deploy other two attendants to attend all day to day activities at the farm. These tasks include poultry hut cleanliness, feeding, locally fowls vaccinating/treating; and selling processes of chickens including packing, transporting and distributing to identified specific hotels and to the market as well.

4.3.5 Project Budget

This project expects to cost a total of TZS 4,740,000 as an initial capital for establishing a poultry farm with 110 fowls (100 hens and 10 cocks). If handled properly the project expects to produce an average of 10 chicks from each hen making total of 1,000 chickens in three-month period. In turn, the 1,000 chickens could be sold at TZS 7,000 price each before they are grown up enough. As such, the project expects to generate at least TZS 7,000,000 through the sales of 1,000 chickens within a six-month period. In order to achieve these expectations the project will need various resources which are categorised into three categories as follows:

- i. Personnel costs which entail wages for poultry farm attendants. The attendants will be responsible for ensuring safety of the chickens and their feeds.
- ii. Professional and consultancy services which concerns about costs to be covered during training as training and consultancy fees.
- iii. Materials & consumables which will cover all costs for the project implementation including purchasing chickens, construction of poultry hut, training materials, meals and transport just to mention a few. More details are found in the table 22.

Table 22: Integrated Organic Poultry Project Budget

S/n	Category and Description	Quantity	Unit measure	Duration	Unit	Unit price	Total cost
		(# of staff/units)	(person, meetings, chickens)	number only)	days, months, year)	in TZS	in TZS

A:	Personnel costs						
1.	Wages for poultry farm attendants (for start-up)	2	Persons	2	Months	50,000	200,000
	Sub-total for personnel						200,000
B:	Professional services & Consultancy						
1.	Allowances and training fees	2	Persons	4	Days	50,000	400,000
	Professional services & Consultancy						400,000
C:	Materials & consumables						
1.	Organize community meetings on IOP project-transport, meals, accommodation	4	Meetings	1	Day	60,000	240,000
2.	Develop a training plan	1	Persons	2	Days	60,000	120,000
3.	Procure training materials	Lump sum					40,000
4.	Organize training to pastoralist young women and men in improved IOP	45	Persons	4	Days	2,000	360,000
4.	Securing land, identifying and clearing site for constructing a poultry hut	2	Persons	5	Days	10,000	100,000
5.	Mobilize construction materials (locally available and shopped ones)	Lump sum		5		Lump sum	1,600,000
6.	Construct an IOP hut and a fence.	2	Persons	10	Days	10,000	200,000
7.	Procure supplementary feeds and feeding containers	Lump sum		2		Lump sum	100,000
8.	Purchase indigenous chickens	110	Chickens	1	Day	8,000	880,000
9.	Secure poultry local medics and vaccination	Lump sum				Lump sum	50,000
10.	Create awareness through meetings on importance of social and economic groups to community development – transport, meals	2	Meetings	1	day	60,000	120,000

11.	Train community members on importance of equal access to social and financial assets between women, girls men and boys	45	Persons	1	Day	6,000	270,000
12.	Organise community members especially young women and young men into socioeconomic groups especially IOP	1	Sitting	1	Day	60,000	60,000
	<i>Sub-total for Materials & consumables</i>						4,140,000
	Grand total						4,740,000

Source: Project planning data (2012)

4.4.1 Project Implementation Report

This section explains what went well, what did not work and puts forward suggestions for improvement. As such, the section presents project achievements, challenges, lessons learned, and the way forward.

i) Project Achievements

- a) Increased community access to cash at home especially amongst pastoralist young women and young men. This project has successfully managed to facilitate the community to have access to financial assets through selling of chickens and eggs from the established indigenous organic poultry scheme. For instance, the poultry farm group has collected total of TZS 4,548,000 from sales of 640 chickens and 970 eggs. Income from sales of chickens was TZS 4,160,000 at a rate of TZS 6,500 each while sales of eggs was TZS 388,000 at a rate of TZS 400 per egg. This income equals to 72.2 per cent of the target of TZS 6,300,000. The earned income was equally distributed to members

whereby every group member received TZS 349,846. Most of project group members especially young women reported to use the cash for buying goats and other domestic items like salt, matches, kerosene, materials for making beads. Others put their money into initial share for Village Savings and Loans (VSL).

- b) Managed to establish an indigenous organic poultry farm at Mela pastoral community and it is actively operating. Before establishment of the farm the project management secured land, identified and cleared the identified site for construction of a poultry hut. Nevertheless, community group members in collaboration with the project adviser mobilized construction materials.



Photo 2: A Young Woman Taking one of the Checkens from a Poultry Hut for Sale



Photo 3: A Cross-section of Chickens in the Poultry Hut

- c) As response to improving community access to social and economic assets, the project managed to organise 13 pastoralist young women and young men into indigenous organic poultry group. This is equal to 43 per cent of the target which was 30. Among them 11 (equals to 85%) are young women and 2 (equal to 15%) are men. The formed group named Maasai vernacular as *Eneboshu* meaning *let's unite*. The group has its leadership being led by young pastoralist ladies. Every one of these beneficiaries has a stake in the established poultry farm.
- d) Conducted training to 37 (equals to 82% of the target of 45) pastoralist young women and young men in improved indigenous organic poultry and on importance of equal access to social and financial assets. These included 20 (54%) young women and 17 (46%) young men.



Photo 4: A Cross-section of Young Women and Men During Training in Indigenous Organic Poultry at Mela Primary School

- e) Obtained total of 100 fowls including 90 hens and 10 cocks as initial capital for the project. This is equal to 91 per cent of the target of 110. Either, the project deployed one security guard for the farm to ensure security of chickens especially at night. The deployment of a security guard replaced the plan to engage two poultry farm attendants.
- f) As part of initial preparation, the project purchased supplementary feeds as well as feeding containers. In addition, the project also secured local medicines for poultry treatment and vaccination. The project management trained group members on how to use these herbs. This was important part of the project as it emphasized on organic poultry. The term ‘*organic*’ refers to the way livestock and agricultural products are

raised and processed, avoiding agrichemicals such as synthetic pesticide and fertilizers (Fanatico, 2008).

- g) In the process of engaging the community the project organised four community meetings on indigenous organic poultry project and on importance of social and economic groups for economic development. A total of 51 community members including 19 women and 32 men participated.
- h) Nevertheless, this project started by conducting an academic study; community needs assessment. The study successfully conducted in a tripartite manner, namely project advisor (the student), Mela Village Council and with support from the Open University of Tanzania (OUT). The CNA revealed that pastoralists are the most socially and economically marginalized deeply depend on livestock keeping.
- i) Further findings demonstrated that girls and women unlike their counterparts, boys and men are socially and financially more marginalized. Nonetheless, the study has shown that young people are economically more marginalized as compared to adults. However this research work discovered that pastoralists can adopt other activities such as indigenous poultry and agriculture.
- j) In addition to CNA the project identified significant problems facing the community in question. For instance, Mela pastoral community face socioeconomic barriers, including limited access to social capital and financial assets.
- k) The project also successfully reviewed related literatures with the aim of making clear the concept of *integrated alternative sustainable livelihoods*. The study explored youth development policy and research papers related to the study. The two research papers emphasized in the importance of alternative sustainable livelihoods to pastoralists. The literature review also identified the gap left by previous studies such as poultry as an alternative sustainable livelihood strategy.

ii) Challenges Faced

Apart from achievements attained the project management identified several challenges revealed during the project implementation period. These included the following:

- a) *Delay of project cycle completion.* Masaai traditional practices are a hindrance to fully completion of the targeted activities. In one hand, most of Masaai populations do not eat chickens and therefore the indigenous organic poultry project did not receive inadequate support from the community. However, those who perceive poultry as source of income consider it as inferior project; hence their participation was also low. On the other hand, young women who are socially and economically most marginalized did not effectively participate in the project. Most of them were not allowed by their spouses or/and their parents to participate mainly due to unfavourable traditional practices. For instance, pastoralist women are not allowed to speak in front of men.
- b) Poor record keeping for poultry production and chickens due to high illiterate rate amongst community members. For instance, about 72.7 per cent of IOP group members were not able to read and write.
- c) Inadequacy of poultry feeds especially during rainy season because most pastoralists especially Masaai neither cultivate any crops nor cook hot meals from which chickens would get food. Purchasing feeds from the nearest town was expensive and most of community members had no access to cash at home or at bank.
- d) Difficulty in prioritizing needs for subsequently establishing problems of the community in question. The community had a lot of priorities to choose from. This lead to difficult situation as far as consensus amongst community members is concerned. However, in the process of levelling the priorities and to make a win-win situation, the community agreed to establish indigenous poultry scheme. According to CNA findings, pastoral community can adopt other livelihoods strategies including poultry.

- e) There was a very little contribution from women and girls during awareness raising meetings. Pastoralist men dominated the meetings. At times, women were to share to men what they wanted to contribute before they dared to say publicly. This situation shows that women have limited freedom of speech especially in front of men in pastoralist communities.

iii) Lessons Learned

- a) This project has learned that participation of traditional leadership like *Laigwenani* (Maasai superior) in development issues is critical and inevitable in pastoralist communities. They usually play the role of facilitation and lobbying.
- b) The project has also learned that poultry, if utilized effectively, is one of livelihood strategies that contribute to improving access to socioeconomic assets; and subsequently to the reduction of vulnerability and poverty eradication in pastoral communities.

iv) Way Forward

- (i) *Conduct final project evaluation*: Conduct final project participatory evaluation to assess the project outcomes.
- (ii) *Establishment of milk collection centre*: Since one of the topmost need of Mela pastoralist community is milk market, efforts should be stressed to establish a milk collection centre at this community. This would contribute to increasing access to financial asset especially to young women and girls.
- (iii) *Savings & credit scheme*: Organise the community especially young people into a savings and credit scheme known as *village savings and loans association (VSLA)*. This is to complement their ongoing IOP project and expand opportunities for access to financial assets.

(iv) *Construction of a dispensary:* Equally, health service was one of the uppermost priorities for this community. As such, its establishment would contribute to improved health service to Mela pastoral community members.

4.4.2 Project Implementation Gantt Chart

The implementation of activities was guided by a project Gantt chart. The chart illustrates planned activities and responsible person for each activity. It also shows dates when each activity started as well as when it ended with the duration shown. The Gantt chart also displays status of implementation per each activity.

Table 23: Project Implementation Gantt Chart

Objective	Outputs	Activities	Timeframe (in months)																	
			2012										2013							
			5	6	7	8	9	10	11	12	1	2	3	4	5					
Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.	One Indigenous Organic Poultry farm established and actively functioning at Mela pastoral community	1.1 Organize community meetings																		
		1.2 Develop a training plan																		
		1.3 Organize training to pastoralist young women and men in improved IOP																		
		1.4 Securing land, identifying and clearing site for constructing a poultry hut																		
		1.5 Mobilize construction materials																		
		1.6 Construct an IOP hut and a fence.																		
		1.7 Procure supplementary feeds and feeding containers																		
		1.8 Deploy Poultry farm attendant																		
		1.9 Obtain 110 indigenous chickens as initial capital																		
		1.10 Secure poultry local medics and vaccination																		
		1.11 Poultry vaccination/treatment using herbs.																		
	30 pastoralist young women and young men are engaged into socioeconomic groups and indigenous organic poultry groups in particular.	2.1 Create awareness through meetings on importance of social and economic groups to community development																		
		2.2 Train community members on importance of equal access to social and financial assets between women, girls men and boys																		
		2.3 Organise community members especially young women and young men into socioeconomic groups especially IOP																		

Source: Adapted from CEDPA (1994)

CHAPTER FIVE

5.0 PROJECT PARTICIPATORY MONITORING, EVALUATION AND SUSTAINABILITY

5.1 Introduction

This chapter delineates various approaches to participatory monitoring, evaluation and sustainability. It explains how monitoring and evaluation system could be developed for this project. Specifically, the chapter explains methods for monitoring activities. It presents participatory monitoring plan, matrix and monitoring activity time table. It also highlights participatory evaluation methods, performance indicators and presents project evaluation summary. At the end of this chapter the author presents project sustainability plan and explains various strategies for sustainability.

5.2 Participatory Monitoring

From its inception, this project was built in line with community participation approach. This is the process of getting community members actively involved in all forms of decision-making for issues they concern; empowering them to identify their problems and suggest solutions. In line with this principle, this project's monitoring of activities was also participatory. Participatory monitoring of activities is critical for effective project implementation and subsequent sustainability of the project.

In this project participatory monitoring refers to as a regular and systematic process of collecting and analyzing information and reporting for decision making purpose through involvement of local community. For short, it is a process of tracking implementation together. The monitoring process based on the tripartite approach in which the community (IOP group members), the host organization and the project advisor actively participated. Each part not only participated in designing and implementing a monitoring

plan but also in every stage of the project. These stages included community needs assessment and prioritisation, problem identification, and implementation of the project.

Monitoring activities for this project was mainly meant to track implementation of planned activities; keeping them on track. It was also meant to assist project implementers, stakeholders and the IOP project advisor to identify problems could emerge in the course of executing interventions and find out ways to mitigate the problems. Another purpose of monitoring was to enable project participants to discover trends in production and sales. It also assisted to assess project progress towards achieving the expected outcomes.

All in all, the monitoring system helped project participants to make collective decisions over various resources used in the project. These resources included manpower, funds, materials and equipment used to the project.

Participatory monitoring was a continuous process during the implementation of this project. Initially the project stakeholders and beneficiaries altogether developed a simple Monitoring Information System earlier before starting project implementation. The monitoring information system acted as a guideline for monitoring of activities. The three parties, namely community, host organisation and project advisor were the main monitors of activities throughout the project.

This project mainly used field visits and review of production records for its monitoring. During this period the project monitored variety of information including poultry production, sales and expenditures. Nonetheless, the project monitored human resources

mainly the deployed poultry farm attendants as well as supervision. This project also monitored materials and equipment deployed to the project.

5.2.1 Monitoring Information System

Information System is highly required for effective collection of information that enables project management to plan for effective monitoring of activities. Monitoring information system as conceived by CEDPA (1994:53) is a system that is designed to facilitate project management to collect and report information over all aspects of a project in question. It is meant to enable “a manager to plan, monitor, and evaluate the operations and performance of the project” (CEDPA, 1994:53). For this project, monitoring information system was meant to guarantee project participants access to information for monitoring of activities.

Project team applied various steps in designing a monitoring information system for the project. These included assessing the identified project indicators at all levels-input indicators, output indicators and outcome/impact indicators. Under this, the project assessed whether the indicators were clear, relevant and whether they were objectively verifiable. In addition to indicators, the project also identified categories of information which was required for project monitoring activities.

Additionally, this project determined what activities should be monitored. The project also decided who should collect the information required, and the frequency in which data would be collected. It also identified people who should use the collected information and suggested how to use it. Furthermore, the project determined what records to keep and what decisions could be made having collected and reported the information to the project management team.

5.2.2 Participatory Monitoring Method(s)

This project deployed Participatory Rural Appraisal (PRA) as the main participatory monitoring method. PRA is ‘a growing family of approaches, methods, attitudes and behaviours to enable and empower people to share, analyse and enhance their knowledge of life and conditions, and to plan, act, monitor, evaluate and reflect’ Chambers (2002:3). According to Chambers (Ibid) PRA is concerned with the shift from dominating by a few group of people such as policy makers to empowering communities; from closed policy making or planning to open planning; and from individual to group.

PRA relies heavily on participation by the communities visited, as the method is designed to enable local people to participate, not only as sources of information but as partners in gathering and analyzing the information (Rietbergen-MacCracken and Narayan-Parker (1998:142). PRA used mainly as part of *regular interactions* with the local community (Mela pastoralist community) throughout the project cycle believing that it is the local community’s responsibility to take a major stake in the project. In this interaction, local community members served as partners in the whole process of the project.

Moreover, the project used PRA as a facilitation tool to community’s collective decision making and community empowerment. Using PRA as empowering approach for local community involved identification of the host organisation and its capacity building as far as project management as concerned. Community empowerment through PRA strengthened the local community to be able to carry over project implementation and monitoring of activities. Nevertheless, this project used PRA for consultation purpose throughout the project life cycle.

The project advisor made several consultations with the local community mainly to learn about community's point of view as well as its priorities over the project. The project adviser consulted local community on key issues at every stage of the project cycle. Furthermore, the project used PRA as a consultation tool during community needs assessment (including prioritisation of needs), project identification and design, implementation and monitoring with good representation of women and girls. Through community consultation technique of PRA beneficiaries got opportunities to interact and provide feedback in all stages of the project cycle.

The project team deployed various techniques in using PRA method. These included interviews particularly during CNA which involved households as well as individual local community members. The team also applied preference ranking technique especially during community needs assessment primarily to reveal community's priorities. The project also used community meetings technique for PRA to gather information on how the project should look like. Meetings were also used during reviewing project implementation and tracking its indicators whether they were being achieved. The team also applied observation technique to vividly see the project implementation status and the poultry production. For short, community members, host organisation and the project advisor altogether observed the project development periodically.

5.2.3 Participatory Monitoring Plan

For effective tracking of activities implementation, project participants in their tripartite bond considered monitoring activities as critical part. As such, participatory monitoring was well planned.

Table 24: Monitoring Information System

Information categories	What to monitor?	What records to keep?	Who collects data?	Who uses data?	How to use information?	What decision can be made?
Work plan activities	<ul style="list-style-type: none"> ✓ Timing of activities. ✓ Manpower ✓ Materials ✓ Financial resources 	<ul style="list-style-type: none"> ✓ Project work plan. ✓ Work schedule 	<ul style="list-style-type: none"> ✓ Community members. ✓ Host organization ✓ Project advisor. 	<ul style="list-style-type: none"> ✓ Community members. ✓ HO. ✓ Project advisor. 	<ul style="list-style-type: none"> ✓ Ensure availability of necessary resources. 	<ul style="list-style-type: none"> ✓ Reschedule of activities ✓ Deployment of required resources.
Income and expenditure	<ul style="list-style-type: none"> ✓ Funds budgeted ✓ Funds secured. ✓ Expenditures ✓ Balance. 	<ul style="list-style-type: none"> ✓ Project budget. ✓ Sales and expenditures ledger. ✓ Sales receipts. 	<ul style="list-style-type: none"> ✓ Community members. ✓ HO ✓ Project advisor. ✓ Poultry attendance 	<ul style="list-style-type: none"> ✓ Community members. ✓ Host organization. ✓ Project advisor. 	<ul style="list-style-type: none"> ✓ Ensure funds availability and proper expenditures 	<ul style="list-style-type: none"> ✓ Make project budget review. ✓ Authorised expenditures
Staff and supervision	<ul style="list-style-type: none"> ✓ Attitude. ✓ Skills of staff ✓ Knowledge. ✓ Educational level. ✓ Salaries/wages (and benefits). ✓ Job performance. 	<ul style="list-style-type: none"> ✓ Job descriptions. ✓ Feedback from training attended. ✓ Certificate 	<ul style="list-style-type: none"> ✓ Supervisor. 	<ul style="list-style-type: none"> ✓ Community members. ✓ Host organization ✓ Project advisor. ✓ Supervisor. 	<ul style="list-style-type: none"> ✓ Ensure staffers are skilled and knowledgeable on IOP. 	<ul style="list-style-type: none"> ✓ Training to staff. ✓ Disciplinary action
Commodities (chickens)	<ul style="list-style-type: none"> ✓ Stock. ✓ Ordering. 	<ul style="list-style-type: none"> ✓ Stock registers. ✓ IOP attendants reports 	<ul style="list-style-type: none"> ✓ Supervisors. ✓ Community members. 	<ul style="list-style-type: none"> ✓ Community members. ✓ Host organization ✓ Project advisor. 	<ul style="list-style-type: none"> ✓ Ensure availability of commodities at IOP farm. ✓ Ensure commodities are in good condition. 	<ul style="list-style-type: none"> ✓ Deployment of required resources. ✓ Training to staff.
Results	<ul style="list-style-type: none"> ✓ Poultry farm existence. ✓ Number of commodities (chickens) purchased and produced. ✓ Sales against expenditure. 	<ul style="list-style-type: none"> ✓ Stock registers. ✓ Poultry attendance reports. 	<ul style="list-style-type: none"> ✓ Supervisors. ✓ Community members. 	<ul style="list-style-type: none"> ✓ Community members. ✓ Host organization ✓ Project advisor. 	<ul style="list-style-type: none"> ✓ Ensure the set objective is realistic. 	<ul style="list-style-type: none"> ✓ Revise objective ✓ Re-train staff.

Source: Adapted from CEDPA, 1994:59

The planning process included development of participatory monitoring information matrix. This matrix contains information like, expected outcomes, outcome indicators, sources of information, suggested tools for data collection, and responsible person for information gathering. . In addition to information matrix, the planning process developed a monitoring work plan matrix. It contains information about monitoring participants. It also highlights project objectives, activities and time frame for monitoring activities.

Box 1: PRA Matrix of Techniques

PRA Matrix of Techniques for IOP Monitoring activities	
Issue to be monitored	Technique that can be used
Timing of activities.	<ul style="list-style-type: none"> ○ Timeline
Resources-manpower, materials and finance.	<ul style="list-style-type: none"> ○ Meetings ○ Semi-structured interviews
Income and expenditure	<ul style="list-style-type: none"> ○ Financial record review
Staff and supervision	<ul style="list-style-type: none"> ○ Observation ○ Semi-structured interview ○ Meetings.
Commodities	<ul style="list-style-type: none"> ○ Observation ○ Production record review
Project results	<ul style="list-style-type: none"> ○ Meetings ○ Observation ○ Production record review

Source: Adapted from Rietbergen-MacCracken and Narayan-Parker (1998)

Table 25: Participatory Monitoring Information Matrix

Expected outcome	Outcome indicators	Base line value	Target (Desired value)	Data sources	Data Methods/ Tools	Data analysis methods	Information dissemination channels	Person responsible	Frequency
Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.	% increase of young women/ men access to social and financial assets	30%	25%	Pastoral community	Semi-structured interviews	Quantitative and qualitative methods	Community meetings	Project adviser/ Community/ HO	Semi-annually
	Number of poultry farm established and actively operating	0	1	Poultry farm site	Observation	Qualitative method	Photographs	Project group members/HO Project adviser	Semi-annually
	Number of community meetings held	N/A	4	HO Community	Interviews Reports review	Qualitative method	Presentation	Project adviser/ HO	Quarterly
	Number of young women and young men trained on IOP	N/A	45	Activity report. Community member	Interviews Activity reports review.	Qualitative method	Photographs Presentation	Project adviser Host Organisation	Semi-annually
	Poultry hut and local fence constructed	0	1	Poultry farm site	Observation	Qualitative method	Photographs	Project group members/HO Project adviser.	Semi-annually
	Number of poultry attendants deployed	N/A	2	Poultry farm site	Observation	Qualitative method	Group meetings	Poultry farm project group members	Semi-annually
	Number of indigenous chickens procured	N/A	110	Poultry farm site	Records review Observation.	Qualitative method	Group meetings Photographs	Group members/Host Organisation/ Project adviser.	Monthly
	Number of awareness creation meetings held	N/A	2	Community members/ HO/Activity reports	Activity reports review	Qualitative method	Photographs Presentation	Host Organisation Project adviser.	Semi-annually
	Number of community	N/A	45	Community	Interviews	Qualitative	Photographs	Project advisor.	Semi-

	members trained on			members HO Activity reports	Activity reports review	method	Presentation	Host Organisation	annually
	importance of equal access to social/financial assets								
	Number of young women and young men organised into socioeconomic groups	0	30	HO Community members	Semi- structured interviews	Quantitative/ Qualitative method	Photographs Presentation	Project advisor Host Organisation	Semi- annually

Source: Adapted from CEDPA (1994:64) and CARE (2007:41)

Table 26: Participatory Monitoring Work Plan Matrix

Objective	Activities	Participants	Lead person	Time frame
Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.	Organize community meetings	Community/HO/Project adviser	Project adviser	Quarterly
	Organize training to pastoralist young women and men in improved IOP	Project adviser/ Host Organisation.	Project adviser	Semi-annually
	Securing land, identifying and clearing site for poultry hut and fence	Group members/HO Project adviser	Poultry group members	Quarterly
	Mobilize construction material	Group members/HO	Group members	Monthly
	Construct an IOP hut and a fence.	Group members/HO/ Adviser	Group members	Semi-annually
	Procure supplementary feeds and feeding containers	Poultry project group members. Project adviser	Poultry project group members	Monthly
	Deploy Poultry farm attendant	Group members/ HO	Group members	Semi-annually
	Obtain 110 indigenous chickens	Group members/HO/Adviser	Group members	Monthly
	Secure poultry local medics and vaccination	Poultry farm group members/ Project adviser	Poultry farm group members	Monthly
	Poultry production	Members/ Project adviser	Group members	Monthly
	Poultry vaccination/treatment	Members/Farm attendants	Group members	Quarterly
	Create awareness through meetings on importance of socioeconomic groups	Project adviser/HO/ Community members	Project adviser	Semi-annually
	Train community members on importance of equal access to social and financial assets	Project adviser/ Host Organisation/Community members	Project adviser	Semi-annually
	Organise community members especially young women and young men into socioeconomic groups especially IOP	Project adviser/ Host Organisation/Community members	Project adviser	Semi-annually

Source: Adapted from CEDPA (1994:64) and CARE (2007:43)

Table 27: Participatory Monitoring Activity Time Table

Activities	Timeframe (in months)													
	2012							2013						
	5	6	7	8	9	10	11	1	2	3	4	5		
Organize community meetings														
Develop a training plan														
Organize training to pastoralist young women and men in improved IOP														
Securing land, identifying and clearing site for poultry hut														
Mobilize construction material														
Construct an IOP hut and a fence.														
Procure supplementary feeds and feeding containers														
Deploy Poultry farm attendant														
Obtain 110 indigenous chickens as initial capital														
Secure poultry local medics and vaccination														
Poultry production														
Poultry vaccination/treatment														
Create awareness through meetings on importance of social and economic groups														
Train community members on importance of equal access to social and financial assets														
Organise community members especially young women and young men into socioeconomic groups especially IOP														

Source: Adapted from CEDPA (1994) and CARE (2007)

5.3 Participatory Evaluation

Various scholars understand the concept of participatory evaluation in different angles. According to Estrella and Gaventa (1998) participatory evaluation is an ongoing process of community learning and capacity-building whereby participants learn from their own achievements and challenges. Nevertheless, participatory evaluation is all about involving the less powerful, visible and assertive actors in evaluating development efforts (Campos

and Coupal, 1996:22 in Estrella and Gaventa, 1998). Therefore participatory evaluation refers to as a process of sharing outcomes after a process of gathering and analyzing information is completed through active community involvement.

Participatory evaluation differs from participatory monitoring in many ways. One of the key ways is that the former assesses the outcomes and impacts brought by outputs and the latter tracks the implementation of the planned activities. Nonetheless, while participatory monitoring makes follow up on delivery and utilisation of resources, participatory evaluation explores justification of resources used in the project. For short, participatory monitoring tracks activities vis-à-vis resources whilst participatory evaluation assesses whether project objectives have been attained and examines effectiveness of resources used. Nevertheless, Campos and Coupal (1996:8 in Estrella and Gaventa, 1998:7) highlights the main functions of participatory evaluation as follows:

‘...to provide stakeholders and programme managers with information to assess whether project objectives have been met and how resources have been used, in order to help improve programme implementation and make critical decisions about project funding’.

5.3.1 Performance Indicators

The goal of this project is to increase community alternative socioeconomic opportunities especially to pastoralist young women and young men at Mela Pastoral Community in Tanzania. This goal will be reached through objectives, outputs, activities and inputs, and their performances will be traced by a hierarchy of indicators. In the process of evaluating this project, the adviser facilitated the community and the host organisation altogether to identify project performance indicators. These include inputs, outputs and outcome indicators. Box 2 shows performance indicators for the project.

Box 2: Project Performance Indicators

Objective Hierarchy	Performance Indicators
Outcome	
Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25%.	<ul style="list-style-type: none"> ○ 55% of pastoralist young women and young men accessed social and financial assets.
Output 1	
Indigenous Organic Poultry farm established and actively functioning at Mela Pastoral Community.	<ul style="list-style-type: none"> ○ 1 poultry farm established and actively operating
Activities:	
1.1 Organize community meetings.	<ul style="list-style-type: none"> ○ 4 community meetings organised
1.2 Develop a training plan.	<ul style="list-style-type: none"> ○ A training plan developed and in place
1.3 Organize training to pastoralist young women and men in improved IOP.	<ul style="list-style-type: none"> ○ A training in improved IOP organized to pastoralist young women and young men
1.4 Securing land, identifying and clearing site for constructing a poultry hut.	<ul style="list-style-type: none"> ○ A five-hectare land secured, site identified and cleared for construction of a poultry hut
1.5 Mobilize construction materials.	<ul style="list-style-type: none"> ○ Construction materials mobilized
1.6 Construct an IOP hut and a fence.	<ul style="list-style-type: none"> ○ An IOP farm hut and a fence constructed
1.7 Procure supplementary feeds and feeding containers.	<ul style="list-style-type: none"> ○ Supplementary feeds and feeding containers procured
1.8 Deploy Poultry farm attendant.	<ul style="list-style-type: none"> ○ 2 poultry farm attendants deployed
1.9 Purchase 110 indigenous chickens as initial capital.	<ul style="list-style-type: none"> ○ 110 indigenous chickens purchased
1.10 Secure poultry local medics and vaccination.	<ul style="list-style-type: none"> ○ Local medics and vaccination secured
1.11 Poultry vaccination/treatment (mainly	<ul style="list-style-type: none"> ○ 110 chickens vaccinated

using herbs).	
Output 2	
Pastoralist young women and young men are engaged into socioeconomic groups and indigenous organic poultry groups in particular.	○ 45 pastoralist young women and young men engaged into socioeconomic groups.
Activities:	
2.1 Create awareness through meetings on importance of social and economic groups to community development.	○ 2 awareness meetings held
2.2 Train community members on importance of equal access to social and financial assets between women, girls, men and boys.	○ 45 community members trained
2.3 Organise community members especially young women and young men into socioeconomic groups especially IOP.	○ 45 community members especially young women and men organized into socioeconomic groups
Inputs:	
Manpower (trainers, masonry technicians, attendants).	○ 2 trainers, 2 poultry farm attendants, and 2 masons are engaged in the project
Training materials.	○ Flip charts, mark pens, manila cards, masking tapes, photo copy papers, and print out materials
Transport means.	○ TZS 120,000 spent for fare
Meals and accommodation.	○ TZS 120,000 spent for meals & accommodation
Local chickens.	○ TZS 880,000 spent for procuring chickens
Poultry feeds and feeding containers (for start-up).	○ TZS 100,000 spent for poultry feeds
Poultry local medicine.	○ TZS 50,000 spent for obtaining local medicines

5.3.2 Participatory Evaluation Methods

Like participatory monitoring this project deployed Participatory Rural Appraisal (PRA) as the main participatory evaluation method. The evaluation was participatory and internal whereby the local community (project group members), the host organisation and the project adviser participated fully in assessing results achieved. There were no external evaluators for this project. The evaluation looked at the progress in work plan that covered the period from May 2012 to May 2013. It also assessed the implementation of planned activities, and achievement of the expected outcomes.

Nevertheless, the participatory evaluation explored cost-effectiveness of the project. The project used various tools during data collection and its subsequent analysis. These tools included focus group discussions, semi-structured interviews, observation, and records review. This project used both quantitative and qualitative methods for data analysis. As far as frequency of evaluation as concerned, the project conducted one session during the project life cycle. This was a mid-term evaluation. The final evaluation will be conducted later on to measure outcomes and impacts.

5.3.3 Project Evaluation Summary

Participatory evaluation was mainly meant to assess whether the project objective and its outputs were achieved. Moreover, participatory evaluation aimed to measure whether the inputs employed to the project were used properly as per allocation.

5.4 Project Sustainability

Various scholars have defined ‘project sustainability’ in different ways. For instance, many economists and international development agencies have defined project sustainability as “the capacity of a project to continue to deliver its indented benefits over a long period of time” (World Bank definition in Shediac-Rizkallah and Bone, 1998:91). Additionally, CEDPA (1998:90) understands project sustainability as “capacity of a project to continue

functioning, supported by its own resources (human, material, and financial), even when external sources of funding have ended.”

Table 28: Project Evaluation Summary

Objective	Performance indicators	Expected outcomes	Actual outcomes
Increased community access to social and financial assets especially amongst pastoralist's young women and young men by 25% by May, 2013.	55% of pastoralist young women and young men accessed social and financial assets.	25% increase of community access to social and financial assets especially cash amongst pastoralist's young women and young men	To be established after final evaluation
	30 pastoralist young women and young men are engaged into socioeconomic groups and indigenous organic poultry in particular	30 young women and young men engaged into indigenous organic poultry scheme as an additional social and economic opportunity	13 young women and young men engaged into indigenous organic poultry scheme. This is equal to 43% of the target
	1 poultry farm established and actively functioning	1 poultry farm established and actively functioning	1 poultry farm established
	4 community meetings organised	4 community meetings organised	4 community meetings organised
	A training in improved IOP organized to pastoralist young women and young men	One training organized to pastoralist young women and young men	One training organized
	Land secured, site identified and cleared for construction of a poultry hut	A five-hectare land secured, site identified and cleared for construction of a poultry hut	Only one hectare of land secured, site identified and cleared
	An IOP farm hut and a fence constructed	One IOP farm hut and a fence constructed	One IOP farm hut constructed, however, a fence is not yet constructed
	2 poultry farm attendants deployed	2 poultry farm attendants deployed	No attendants deployed. Instead, one poultry farm security guard engaged to ensure fowls security
	110 indigenous chickens purchased	110 indigenous chickens	100 indigenous chickens procured, reaching 91% of the target
	110 chickens vaccinated	110 chickens vaccinated	All 100 (91%) chickens vaccinated using local herbs

Source: Project data (2012)

Shediac-Rizkallah and Bone in Johnson et al (2004:137) categorized sustainability into three issues, namely, “maintaining benefits achieved through an initial program, continuing the program within an organisation, and building the capacity of the recipient community to continue a program”. Therefore project sustainability refers to as capacity building process to community to sustain the current project benefits for the future within the organisation even after the donor funding comes to an end.

5.4.1 Sustainability Strategies

Since this project is an income generating and self-sustaining activity sustainability is not a big issue. Nonetheless, project team identified various strategies identified to ensure effective sustainability. One of the key identified institutional sustainability strategies was to facilitate development of a shared vision, mission and core values for the community and the host organisation. Both the community and the host organisation developed their visions.

Another strategy was to secure support from the local government authority (Mvomero District Council level), local community leaders and host organisation. The project also strategized to gain political support by engaging Ward Councillors for the project in question. It is hoped that the project will gain full support from the above mentioned groups because the project contributes to the youth development policy of which the government, politicians and even the local community advocate for. While the government would find a way to continue supporting the community, politicians would like to gain populace from youth and women. Furthermore, the local community has a great role toward the project; its acceptance of the project would mean sustaining the project. If the local community has a negative attitude towards the project, hence do not support it, the project will dwindle immediately. In this project both the local community

and the host organisation participated fully in all stages of the project including needs and problem identification, monitoring and evaluation.

Additionally, as one of efforts to ensure sustainability, the project management team also developed project monitoring and evaluation system. The system would enable regular monitoring of planned activities. During monitoring process the community will have an opportunity to review the plan and decide measures to take in order to forge ahead the project.

Most importantly, the project management planned to introduce a new income generating project as one of financial sustainability strategies. This is the establishment of local milk collection point, namely *Mela Milk Collection Centre (MMCC)*, one of the topmost community's priorities as per CNA findings. During the participatory community needs assessment the community identified various needs which were in fact their problems. However, it would be irrational to address them altogether; hence there was a need to prioritise them using a Peer wise approach. As a result, establishment of a milk collection centre, construction of a dispensary, and establishment of a livestock market were serially the top-ranked priorities. The milk collection centre will stimulate more business opportunities.

5.4.2 Sustainability Plan

In endeavours to ensure this project is sustainable, project management designed an integrated community sustainability plan (ICSP). This is “an opportunity to engage citizens in a dialogue about what they value about their communities and what they want their community to look like in the future” (Baxter and Purcell, 2007:38). Table 29 highlights key activities to reflect the ICSP for indigenous organic poultry project:

Table 29: Integrated Community Sustainability Plan

Activity	Performance indicator	Time-frame
Facilitate development of institutional visions, missions and core values	Vision & mission statements and core values for the community and the host organisation developed	October, 2012
Facilitate the community to identify key strategies in order to achieve the developed visions	Key sustainability strategies including the establishment of alternative income generating project-milk collection centre	November, 2012
Obtain community's willing to commit necessary resources	The community has committed resources (human/staffing, funds from sales) to sustain the project	Mach, 2013
Obtain support from the local government authorities (LGAs).	Acceptance of the project by the LGAs, and provision of necessary support by the host organisation.	Ongoing
Engage Ward Councillors to gain political support	Ward Councillors providing support to the project	Ongoing
Design and administer skills training	45 community members trained in various trades such as knitting, tailoring, embroidery, cookery	Ongoing
Establish monitoring and evaluation system	Monitoring and evaluation system established for ongoing monitoring	November, 2012
Form a Community Project Advisory Committee (CPAC)	CPAC comprising of community leaders, host organisation, and group members formed	December, 2012

Source: Project data (2012)

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter sums up the entire work done and provides with couple of suggestions for further work. The chapter is divided into two main parts; the conclusions and recommendations. The former provides summaries of each of the previous chapters and the latter supplies with key recommendations. Specifically, the conclusions part summarises the findings of participatory assessment, literature review and explains the reasons for selecting the project in question. It also reports about project implementation and summarises findings on participatory monitoring, evaluation and sustainability. Furthermore, the recommendations part highlights key points for other project designers intending to establish similar projects.

6.2 Conclusions

Based on CNA findings, this study has revealed that integrated alternative sustainable livelihoods is critical, viable and has a great role in forging ahead community economic development among pastoralists. Although pastoralists heavily involve in livestock keeping as their main livelihood activity, they can adopt other occupations in addition to their traditional livelihood. These include indigenous organic poultry scheme, agriculture, and small business. Nevertheless, the study has disclosed that pastoral communities are in high needs of milk market & livestock market, water supply for domestic and livestock, financial capital and savings & credit service for their economic development.

Moreover, findings from literature review show that ‘alternative livelihoods’ approach is an effective way of combating poverty in communities (Ireland, Ibid). Again, Bee et al

(Ibid) unearthed that pastoral communities are in major crises; they are socially, economically, and politically marginalized and most of them depend on livestock keeping for their livelihoods. Unfortunately, according to Bee et al (Ibid), livestock keeping is falling down due various factors including drought. Therefore Bee et al (Ibid) discovered that following the decline of livestock livelihood many pastoralists are now engaging into alternative livelihoods. Unfortunately, “those that remain in pastoralism are becoming increasingly vulnerable to stresses, (livestock) disease outbreaks, unpredictable market forces and political pressures from more powerful interests” (Mattee, 2007:12).

During participatory CNA, the community identified several needs to be addressed and subsequently prioritised them using Pair Wise ranking method. As a results, milk market, dispensary and livestock market were serially top three needs identified by community members. Despite the above community’s preferences, they agreed and opted for indigenous organic poultry project as an integrated alternative sustainable livelihood strategy.

The main reason for this decision is the community’s willingness to adopt alternative livelihoods while keeping their traditional pastoralism. In addition, poultry is easy to run and it does not need huge capital. Poultry is more directly beneficial to pastoralist young women and girls whose access to livestock is very limited. For pastoral communities therefore, poultry is not only source of employment and income but it is a women and girls empowerment strategy. At the meantime, community members agreed to address the need for milk market and dispensary later on once the current project has taken off.

The development objective of this project is to increase community alternative socioeconomic opportunities especially to pastoralist young women and young men at Mela pastoral community in Mvomero district in Tanzania. Although a final evaluation

has not been conducted yet, indicators show that this goal has been achieved following the establishment of Indigenous Organic Poultry farm. The farm has increased social and economic opportunities for pastoralist young women and young men.

Nevertheless, the project objective has also been fairly reached whereby community's access to social and financial assets has increased. However, precise data would be presented after project final evaluation had been conducted. Furthermore, the two targeted project outputs have been achieved to the great extent. In one hand, one poultry farm has been established and actively operating. On the other hand, a total of 13 young women and young men equals to 43 per cent of the target of 30 have engaged into socioeconomic groups especially indigenous organic poultry.

Additionally, this project successfully managed to develop participatory monitoring and evaluation plan. The participatory monitoring and evaluation revealed that 82 per cent of targeted community members were trained in improved indigenous organic poultry, and on importance of equal access to social and financial assets. Moreover, participatory monitoring and evaluation findings show that one poultry hut for fowls' shelter was constructed. Yet still, a total of 100 chickens were procured as initial capital for the poultry farm project. However, the farm is not yet fenced and it is only one-hectar instead of five –hectars as per plan.

Moreover, the project management identified several sustainability strategies ranging from institutional to political and financial sustainability strategies. These strategies include development of a shared vision and mission for the community and the host organisation. The community and project members also planned to obtain support from the local government authority, and to get political support. Most significantly, the project management planned to introduce a new project namely, *Mela Milk Collection Centre*.

Nonetheless, shortage of necessary resources, mainly funds and time, has contributed to failure to achieve all the planned activities including poultry farm fence and land. Moreover, community's perception, customs and taboos do not favour indigenous poultry. Most of pastoralists mainly Masai do not eat chickens as one of their customs. Nevertheless, many of them perceive poultry as inferior livelihood strategy. However, this perception/custom is gradually diminishing.

If all planned activities were accomplished including final evaluation there would be a 25 per cent increase of community members especially pastoralist young women and young men who have access to social and financial assets. This increase would make an average of 55 per cent of pastoralist young women and men who would enjoy alternative socioeconomic opportunities.

6.3 Recommendations

Despite pastoralist community's willing to adopt integrated alternative sustainable livelihoods like establishment of indigenous organic poultry it is recommended that project designers should be careful about establishing similar projects to pastoralists. They should conduct thorough analysis before they initiate projects. This project has discovered that pastoral communities need more awareness campaigns on importance of alternative sustainable livelihoods. Most pastoralists profoundly still perceive livestock keeping as a sole livelihood activity regardless shocks and stresses they are facing.

Project designers and managers should address pastoralist perceptions and customs beforehand if they want their new projects to be successful. Big projects like establishment of milk collection centres, livestock market, and construction of dams are some of the top priorities for pastoralists. Pastoralists are mostly in need of other social services such as dispensary, clean and safe water supply.

Apart from all these perceptions and needs the fact that pastoralism is falling down due to climate change effects including drought remains there. Drought compels pastoralists to keep on moving fetching for water and pastures, the situation that keep them into remote and become more marginalised and vulnerable. As such, other livelihood projects like indigenous organic poultry, village savings and loans associations and agriculture would be more viable for pastoralists.

This study recommends that project designers and managers should conduct participatory assessment before they initiate a project to have positive achievements of their prospective projects. It is during participatory assessment where one can prioritise needs and levelling them. Sometimes communities have high expectations, thus it is a project designer's ability to level their needs and come up with reasonable needs. This study has learned that participatory needs assessment is a capital for project implementation, monitoring and evaluation, and it is a basis for project sustainability.

We always learn that if you assess together you will identify problems together and design the ways to address the problems; you will implement, monitor and finally evaluate and plan for sustainability together. Based on literature review it is recommended as well that pastoralists should diversify their livelihood style. They should adapt integrated alternative sustainable livelihoods to counteract socioeconomic barriers. In fact, moving from pastoralism as a sole source of livelihoods to adapting other kinds of livelihoods is inevitable for pastoralists.

As far as sustainability is concerned, it is critical for project management team to design new projects related to livestock in order to keep community's interests. For instance, establishment of milk collection centre would be more suitable as far as integrated alternative sustainable livelihoods approach is concerned.

Nevertheless, in order to have positive interventions in pastoralist communities especially Masaai, men engagement is critical. It should be noted that this project is implemented mostly by young women both married and unmarried. It is the custom of Masaai women that they have no voice in front of men. Customarily, women are not allowed to talk as well as eat in front of men. Therefore men engagement in all stages of project-participatory assessment, designing and implementation, participatory monitoring and evaluation as well as sustainability plan has been important and good practice for this project. It is through involvement of men the project got support and took off. As such, in order for any women targeted project to be successful pastoralist men involvement is inevitable. They have power to provide or deny permit for women's and girls' participation.

Above all, this work is a descriptive research which specifically used a cross-sectional survey study methodology in which respondents were the main source of information. However, the stratified sampling approach that emphasized age and gender mainstreaming coupled with simple random sampling was more useful for this work. Nonetheless, I recommend the quantitative method which was used during actual data collection coupled with qualitative method. I also recommend semi-structured questionnaires method of data collection to collect primary data. This tool ensured not only consistent but also conformity of data collected and resulted in to reliable conclusion.

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APPENDICES

Appendix 1: Questionnaire for CNA

1(a) Questionnaire English Version

1: Community Demographic Characteristics

Please circle the appropriate/suitable response in the following; where necessary you can circle more than one response

Sex	Age	Marital status	Occupation	Your education level	Your skills
1= male 2= female	1= 15-24 2= 25 and above	1= married 2= not married 3=widow/widowed	1= livestock 2= business 3= peasant 4= employed	1= primary education 2= secondary education 4 years 3= secondary education 6 years 4= Above secondary 5=Not at all	1= carpentry 2= tailoring 3=motorcycle repair 4= driving 5=Not at all
Number of adults living in household:.....					
Number of children living in household:.....					
How many years have you lived in this community?.....					

2: Financial Assets/Capital

Please indicate the types of your financial asset/capital and rank them in order of importance; circle the correct response:

Financial assets/capital	Do you have access to such a financial capital?	Rank your portfolio financial capital in order of importance in relation to easiness to access and spend	
		Easiness to access:	Easiness to spend:
Cash saving at bank	1= Yes 2= No	1= very easy 2= moderate 3= not easy	1= very easy 2= moderate 3= not easy
Cash saving at home/pocket	1= Yes 2= No	1= very easy 2= moderate 3= not easy	1= very easy 2= moderate 3= not easy
Credit	1= Yes 2= No	1= very easy 2= moderate 3= not easy	1= very easy 2= moderate 3= not easy
Livestock	1= Yes 2= No	1= very easy 2= moderate 3= not easy	1= very easy 2= moderate 3= not easy
Poultry	1= Yes 2= No	1= very easy 2= moderate 3= not easy	1= very easy 2= moderate 3= not easy
Others (Specify).....			

3: Physical Assets/Capital

Please indicate the physical infrastructure you have access to; circle the suitable response:

Physical capital	Codes for responses	You can circle more than one responses
Water supply	1= borehole 3= river 4= dam 2= well/spring water 5= others (specify)	
Cooking fuel	1= firewood 3= cow dung 2= charcoal 4= others (specify)	
Health services	1= dispensary 3= not at all 2= health centre	
Roads	1= feeder roads 3= road to the nearest town/market 2= inter-village road	
Education services	1= Primary school 3= Not at all 2= Secondary school 4=Others (specify)	
Toilet available	1= YES 3= NO	
Own a house	1= YES 2= NO	

4: Social Asset/Capital

If you belong to any local association/group, please provide the following information; circle appropriate response:

Association/Group.	For how long?
1= youth group 2= women group 3= credit and savings group 4= religious group 5= not at all	1=<2 years 2=>2 years

5: Livelihoods Strategies and Outcomes

Please provide information on your income sources and its stability. Circle the correct response:

Income source	Average amount of sales per month	Average amount per month	How stable is this source of income?
Livestock selling	1= ≤1 2= >1	1= <400,000 2=>400,000	1= stable 2= somewhat stable 3=unstable
Selling of milk	1= <500 litres 2= >500 litres	1= <100,000 2=>100,000	1= stable 2= somewhat stable 3=unstable
Employment		1= <100,000 2=>100,000	1= stable 2= somewhat stable 3=unstable
Transport services (bodaboda)		1= <100,000 2=>100,000	1= stable 2= somewhat stable 3=unstable
Tailoring		1= <100,000 2=>100,000	1= stable 2= somewhat stable 3=unstable

6: Alternative Sustainable Livelihood Activities

Which of the following activities can you do apart from your normal activities?	You can circle more than one responses
Agriculture	
Poultry	
Bee keeping	
Carpentry	
Tailoring	
Petty trade including selling food stuffs, milk, honey products	
Handicrafts including curving, weaving/knitting, mat and basket making	
Transport service including “boda boda” (motor cycle) and bicycles	
Others (specify)	

7. Community Needs

Which of the following is the most important need to you? Please circle the most appropriate; you can circle more than one:

Need	1	2	3	4
	Completely unimportant	Unimportant	Important	Very Important
Market for livestock				
Market for milk				
Livestock dip				
Dam				
Drinking water supply				
Credit service				
Capital for business				
Tools for honey production				
Roads				
Electricity				
Dispensary				
Others (Specify).....				

1 (b) Questionnaire Swahili Version

1: Idadi na Hali ya Watu katika Jamii

Tafadhali zungushia jibu sahihi katika swali lifuatalo; unaweza kuzungushia zaidi ya jibu moja pale inapolazimu:

Jinsi	Umri	Hali ya ndoa	Shughuli	Kiwango chako cha elimu	Ujuzi ulio nao
1= Mume 2= Mke	1= 15-24 2= 25---	1= Nimeoa/ Nimeolewa 2= Sijaoa/ Sijaolewa 3=Mjane	1= Ufugaji 2= Biashara 3= Kilimo 4= Mwajiliwa	1= Msingi 2= Sekondari miaka minne 3= Sekonadari miaka sita 4= Zaidi ya secondary 5= Sijasoma	1= Uselemala 2= Ushonaji 3= Fundi pikipiki 4= Udereva 5= Hakuna
Idadi ya watu wazima waishio katika kaya:...					
.....					
Idadi ya watoto waishio katika kaya:...					
.....					
Una miaka mingapi tangu kuanza kuishi hapa?:.....					
.....					

2: Rasilimali Fedha

Tafadhali onesha aina ya rasilimali fedha/mtaji na upange katika umuhimu wake;

zungushia jibu sahihi zaidi:

Rasilimali fedha	Je, unayo fursa ya kufikia hizo rasilimali fedha?	Panga aina ya rasilimali fedha zako katika umuhimu kususiana na urahisi wa kupata na kutumia	
		Fursa ya kufikia rasilimali:	Urahisi wa kutumia:
Akiba ya fedha benki	1= Ndiyo 2= Hapana	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi
Akiba ya fedha nyumbani	1= Ndiyo 2= Hapana	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi
Mikopo	1= Ndiyo 2= Hapana	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi
Mifugo	1= Ndiyo 2= Hapana	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi
Ufugaji wa kuku	1= Ndiyo 2= Hapana	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi	1= rahisi sana 2= rahisi kiasi 3= siyo rahisi
Nyinginezo (fafanua).....			

3. Rasilimali Miundo Mbinu

Tafadhali onesha rasilimali miundo mbinu ambazo una fursa nazo; zungushia jibu sahihi zaidi:

Rasilimali Asili	Majibu	Unaweza kuzungushia zaidi ya jibu moja
Maji	1= kisima kirefu 2= kisima chemchem 3= mto 4= bwawa 5= Mengineyo (fafanua).....	
Nishati ya kupikia	1= kuni 2= mkaa 3= samadi 4= Nyigineyo (fafanua).....	
Huduma za afya	1= zahati 2= kituo cha afya 3= Nyiginezo (fafanua).....4= Hakuna	
Barabara	1= barabara za vitongoji 2= barabara za kijiji-kwa-kijiji 3= Barabara iendayo katika mji ulio karibu 4= hakuna	
Huduma za elimu	1= Shule ya Msingi 2= Shule ya Sekondari 3= Nyiginezo (fafanua).....	
Uwepo wa choo	1= NDIYO 2= HAPANA	
Unamiliki nyumba	1= NDIYO 2= HAPANA	

4: Rasilimali/Mtaji Jamii

Kama umejiunga na chama/kikundi chochote cha kijamii, tafadhali toa taarifa zifuatazo; zungushia jibu sahihi zaidi:

Chama/Kikundi	Kwa muda gani?
1= kikundi cha vijana wanawake 2= kiukundi cha 3= kikundi cha kuweka na kukopa kidini 4= kikundi cha 5= Hapana	1=chini ya miaka 2 2=zai di ya miaka 2

5. Njia za Kujipatia Kipato

Tafadhali toa taarifa kuhusu vyanzo vyako vya mapato na uthabiti wake; zungushia jibu sahihi zaidi

Chanzo cha Mapato	Wastani wa mauzo kwa mwezi	Wastani wa mapato kwa mwezi	Ni kwa kiasi gani chanzo cha mapato ni thabiti?
Uuzaji mifugo	1= ng'ombe 1 au hakuna 2= zaidi ya ng'ombe 1	1= chini ya Tsh 400,000 2= zaidi ya Tsh 400,000	1= thabiti 2= thabiti kidogo 3=siyo thabiti
Uuzaji maziwa	1= chini ya lita 500 2= zaidi ya lita 500	1= chini ya Tsh 100,000 2= zaidi ya Tsh 100,000	1= thabiti 2= thabiti kidogo 3=siyo thabiti
Ajira		1= chini ya Tsh 100,000 2= zaidi ya Tsh 100,000	1= thabiti 2= thabiti kidogo 3=siyo thabiti
Usafirishaji (bodaboda)		1= chini ya Tsh 100,000 2= zaidi ya Tsh 100,000	1= thabiti 2= thabiti kidogo 3=siyo thabiti
Ushonaji		1= chini ya Tsh 100,000 2= zaidi ya Tsh 100,000	1= thabiti 2= thabiti kidogo 3=siyo thabiti

6. Shughuli Mbadala za Kujipatia Kipato na Kuishi

Ni shughuli gani kati ya hizi zifuatazo unaweza kuifanya licha ya shughuli yako ya kila siku?	Unaweza kuzungushia zaidi ya jibu moja
Kilimo	
Ufugaji kuku	
Ufugaji nyuki	
Uselemala	
Ushonaji	
Biashara ndogondogo	
Kazi za mikono kama vile uchongaji, usukaji, ufumaji	
Usafirishaji kama vile “boda boda” na baiskeli	
Nyinginezo (fafanua).....	

7. Mahitaji ya Jamii

Lipi kati ya yafuatayo ni hitaji muhimu zaidi kwako? Tafadhali zungushia jibu sahihi zaidi; unaweza kuzungushia zaidi ya jibu moja:

Hitaji	1	2	3	4
	Siyo muhimu kabisa	Siyo muhimu	Mhimu	Mhimu sana
Soko kwaajili ya mifugo/maziwa				
Josho la mifugo				
Bwawa				
Upatikanaji wa maji ya kunywa				
Huduma ya mikopo				
Mtaji kwaajili ya biashara				
Vifaa vya kuzalishia asali				
Barabara				
Umeme				
Zahati				
Mengineyo(fafanua).....				

Appendix 2 Research Proposed Budget 2011-2012

No.	Item	Unit	# Unit	Unit cost	Total cost
1	Photo copying paper	Ream	5	10, 000	50, 000
2	Note book	Pc	10	1,000	10,000
3	Pen	Pkt	1	10,000	10,000
4	Travel	Trip	10	10,000	100,000
5	Subsistence	Days	30	30,000	900,000
6	Research binding				100,000
	Total				1,170,000

Appendix 3: Schedule of Field Visits for CNA

Date	Location	Activity	Comment
30/04/2012	Mela village	Consultation with Host Organisation-Mela Village Council to seek partnership	Identified participants to engage into survey, tested questionnaire. Identified ways through which data would be collected. Data collection conducted.
1/05/2012	Mela village	Follow up consultation with the host organisation to learn more about it	
2/05/2012	Mela village	Develop and share common strategy for CNA	
3/05/2012	Mela village	Training session for data collectors (MVC members)	
4/05/2012	Mela village	Testing questionnaire to CNA survey participants	
5/05/2012	Mela village (The community for CNA)	Field data collection at community level	
6/05/2012	Mela village (The community for CNA)	Field data collection at community level	

Appendix 4: List of Contacted Host Organisation Members

S/n	Name	Sex	Designation	Contact/ Address
1.	Ngeke Sakat	M	Village Chairman-Mela	0756 000442
2.	Saito Mwalimu	M	Hamlet Chairperson-Kisangi	0758200414
3.	Kiunga Mianga	M	Hamlet Chairperson-Sadala	0752 133069
4.	Mariam Tukunya	F	Hamlet Chairperson-Mkwajuni	0757837002
5.	Sunguaiya Samwel	M	Hamlet Chairperson-Kilimahewa	0752 664747
6.	Haiyai Masaine	M	Hamlet Chairperson-Matangini	0755236489
7.	Adam Lakayei	M	MVC Member	0752768152
8.	Moono Keikei	M	MVC Member	0755 941882

S/n	Name	Sex	Designation	Contact/ Address
9.	Mlimba Kairanga	M	MVC Member	0763588394
10.	Moses Mambega	M	MVC Member	0757444554
11.	Hamisi Letika	M	MVC Member	0763200292
12.	Michael Niuyai	M	MVC Member	0757174589
13.	Leng'wesi Issa	M	MVC Member	0757845749
14.	Sayuni Letika	M	Pastor EAG (Invitee)	0754585735
15.	Malaki Lokonwa	M	MVC Member	0762082971
16.	Joshua Lekadi	M	MVC Member	0756202531

Appendix5: Training Plan

Prospective trainees	Area/issue to be trained	When?	Durati on	Identifie d trainer	Required resources and materials
Pastoralist young women and young men	Characteristics of Indigenous organic Poultry	Novem-ber 2012	1 hour	Philbert Songolo	Idea cards, Flip chart, Mark pens, Masking tape
	Advantages of Indigenous Organic Poultry	Novem-ber 2012	1 hour	Philbert Songolo	Idea cards, Flip chart, Mark pens, Masking tape
	Inputs and resource required for indigenous organic poultry	Novem-ber 2012	1 hour	Philbert Songolo	Idea cards, Flip chart, Mark pens, Masking tape
	General husbandry of poultry- feeding, Housing, and Breeding	Novem-ber 2012	6 Hours	Philibert Songolo	Idea cards, Flip chart, Mark pens, Masking tape
	Poultry disease management	Novem-ber 2012	2 Hours	Philbert Songolo	Idea cards, Flip chart, Mark pens, Masking tape

Appendix 6: Indigenous Organic Poultry (IOP) Training Manual

INDIGENOUS ORGANIC POULTRY: AN INTEGRATED ALTERNATIVE LIVELIHOOD IN PASTORALIST COMMUNITIES TRAINING MANUAL

The Training Manual Overview

Pastoralist communities exclusively depend on pastoralism as their main means of livelihood. Nonetheless, livestock keeping for pastoralists is also a cultural way of life. This Training Manual (TM) is devised to assist pastoral communities to establish poultry in a free range manner along side with their traditional livestock keeping (cattle and goats). Indigenous Organic Poultry (IOP) will serve as integrated alternative sustainable livelihood to complement livestock/pastoralism. It has been learnt that pastoralists' mobility has been reduced to a great extent; they have started to settle. Pastoralists move during dry season (July-November) searching for greener pastures and water for their livestock, only part of the pastoral households move leaving behind others to do other things.

This training manual will serve as a guideline for imparting knowledge, skills, and attitudes towards indigenous poultry in pastoralist communities in Tanzania. The emphasis throughout this training will be on the poultry farming without using chemicals for either treatment/ mitigation or feeding. This will not only reduce running cost but also will ensure pure organic product of meat and eggs from scavenging chickens. In organic poultry production systems, birds are raised without cages in housing that allows outdoor access, are fed organic feed and managed with proactive practices and natural treatments (Fanatico, 2008).

Traditional chicken contribute over 70% of the poultry meat and eggs produced and consumed in the rural areas and 20% consumed in urban areas of mainland Tanzania (URT, 2008). According to Minga et al (Mingaetal) Tanzania was estimated to have 28.3 million poultry in 1995. Of these about 26.6 million equals to 94 per cent were scavenging chickens.

Training Objectives

At the end of this course pastoralists should be able to:

- a) Adopt indigenous organic poultry as an integrated alternative livelihood activity to complement their traditional pastoralism
- b) Identify distinguished characteristics of indigenous poultry
- c) Identify advantages of indigenous organic poultry as an alternative source of income
- d) Understand inputs and resource required for indigenous organic poultry.
- e) Understand general husbandry of poultry- feeding, Housing, and Breeding
- f) Explain poultry disease management

Relevance of Training to Pastoralist

Pastoralists are the most marginalized and vulnerable populations heavily depend on livestock for their livelihoods. Reports show that girls and women are more marginalized than their counterparts, boys and men in terms of access to financial assets (CAREInternational, 2011). For example, a Community Needs Assessment (CNA) conducted in March 2012 at Mela pastoralist village shows that only 30 per cent of women and girls have access to cash saving at home as compared to 64.7 per cent of boys and men (Mhangwa, 2012). Moreover, only 46 per cent of girls and women can easily access livestock asset as compared to 94 per cent of all men. Nonetheless, the CNA revealed that young people are also economically more marginalized as compared to adults in pastoral

communities. For instance, only 36 per cent of all youths have access to cash saving at home, while 57 per cent of all adults have access to cash saving at home.

Nevertheless, it has been learned that although pastoralists are heavily engaged in livestock keeping as their main occupation, they can adapt to other activities as alternative sustainable livelihoods in conjunction with livestock keeping. For instance, a CNA conducted at Mela pastoral community show that about 76.7 per cent of pastoralists were also engaged in poultry as their source of livelihoods (Mhangwa, Ibid).

Of all respondents, 84.6 per cent girls and women showed more readiness to engage into poultry as compared to 70 per cent of boys and men. As such, pastoralists can scale up poultry livelihood for income gains to supplement their livestock keeping activity. This justifies that poultry training is critical for women and girls who show readiness for poultry activity. Women for this reason are expected to roll out to the next generation the knowledge and skills which will be acquired at the end of the training; hence its sustainability.

Furthermore, the TM and its subsequent establishment of IOP will act as instrument for women empowerment in the pastoralist communities. In order to effectively attain this desire, pastoralists need to be trained on successful and competitive indigenous organic poultry. This training manual will significantly facilitate pastoralists particularly girls and women to establish free range organic poultry as an integrated alternative sustainable livelihood. Organic poultry for pastoralists will also facilitate to increase income which in turn will reduce vulnerability as well as improved wellbeing amongst them.

Targeted Trainees

This manual is specifically designed for young women and young men in pastoralist communities in Tanzania. It is meant to facilitate trainees to acquire knowledge, skills and competencies as far as indigenous organic poultry as concerned. It is also devised as a guide for trainers to systematically deliver materials to trainees. The TM targets girls, women and young men mainly because these groups are more marginalised in accessing socio-economic assets as compared to adult men in pastoral communities.

The establishment of indigenous organic poultry will serve as complementary livelihood to livestock keeping and source of income among these populations. As such, at the end of this manual trainees are expected to establish indigenous poultry farms at their respective homes. The free-range chickens and subsequent eggs will increase income amongst pastoralist communities particularly women and girls and hence reduce vulnerability. If seriously run indigenous poultry will act as an instrument for women empowerment and source of employment for young women in pastoralist communities in Tanzania.

Presentation Techniques

This manual highlights various techniques to be used in various training sessions basing on circumstances. Since pastoralists are periodically mobile searching for greener pastures and water, the TM will consider this factor. The manual therefore will focus on techniques which are suitable for their environment. In applying these techniques the trainer will separate girls and women from young men to avoid cultural barriers in facilitating the training. The training will be delivered under tree and in institutions such as schools and religious buildings. The best way to reach all targeted pastoralists even during their mobility time searching for greener pastures is to design mobile training venues. The following techniques will be commonly deployed throughout this training manual.

Brainstorming

- Formulate and pose questions to class.
- Generate as many ideas as possible; what matters here is the quantity not quality.
- Accept all ideas (do not criticize).
- Summarize all ideas.
- Discard “unacceptable” or unworkable ideas.
- Determine the best solution(s).
- Lecture /Explanation
- Present new material if it is the first day of the training
- Review previously learned materials if it is the second day and subsequent days.
- State objectives for the lesson.

Field Visits

- This technique is meant to promote firsthand experience
- Prepare a trip
- Notify the part to be visited prior to departure
- Encourage learners to jot down key points when they observe or learn
- Case study
- Give a real or fictional situation to trainees
- Invite trainees to suggest different answers to issues raised from the case study
- Provides trainees with problem solving skills
- Demonstration. Demonstrate what you have presented to learners.
- Allow trainees to practise immediately after instruction or explanation
- Lead trainees to learn a set of activities and experiment
- Encourage them to do things by themselves

Group Discussion

Form a couple of groups for trainees to have opportunity to discuss issues posed. This approach increases participation and creates a sense of collaboration in tackling issues.

You can apply Phillips 666 theory:

6 persons in a group

6 ideas to be generated

6 minutes to be spent.

Outline of Course Contents

In order to impart a comprehensive knowledge, skills and competencies to pastoralist girls, women and young men on indigenous organic poultry the following outlined course contents will be delivered:

Distinguished Characteristics of Indigenous Poultry

- Indigenous poultry have capability to survive by feeding themselves in free ranging manner.
- These local backyard chickens produce very delicious meat and eggs
- Indigenous poultry can flourish well under adverse situations such as poor housing, poor management and poor feeding.
- Free-ranging indigenous chickens are relatively disease resistant
- They are comparatively hardier and need less health care than exotic birds.
- They have better adaptability to extreme climatic conditions
- Capability of self defense from predators due to its alertness, light body weight, longer shank length, camouflaged characters and aggressiveness (Singh, 2005).

Advantages of Indigenous Organic Poultry as an Alternative Source of Income

- Indigenous poultry is a source of nutritious food like chicken and eggs necessary for human health in families
- Free range poultry provides high return as the investment cost is very low. Most of farmers receive money from chicken and eggs sales.
- Scavenging chickens are source of manure which can be used for organic farming activities
- It is also a source of employment to many communities
- Backyard poultry is cost effective; it requires very few inputs as chickens scavenge their feed requirements (Ghadai, 2007)
- Very little veterinary care is needed to raise chickens. They possess the ability to protect themselves from predators.
- Indigenous poultry is very marketable whereby chickens, meat and eggs from local breeds are sold at a high price. People have a preference for eggs and meat of indigenous poultry compared to those realized from farm-bred.

Basic Requirements for Indigenous Organic Poultry

- Appropriate housing that permits natural behavior, including outdoor access
- Certified organic feed, including pasture
- No antibiotics, drugs or synthetic parasiticides
- Organic processing of meat and eggs
- Recordkeeping system to allow tracking of poultry and products (audit trail)
- Organic system plan including description of practices to prevent contamination, monitoring practices and list of inputs
- Production that does not contribute to contamination of soil or water
- No genetically modified organisms, ionizing radiation or sewage sludge.
- Vaccines are allowed in organic production to prevent disease. Fanatico (2008).

Housing for Indigenous Organic Poultry

It is usual in many African countries that indigenous chickens are not necessarily housed. However, housing for poultry is very important as far as productivity as concerned. In order to improve poultry production housing for chickens is inevitable.

Feeding of Indigenous Poultry

In most cases indigenous chickens are not fed; they mainly depend on scavenging for their food. Chickens are basically left independent; free range to scavenge for food. However, it is necessary to feed them with balanced feed supplement. Provision of water is also critical for chickens.

Poultry Disease Management

Local treatment for indigenous flock is highly encouraged. Such poultry diseases mitigation as the use of red pepper and fresh leaves of aloe *spp.* are crushed and put in a trough with water for the chicken (Mathuva, 2005). New castle Disease (ND) has been identified as the common disease for free-ranging local chickens

Constraints, Challenges & Solution of Indigenous Poultry

- Poor growth rate of indigenous chickens. The growth rate of scavenging poultry is generally low as compared to that of commercial chickens.
- Scavenging chickens lay on very small and very little eggs
- Poor housing for poultry production
- Poor feeding of free range poultry

Detailed Training Sessions

Training Session I: Characteristics of Indigenous Organic Poultry

Specific Objective:

- At the end of this session participants will be able to identify distinguished characteristics of indigenous poultry
- They will be able to distinguish indigenous poultry from indigenous organic poultry

Key Message:

‘Indigenous fowls enjoy the privilege of superiority over exotic birds’.

Session duration: **60 Minutes**

Methodology:

Brainstorming	10 Minutes
Lecturing(reinforcement)	10 Minutes
Group discussion	20 Minutes
Wrap up	10 Minutes
Session Evaluation	10 Minutes

Facilitation Materials:

Flip charts with flip chart stand, marker pens, masking tape and realia (showing real scavenging local chickens).

Key steps:

- (i) Facilitate the participants to brainstorm on the meaning of indigenous poultry (IP) and indigenous organic poultry (IOP)
- (ii) Reinforce the given answers by participants by highlighting key differences between IP and IOP
- (iii) Lead participants to identify distinguished characteristics of indigenous poultry

- (iv) Organize participants into groups and let them further discuss on various characteristics of indigenous poultry
- (v) Facilitate participants groups presentations
- (vi) Wrap up the session by highlighting key distinguished characteristics of indigenous fowls vis-à-vis exotic birds
- (vii) Get participants to evaluate the training session to measure the session effectiveness
- (viii) Form several small groups and encourage participants to evaluate the session or alternatively, ask participants questions

Essential Information:

- Although currently there is a big move towards commercial poultry, indigenous fowls enjoys the privilege of superiority over exotic birds due to its following distinguished characteristics as laid down by various scholars including Singh (2005):
- Use of broodiness for hatching the chicks, while exotic chickens cannot hatch chicks.
- Indigenous poultry have capability to survive by feeding themselves in free ranging manner.
- These local backyard chickens produce very delicious meat and eggs
- Indigenous poultry can flourish well under adverse situations such as poor housing, poor management and poor feeding.
- Free-ranging indigenous chickens are relatively disease resistant
- They are comparatively hardier and need less health care than exotic birds.
- They have better adaptability to extreme climatic conditions
- Capability of self defense from predators due to its alertness, light body weight, longer shank length, camouflaged characters and aggressiveness.

Note:

Organic refers to the way livestock and agricultural products are raised and processed, avoiding agrichemicals such as synthetic pesticides and fertilizers.

Participants should note that in organic poultry production systems, birds are raised without cages in housing that allows outdoor access, are fed organic feed and managed with proactive practices and natural treatments (Fanatico, 2008).

Training session II: Advantages of Indigenous Organic Poultry**Specific objective:**

At the end of this session participants will be able to identify advantages of indigenous organic poultry

Key Message:

Indigenous organic poultry is a source of income for family wellbeing (and source of nutritious food like chickens and eggs important for our health).

Essential Information:

- ✓ Indigenous organic poultry provides high return as the investment cost is very low. Most of farmers receive money from chicken and eggs sales. The gained income is used for the wellbeing of the families
- ✓ It is also a source of employment to many communities and women empowerment
- ✓ This free range poultry is also a source of nutritious food like chicken and eggs necessary for human health in families
- ✓ Scavenging chickens are source of manure which can be used for organic farming activities
- ✓ The backyard poultry is cost effective; it requires very few inputs as chickens scavenge their feed requirements (Ghadai, 2007)

- ✓ Very little veterinary care is needed to raise chickens. They possess the ability to protect themselves from predators.
- ✓ Indigenous poultry is very marketable whereby chickens, meat and eggs from local breeds are sold at a high price.
- ✓ People have a preference for eggs and meat of indigenous poultry compared to those realized from farm-bred.
- ✓ There does not appear to be any problem in marketing of local poultry. Most of the households dispose off their produce like eggs or chickens in nearby markets, whereas, those away from the towns sell at their door steps (Ghadai, 2007).

Note:

Some pastoralists mainly Masaai do not eat chickens as one of their customs. Nonetheless, this custom is now diminishing

Conclusion and Recommendation

Training manual if fully utilized may ease facilitation and deliver of intended knowledge, skills, and competencies to trainees. However, only a well designed training manual can serve this purpose. As such, training manuals should be prepared in such manner that they facilitate easy acquisition of new or reinforcing knowledge or skills. It is hoped that this TM successfully managed to fulfill the needs of the trainees particularly in indigenous poultry. It has given pastoralist girls, women and young men ample opportunity to learn and strengthen their knowledge and/or skills on indigenous poultry. This free-ranging poultry is considered to contribute to poverty reduction in most of geographical regions in Tanzania. Some of the tribes like Sukuma, Nyamwezi, Gogo, Hehe just to mention but a few, keep local chickens for their economic gains alongside farming and agro-pastoralism. It is therefore believed that, indigenous organic poultry will significantly contribute to

raising income and reducing vulnerability and poverty in pastoralist communities.

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Appendix 7: Indigenous Organic Poultry Training Report

1.0 Introduction

Indigenous organic poultry is a source of income for family wellbeing (and source of nutritious food like chickens and eggs important for our health). Although currently there is a big move towards commercial poultry, indigenous fowls enjoy the privilege of

superiority over exotic birds due to its distinguished characteristics as laid down by various scholars including Singh (2005). The term ‘*organic*’ refers to the way livestock and agricultural products are raised and processed, avoiding agrichemicals such as synthetic pesticide and fertilizers. Furthermore, it should be noted that in organic poultry production systems, birds are raised without cages in housing that allows outdoor access, are fed organic feed and managed with proactive practices and natural treatments (Fanatico, 2008). The project adviser in collaboration with the host organization organized training on improved indigenous organic poultry to encourage young women and young men to adapt indigenous organic poultry as an integrated alternative livelihood activity to complement their traditional pastoralism. The following is a brief report on this training.

2.0 Activity Name:

Train pastoralist young women and young men on establishment of Indigenous Organic Poultry at Mela village.

3.0 Activity Objectives:

Encourage young women and young men to adapt indigenous organic poultry as an integrated alternative livelihood activity to complement their traditional pastoralism.

Equip young women and young men with skills and knowledge on indigenous organic poultry for economic gain.

4.0 (a) Targets:

- ✓ 45 pastoralist young women and young men from Mela Pastoral Community

(b) Actual Participants (List attached):

- ✓ 35 (19 young women, 17 young men); this is equal to 77.7 per cent of all participants targeted for this training

5.0 Location/Venue of Activity: Mela Primary School in Mvomero District

6.0 (a) Timeframe: 2 full days

(b) Implementing Date(s): 27th-28th December, 2012

7.0 Achievements/Results:

- 77.7% of targeted participants attended the meeting.
- Participants appreciated the training and promised to organized themselves into groups and start poultry work.
- Participants promised to use the skills and knowledge they gained during the training for effective poultry in groups and individually.

8.0 Performance Indicator

(a) Training Outputs:

- 35 young women and young men are skilled and knowledgeable pastoral community members in IOP and can demonstrate proper ways of handling indigenous chickens and eggs.
- Participants are aware of inputs and resource required for indigenous organic poultry project

(b) Expected Training Outcomes:

- Pastoralists adapted an improved indigenous organic poultry as an alternative sustainable livelihood strategy
- Indigenous organic poultry farm established at Mela pastoral community

9.0 Constraints Encountered and how to Overcome:

- Poor turn up of participants during the training due to various reasons mainly related to traditional practices.
- Negative perception of community members especially rich pastoralists towards indigenous poultry

10.0 Agenda/Issues/Topics Addressed:

- a) Characteristics of indigenous poultry
- b) Advantages of indigenous organic poultry as an alternative source of income
- c) Constraints and challenges over indigenous organic poultry
- d) Various kinds of indigenous chickens
- e) Understand inputs and resource required for indigenous organic poultry.
- f) General husbandry of poultry- feeding, Housing, and Breeding
- g) Indigenous organic poultry production
- h) Disease management; indigenous chickens' mortality.
- i) Assess indigenous poultry marketing

11.0 Methodology Used

- The training sessions were participatory and informal using one of the classrooms at Mela Primary school.
- The use of idea cards during facilitation was dominant
- Questions and answers method was also used to elicit ideas and more contributions from participants
- Experience-based presentations from other indigenous poultry entrepreneur

12.0 Resource person(s)/Facilitator(s):

- Philbert Songolo-Head Teacher Lubungo Primary School, a poultry entrepreneur and trained person in poultry

- Vincent Mhangwa-Student at the Open University of Tanzania

13.0 Resolutions/Recommendations Made:

- The participants resolved to use the skills and knowledge they got from the training to start indigenous poultry projects both in groups as well as individually
- They promised to encourage other community members who did not attend the training to engage in indigenous poultry.

14.0 Financial Resources Used

(a) Funds Utilized TZS: 360,000/-

(b) Other Supplies: Manila cards (Idea cards), Flip chart and Marker pens.

(c) Host Organisation Contribution: Training room (classroom)

15.0 Conclusion:

Indigenous organic poultry (IOP) is believed to significantly contribute to poverty reduction in most of geographical regions in Tanzania. Some of the tribes like Sukuma, Nyamwezi, Gogo, Hehe just to mention but a few, keep local chickens for their economic gains alongside farming and agro-pastoralism. This training has given pastoralist young women and young men ample opportunity to learn and strengthen their knowledge and/or skills on indigenous organic poultry. It is hoped that IOP will contribute to raising income and reducing vulnerability and poverty in pastoralist communities. Furthermore, indigenous organic poultry will serve as integrated alternative sustainable livelihood to complement livestock/pastoralism.

Appendix8: List of Participants during IOP Training at Mela Village, Tanzania

S/n	Name	Sex	Designation	Contact/Address
1	Neema Lepaso	F	Community member	0782 733640
2	Elia Mhando	M	Community member	0764 597936

S/n	Name	Sex	Designation	Contact/Address
3	Tabisa Talek	F	Community member	0764 372029
4	Nasombe Sawasawa	M	Community member	-
5	Maritha Abedi	F	Community member	-
6	Ester Rajabu	F	Community member	0612658779
7	Susana Mrinde	F	Community member	-
8	Anna Peter	F	Community member	0654 598170
9	Janeth Msanzia	F	Community member	0785 940938
10	Pendo Mathayo	F	Community member	0764 106790
11	Kadeghe Mathayo	M	Community member	-
12	Kerai Hassan	M	Community member	-
13	Benego Michael	M	Community member	-
14	Samwel Michael	M	Community member	-
15	Cress Mlimba	M	Community member	0788 919211
16	Amani M. Kunini	M	Community member	0713 913033
17	Mbamai Mlimba	M	Community member	0719 875833
18	Pita Saidi	M	Community member	-
19	Steven Kinana	M	Community member	0757 968243
20	Mejoh Sakati	M	Community member	-
21	Kaniyo Sakati	M	Community member	-
22	Shabala Taleki	M	Community member	0753 169960
23	Letoile Langasi	M	Community member	0765 325344
24	Ngeke Sakati	M	Village Chairman	0756 000442
25	Anna Mayeseki	F	Community member	-
26	Ester Saidi	F	Community member	-
27	Neema Koshoka	F	Community member	-
28	Mariam Tukunya	F	Hamlet Chairperson	-
29	Tulapani Meja	F	Community member	-
30	Mariam Selemani	F	Community member	-
31	Neema Salum	F	Community member	-
32	Belita Kiniyo	F	Community member	
33	Merina Malupe	F	Community member	-
34	Anna Samora	F	Community member	0752 126229
35	Lea Mbunjai	F	Community member	-
36	Magreth Sambeti	F	Community Member	-
37	Sayuni Letika	M	Community member	0754 585735

Appendix 9: Members Organized into IOP Group-*Eneboshu*-Poultry Scheme at Mela

S/n	Name	Sex	Designation	Contact/Address
1	Maritha Abedi	F	Chair person	-
2	Pendo Mathayo	F	Secretary	0764 106790
3	Mariam Tukunya	F	Treasurer	0757 837002
4	Neema Lepaso	F	Member	0782 733640
5	Elia Mhando	M	Member	0764 597936
6	Tabisa Talek	F	Member	0764 372029
7	Ester Rajabu	F	Member	0612658779
8	Ester Saidi	F	Member	-
9	Janeth Msanzia	F	Member	0785 940938
10	Merina Malupe	F	Member	
11	Sayuni Letika	M	Member	0754 585735
12	Magreth Sambeti	F	Member	-
13	Anna Mayeseki	F	Member	0762 856849

Appendix 10: Fomu za Uwekaji Kumbukumbu za Ufugaji Kuku wa Asili

10 (a) Fomu ya Kumbukumbu za Kuku na Uzalishaji

Jina la Mfugaji/ Kikundi		Tarehe			Tarehe		
Na	Kumbukumbu	Idadi	Thamani	Maoni	Idadi	Thamani	Maoni
1	Tetea						
2	Jogoo						
3	Vifaranga wadogo (mwezi 0-2)						

Jumla				

Source: Heifer International Tanzania (2010:54)