

APPENDICES

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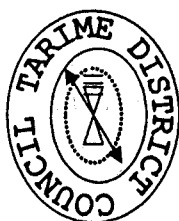
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2. Letter of Introduction

TARIME DISTRICT COUNCIL

Tel: +255 28 2690518
 Fax no: +255 28 2690518,



*District Executive Director,
 P.O. BOX 16,
TARIME.*

Ref. No. HWT/PF/1932

25/10/2005

Leonard Mosses Masale,
 District Agriculture and
 Livestock Development Officer.

RE: PERMISSION TO WORK WITH CHERECHE CBO

Please, refer to the above heading.

I take this opportunity to grant you permission, as required by your MSC CED Program, to work with Chereche Paddy Farmers Group.

It is with the expectation of the Council to Strengthen the Group and build its capacity to sustain both the paddy farm and the Rain water dam.

However, you are required to work closely with the village government and the village community in implementing your proposed afforestation project. You are to submit your Monthly implementation report to the District Executive Director as part of your Open Performance Review and Appraisal System (OPRAS) for annual salary increment and Promotion.

I wish you the best.

Mathias S. Ngw'ibombi
Ag. DISTRICT EXECUTIVE DIRECTOR
TARIME

Copy to: The Secretary
 Chereche Farmers Organization.

“ “ The Village Executive Officer
 Chereche Village.

3. Needs Assessment

Target beneficiaries

Paddy farmers (The CBO), Village Households, Village Government, District Council,

What are the needs?

- Continued water supply for irrigation, domestic and livestock use
- Basic demands for fuel-wood, timber and income.
- Implementable CBO constitution
- Income generating activities
- By-law for protecting the Chereche village catchment area.
- Paddy free of pests and diseases

The project prerequisites to achieve the project aims are to strengthen the organization by:

- having an implementable CBO constitution that is recognized by the courts of law.
- having an enactable by-law for protecting the Chereche village catchment area.
- training CBO members on tree nursery management and tree planting.
- demarcating and allocating plots per member in the Catchment area for multipurpose tree planting.

The project will assist the village government to have source of tree seedlings to the rest of the village population. The expected output is forest produce and conserved soils in the catchment area of the dam.

The needs to be addressed by this project are forest produce to meet basic demands for fuel-wood, timber and income.

However, in the long run the project will save the dam from siltation and assure the organization members availability of water for a long time for crop production.

Whom are to define the *needers'* needs

The Community based organization

Government Extension workers

Project supervisor

Village Government

VI – Agroforestry Project

Training Coordinator

Zonal Agricultural Research Institute

Community Development Officer

District Forestry Officer

Photographs showing the afforestation in the project area (Photos by Masale)

²⁰
CHERECHÉ WATER DAM



Figure 1 Chereché Rain Water Dam full to capacity in 2006 (Note the bare Catchment)

²²
PADDY FARM IN CHERECHÉ



Figure 2 Paddy Farm below the dam prepared for planting in 2006 (Note irrigation canal)

THE DAM CATCHMENT AREA



Figure 3 Chereche Dam catchment area lacking trees as per 2005 situation
(Note water at the edge of the dam and the Rorya hills at the background)

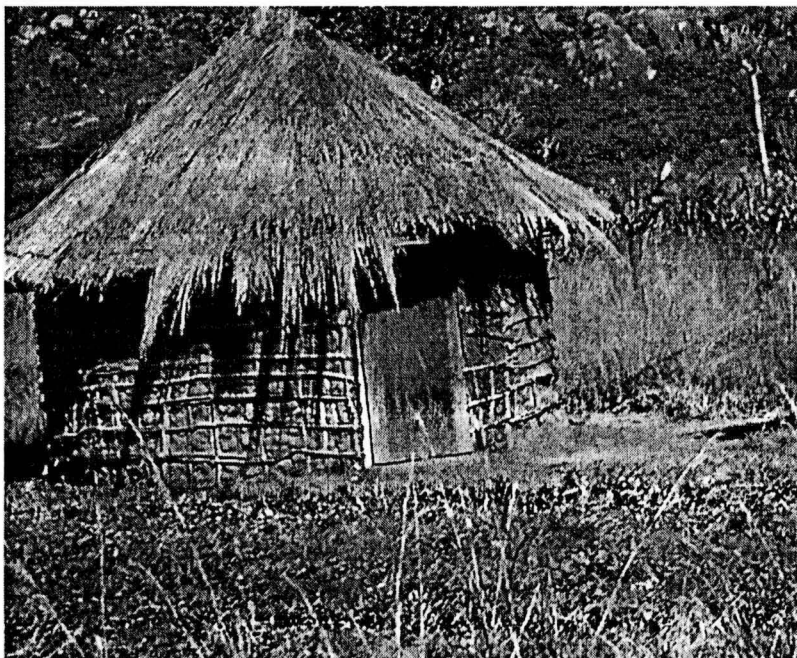
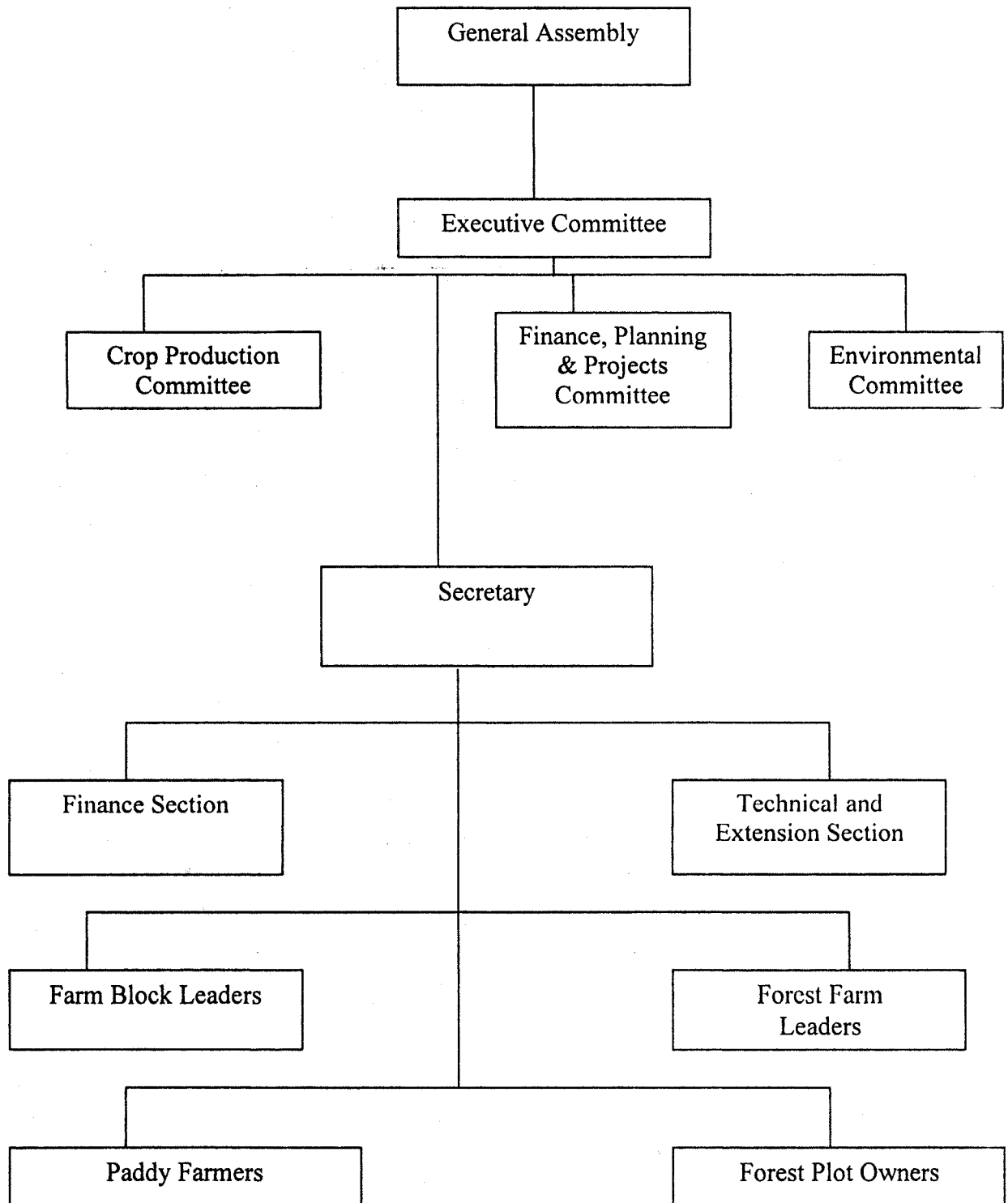


Figure 4 below shows a typical Luo hut with sweet potatoes planted at forefront

4. Organization Chart

4.1 CHERECHE RORYA FARMERS ORGANIZATION



4.2 Staff Job Descriptions

1. Organization Secretary:

PURPOSE OF THE JOB: To provide efficient organizational Services to the organization including member's capacity building and staff development

REPORTS TO: Organization Chairperson

Responsibilities and duties:

1. Coordinates working schedules of the organization
2. Evaluate achievements and problems of implementing activities in the organization.
3. Coordinates capacity building activities of the organization.
4. Ensures the preparation of the annual report
5. Advises the organization Chairperson
6. Is the custodian of the Organization documents and equipments
7. Is the Chairperson of the Crop production committee
8. Is the Secretary to the Finance Committee and the general assembly.
9. to perform all other duties as will be directed by the organization management

2. Acting Organization Accountant

PURPOSE OF THE JOB: To perform all the accounting functions of the organization

REPORTS TO: Organization Secretary

Responsibilities and duties

1. Is responsible for the accounts of the organization
2. Effects all budget payments of the organization
3. Compiles annual financial estimates
4. Prepares monthly, quarterly, half yearly and annual financial reports.
5. Prepares final accounts
6. Replies to all audit queries
7. Supervises accounting staff under him/her
8. Pays salaries and wages
9. Performs any other accounting duties as directed by the organization Secretary

Key Outputs

1. Preparation of draft budget
2. Monthly, quarterly and half yearly financial reports
3. Annual final audited accounts.

3. Acting Organization Cashier

PURPOSE OF THE JOB: To assist the accountant in maintaining the accounts of the organization.

REPORTS TO: Organization accountant

Responsibilities and duties

1. Receives and pay cash
2. Makes bank reconciliation

3. Prepares periodic financial reports
4. Writes and keeps accounts register
5. Prepares Payment Vouchers
6. Keep accounts files
7. Prepares salaries and other payments
8. Performs any other accounting activities under the direction of the organization accountant.

4. Irrigation Technician (IRRT)

PURPOSE OF THE JOB: Promoting and supervising all irrigation technologies introduced to the farm.

REPORTS TO: Organization Secretary and Project Supervisor

Responsibilities and duties

1. Will implement National Irrigation Policy
2. Will identify and conduct pre-feasibility study on areas potential for irrigation through surface water or through harvesting of rainwater for irrigation purposes.
3. Will evaluate irrigation technologies adopted by Farmers
4. Will advise on use of irrigation technologies and regulations
5. Will promote sustainable land, water and natural resources management in irrigation catchment area and irrigate lands
6. To solicit NGOs and other stakeholders in supporting Chereche irrigation project.
7. To supervise construction of irrigation infrastructures
8. To provide irrigation extension services to farmers
9. To facilitate and advice on formation of irrigation farmers groups for management of irrigation schemes and proper irrigation water management of irrigation schemes and proper irrigation water management.
10. To report on irrigation cropping water management
11. To be a custodian of irrigation equipments and supervise irrigation schemes
12. To facilitate farmers in contributing resources for planning and implementation of irrigation project.
13. To perform all other duties as will be directed by the organization Secretary and Project Supervisor

5. Crop Production Extension Officer (CPEO)

PURPOSE OF THE JOB: Promoting, supervising all crop production activities

REPORTS TO: Reports to: Organization Secretary and Project Supervisor

Responsibilities and duties

1. The CPEO will work using groups of farmers and farm Block leaders
2. Will establish adoption plots/units using Farmer's Field School approach
3. Will organize farmer's field days,. farm tours and agricultural shows
4. Will conduct farmers Agricultural needs assessment
5. Will conduct demonstrations in collaboration with other NGO'S, Input supplies, marketing and credit Agencies

6. Should maintain a farm register describing a minimum social and economic statistics about farmers with their economic mobility
7. Develop. and promote crop development programs
8. Advise farmers on alternative sound crop husbandry methods
9. Advise farmers on farm budgets
10. Advise and promote the use of farm field Schools/PRA for crop extension.
11. Advise and promote sound soil and water conservation methods and hence conserve the environment.
12. Provide farmers with information about availability of agricultural inputs, implements, drugs and the safe and sound use of the same
13. Advise farmers on crop markets so as to get good returns
14. Submit implementation reports to the crop production committee as required (monthly, quarterly and annual)
15. Coordinate all agricultural activities and programs that are implemented the organization.
16. To perform all other duties as will be directed by the organization Secretary and Project Supervisor

6. JOB TITTLE: Project Supervisor

**RESPONSIBLE TO: 1. DISTRICT EXECUTIVE DIRECTOR
2. ORGANIZATIONAL SECRETARY**

PURPOSE: Coordinating, Supervision and monitoring of afforestation project activities undertaken by the Government Staff attached to the project

Responsibilities and duties:

1. Advises the Secretary on matters pertaining the afforestation project and paddy production
2. Develop and promote crop and livestock programs in the village and the organization
3. Liaise with parastatals, Government Institutions, Donors and Organizations dealing with environment, crop and livestock development in order to support development activities in Chereche
4. Coordinate implementation of Development Programs, which are implemented by Government staff attached to the afforestation project..
5. Collaborate with institutions which deal with environment conservation in order to ensure that Agricultural development conserves the environment.
6. Coordinate and supervise preparation of estimates for **inputs** and agricultural **implements** requirement for the project and make follow up for their availability and distribution.
7. Write reports for all the staff under his supervision i
8. Carry out any other agricultural/Livestock activities as assigned to him by DED and the Organization.

7. JOB TITTLE: TRAINING COORDINATOR (TC)**RESPONSIBLE TO:** Organization Secretary**PURPOSE OF THE JOB:** To train and guide the delivery/dissemination of technical messages to organization members, farm families, and School Children in order to promote project activities to all the community**Responsibilities and duties:**

1. To train School Children on environmental issues
2. To train Organization members on Catchment protection
3. To establish a tree nursery pilot in his School for demonstration to School Children, Organization members and the Community at large
4. To develop a revolving fund for the School tree nursery
5. To coordinate afforestation of the Village School environment by the school children
6. To interpret technologies delivered to the organization in a simple and understandable language.
7. To harmonize implementation of activities and use of scarce resources, and evaluate the performance of regular School children training, farmers training and overall extension activities.
8. To supervise and guide the collection, simple interpretation and application of necessary environmental data and information for the organization
9. To compile monthly, quarterly, mid year and annual afforestation implementation report to the Organization Secretary and the Project Supervisor
10. To train organization staff on simple bookkeeping and record keeping
11. To train organization members on data collection and interpretation
12. To perform all other duties as will be directed by the organization Secretary and Project Supervisor

5. Project Planning Time Table

Afforestation project implementation plan

OBJECTIVES:

1. To organize Chereche CBO and village Government institutions in having enactable constitution and catchment protection by-law by the end of June 2006.
2. To reduce land degradation through establishment of a 500m wide strip of multipurpose tree cover by CBO members by the end of March 2007.

ACTIVITIES	2005		Project Month 2006												2007			Resources Needed	Persons Responsible
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M		
Creating awareness of the afforestation project																		- Fuel - Allowances	CPEO, IRRT Project Supervisor
Marking contours in the catchment																		-Pegs, sisal seedlings, fuel Allowances	- IRRT, CBO members.
Reviewing the CBO constitution																		Stationeries	Project supervisor CBO secretary, CBO members
Formulating the catchment project by -law																		Stationeries	VEO, CPEO, IRRT, Project Supervisor, Village Government
Training of CBO members and village government on planting of trees																		- Stationeries - Fuel - Allowance - Tree seedlings	CPEO, Forestry Officer Vi-AFP Officer IRRT

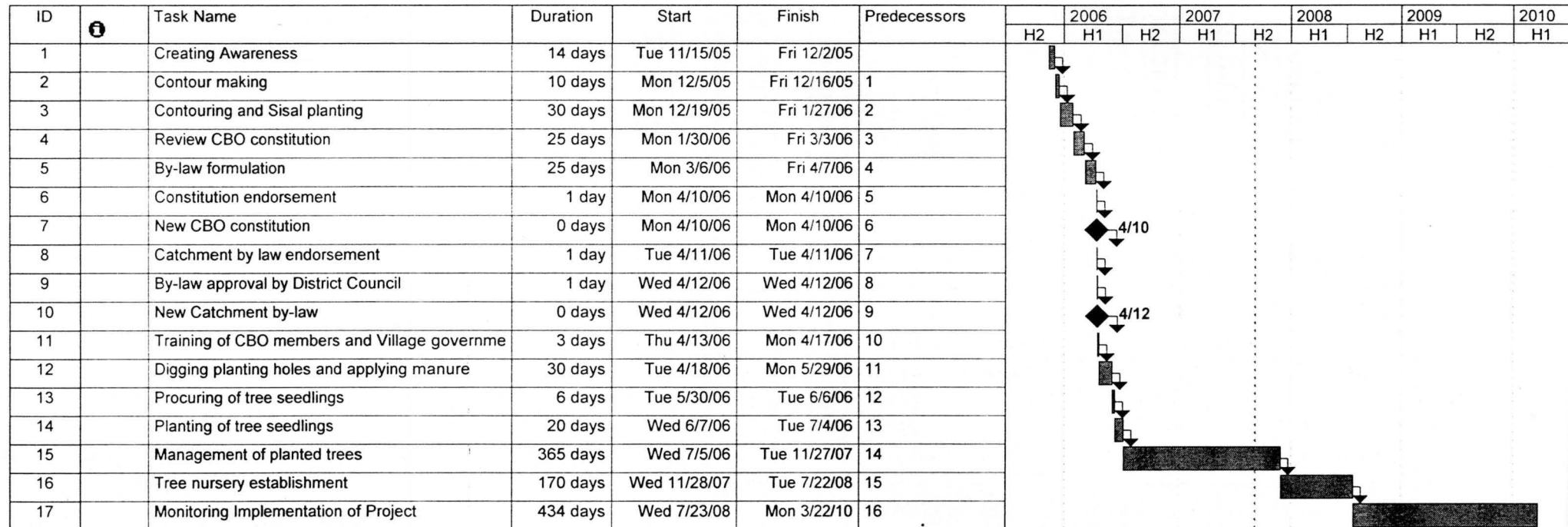
ACTIVITIES	2005		Project Month 2006												2007			Resources Needed	Persons Responsible
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M		
Digging planting holes and putting manure																		Hand Hoes, manure	VEO CBO secretary CBO Members
Procuring of tree seedlings																		Tree seedlings, Fuel, Funds	IRRT CBO secretary
Planting of tree seedlings																		- hand hoes - Tree seedlings - Community members	CPEO IRRT VEO Proj. Supervisor CBO secretary CBO members
Endorsing the CBO constitution																		Stationeries	Project supervisor CBO secretary, CBO members
Tabling to District Council catchment protection by - law																		Stationeries	DED, Project supervisor, Councilors
Management of planted trees																		-	CBO members
Tree nursery establishment																		Tree seeds, Nursery equipments forest top soil	SCC VI-AFP CBO secretary CPEO
Monitoring Implementation Of Project																		Fuel stationeries	CPEO VEO IRRT CBO secretary Project supervisor, CBO members

Table adapted from CEDPA (1994): Project planning for program managers; pp 46.

KEY

- | | | |
|-----------------|---|--|
| 1. CPEO | – | Crop Production Extension Officer |
| 2. IRRT | – | Irrigation Technician |
| 3. SCC VI – AFP | – | SCC Vi – Agro forestry Project (Swedish acronym) |
| 4. VEO | – | Village Executive officer |
| 5. DED | – | District Executive Director |

6. Project Implementation Gant Chart



Project: Masale Project
Date: Sat 9/1/07

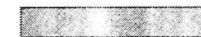
Task



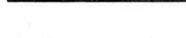
Milestone



External Tasks



Split



Summary



External Milestone



Progress



Project Summary



Deadline



7. Project Budget

	BUDGET CATEGORY	UNIT COST (TSHS)	No. OF UNITS	TOTAL (TSHS)
I	TRAVEL AND TRANSPORTATION			
	Fuel	1,300	960	1,248,000
	Per Diem	30,000	24	720,000
II	MATERIALS			
	Tree seedlings	50	15,000	750,000
	Transportation costs (km)	900	640	576,000
III	OTHER DIRECT COSTS			
	Stationeries	50,000	8	400,000
	Printing charges	3,000	120	360,000
	Photocopies	16,000	10	160,000
IV	TRAINING			
	Training hall	10,000	10	100,000
VI	INDIRECT COSTS			
	Communication charges	5,000	12	60,000
	TOTAL COSTS			4,374,000

6. Project Power Point Presentation

Report title

Report on Catchment afforestation project for protection of chereche rainwater dam In Chereche village in Tarime district, Tanzania

By Leonard Masale ID Nr. 618566
SNHU/OUT Mwanza Center

1.Presentation sequence

- Introduction
- Community needs assessment
- Problem Identification
- Project Implementation
- Monitoring/Evaluation
- Conclusion & recommendation

2.Community needs assessment...

The assessment involved getting information and data using the following research methods and tools:

- Physical observation while conducting transect walk
- Focus Group Discussions (FGDs) guide using structured discussions

3...Community needs assessment

- Quantitative method whereby structured interview using a questionnaire was applied
- Secondary data sources by reviewing relevant records and reports
- Coffing-Hutchinson needs analysis methodology in prioritizing the needs

4...Community needs assessment

Physical observation

- The observation group consisted of three persons which included the SNHU student.
- The group assessed development activities that included the way the people lived and behaved, infrastructure development and environment management.

5...Community needs assessment

Focus Group Discussions (FGDs) guide

- Focus Group discussion tool was applied to understand people's knowledge attitudes, and feelings towards afforestation issue.
- These were interviewed using a FGD guide carrying twelve questions

6...Community needs assessment

Structured Interview Using a Questionnaire

- The questionnaire was used to extract the awareness on environmental problem that is deforestation, extent, causes and consequences of deforestation in the village; Measures being taken to address the problem and personal opinions to alleviate the problem.

7...Community needs assessment

Secondary Data Sources

- Reviewing records and reports was another methodology used.
- Documents reviewed consisted of census data and CBO monthly reports.
- Reports used included the village annual reports and the District Agriculture and Livestock Development Department annual reports.

8...Community needs assessment

Coffing-Hutchinson Needs Analysis Methodology

- After identifying all the needs, a Coffing-Hutchinson needs analysis methodology was used.
- Each participant had to go through the master list carefully and placed a check mark against each need one considered important for the village

9...Community needs assessment

- The participants then went over checked items in the list and five most important items were circled.
- A checked item was equal to one point while a circled item was equal to ten points
- Causal – effect analysis was done to identify the main cause of the problem and the effect of the problem to the environment and the community

10...Community needs assessment

- The Village receives bimodal marginal rainfall of less than 900mm per annum
- Short rains are around October to December, and
- Long rains are in late February to May.
- Tree planting activities must follow this rainfall pattern.

11...Community needs assessment

Village Information

- Chereche is one of the villages in Nyathorogo ward, Luo-Imbo Division, Rorya political constitution, in Tarime district, Tanzania. It has an area of about 10,000 ha with agricultural potential area of 5,300 ha. The households were concentrated in 290 ha.

12...Community needs assessment

- The village Population was 3,188 (1,712 females, 1,476 males) in 580 households and in 7 sub villages (2002 census data).
- The Village receives marginal rainfall of less than 900mm per annum limiting crop production. There is bimodal rainfall pattern with short rains (*Vuli*) around October to December and long rains (*Masika*) in late February to May. The mean temperature was about 25 centigrade

13...Community needs assessment

- the village had a problem of land degradation which resulted into low land productivity.
- There was no cash crop farming and most households were poor in terms of basic human needs.
- The source of water was rainfall in the catchment area of Rorya hills draining an area of 412 ha to a multipurpose dam.

14...Community needs assessment

The CBO mission statement

- The CBO mission statement is to establish a multipurpose, self sustaining and environmental friendly harvested rain water irrigation scheme for economic growth and poverty reduction of the organization members.

The goal of the CBO

- The goal is to reduce food and income poverty of members at risk of unreliable rainfall pattern.

15. Problem identification...

- The problem is land degradation in Chereche dam catchment area in due to human activities on the catchment.

16...Problem identification

- Expected effects are soil erosion leading to siltation of the dam, and reduction of the amount of water necessary for domestic use and farming.

17...Problem identification

- If nothing was done, the dam would be silted up and irrigation activities would cease to exist.
- Water for domestic use would also be scarce
- Tree planting would also be affected

18 Analysis

SPSS was used for analysis of raw data

- This included the mean and median
- Measures of variation – range and standard deviation, frequencies, and percentages

19. Implementation

- CBO constitution was reviewed to strengthen the CBO into a legal entity
- Catchment Protection By-law was formulated and circulated primary courts within the district.
- Trees were planted in the catchment area
- Trees nurseries were established to supply tree seedlings for sale

20. Monitoring

Variables monitored

- Number of trainings conducted in afforestation techniques
- Number of trainings conducted in tree seedlings production
- Number of trained nursery attendants

21....Monitoring

- Number of CBO members planting trees correctly
- Number of planted trees surviving per CBO member by the end of December 2006,
- Number of tree seedlings ready for planting up to February 2007.

22. Implications

- The elder generation has ties with land than the new generation.
- Recipients of extension messages should include the old who own land regardless of their literacy level.
- Policies, laws and bylaws should be made available to village communities
- Communal land is subject to serious land degradation.
- On land use planning, livestock should be taken into consideration.

23. Evaluation

- Formative evaluation was done in early March 2006, June 2006 and December 2006.
- Summative evaluation was done in February 2007.

24. Summative evaluation...

- Number of trained nursery attendants
- Number of CBO members planting trees correctly
- Number of planted trees surviving per CBO member
- Number of tree seedlings raised by the project nursery

25...Summative evaluation

- Number of other stakeholders deriving income from the afforestation program
- Number of households building modern houses
- Number of households able to pay school fees for children passing standard seven examinations

26. Formative evaluation...

- Community awareness and respect of the CBO constitution
- Community awareness and implementation of catchment protection by-law
- Income generated from tree seedling sales
- Members depending on own farm agroforestry woodlots
- Members with own tree nurseries and deriving income from the sale of seedlings

27...Formative evaluation

- Financial contribution of the afforestation project to the CBO
- Income generated by the forest products to individual members
- Village community members with own woodlots
- Sub-village or hamlets community owning demarcated forest plots in the catchment area and deriving income from forest produce
- Cleanliness of the dam water as a result of controlled soil erosion

28...Sustainability

- Tree seedling nursery used as a source of income through sale of tree seedlings.
- Forest produce for sale for financial income
- Small scale industry to add value in forest produce and paddy produce for income generation.
- grow fish in the dam to derive income and nutrition

29...Sustainability

- Funds from the paddy account to support the afforestation program
- open a savings and Credit Account for members
- Charge fees for harvesting of forest produce

30...Sustainability

- Legal constitution and catchment protection by-law to ensure continuity of the project.
- Train some members to become trainers of fellow members.
- Conducted Field days to stimulate other village communities to initiate afforestation projects in their villages.

31...Sustainability

- Tree planting at the project area to be part of the National Tree Planting day

32. Conclusion

- Participation of the members is an indispensable element in formulating and adjusting technical proposal to their productive systems
- Manipulative participation is necessary for continuity of the afforestation program - to adhere to the CBO constitution and catchment protection by-law.

33. Recommendation

- Legislation for protection of efforts invested in the catchment household farms must go hand in hand with tree planting.
- The legislation should regulate harvesting of forest/tree produce in the forest and household farms.

34. Recommendation

- Community lands be demarcated and leased to NGOs, CBOs, CSOs, and hamlets for afforestation.
- Each hamlet member be allocated a plot and allowed to grow multipurpose trees, and keep own beehives for honey production.

35. Recommendation

- There should be no free accessible land in the villages to avoid environmental degradation.
- Every body must depend on trees grown on own land and/or leased land

36. Recommendation

- Copies and translation of laws and policies should be available to village community members.
- Agricultural shows to include afforestation promotion item and good performing individuals, institutions be recognized and awarded presents

36. END OF SLIDE SHOW

- Thank you for listening

9. Academic Goals for the Project

1. PROFESSIONAL GOALS

My professional goals that I hope to achieve through my participation in the community project are the following:-

- 1.1 To get practical and applied skills for designing and managing community – based, sustainable development projects and thus build capacities of community based organizations so that they can realize their potential to own and control available economic, environmental and social resources thus improving members' income.
- 1.2 To build strong and sustainable institutions through working cooperatively with village communities and influence other communities to replicate good practices developed by the target community.
- 2.0 The activities of the community Project will enable me to achieve my professional goals by working with them in Strengthening the farmers Group into an eligible and credible Community Based Organization (CBO) through a legal constitution;
Working with both the community at large and the village government in enacting a by-law for protecting both the CBO and the community projects;

As itemized in the section of what the project is expected to achieve, it will include a number of activities to arrive at. The activities are training, reviewing draft constitution, formulating catchment protection by-law, designing sustainable and cost effective soil erosion control project, proposal writing, designing monitoring and evaluation plan. However, lessons and experiences will be used as a tool to strengthen the project.

After working for a year with the community in this project, I will have gained an understanding on implementing a participatory development project basing on the needs arising from the respective community. The community will identify type of a project to implement with the resources they have, but with a wider understanding on key issue like sustainability and feasibility.

3.0 Activities to be undertaken in developing my professional skills required to achieve my professional goals and community project goals.

- Revising the CBO draft constitution and discuss it with all CBO members before the final draft.
- Drafting a catchment protection by-law and discuss it in a village general assembly for their approval:
- Training of both CBO members and non-CBO members on afforestation activities in order to create awareness for most of village communities.
- To invite the Mara Regional Commissioner to officiate the tree – planting activity of the afforestation project in order to publicize the project.
- Literature search in understanding the identified problem to address. Learn on a number of methodologies used / required in designing, implementing, monitoring and evaluating a community project.

I will be involved in training and designing a training program.

This will give more challenges on how to train farmers on technical issues.

During the process, I will be collecting, documenting, and taking digital photos of what is happening for the future use.

The project proposal involving the community will be submitted to development partners that include the Mara VI-Agroforestry Project, Ministries dealing with Agriculture and Natural Resources for funding. Acceptability for funding and implementation of the project by the community using local available resources will be an achievement in my professional goal. Currently, the Ministry for Agriculture has pledged to support the project by providing tree-seedlings.

The Village government has facilitated all farmers in the village to attend an afforestation seminar and implement the project over the whole of the catchment area.

10. Computer Output (SPSS)

i Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
gender of respondent * family structure	55	100.0%	0	.0%	55	100.0%
gender of respondent * monthly cash income	55	100.0%	0	.0%	55	100.0%
gender of respondent * landownership	55	100.0%	0	.0%	55	100.0%
gender of respondent * tree planted	55	100.0%	0	.0%	55	100.0%
age of respondent * family structure	55	100.0%	0	.0%	55	100.0%
age of respondent * monthly cash income	55	100.0%	0	.0%	55	100.0%
age of respondent * landownership	55	100.0%	0	.0%	55	100.0%
age of respondent * tree planted	55	100.0%	0	.0%	55	100.0%
education of respondent * family structure	55	100.0%	0	.0%	55	100.0%
education of respondent * monthly cash income	55	100.0%	0	.0%	55	100.0%
education of respondent * landownership	55	100.0%	0	.0%	55	100.0%
education of respondent * tree planted	55	100.0%	0	.0%	55	100.0%
marital status of respondent * family structure	55	100.0%	0	.0%	55	100.0%
marital status of respondent * monthly cash income	55	100.0%	0	.0%	55	100.0%
marital status of respondent * landownership	55	100.0%	0	.0%	55	100.0%
marital status of respondent * tree planted	55	100.0%	0	.0%	55	100.0%

ii Gender of respondent * family structure Cross tabulation Count

	family structure		Total
	male headed	female headed	
gender of male respondent	33	0	33
gender of female respondent	19	3	22
Total	52	3	55

iii Gender of respondent * monthly cash income Cross tabulation Count

	monthly cash income				Total
	less than 20,000	21,000-40,000	41,000-60,000	above 60,000	
gender of male respondent female	25	2	3	3	33
	19	3	0	0	22
Total	44	5	3	3	55

iv Gender of respondent * landownership Cross tabulation Count

	landownership			Total
	private	communal	no answer	
gender of male respondent female	27	5	1	33
	19	3	0	22
Total	46	8	1	55

v Gender of respondent * tree planted Cross tabulation Count

	tree planted				Total
	less than 5	6-10	above 10	no answer	
gender of male respondent female	1	14	18	0	33
	3	6	11	2	22
Total	4	20	29	2	55

vi Age of respondent * family structure Cross tabulation Count

	family structure		Total
	male headed	female headed	
age of 18-35 respondent	19	2	21
36-60	27	1	28
above 60	6	0	6
Total	52	3	55

vii Age of respondent * monthly cash income Cross tabulation Count

	monthly cash income				Total
	less than 20,000	21,000-40,000	41,000-60,000	above 60,000	
age of 18-35 respondent	17	3	1	0	21
36-60	21	2	2	3	28
above 60	6	0	0	0	6
Total	44	5	3	3	55

viii Age of respondent * landownership Cross tabulation Count

	landownership			Total
	private	communal	no answer	
age of 18-35 respondent	15	5	1	21
36-60	25	3	0	28
above 60	6	0	0	6
Total	46	8	1	55

ix Age of respondent * tree planted Cross tabulation Count

	tree planted				Total
	less than 5	6-10	above 10	no answer	
age of 18-35	3	10	7	1	21
respondent 36-60	1	9	18	0	28
above 60	0	1	4	1	6
Total	4	20	29	2	55

x Education of respondent * family structure Cross tabulation Count

	family structure		Total
	male headed	female headed	
education of none	1	0	1
respondent primary	50	3	53
secondary	1	0	1
Total	52	3	55

xi Education of respondent * monthly cash income Cross tabulation Count

	monthly cash income				Total
	less than 20,000	21,000-40,000	41,000-60,000	above 60,000	
education of none	1	0	0	0	1
respondent primary	42	5	3	3	53
secondary	1	0	0	0	1
Total	44	5	3	3	55

xii Education of respondent * landownership Cross tabulation Count

	landownership			Total
	private	communal	no answer	
education of none	1	0	0	1
respondent primary	44	8	1	53
secondary	1	0	0	1
Total	46	8	1	55

xiii Education of respondent * tree planted Cross tabulation Count

	tree planted				Total
	less than 5	6-10	above 10	no answer	
education of none	0	0	0	1	1
respondent primary	4	20	28	1	53
secondary	0	0	1	0	1
Total	4	20	29	2	55

xiv Marital status of respondent * family structure Cross tabulation Count

		family structure		Total
		male headed	female headed	
marital status of respondent	married	51	2	53
	widowed	0	1	1
	no answer	1	0	1
Total		52	3	55

xv Marital status of respondent * monthly cash income Cross tabulation Count

		monthly cash income				Total
		less than 20,000	21,000-40,000	41,000-60,000	above 60,000	
marital status of respondent	married	43	4	3	3	53
	widowed	1	0	0	0	1
	no answer	0	1	0	0	1
Total		44	5	3	3	55

xvi Marital status of respondent * landownership Cross tabulation Count

		landownership			Total
		private	communal	no answer	
marital status of respondent	married	44	8	1	53
	widowed	1	0	0	1
	no answer	1	0	0	1
Total		46	8	1	55

xvii Marital status of respondent * tree planted Cross tabulation Count

		tree planted				Total
		less than 5	6-10	above 10	no answer	
marital status of respondent	married	4	18	29	2	53
	widowed	0	1	0	0	1
	no answer	0	1	0	0	1
Total		4	20	29	2	55

11. Questionnaire Code Book

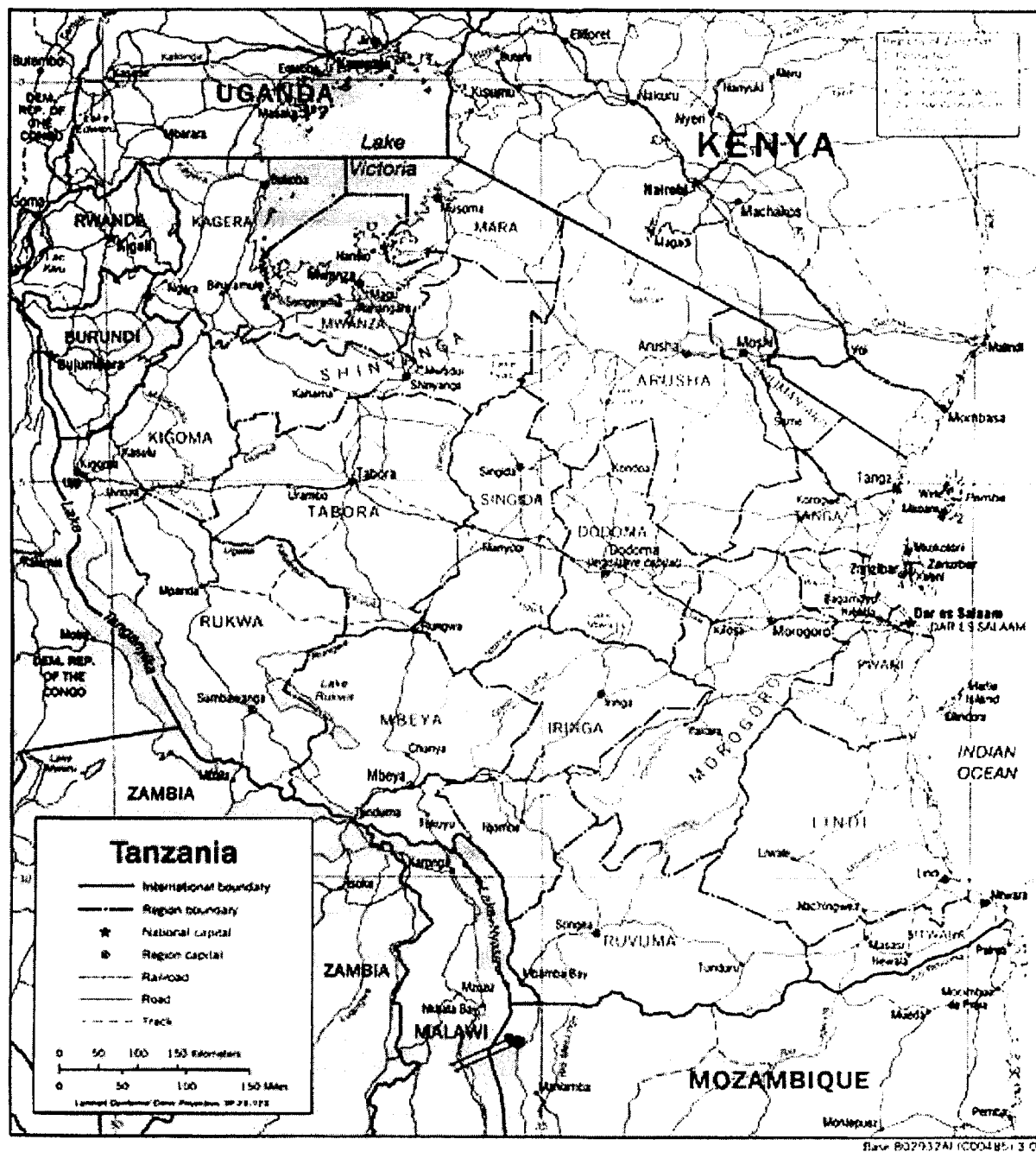
CHERECHE PROJECT QUESTIONNAIRE CODE BOOK				
NAME	ITEM	VARIABLE LABEL	VALUES	CODE
case	1	case number of respondent	NONE	1
gender	2	gender of respondent	Male	1
			Female	2
			No answer	3
age	3	age of respondent	Below 18 years	1
			Between 18 and 35	2
			Between 36 and 60	3
			Over 60	4
			No answer	9
maristat	4	marital status of respondent	Single	1
			Married	2
			Divorcee	3
			Widowed	4
			No answer	9
educatio	5	education of respondent	None	1
			Primary	2
			Secondary	3
			Post Secondary	4
			No Answer	9
famstruc	6	family structure	Male headed	1
			Female headed	2
			Neither	3
			No Answer	9
occupat	7	Main occupation	Crop Farming	1
			Livestock Keeping	2
			Fisherman	3
			Petty trader	4
			Formal employment	5
			No answer	9
income	8	monthly cash income	Less than 20,000	1
			Between 21,000 and 40,000	2
			Between 41,000and 60,000	3
			Over 60,000	4
			No answer	9

cashcont	9	main cash income contributor	Crops	1
			Livestock	2
			Timber/Charcoal sale	3
			Formal employment	4
			No answer	9
crops	10	main cash contributing crops	Rice	1
			Maize	2
			Millet	3
			Cassava	4
landown	11	landownership	Private	1
			Communal	2
			Hired	3
			Other	4
			No answer	9
landacq	12	land acquirement method	Inheritance	1
			Allocated by Village Government	2
			Bought	3
			Hired	4
			Hired and allocated by Village Government	5
livstown	13	livestock ownership	Yes	1
			No	2
			No Answer	9
livstacq	14	livestock acquirement method	Mainly inheritance/dowry	1
			Bought	2
			Hired	3
			I don't have	4
			Both inheritance and buying	5
			No answer	9
decmaker	15	decision maker in household	Male	1
			Female	2
			Both male and Female	3
livgraz	16	livestock grazing place	Individual farm	1
			Communal land	2
			Zero grazing/Stall feeding	3
			Have no livestock	4
			No answer	9
livkeepe	17	livestock grazer	Children	1
			Father	2
			Farmers teams	3

			Zero grazing	4
			Do not have livestock	5
			Father and Children	6
			No answer	9
			Yes	1
extrafar	18	extra farm produce	No	2
treetrai	19	tree planting training	Yes	1
			No	2
trainer	20	tree planting trainer	Extension Officer	1
			Fellow farmers	2
			Family/Experience	3
			No answer	9
treeplan	21	tree planted	None	1
			Less than 5	2
			six to ten	3
			More than 10	4
			No answer	9
treesurv	22	trees survived	None	1
			Less than 5	2
			six to ten	3
			More than 10	4
			No answer	9
treedied	23	cause for tree death	Drought	1
			Destroyed by livestock	2
			Pests and Diseases	3
			Poor management	4
			Drought and Livestock	5
			No answer	9
treesour	24	source of trees	Formal institutions	1
			Own nursery	2
			Wildlings	3
			No answer	9
bylaw	25	Village government afforestation bylaw	Yes	1
			No	2
			I don't know	3
bylawper	26	bylaw performance	Very effective	1
			Somehow effective	2
			Not effective	3
			I don't know	4

belief	27	local beliefs on trees	Yes	1
			No	2
			I don't know	3
			No answer	9

12. Map of Tanzania



Note: The afforestation project was in Mara Region on the Eastern part of Lake Victoria at the border with Kenya.