CO-MANAGEMENT PLAN FOR LIUNDI /MILALA FOREST BLOCK IN

LIWONDE FOREST RESERVE MACHINGA DISTRICT





February, 2014

This plan has been produced by the communities of GVHs Mbando, Liundi, Mgumbala, Kawalala and Milala with technical support from: - Machinga District Forestry Office and PCU (South). It is a 5 year plan (2014-2019) and will be reviewed after five years.

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ACRONYMS

FD Forestry Department

DFO District Forestry Office (r)

ADFO Assistant District Forestry Officer

FA Forestry Assistant

EU European Union

FDF Forest Development Fund

FMU Forest Management Unit

GPS Geographical Positioning System

GIS Geographical Information System

GVH Group Village Headman

H/Hs Households

Ha Hectares

IFMSLP Improved Forest Management for Sustainable Livelihoods Programme

LFMB Local Forest Management Board

LFO Local Forest Organization

NTFP Non-Timber Forest Product

T/A Traditional Authority

SUMMARY

Liundi/Milala Co-Management Plan is a document that reflects all participatory processes of discussion, analysis, consultation and planning that were carried out by both Community members of Group Village heads, Liundi, Mbando, Milala, Mgumbala, and Kawalala of Traditional Authority Mposa and Forestry Department through Machinga District Forestry Office. The entire process was intended to empower local communities in GVH Liundi, Mbando, Milala, Mgumbala, and Kawalala area so that they are able to make informed decision jointly with the Forestry Department and take the responsibility over the forest resources around their area both on customary land and state-owned forest reserve or part of it, in this case Forest Block. This is in line with the National Forestry Policy, 1996 which advocates for Comanagement of protected areas such as Forest Reserves.

This Co-management plan shall guide both Liundi/Milala community and Forestry Department (Machinga District Forestry Office in particular) in sustainable management and utilization of the Forest resources mainly non timber forest products. As such, the document outlines management objectives, forest management units, and management practices for each product, resource user rules, patrolling plan, participatory monitoring and evaluation plan and other important aspects in simple terms which will assist to conserve and regulate access of forest products.

The village has a total number of 759 households and its population is disaggregated as shown in annex 1 below:

The block has nine streams namely; *Namiyala, Chikata, Namandanje, Namphambe, Kaombe, Nkokanguwo, Kabuli, Lombe and Nangapoche*. Out of them eight (7) are perennial and these are; *Namiyala, Chikata, Namphambe, Nkokanguwo, Kabuli, Lombe and Nangapoche*. It has got one main objective and four specific objectives. The block shall provide the communities of Liundi/Milala with woody and non woody products as well as environmental services (protection of catchments and fragile areas)

The communities have developed eight (8) management practices in order to guide the management systems and limited utilization of some Forest resources. In addition, fourteen (14) resource use rules and penalties including detailed management plan for each product have also been formulated.

Apart from the resource use rules, management practices, the communities also managed to develop an Activity, Patrolling, and Monitoring Plans for woody and non-woody products.

1.0 INTRODUCTION

This document is a forest co-management plan for Liundi/Milala Forest Block. The block is 933.33ha and is located to the Eastern side of Liwonde Forest Reserve which is 24,351.87 ha. This plan derives its objectives from Liwonde Strategic Forest Area Plan whose main objectives include:

- Rehabilitation and protection of fragile areas within and outside the forest reserve.
- Increasing forest cover, productivity and value, to ensure continuous provision of local and national Services.
- Improvement of livelihoods of forest dependent communities through sustainable forest management and utilization.
- Improvement of forest governance issues through local institutions.

2.0 MANAGING AUTHORITY

This Forest block shall be managed by a Local Forest Organization known as Liundi/Milala Block Management Committee from Group Village headmen Liundi, Mbando, Mgumbala, Kawalala and Milala of Traditional Authority Mposa in collaboration with Department of Forestry through Machinga District Forestry Office. The Block Committee shall be officially registered by the District Forestry Office.

3.0 DESCRIPTION OF THE FOREST BLOCK

3.1 General Description

Liundi/Milala Forest Co-management Block is found in Liwonde Forest Reserve which is located to the Eastern part of Machinga district about 30Km away from Machinga boma and about 20 Km away from Namwera Turn-Off.

The Block has a total area of **933.33** hectares with steep slopes and many streams. These streams include; *Namiyala, Chikata, Namandanje, Namphambe, Kaombe, Nkokanguwo, Kabuli, Lombe and Nangapoche*. Perennial rivers in the block include, *Namiyala, Chikata, Namphambe, Nkokanguwo, Kabuli, Lombe and Nangapoche*.

The Block is characterized by red stony soils (katondo) and black sandy soils. It is dominated by dry- Miombo woodland tree species such as *Ntwana*, *Mchenga*, *Thombozi*, *Msolo*, *Mlombwa*, *Chiumbu*, *Chinama*, *Mbanga*, *Njombo*, *Masuku*, *Mbwabwa*, *Mchonya*, *Mkalati*, *Lungwe*, *Mpoza and Mpembu* (*Maula*).

The Block is in good condition in the sense that it is dominated by regenerants. There are visible human interferences like opening up of gardens, charcoal burning and illegal firewood collection for both domestic and commercial purposes that are leading to deforestation.

3.2 Boundary

The block borders with Chindenga Nsanama Forest block to the West and Chikata River separates the two blocks. Mikunga Forest block to the East with Nangapoche River separating the two blocks. Chaone which is a customary land lies to the North. The boundary was demarcated using Geographical Positioning System (GPS). For block boundary refer to map on page 8.

3.3 Land Tenure

Liundi/Milala Forest block is part of Liwonde Forest Reserve which was gazetted in 1924 to protect catchment areas and special tree species. This implies that the Forest Reserve which includes Liundi/Milala Forest block itself still remains the property of Malawi Government.

3.4 Forest Users

The primary user groups of the block are the people from the four Group Village Headmen namely: Liundi, Mbando, Mgumbala and Kawalala. In total, the four Group Village Headmen have 759 households (H/Hs) that benefit from the block. There are also secondary users from the neighboring communities outside Liundi/Milala. Currently, commercial Forest resource users are not welcome in the block

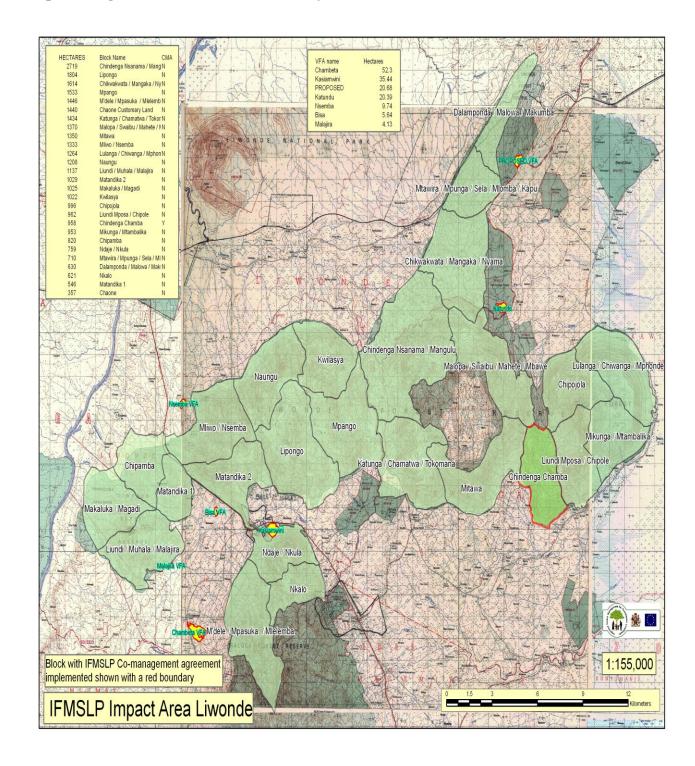
3.5 Uses

The block is used in three main ways which include; Sources of woody and non woody products, environmental protection and tourism.

Non-woody forest products include: - mushrooms, fibers, medicine, fruits, bamboos, honey, game meat and thatching grass. Woody products include firewood, timber, and poles, cooking sticks, wooden spoons, mortars, pestles and curios.

NB. The Managing Authority shall only permit domestic firewood collectors on head loads, mushroom collectors, fruit collectors, thatch grass collectors and medicinal plants collectors. No harvesting of timber, poles, firewood in cubic meters, curios for both commercial and domestic use shall be allowed as the block is going through the process of tending and managing regenerants.

Map showing Block Location and Boundary in Liwonde Forest Reserve



4.0 FOREST MANAGEMENT UNITS

Liundi/Milala Forest block has two (2) Forest Management Units (FMUs). These are described below:-

4.1 FMU 1

This FMU is covered by regenerating young tree species of miombo woodland such as: *Mtwana*, *mombo*, *Thombozi*, *Mchenga*, *Mlombwa*, *M'bawa* and fruit trees like *Masuku*, *Chinama*, *Mphinjipinji and Maula* with an area of about ------ hectares.

The area is strictly protected from harmful bush fires, fibre collection, animal grazing and any other type of forest harvesting.

4.2 FMU 2

This is an area from where diverse woody products are found. It is the largest forest management unit in the block covering an area of about -------- hectares. Most of the rivers which are found in the block originate from this FMU. Big trees of timber size can be obtained in this area though not permitted to be accessed as regard to the terrain of the forest block (very steep area). This is an area where illegal charcoal burning, illegal timber sawing illegal cutting down of trees for firewood is currently taking place.

Key tree species found in this FMU include *Mtwana*, *mombo*, *Thombozi*, *Mchenga*, *Mlombwa*, *M'bawa and fruit trees like Masuku*, *Chinama*, *Mphinjipinji and Maula*;

NB: Despite an area having diverse woody products, harvest of such products is currently prohibited by the Managing Authority as the block is under management process and utilization is limited to commercial users.

Map of Liundi / Milala Block showing FMUs

5.0 MANAGEMENT OBJECTIVES

5.1 General Objective

•To improve the livelihoods of Liundi/ Milala community through sustainable management and utilization of forest resources and services.

5.2 Specific objectives

- 1. To provide fuel wood, for domestic purposes. This will be done in FMU 2.
- 2. To protect the regenerants so as to improve forest cover and increase the wood base. This will mainly take place in FMU 1.
- 3. To protect the stream banks and other fragile areas. This will be done in FMU 2.
- 4 To sustainably utilize Non -Timber Forest Products (NTFP) –mushroom, honey, medicine, fruits, thatch grass and game meat. This will be taking place in FMUs 1 and 2

6.0 MANAGEMENT PRACTICES

The following are the appropriate management practices that have been developed in order to guide the management system and limited utilization in the block.

NO	PRACTICES	DESCRIPTION
1	Protected areas	-All catchment areas, stream banks and steep slopes will not be
		harvested.
2	Fire protection in the	-Fire protection shall be a priority in the whole block to avoid
	block	damaging the regenerants.
3	Regeneration	Regeneration shall be by coppicing, root suckering and
		planting.
4	Controlled early	-Early burning shall be done soon after rainy season to prevent
	burning	fierce bush fires and stimulate regeneration.
5	Seed trees	-The standards shall produce seed sufficient to support genetic
		variation.
6	Fruit trees	-Fruit trees shall be reserved until they become underproductive
		when they shall be used for other woody products.
7	Timber standard	-Timber trees shall be reserved for standards and included in
		the management practices
		-These trees can be harvested in the next rotation
8	Harvesting	-Harvesting shall only be permitted to domestic firewood
		collectors on head loads, domestic thatch grass collectors,
		domestic fruit collectors and domestic mushroom collectors.
		Only dried and fallen branches of trees shall be allowed for
		domestic firewood collectors in head loads.

7.0 RESOURCE USE RULES

NO	RESOURCE RULES	SPECIFICATION	PENALTY
1	No cutting of trees along the stream banks (50m on either side)	Cutting of trees will be only done 50m away from the stream banks on both sides.	Anyone found guilty of cutting trees along the stream banks shall pay a fine of K15, 000 for each felled tree. The tools and felled trees shall be confiscated. Failure to pay the fine, the offender shall be given a piece of work in the block. If he/she fails to comply with, then he/she will be sent to court to answer charges.
2	No charcoal burning	Charcoal burning in the block or outside the block is not allowed.	Anyone found guilty of burning charcoal in and outside the block shall pay a fine of K50, 000.00 and failure to do so will be taken to court.
3	(a)No setting of bush fires in the block.	Any fires that occur in the block other than one set during controlled early burning is unauthorized.	Anyone found guilty of setting fire in the block shall pay a fine of K50, 000.00 and failure to pay shall be dragged to court.
4	No unauthorized pit- sawing in the block.	-Pit-sawing shall only take place in the demarcated coupes under permission from the block committee (LFO).	-Anyone found guilty of an offence related to pit-sawing in the block shall pay a fine of K15, 000.00 per felled treeThe planks and tools shall be confiscated. If he/she fails to pay the stipulated fine shall be taken to court for prosecution.
5	No unauthorized hunting.	Hunting shall be allowed to take place at the right time of the season and with permission from the LFO.	Anyone found guilty of hunting without permission shall pay a fine of K1, 500.00.
6	No disposal of pollutants of any kind in the block.	-Rivers and forests shall be totally protected from being pollution.	Any person found guilty of an offence related to pollution of the water and forest shall pay a fine of K10,000.00 and failure to do so shall be taken to court for prosecution.
7	(a)No unauthorized collection of firewood.	Collection of firewood shall be done after obtaining permission from the LFO.	-Anyone found guilty of collecting firewood for domestic use without permission shall pay a fine of K150.00/head load and K400 per bicycle.

	(b)Authorized free collection of firewood.	-Every Saturday communities from the four GVHs adjacent to the block will be permitted to collect firewood freelyOnly dry firewood will be allowed to be collected	-Any outsider found guilty of joining the authorized communities in the collection of firewood on the day set for free collection shall pay a fine of K200.00/head load.
8	No unauthorized grazing of animals in the block.	All regenerants in the block are protected from any damage.	Anyone found guilty of grazing animals in the block shall pay a fine of K500 per one goat and K1000 per cattle.
9	No entry of unauthorized visitor in the block.	required to obtain permission from the LFO.	Visitors found guilty of visiting the block without permission from the LFO shall pay a fine of K15000.00 each.
10	No unauthorized collection of soil and stones.	Collection of soil and stones shall be done after obtaining permission from the LFO.	-Anyone found guilty of collecting soil without permission shall pay a fine K500 per wheelbarrowAnyone found guilty of collecting quarry stones without permission shall pay a fine of K5, 000.00 per tonne.
11	Cutting of fruit trees in the block is not allowed	Fruit trees are not allowed to be cut in the block.	Anyone found guilty of an offence related to the cutting of fruit trees shall pay a fine of K15,000.00.
12	Cutting of freshly and young trees for firewood is strictly prohibited in the block.	Cutting of trees for firewood shall only be allowed with permission from the LFO	Anyone found guilty of an offence related to cutting of freshly young trees for firewood shall pay a fine of K20,000.00
13	Opening up of gardens or establishing settlement in the block is not allowed	People are not allowed to cultivate or build houses in the block.	• • • • • •
14	No un authorized hanging of bee hives in the block	Hanging of bee hives shall only be done in demarcated coupes with permission from the LFO	Anyone found guilty of hanging bee hives without permission shall pay a fine of K2000 per hive.

8.0 MANAGEMENT PLAN FOR EACH PRODUCT

8.1 **Woody Products**

Name of Product: Firewood

Mchenga, Mtwana, Lungwe, Mbanga, Chinama, Ntatasika and Mlombwa **Key Species:**

Demand: High **Supply:** Low **Problems/Issues:**

- Wild fires
- Brick burning
- Illegal harvesting.
- Charcoal production

Management Practices:

- Collection of firewood shall be monitored by the LFO. Only dead and fallen branches of trees shall be allowed for domestic use.
- Fire shall be used as a management tool in the block in patches in-order to promote regeneration and reduce fire hazard
- Forest patrols shall be intensified in the block

Allowable Quantity per year:

41600 head loads of firewood shall be harvested per year for domestic purposes.

Who can be issued with permits?

Permits shall be issued to firewood collectors.

Fees/royalties:

Domestic users shall pay K100.00 per head load of indigenous firewood.

N.B: Communities from Liundi/ Mbando, Mgumbala, Kawalala and Milala shall be allowed to collect firewood for free every Saturdays.

Name of Product: Poles

Key Species: M'banga, Nkalati, Lungwe and Thombozi.

Demand: High None **Supply:**

Problems/Issues:

- Scarcity of species
- Illegal harvesting

Management Practices:

Forest patrols shall be intensified

- Controlled early burning shall be encouraged in the block
- Enrichment tree planting shall be promoted in areas with patchy stands.

Allowable Quantity per year: Nil

Who can be issued with permits?

No permit shall be granted to anyone for pole collection

Fees/royalties: Nil

Name of Product: Timber

Key Species: *Mbawa, Mlombwa, Naphini, Nkalati, Mchonya* and *Nkweranyani,*

Demand: High **Supply:** None

Problems/Issues:

- Illegal harvesting
- Bush fires

Management Practices:

- Fire shall be used as a management tool in patches in order to promote regeneration and reduce fire hazard.
- Enrichment planting shall be carried out in areas which have no regenerants.
- Forest patrols shall be intensified in the block

Allowable Quantity per year: Nil

Who can be issued with permits?

• No one shall be issued with permit for pit sawing in the forest block

Fees/royalties: Nil

8.2 Non Woody Products

Name of product: Mushroom

Key species: Utenga, Kungolokwaititi, Nakasache, Nakajongolo, Chipatwe,

Usinda, Nakambalakata,

Demand: High **Supply:** Low

Problems/Issues:

- Poor harvesting practices
- In adequate rainfall

Management practices:

- Harvesting of mushroom shall be done in all places where it is available in the block.
- Monitoring of mushroom harvesting shall be done by the block committee.
- Use of fire shall be regulated to avoid scorching mushroom seed or spores.

Allowable Quantity per year:

• 2 baskets of mushrooms shall be collected per household per season for domestic use only.

Who can be issued with permits?

• Permits shall be issued to domestic mushroom collectors.

Fees/royalties:

• Communities for the five GVHs shall collect mushrooms free of charge.

Name of Product: Honey

Key tree species that attract bees: *Blue gum, Mpandula and Mlungamo.*

Demand: High **Supply:** High

Problems/Issues:

- Lack of modern bee keeping materials
- Lack of technical knowledge in bee keeping.
- Bush fires.

Management practices:

- Hanging of bee hives for both commercial and domestic purposes shall be permitted in FMU 2 where there are big trees and water.
- Hanging and harvesting of honey shall be monitored by the LFO.
- Remaining products from harvested honey shall be processed into Candle wax and floor polish.
- Weeding shall be carried out in all areas where bee hives have been hanged in order to reduce fire hazard
- All bee hives shall have identities such as number and name of owner.
- In areas where bee hives are hanging, fire shall be strictly excluded to avoid damages.

Allowable Quantity per year:

• 200 bee-hives shall be allowed to be hanged per year for domestic and 200 bee hives for commercial purposes per year.

Who can be issued with permits?

 Permits shall be issued to groups or individuals hanging bee hives for domestic and commercial use

Fees/royalties:

• Commercial bee keepers (outsiders) shall pay a fee of K1000 per bee hive per year, and K500 shall be paid per bee hive per year for domestic purposes.

Name of product: Fruits

Key species: *Nthema, Masuku, Mphinji, Mapoza, Mateme*

Demand: High
Supply: Medium

Problems/Issues:

- Bush fires
- Poor harvesting practices
- Illegal felling of fruit trees

Management practices:

- Only matured and ripen fruits shall be harvested.
- Fruit trees growing areas shall be protected from fires.
- Harvesting of fruits shall be done using recommended harvesting methods (collection of fallen fruits, climbing up the tree and using long hooked sticks).
- Fruit trees shall only be used for fruit collection purpose until the tree dies or has stopped bearing fruits.
- Collection of fruits in the block shall be monitored by the block committee.

Allowable Quantity per year:

• 1518 pails of fruits for domestic use only per season

Who can permits be issued to?

• Permits shall be issued to domestic fruit collectors only.

Fees/royalties:

• Villagers from Liundi, Mbando, Mgumbala, Kawalala and Milala shall collect fruit for free.

Name of product: Medicine

Key species: Chinama, Palibekanthu, Mjoka, Chiumbu, Mlombwa, Thombozi, Mpoza

and Mdima.

Demand: High **Supply:** None

Problems/Issues:

- Bush fires
- Poor harvesting practices

Management practices:

- Harvesting of medicinal plants shall only be done using branches and leaves instead of roots.
- Medicinal trees shall be protected from fires by the block committee.
- Intensifying forest patrols

Allowable Quantity per year: Nil.

Who can be issued with permits?

• No one to be issued permit for herb collection

Fees/royalties: Nil

Name of product: Thatch grass

Key species: Kamphe (tsekera), Mapyopyo, Nakashe, Nansongole, Senjere, and Nsewe

Demand: High **Supply:** Low

Problems/Issues:

- Bush fire.
- Bad grazing practices

Management practices:

- Thatch grass collection shall be done between May and June.
- Only matured grass shall be recommended to be harvested.
- Number of bundles shall be limited per household per year.
- Bush fires shall be protected in areas where there is thatch grass in the block.
- Awareness meetings shall be intensified to the communities adjacent to the block before controlled early burning operation starts.

Allowable Quantity per year: Nil.

Who can be issued with permits?

Permits shall be issued to thatch grass collectors for domestic use.

Fees/royalties:

• Free for villagers within the block

Name of product: Game

Key species: Kalulu, Gwape, Mbawala, Nguluwe, Nyani, Pusi and Mbira

Birds: Nkwali, Lipomombo

Demand: High **Supply:** Low

Problems/Issues:

- Bush fires:
- Illegal hunting
- Deforestation

Management practices:

- Hunting of animals shall be allowed after the breeding season.
- Number of animals to be killed shall be limited per year.
- Controlled early burning shall be encouraged.
- Regenerating trees shall be promoted in –order to maintain ground cover.
- Pollution of water in the streams shall be strictly prohibited.
- Nets shall not be allowed for hunting
- Intensifying forest patrols

Allowable Quantity per year:

• 15 and 20 permits shall be paid for domestic and commercial hunters respectively.

Who can permits be issued to?

• Permits shall be issued to animal hunters.

Fees/ royalties:

• Commercial hunters shall pay a fee of K1, 000.00 per permit while domestic hunters shall pay K500 per permit.

9.0 ACTION PLAN

NO	ACTIVITY	WHO WILL DO IT	WHEN	REQIREMENTS
1	Forest patrols	Committee members, all	January-	Panga knives, Spears,
		communities and the	December.	axes, receipt books,
		Extension workers.	-When a need	exercise books, pens
			arises).	and catapults.
2	Weeding and	Committee members, all	April-October	Hoes, slashers, panga
	screefing	communities.		knives.
3	Tree planting	Committee members, all	December-April	Hoes, wheelbarrows,
		communities and the		shovels, trowels.
		Extension worker.		
4	Issuing of	Committee members.	January-December	Permits/receipts
	permits			books.
	firewood			
	collectors			
5	Committee	Committee members.	January-December	Exercise books, pens,
	meetings			minerals.
6	General	Committee members and	Once in a month	Exercise books, pens.
<u> </u>	meetings	all communities.		2.5
7	Controlled	Committee members, all	April- June	Matches, moppers, fire
	early burning	communities and the		pack pumps.
	N T	Extension worker.	M C 1	D 1 ' 1
8	Nursery	Committee members, all	May-September	Panga knives, hoes,
	establishment	communities and the		pails, rakes, slashers,
		Extension worker.		shovels,
				wheelbarrows,
9	Firebreak	Committee members of	Amail Turky	watering cans.
9		Committee members, all communities and the	April- July	Hoes, slashers, panga
	screefing			knives.
		Extension worker.		

10.0 PATROLING PLAN

- 1. Block management committee shall conduct patrols once a week and any day if a need arises.
- 2. Joint patrols between the BMC and FD staff shall be done once a month

NB: All confiscated materials shall be managed and disposed by the Block Management Committee with technical advice from the FD.

11.0 MONITORING AND EVALUATION PLAN

NO	WHAT WILL BE MONITORED	WHO WILL DO THE MONITORING	WHAT WILL BE THE INDICATORS	WHAT ARE THE METHODS TO BE USED	WHEN WILL THE MONITORING BE CONDUCTED
1	Patrols carried out in the block.	Committee members and the Extension workers	Reduced malpractices	Written progress reports (records)	Throughout the year.
2	Weeding	Communities guided by the extension worker	Area (Ha) weeded	Site visits and reports	April-June
3	Tree planting	Committee members and the Extension workers	Number of trees planted Hectares planted	Field visits Supervision	December-April
5	Issuing of permits	Committee members and the Extension workers	Number of permits used	Checking records Counting leaves of the permits used	Throughout the year.
6	Committee meetings	Extension worker and local leaders	Reports	Checking minute books	Once every two months.
7	General meetings	Extension worker and local leaders	Reports	Interviewing community members	Once every two months.
9	Controlled early burning	Committee members and the Extension workers	Number of hectares burnt	Site visits and reports	April-June
10	Ground preparation	Committee members and the Extension workers	Distance/ area prepared	Site visits, reports and supervision	October- November
11	Nursery establishment	Committee members and the Extension workers	Number of nurseries established	Site visits, reports and supervision	June-October
12	Firebreak screefing	Committee members and the Extension workers	Distance screefed	Site visits and reports	April-May

12.0 FINANCIAL PROJECTIONS

12.1 Annual Cash Flow

In accordance with the data collected, estimated annual cash flow for Liundi/Milala Forest Block is tabulated below. Under the Co-Management model, it is proposed that 60% of the gross income accrued from both domestic and commercial permit fees will be retained in the Block Management account. 10 % will be transferred to the Local Forest Management Board account while 30% will be deposited in the Forest Development Fund account held at national level.

Refer to annex 1 and 2 for the estimated annual cash flow and financial projections on activity:

ANNEXES

Annex 1: Household and Population Data

NO	GVH'S Name	No of	Men	Women	Boys	Girls	Total Population
		hh					
1	SGVH Mbando	177	144	177	264	270	855
2	GVH Liundi	216	155	216	247	220	838
3	GVH Milala	211	172	211	323	289	995
4	GVH Mgumbala	36	31	36	109	106	282
5	GVH Kawalala	119	96	119	164	169	548
	TOTALS	759	598	759	1107	1054	3518

Annex 2: Financial Projections on Management Cost

NO	Activity CTIVITY	No of people involved	Number /Area to be covered	Daily Wage/Rate	Total Amount Required
1	Forest boundary screefing	100	10000m	K300.00/25m	K120,000.00
2	Tree planting	50	5 ha	K3000/ha	K15,000.00
3	Forest patrols	2 (Police officers)	933.33ha	K10000/person /day	K20,000.00
TOTA	K155,000.00				

Annex 3: Estimated Annual Cash Flow for Liundi/Milala Forest Block

ACCOUNT	AMOUNT (MK)	%
INCOME		
a) Domestic permits	K7,306,000.00	
b) Commercial permits	K3,424,500.00	
Gross Income	K10,730,500.00	
Money into Local Forest Management Board (LFMB)	K342,450.00	10
Account from Commercial permits.		
Money into Forest Development Fund (FDF) Account from	K1,027,350.00	30
commercial permits.		
Block Forest Management Committee Account from	K2,054,700.00	60
Commercial permits.		
Money into Block Committee Account (Domestic + 60	K9,360,700.00	
% of Commercial permits)		
Average income per household (759)	K12,332.90	
Estimated management cost	K155,000.00	

Annex 4: Estimate of available Forest Resources

This is based on three sample plots data

No	Product Name	Uses	Total/0.04 ha	Total/ha	Available in
					2 ha
1	Firewood	For fuel wood	30 trees	750 trees	1500 trees
2	Fruits	For eating	10 trees	250 trees	500 trees
3	Medicines	For curing diseases	8 trees	200 trees	400 trees
4	Thatch grass	For roofing	40 bundles	1000 bundles	2000
					bundles

Notes:

- Estimates based on three 20m x 20m sample plots inside the block.
- A two hectare coupe is the suggested annual harvesting area.
- Fruit trees shall be reserved until they become unproductive when they shall be used for other woody products. Main fruit tree species is Masuku (Uapaca kirkiana).

Annex 5: Requirements for Forest Products for Domestic Use

The total number of households represented by the block management committee is **759**. Therefore, the table below calculates the annual domestic forest product requirements of these households:

N0	Product Name	Use	Per HH/yr	Annual
			(Mean)	requirements for
				the 759 HHs
1	Firewood	For fuel wood	55 head loads	41600 head loads
2	Fruits	For eating	2 pails	1518 pails
3	Thatch grass	For roofing and fencing	20 bundles	15180 bundles
4	Mushrooms	For relish	2 baskets	1518 baskets

Annex 6: Harvesting Plan for Woody and Non Woody Products Forest block

No	Product	Available	Domestic	Available	Total products	Surplus available
		in the	demand for	in the	available in the	for commercial
		harvestable	whole	village	vfa	harvesting
		coupe	community			
1	Firewood	-300 head	41600headload	-160 head	41960 head loads	-360 head loads
		loads	S	loads		
2	Fruits	50 trees	1518 pails	200 trees	250 trees	- 90 pails
3	Thatch grass	2000	15180 bundles	200bundles	2200 bundles	-12980 bundles
		bundles				

Annex 7: Income Projection from Woody Products

Product	Domestic requirement		Commercial requirement		Frequency	Quantity/ year	Annual Calculations	
Name	hh	Permit	hh	Permit			Domestic	Commercial
Firewood	400	K100/ head load (indigenous)	30	K200/ head load	2 head loads/hh/wk for domestic use.	41600 head loads (domestic)	K4,160,000.00	Nil
	10	K200/bicycle	25	K 300/bicycle	4 bicycles/hh/ month.	480 bicycles per year for domestic use.	K96,000.00	Nil
TOTAL FOR WOODY PRODUCTS						K4,256,000.00	Nil	

Annex 8: Revenue Projection from Non Woody Products

Product Name	Domestic requirement		Commercial requirement		Frequency	Quantity/ year	Annual calculations	
	hh	Permit	hh	Permit			Domestic	Commercial
Mushroom	759	Free access			2 baskets /hh/season for domestic use only	1518 baskets/yr For domestic use		
Fruits	759	Free access	30	K1000/pail	2 pails /hh/ season for domestic use and 3 pails/hh/season for commercial use	1518 pails for domestic use and 90 pails for commercial use/season		K90,000.00
Thatch grass	400	Free access			20 bundles/hh/yr for domestic use only	800 bundles for domestic use per yearly		
Game	20	K500/ permit	10	K1000/permi t	15 permits per year for domestic use and 20 permits for commercial use per year	200 permits for domestic hunters and 50 permits for commercial hunters	K7500	K20,000.00
Honey	20	K500/bee hive	10	K1000/bee hive	10 bee hives/hh/yr for domestic use and 20 bee hives for commercial use /year	200 bee hives for domestic use and 200 for commercial	K100,000.00	K200,000.00
Medicine	25	K1500/50Kg bag	5	K3000/50Kg bag	2 bags/hh/yr for domestic use and 3 bags/hh/yr for commercial use	50 bags for domestic use per year and 15 bags for commercial use	K75,000.00	K45,000.00
TOTAL FOR NON WOODY PRODUCTS							K3,050,000.00	K3,424,500.00

Annex 9: Summary Table of Fees and Royalties

Block Name: Liundi Milala Block Machinga

Product	Unit		Fee Rate		
		Domestic (MK)	Commercial (MK)		
	Head load	free	100		
Fuel wood	Bicycle	free	200		
Wild fruits	Pails	Free	1000		
Mushrooms	baskets	Free	free		
Medicine	50 kg bag	1500	3000		
Thatch grass	Bundles	Free	free		
Game animal	Per permit	500	1000		
Bee keeping	Per hive	500	1000		

Annex 10: Liundi/Milala Block Management Committee Constitution:

Name of LFO: Liundi/Milala Block Management Committee.

Name of the Block: Liundi/Milala Forest block

Address: C/0 BOX 131

Chilema. Machinga.

Contact numbers: Cells:

GVH Liundi (0991342591)

1.0 OBJECTIVE

To satisfy Liundi/Milala wider community's (especially those from GVHs Mbando, Liundi, Milala, Mgumbala and Kawalala) needs of forest based products such as firewood, poles, wood, timber, thatch grass, honey and mushrooms through collaborative management and sustainable utilization of forest resources within Liundi/Milala Forest block and promote conservation of fragile areas.

2.0 STRUCTURE:

- There shall be an elected managing committee comprising office bearers (13 members) such as Chairperson and vice, Secretary and vice, Treasurer and other 8 members.
- These members shall be elected proportionately from the four (5) villages mentioned in 1.0 above.
- Community members from the above 5 villages shall be automatic members of Liundi/ Milala wider community. To this effect, elected members shall be representatives of different interested user groups of the Block from the above five villages.
- All Village Heads in the stated villages and the Group village Headmen Mbando, Liundi, Mgumbala and Kawalala shall be ex-officials of the Block Management committee.
- The wider community members shall be automatic members of the Block Management Committee.

3.0. ELECTIONS:

- Elections shall take place in a free and fair manner in consultation with the four Group village heads. Two (2) chosen community members (representatives) from each of the four (5) villages shall contest for executive membership of the Block Management Committee. Village heads shall accompany their contestants to the elections as observers.
- Elections shall take place every three years except when the whole committee is dissolved or some members are disqualified, dismissed or have resigned.
- Elected office bearers shall run a term of three years and will be eligible to stand for another one term basing on efficiency and effectiveness.

The entire Block Management committee shall be dissolved after conniving and committing
a serious crime or conducting business not in a transparent manner. Since Community
members have a stake in the management of the Block, they have the right to summon the
Block Committee to the Group Village head as BMC advisor to clarify issues pertaining to
management of their block.

4.0. ELIGIBILITY OF MEMBERS:

Eligible members shall only be:-

- Citizens from the stated four villages
- Committed & dedicated members from the three villages.
- People with no record of conviction after committing an offence.
- Non-drunkard(s).
- Visionary
- People with respect

4.1. Termination of Membership:

Members shall be eliminated only if:-

- A member commits a serious crime such as theft, corruption, mismanagement of forest products.
- A member has rebelled against the Block Committee.
- If the term of office has expired.
- A member has passed away.
- A member has gone mad.

4.2 Disqualification/Dismissal of Members:

A member shall be disqualified/ dismissed if:-

- He/she fails to attend meetings for three consecutive times without apparent reasons
- A member commits a serious crime such as theft, corruption, mismanagement of forest products, misappropriation of Block Management Committee funds and equipment.

4.3. Substitution of Members:

Substitution of a member shall take place only if:-

- A committee member dies.
- A committee member has gone elsewhere (transfer) outside the stated villages.
- A committee member has voluntarily stopped to be a member.
- A committee member has gone mad.
- A committee member has been dismissed after committing an offence.

4.4. Rights & Responsibilities of Members:

All Block Committee members shall have the following rights & responsibilities/duties.

a) Rights/Freedoms of Members:

- Right of Association.
- Freedom of Speech in giving suggestions at meetings of the Committee.
- Right to be elected to any position of the Block Management Committee.
- Right to know anything concerning the Block Management Committee.
- Right to benefits accrued from Block or any other sources.

b) Responsibilities/Duties:

- Participate in all Committee undertakings.
- Lead the Committee in different aspects.
- Taking care of Committee property.
- Represent the Block Management Committee in other forums.

5.0. SPECIFIC ROLES AND RESPONSIBILITIES:

5.1 The Chairperson shall:

- Call meetings of management and preside over deliberations of such meetings.
- In consultation with local leaders call meetings for wider community.
- Be signatory of Institution's account.
- Take part in conflict resolutions

5.2 The Secretary shall:

- Record all minutes of meetings and events of the Block.
- Welcome guests during events.
- Deal with all correspondences of the committee.
- Record fines, finances and penalties.
- Be signatory of Institution's account.

5.3 The Treasurer shall:

- Keep custody of the entire Block's equipment.
- Keep custody of all the Block's finances.
- Be signatory of Institution's account
- Issue licenses for forest products and operations

5.4. Committee members shall:

- Be delegated to represent any member of the executive in meetings
- Participate in committee deliberations
- Be chosen to be a signatory of the institution's account
- Manage conflicts of the committee

5.5. The Group Village Headman and village headmen shall:

- Mobilize their subjects on development activities of the Block.
- Assist to settle disputes which the Block Management committee has failed to settle.

• Advise the Block Management committee where necessary.

5.6. The Forestry Department shall:

- Provide technical support on all activities of the Block Management Committee.
- Assist the Block committee in solving disputes that are beyond capacity of GVH level.
- Observe elections of office bearers of the Block Management Committee.
- Assist in resource use regulation and law enforcement.

5.7. General members shall:

- Be required to take part in tree planting, early burning, thinning, fire break maintenance of the Block and any other activity as may be determined by the managing committee.
- Elect their representatives into the Block committee.
- Call for dissolution of the committee or disqualification of an elected member in the case of corruption.

6.0. FUNCTIONS OF THE BLOCK COMMITTEE:

- Managing Body (Block Management Committee) shall meet twice every month to discuss management issues.
- Managing body shall meet once in a quarter with a wider committee for information giving, feedback or consensus.
- Quorum of management meeting shall be half the number of Block Committee members i.e.
 15 Members.
- Decision shall be reached by voting.
- Block Committee, GVH, VHs shall develop resource use rules, penalties and sanctions.
- Review of the constitution shall be made after one year.
- The block committee shall be registered at the DFO as a Local Forestry Organization.
- The managing committee shall steer all activities of the Block in collaboration with the Forestry Department and with consultations with all the three Group heads and the village headmen.
- Block Management committee shall with consultations with Forestry Officers issue permits and licenses to people for the purpose of accessing products in the Block.
- The Block Management Committee shall upon thorough consultations with the wider community review the Block Management Plan after five years. The reviewed versions shall be presented to the local leadership, other interested stakeholders and the wider community.

7.0. BLOCK MANAGEMENT COMMITTEE FINANCES:

7.1. Sources of Finances

Finances for the Block Management Committee shall come from the following main sources:-

- Licenses from Forest User groups/Clubs
- Loans from lending institutions such as MARDEF

Sales of Forest Products & services

7.2. Other Sources

- Tree seedling raising & sales
- Other feasible businesses

8.0. **BENEFIT SHARING:**

100% of monetary benefits arising from sales of forest products for commercial use will be shared as follows: 60% into Block Management Committee Account, 30% into Forestry Department Account and 10% into Local Forestry Management Board (LFMB) Account.

All the money accumulated into Liundi/Milala Block Management Committee Account shall be used as follows:

- 1. Forestry management activities of the Block- 20%.
- 2. Administration costs of the Block Committee-15%.
- 3. Micro-Credit scheme-25%.
- 4. Community Development (bridges, welfare, orphans etc.)-40%.

NOTE:

- Forest Management activities shall include Block boundary screefing, Slashing, Controlled early burning, Monitoring activity implementation, conduct forest patrols, Plot and coupes' demarcation, licensing of forest produce, maintenance of road network adjacent to the block and others.
- Micro-Credit scheme shall provide soft loans to Liundi/Milala wider community to start small-scale businesses with an intention of increasing household income levels. The loan will attract an interest of 20% per return. There will be a sub-committee headed by one of the elected members of the BMC to manage the loans. The loans will only be given to organized groups (20 members per group) to ease repayment.

9.0 Names of Liundi/Milala Block Management Committee members from GVHs Mbando, Liundi, Mgumbala, Milala and Kawalala

NO	NAME	POSITION	SEX
1	Charles Bonongwe	Chairperson	Male
2	James Masanjala	Vice chairperson	Male
3	Martha James	Secretary	Female
4	Grace Kachitsa	Vice secretary	Female
5	Rose Bobi	Treasurer	Female
6	Joyce Saidi	Member	Female
7	Lucius Magombo	Member	Female
8	Lucy Frank	Member	Female
9	Martha Buleya	Member	Female
10	Patuma Green	Member	Female
11	Mariam Uladi	Member	Female
12	Emily Lanjesi	Member	Female
13	Patrick Silika	Member	Female

Annex 11: Co- Management Agreement Template

CO-MANAGEMENT AGREEMENT (Forestry Act, 1997 Section 25) and

The Government, hereby, wishes to make an agreement with the LFO to provide for comanagement, in partnership with the Department of Forestry, of the forest resources of Liundi/Milala forest block of Liwonde forest reserve, in order to promote sustainable forest management and the enhancement of the livelihoods of the forest adjacent communities.

NOW IT IS HEREBY AGREED as follows:

- 1. The Government shall upon being satisfied with transitional arrangements recognize the joint authority of the LFO to protect, manage, control and utilize sustainably the forest resource for the benefit of the local community of GVHs Mbando, Liundi, Mgumbala, Kawalala and Milala.
- 2. The LFO accepts and undertakes to protect, manage, control and utilize sustainably the forest resource in accordance with terms and conditions stipulated in this agreement and annexed block co-management plan.

LFO OBLIGATIONS:

- 3. In particular the Government gives authority to the LFO subject to the following conditions:
- (a.) Forest resources shall be properly maintained and managed according to approved management techniques as set out in the annexed block Co-management Plan.
- (b.) The LFO shall enforce the powers that have been devolved to them by the Government in the Forest Rules 2001, and in any subsequent rules, and as agreed in the LFO Registration Agreement.
- (c.) The LFO shall protect, manage, control and utilize in a manner that maintains productivity, the forest resources within their jurisdiction and will issue permits and licenses for forest produce primarily for the benefit of the local community and (in the event of surplus products becoming available) for their commercial sale under a license system, as set out in the annexed management plan.
- (d.) To assist the District Forest Officer with the issuing of conveyance certificates, the local forest organization may provide the necessary supporting documentation (ownership certificate) to verify source and ownership of wood products under its control. It may

- also assist local private individuals with wood products in their locality verify ownership for applying for a conveyance certificate from the District Forest Officer.
- (e.) Benefits accruing from the forest resource shall be equitably utilized by the community in accordance with the benefit sharing arrangements set out in the annexed management plan and LFO constitution.
- (f.) Revenue accruing from the forest resource shall be equitably utilized by the community in accordance with the LFO Constitution and as per agreements reached at general assemblies of the LFO
- (g.) 10% of the share of revenue accruing from the issue of commercial harvesting permits and licenses (i.e. those permits and licenses not issued for domestic or subsistence purposes) shall be deposited into the account of the Local Forest Management Board of Liwonde Forest Reserve, with transfers being made on a quarterly basis
- (h.) 30% of the share of revenue accruing from the issue of commercial harvesting permits and licenses (i.e. those permits and licenses not issued for domestic or subsistence purposes) shall be deposited into the Forest Development Fund Account Number 1 with such transfers being made on a quarterly basis.
- (i.) It is expected that 60% of the funds available to the LFO after sharing the proportions specified in (g) and (h) will be utilized by the LFO for the purposes of forest development, management and operating costs. This includes utilization of the funds inside and outside the area of the co-management block.
- (j.) The LFO shall make accessible records of accounts and licenses issued to the Director of Forestry or his/her representative, the District Commissioner or his/her representative upon receiving notification from the Director of Forestry or District Commissioner.
- (k.) The LFO shall represent and be accountable to the community and operate in accordance with the agreed constitution.

FORESTRY DEPARTMENT OBLIGATIONS:

- 4. In particular the District Forestry Officer and his delegated representatives, shall;
- (a.) Provide technical expertise to support the joint implementation with the LFO and the timely revision of the attached block co-management plan.
- (b.) Advise and assist with monitoring local accountability mechanisms including, conduct of meetings, elections, by-elections, record keeping, financial accounting, and reporting.
- (c.) Provide a basic set of office resources for the LFO (on signature of this agreement) comprising cash books; minute books; duplicate license forms; headed paper and an official LFO stamp or unique mark, plus other necessary items in order to support the set-up of a transparent and well documented forest management and local licensing system. It is anticipated that the LFO will take over purchasing these items after collecting revenue.

- (d.) Assist the coordination of forest law enforcement activities between the LFO, traditional Leaders, local community policing forums, local police officers and the District Magistrate in accordance with annexed co-management plan.
- (e.) With the LFO jointly monitor the block demarcated in the co-management plan to ensure management is in accordance with this Agreement and in accordance with Standards & Guidelines for Participatory Forestry in Malawi.
- (f.) Jointly with the LFO countersign any permits and licenses being for the commercial utilization and harvesting of forest products (non-domestic use) in accordance with block co-management plan
- (g.) In line with licensing procedures issue conveyance certificates against verified documentation to ensure legal transportation of forest products.
- (h.) Provide in collaboration with other partners, legal, organizational, marketing and other forms of support to the LFO as appropriate.
- (i.) Organizes in collaboration with other partners, relevant training courses to enhance organizational, technical and management capacity of Local Forest Boards, LFO, traditional authorities and other members of the community.
- (j.) Recognize and actively support the protection and policing measures taken by the FMB, LFO and the community in accordance with the Forest Act, 1997, Forest Rules 2001, and Local Forest Organization Registration Agreement.

COMMENCEMENT, DURATION AND TERMINATION:

- 5. This Agreement shall come into effect when signed by the Director of Forestry, representatives of the parties, and shall be binding indefinitely subject to clauses 6 and 9 below.
- 6. The Director of Forestry shall have the right to terminate this agreement and revoke authority to protect, manage, control and utilize forest resources, in any of the following events;
 - Negligence or failure to protect, manage and control the co-management block.
 - If the LFO commits any serious breach of this agreement.
- 7. The powers stipulated in clause 6 above, shall not be exercised unless the Director of Forestry has tried all efforts to resolve or correct the situation amicably.
- 8. In cautioning the local community the Director of Forestry shall cite the shortcomings and remedies giving the period within which they should be addressed.
- 9. The LFO may terminate this agreement at any time by giving notice of not less than 8 weeks, in any of the following events;
 - If there is serious breach of this agreement.
 - If for any reason the community finds itself unable or unwilling to continue with the activities of the designated co-management block.

10. In the event of notice of termination, LFO shall be under obligation to ensure that the forest area is protected until a Caretaker Committee or Government has assumed authority over the block.

DEMARCATION AND BOUNDARY:

11. Division or delineation of forest areas shall be as displayed on the sketch map forming part of the Management Plan annexed to this Co-management Agreement.

DISPUTES:

12. In the event of any dispute arising under the Forestry Management Agreement, the matter shall be referred to the Minister Responsible. If any party is dissatisfied with the decision passed by the Minister he/she may apply for a judicial review to the High Court.

Dated. 1910212014

WITNESSES:

LIUND

VILLAGE HEADMAN/WOMAN:

Date 1910212014

TRADITIONAL AUTHORITY:

Dated. 1910212014

DISTRICT COMMISSIONER:

Dated. 1910212014

SIGNED:

DIRECTOR OF FORESTRY:

Dated 13-02-14

CHARLES Bonongue

CHAIRPERSON, LOCAL FOREST ORGANISATION:

AND