

GYELWARINGA COMMUNITY FOREST MANAGEMENT PLAN (1st Revision)



TOTAL AREA:	259 HECTARES
NO. OF H/H:	75
VILAGE:	TASHIGATSHEL, BJAPCHO AND MEBESA
GEWOG:	BJAPCHO
DZONGKAG:	CHUKHA

**Plan period: December 2022 to November
2032**

Approval Sheet.

DoFPS/SFED/SFS/2-2/2022-23/286 Dec 20, 2022

APPROVAL SHEET: GYELWARINGA COMMUNITY FOREST MANAGEMENT PLAN

Name of Community Forest	Gyelwaringa Community Forest
Village	Bjachho, Tashigatshel and Mebesa
Chiwo	Bjachho, Tashigatshel and Mebesa
Gewog	Bjabcho
Dzongkhag	Chhukha
Production area (Hectare/Acre)	234 Hectares 244 ha. <i>completely</i>
Protection area (Hectare/Acre)	15 Hectares
Total Community Forest Area (Hectare/Acre)	259 Hectares
Total CFMG Member (No. of HH)	73 75

	Community Forest Management Group	Forestry Representative (CFMP facilitator)	Gewog Administration	Social Forestry Section	Divisional/Park Office
Signature					
Name	Makha Wangyal	Nagphel	Penjor Dorji	Pema Gyeltshen	Pema Wangda
Title	Chairperson	Sr. Forest Ranger II	GUP	Head	Chief Forestry Officer

Signature		
Name		K. J. Hemphel
Title	Focal Officer T. B. Rai	Chief Forestry Officer
DIVISION	Social Forestry and Extension Division	Social Forestry and Extension Division

APPROVED BY:

Director
 Department of Forests & Park Services
 DIRECTOR GENERAL
 Thimphu : Bhutan
 DEPARTMENT OF FORESTS AND PARK SERVICES

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ACRONYMS

AAC	Annual Allowable Cut
AD	Annual Demand
AHL	Annual Harvesting Limit
CF	Community Forest
CFMG	Community Forest Management Group
CFMP	Community Forest Management Plan
CFO	Chief Forestry Officer
DoFPS	Department of Forest and Park Services
FNCA	Forest and Nature Conservation Act
FNCRR	Forest and Nature Conservation Rules and Regulations
FO	Forestry Officer
HH	Household
Nu	Ngultrum
NWFPs	Non Wood Forest Produce
SRFL	State Reserved Forest Land

EXECUTIVE SUMMARY

Gyelwaringa Community Forest is located between Bjabcho and Tsimakha villages above Mebesa. The CF was established in 2008 by 65 households from Tashigatshel, Mebesa and Bjabcho villages. The CF was revised in 2021 with the increment of members from 65 to 73 households. There is no extension or reduction of area and is completely based on 2008 boundary survey.

The CF has an area of 259 ha which is divided into two with 107 ha under block I and 152 ha under block II respectively. The division of the block was done for easy management despite the topographical features or forest type variations. Both the blocks are dominated with broadleaf forest as the main forest type (233.18 ha) followed by mixed conifer (18.59 ha), meadow (6.92 ha), blue pine (0.73 ha) and shrub (0.11 ha).

The Annual Allowable Cut (AAC) of the CF shows that there is insufficient timber for construction with only 116 drashing, 51 cham, 40 tsim, 20 dangchung, 187 firwood and 293 fencing posts against the Annual Demand (AD) of 118 drashing, 340 cham, 700 fencing posts and 127 firewood annually. Since the CF falls within the broadleaf forest, the prime timber species like blue pine, hemlock, spruce, etc. are very limited in the area and therefore, most of the AAC may be contributed by secondary timber species like *Alnus* and *Quercus lamellose* which are usually used by the CFMG members as an alternative source to the above preferred species.

Besides CF producing timber, firewood, fencing posts and leaf litter collection sites for CFMG, the management regime also provides important habitat for bear conservation areas in particular. The rich acorn forest feed a number of bears in the CF which is important for the CFMG members to protect the oak forest for this species conservation. Further, the rich NWFPs like fern shoots, mushroom, walnut and bamboo also aids nutrition security and livelihood opportunities to the CFMG members.

Owing to all these benefits, the CFMG members submitted the formal application for the revision of CF management plan for the next 10 year periods. Accordingly, this revised plan is based on forestry field manual for CF in Bhutan 2018 (3rd edition) and aligned its regulation norms with FNCRR 2017 and Forest and Nature Conservation Act 1995.

1. SECTION A: MANAGEMENT PLAN

1.1: Introduction

The CF is located about 9 km north-west from the gewog center and is connected by Bjabcho farm road at the south eastern most parts of the block I. The north-western parts of the block II are located close to the Tsimalakha town which is usually away from the beneficiary villages. Both the blocks are dominated by *Quercus lamellosa* associated with other broadleaf species and the desired species like blue pine, hemlock and spruce are limited to upper parts of the block II only.

Both the blocks comprise of four types of forests each, however the blue pine is absent in block I whereas shrub is absent in block II. The broadleaf comprises of 233.18 ha (90.67%) followed by mixed conifer 18.59 ha (6.41%), meadow 6.92 ha (2.64%), blue pine 0.73 ha (0.24%) and shrub 0.11 ha (0.04%). Regenerations are generally repressed by the growth of undergrowth bamboos. The block I recorded 16 species among which *Alnus* dominating with 22.79%, whereas in block II, there were 13 species of which *Rhododendron* counted the highest (26.37%). The quality timber species are therefore required to plant in some areas.

To date, the members were easily accessible to the forest resources since from the establishment of CF in 2008. The timber, firewood, fencing posts, etc. could easily approve and access to the resources as per management plan without following the process of the forestry department. The members could also generate income through sale of excess timber and NWFPs thereby contributing poverty reduction in the villages. CFMG will be managing their CF for next 10 years with the following objectives:

1. Sustainable management and utilization of forest resources for future generation;
2. Protection of wildlife and forest resources from the outsiders;
3. Protection and management of water resources for down living communities.

Table 1: Total community Forest Area; 259 hectares

Sl. No	Block Name	Block Area
1.	Block 1: Sisinabu	107 Hectares
2.	Block 2: Sisikha	152 Hectares

Community Forest Map.**Figure 1: CF Boundary Map****Table 2:** Community Forest boundaries

Boundaries	Permanent features
East	From Phulajo Phumpomsa, following the foot path of Bjaphu Khaluma, Changche Lupo, Tshomomo and then to the foot path of Tshorigang. After that the boundary follows the ridge of Gangkhanamina and Gojakha and then to the edge of Bjabcho farm road till it reaches to Khamjopang
West	Follow the stream of Degopangzoor till it reaches to the source called Sisikha Reetsam. Then follow the foot path of Bjechimo through the woods till it reaches to the Sisinabu stream side which is about 300 m from the Tsimalakha town
North	From Sisinabu stream, it follows through Sisinabugu till it reaches to the Phulajophumpomsa
South	From Tsemo following the old irrigation channel and footpath till it reaches to Shorenaloom. Then to Shorenaney and Bjabarmoo, Gedulakha and Bjana till it reaches to Chukhortalu

Table 3: Social information

Specification	Description
Name of the villages	Mebesa, Tashigatshel, Bjabcho
Ethnic groups with CFMG	Ngalops
Basic amenities	Farm road, rural water supply, electricity, mobile network, BHU II, primary school and RNR center,
Total household (HH) number of CFMG	75
Population of CFMG members	575
% male and % female	44.87% and 55.13%
Main source of income	Potato

Cattle population of the CFMG	43
Main crops	Paddy and vegetables
Cropping pattern	Monoculture
Any other information	-

1.2. Community Forest Map

The given map shows the location of CF with respect to its beneficiary villages. Tashigatshel, Mebesa and Bjabcho villages comprise its members and benefits from this CF. All the CFMG members from these villages depend on this CF resources since from the establishment of CF in 2008. The road networks are limited to the south-eastern most parts of the CF only.

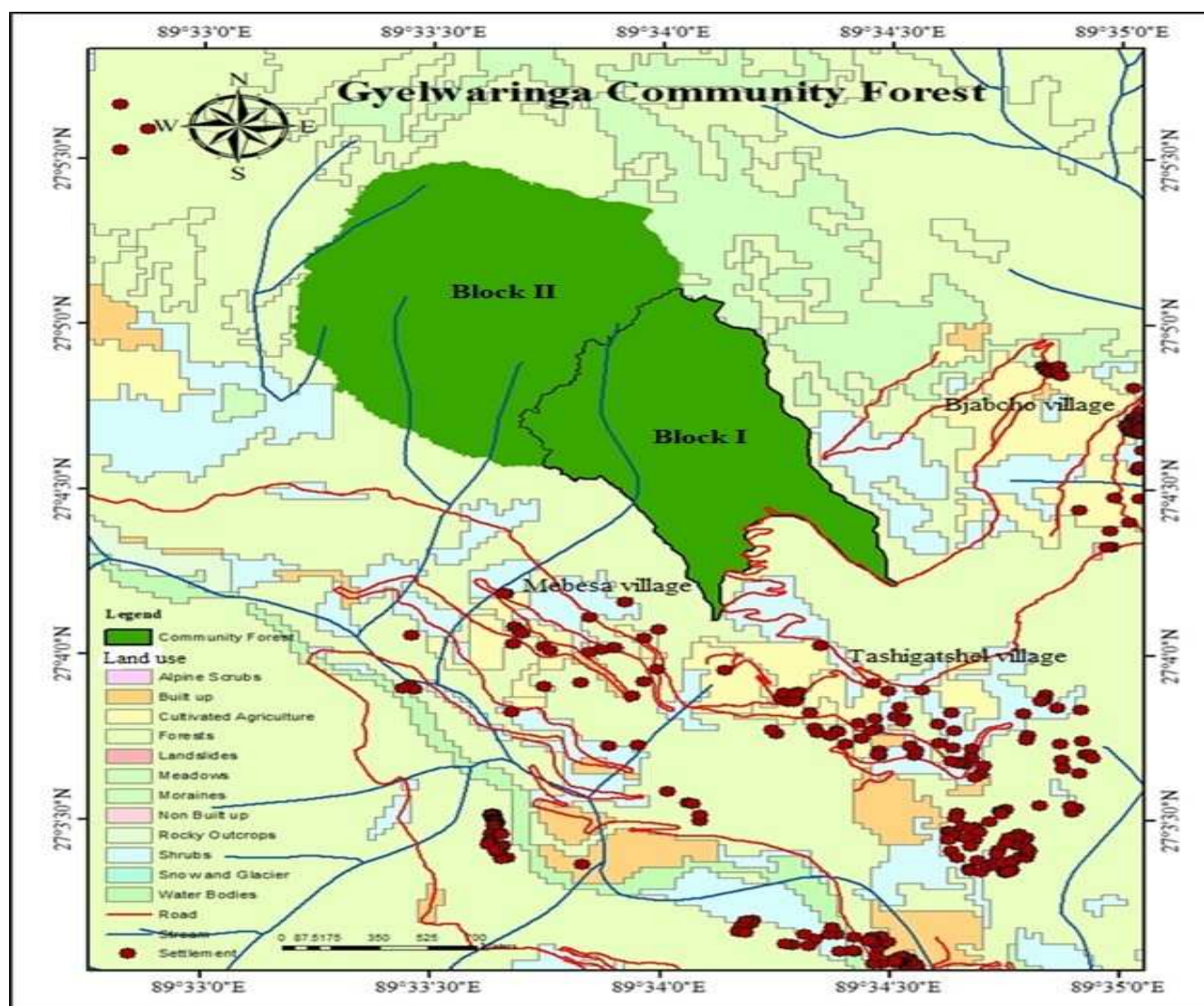


Figure 2: Community Forest Land Use map

1.3: Forest Information

1.3.1a: Sisinabu Block

Table 4: Forest Resource Assessment (Block I)	
Name of Community Forest	Gyelwaringa Community Forest
Date of Assessment	05/10/2021
Name of block	Sisinabu
Block area	107 ha
Name of recorder	Kelzang Jurney

a. Forest & Habitat Type					
Forest	<input checked="" type="checkbox"/>	Thicket/pole stage	<input type="checkbox"/>	Shrub land	<input type="checkbox"/>
Grassland	<input type="checkbox"/>	Plantation	<input type="checkbox"/>	Other	<input type="checkbox"/>
Vegetation type					
Subtropical forest	<input type="checkbox"/>	Chir pine forest	<input type="checkbox"/>	Warm broadleaved forest	<input type="checkbox"/>
Cool broadleaved forest	<input checked="" type="checkbox"/>	Mixed conifer forest	<input type="checkbox"/>	Blue pine forest	<input type="checkbox"/>

Definitions	
Broadleaf forest	75% or more of the tree species present are hardwoods
Conifer forest	75% or more of the tree species present are coniferous
Mixed forest	All other combinations of tree species
Mature Forest	Vegetation dominated by mature trees (trees > 40 cm dbh)
Thicket/pole stage	Vegetation > 3m in height consisting of young trees usually < 40cm dbh
Shrubs	Non-tree species > 2m in height (often thorny and multi-stemmed)
Shrub-land	Vegetation dominated by woody multi-stemmed plants or single stemmed plants and regeneration mostly < 3 m tall
Grassland	Vegetation dominated by grass species and where only a small part of the area is covered by trees or shrubs.
Crown cover	The percentage of the area covered by the crowns of trees forming the main canopy (usually mature trees)
Regeneration	Seedlings, saplings and coppice regrowth of naturally occurring tree species that are less than 1.3 metres tall but greater than 30cm tall
Seed trees	Mature trees with healthy crowns capable of producing flowers and seed
Soil Cover	The percentage of the area with soil surface covered either by live vegetation or a layer of other plant vegetation

b. Forest Condition	
Write the names of the 3 main tree species	
Local name	Scientific name

Sokeyshing (Dz)	Castanopsis spp.
Tongkeyshing (Dz), bull oak (Eng.)	Quercus lamellosa
Gamashing (Dz), alder (Eng.)	Alnus nepalensis
(i) Plantation	
Is there any Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Approximate height of planted trees (m)
Year planted	Is the plantation? Under stocked <input type="checkbox"/> Stocked <input type="checkbox"/> Overstocked <input type="checkbox"/>
(ii) Forest Condition – Age	
Mature <input checked="" type="checkbox"/> Main canopy of mature trees	Pole stage <input type="checkbox"/> Main canopy of pole-stage trees
Shrub land <input type="checkbox"/> Main canopy of shrubs, young trees or regeneration	Any <input type="checkbox"/> No continuous canopy. Isolated trees only
(iii) Forest Condition - Canopy density	
Dense <input checked="" type="checkbox"/> Canopy density > 70%	Open <input type="checkbox"/> Canopy density < 70%
Very open <input type="checkbox"/> No real canopy. Isolated trees only	

(iv) Forest Condition – Regeneration		
Abundant <input type="checkbox"/> Regeneration easy to find in most places	Scattered/few <input checked="" type="checkbox"/> Regeneration only in some places and hard to find	None <input type="checkbox"/> No regeneration
Write the names of the 3 main tree species in the regeneration		
1) Symplocos spp.	2) Castanopsis spp.	3) Quercus lamellose
Regeneration: Seedlings > 30cm and < 1.3m height		

(v) Forest Condition – Approximate density of seed trees		
High <input type="checkbox"/> > 50 seed trees per ha	Moderate <input checked="" type="checkbox"/> 10 - 50 seed trees per ha	Low <input type="checkbox"/> < 10 seed trees per ha

Block Condition – Summary			
Use the forest condition class box below to get an average condition for the block			
Poor <input type="checkbox"/>	Average <input type="checkbox"/>	Good <input checked="" type="checkbox"/>	Very Good <input type="checkbox"/>
Does the main forest canopy consist of large, mature trees?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Forest Condition				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature forest	Dense	Abundant	High	Very good
		Scattered/few		Good
	Open	Abundant		Good
		Scattered/few	Moderate	Average

Pole stage forest	Dense	Abundant	High	Good
		Scattered/few		Average
	Open	Abundant		Average
		Scattered/few	Moderate	Poor
Shrub land and young growth	Dense	Low	Moderate	Average
	Dense	Low	Low	Average
	Open	Moderate	Low	Poor
Any	Very open	None	Low	Poor

d. Open spaces

Approximate total open space area (ha)	3.5ha
Dominant vegetation type in the open space	Alnus nepalensis
Cause of open space e.g. grazing, fire, harvesting, etc.	Roads construction, timber and firewood harvesting

e. Grazing and fodder

Grassland type				
Natural <input checked="" type="checkbox"/>	Man-made <input type="checkbox"/>	Mixture <input type="checkbox"/>	Predominantly forest <input type="checkbox"/>	
Main fodder species being used				
Local name		Scientific name		
Gayzasugma (Dz), maize (Eng.)		Zea mays		
(Dz), buckwheat (Eng.)		Fagopyrum esculentum		
Wheat straw (Eng.)		Triticum aestivum		

Pasture quality		
Local name	Scientific name	Palatable/unpalatable
Baa (Dz.) bamboo (Eng.)	Yushania	Palatable
Ram (Dz.)	Strobilanthes spp.	Palatable
-	Pilea scripta	Palatable

Use pattern	Seasonal <input checked="" type="checkbox"/>	All year <input type="checkbox"/>
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Type of user	Migratory <input type="checkbox"/>	Local <input checked="" type="checkbox"/>	Both <input type="checkbox"/>
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f. Catchment Condition

(i) Catchment condition – soil cover		
Soil cover		Soil cover class
> 50% of the soils are covered by vegetation		high <input checked="" type="checkbox"/>
25 - 50% of the soils are covered by vegetation		moderate <input type="checkbox"/>
< 25% of the soils are covered by vegetation		low <input type="checkbox"/>
(ii) Catchment Condition - Soil type and erosivity		
Soil type (colour, texture and type)		
Erosive <input type="checkbox"/>		Non-erosive <input checked="" type="checkbox"/>
disperses and/or breaks up in water easily		stable to water flow
(iii) Catchment Condition – Slope		
Slope (degrees)	Slope steepness class	

<10°	Gentle	<input type="checkbox"/>
10° – 30°	Moderate	<input type="checkbox"/>
> 30°	Steep	<input checked="" type="checkbox"/>
Catchment Condition – Summary (Use the catchment condition class box below to get the average condition for the block)		
Less critical	<input checked="" type="checkbox"/>	Moderately critical <input type="checkbox"/> Highly critical <input type="checkbox"/>

Catchment Condition Class Box			
Slope category	Soil erosivity	Cover class	Condition class
Flat	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	any	Less critical
Moderate	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	Moderate or high	Less critical
		Low	Moderately critical
Steep	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	Moderate or high	Moderately critical
		Low	Highly critical

g. Fauna (List any animal or bird species seen or which are known from the block)	
Local name	Scientific name
Phap (Dz), wild pig (Eng.)	Sus scrofa
Dhom (Dz), Himalayan black bear (Eng.)	Ursus thibetanus laniger
Kasha (Dz) barking deer (Eng.)	Muntiacus mutjac

h. Biotic Pressures (underline those present and level of severity)			
Fire	common	occasional	absent
Grazing	Heavy	limited	absent
Shrub layer	Dense	moderate	absent
Fodder collection (list main species used)	common	limited	absent
NWFP collection (list the main products including bamboo & cane)	common	limited	absent
Leaf litter collection	common	limited	absent
Encroachment	common	occasional	absent
Pole harvesting	common	occasional	absent
Fuel-wood harvesting	common	occasional	absent
Timber harvesting	common	occasional	absent
Hunting	common	occasional	absent
Others (describe)			

i. Management Options (list any potential management options (activities) for the block)	
1	Harvesting of timber and fire-wood should follow silvicultural principles irrespective of its

	location and road accessibilities.
2	Avoid harvesting around water sources and stream buffer
3	Requires water source protections to ensure enough supply of water to the down living villages
4	Conserve oak forest for sloth bear management in the CF

1.3.1b: Map of Sisinabu Block

The management block has 107 ha of which 102.01 ha are production forests. The other 5 ha falls under protection forest which are mainly of road (2 ha) and stream buffers (3 ha). This block consists of four forest types that are mainly dominated by broadleaf (102 ha) followed by meadow (2.89 ha), mixed conifer (2 ha) and shrub (0.11 ha). This block is the most accessible area both in terms of road connectivity and village vicinity as compare to block II.

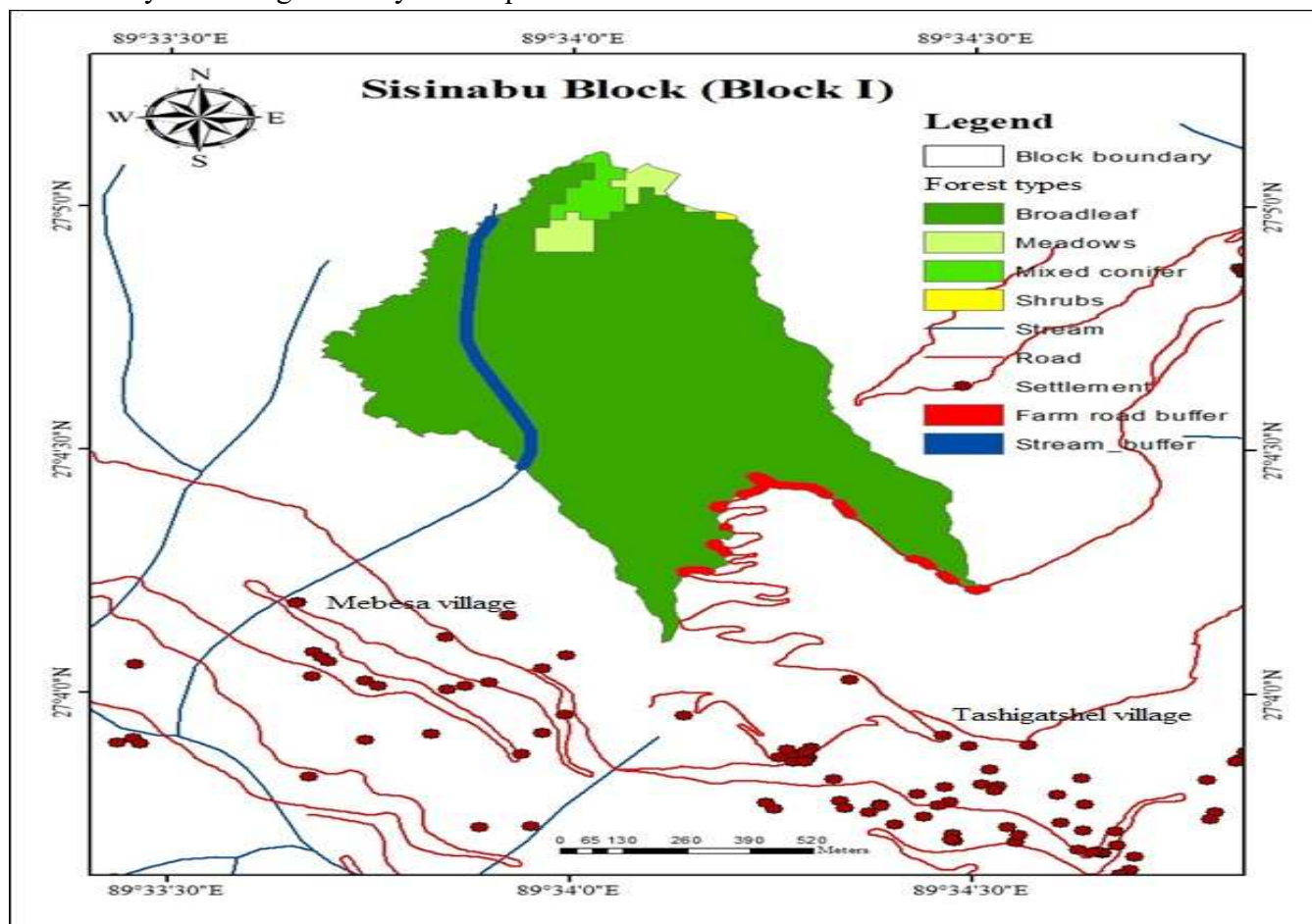


Figure 3: Management Map of Block I

1.3.2a: Sisikha Block

Table 5: Forest Resource Assessment (Block II)	
Name of Community Forest	Gyelwaringa Community Forest
Date of Assessment	08/10/2021
Name of block	Sisikha
Block area	152 ha
Name of recorder	Kelzang Jurney

a. Forest & Habitat Type					
Forest	<input checked="" type="checkbox"/>	Thicket/pole stage	<input type="checkbox"/>	Shrub land	<input type="checkbox"/>
Grassland	<input type="checkbox"/>	Plantation	<input type="checkbox"/>	Other	<input type="checkbox"/>
Vegetation type					
Subtropical forest	<input type="checkbox"/>	Chir pine forest	<input type="checkbox"/>	Warm broadleaved forest	<input type="checkbox"/>
Cool broadleaved forest	<input checked="" type="checkbox"/>	Mixed conifer forest	<input type="checkbox"/>	Fir forest	<input type="checkbox"/>
				Blue pine forest	<input type="checkbox"/>
				Other	<input type="checkbox"/>

Definitions	
Broadleaf forest	75% or more of the tree species present are hardwoods
Conifer forest	75% or more of the tree species present are coniferous
Mixed forest	All other combinations of tree species
Mature Forest	Vegetation dominated by mature trees (trees > 40 cm dbh)
Thicket/pole stage	Vegetation > 3m in height consisting of young trees usually < 40cm dbh
Shrubs	Non-tree species > 2m in height (often thorny and multi-stemmed)
Shrub-land	Vegetation dominated by woody multi-stemmed plants or single stemmed plants and regeneration mostly < 3 m tall
Grassland	Vegetation dominated by grass species and where only a small part of the area is covered by trees or shrubs.
Crown cover	The percentage of the area covered by the crowns of trees forming the main canopy (usually mature trees)
Regeneration	Seedlings, saplings and coppice regrowth of naturally occurring tree species that are less than 1.3 metres tall but greater than 30cm tall
Seed trees	Mature trees with healthy crowns capable of producing flowers and seed
Soil Cover	The percentage of the area with soil surface covered either by live vegetation or a layer of other plant vegetation

b. Forest Condition	
Write the names of the 3 main tree species	
Local name	Scientific name
Tongphushing (Dz), blue pine (Eng.)	Pinus wallichiana
Tongkey (Dz) bull oak (Eng.)	Quercus lamellosa
Hemlock (Eng.)	Tsuga dumosa
(i) Plantation	
Is there any plantation?	Approximate height of planted trees (m)
Yes <input type="checkbox"/>	
No <input checked="" type="checkbox"/>	
Year planted	Is the plantation?
	Under stocked <input type="checkbox"/>
	Stocked <input type="checkbox"/>
	Overstocked <input type="checkbox"/>
(ii) Forest Condition -Age	

Mature <input checked="" type="checkbox"/> Main canopy of mature trees	Pole stage <input type="checkbox"/> Main canopy of pole- stage trees	Shrub land <input type="checkbox"/> Main canopy of shrubs, young trees or regeneration	Any <input type="checkbox"/> No continuous canopy. Isolated trees only
(iii) Forest Condition - Canopy density			
Dense <input checked="" type="checkbox"/> Canopy density > 70%	Open <input type="checkbox"/> Canopy density < 70%	Very open <input type="checkbox"/> No real canopy. Isolated trees only	

(iv) Forest Condition – Regeneration		
Abundant <input type="checkbox"/> Regeneration easy to find in most places	Scattered/few <input checked="" type="checkbox"/> Regeneration only in some places and hard to find	None <input type="checkbox"/> No regeneration
Write the names of the 3 main tree species in the regeneration		
1) Tsuga dumosa	2) Symplocos	3) Quercus lamellosa
Regeneration: Seedlings > 30cm and < 1.3m height		

(v) Forest Condition – Approximate density of seed trees		
High <input type="checkbox"/> > 50 seed trees per ha	Moderate <input checked="" type="checkbox"/> 10 - 50 seed trees per ha	Low <input type="checkbox"/> < 10 seed trees per ha

Block Condition – Summary		
Use the forest condition class box below to get an average condition for the block		
<input type="checkbox"/> Average	<input type="checkbox"/> Good	<input checked="" type="checkbox"/> Very Good
Does the main forest canopy consist of large, mature trees?		
Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>

Forest Condition Class Box				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature forest	Dense	Abundant	High	Very good
		Scattered/few		Good
	Open	Abundant		Good
		Scattered/few	Moderate	Average
Pole stage forest	Dense	Abundant		Good
		Scattered/few	Moderate	Average
	Open	Abundant		Average
		Scattered/few	High	Poor
Shrub land and young growth	Dense	Low	Moderate	Average
	Dense	Low	Low	Average
	Open	Moderate	Low	Poor
Any	Very open	None	Low	Poor

d. Open spaces	
Approximate total open space area (ha)	4.5ha

Dominant vegetation type in the open space	Symplocos and Alnus nepalensis
Cause of open space e.g. grazing, fire, harvesting, etc.	Wetland or marshy land that inhibits or favour the growth of some species

e. Grazing and fodder			
Grassland type			
Natural <input checked="" type="checkbox"/>	Man-made <input type="checkbox"/>	Mixture <input type="checkbox"/>	Predominantly forest <input type="checkbox"/>

Main fodder species being used (list 3 only)	
Local name	Scientific name
Gayzasugma (Dz), maize (Eng.)	Zea mays
(Dz), buckwheat (Eng.)	Fagopyrum esculentum
Wheat straw (Eng.)	Triticum aestivum

Pasture quality		
Local name	Scientific name	Palatable/unpalatable
Baa (Dz.) bamboo (Eng.)	Yushina	Palatable
-	Selaginella spp.	Unpalatable
Damroo (Dz.)	Elatostema spp.	Palatable

Use pattern	Seasonal <input checked="" type="checkbox"/>	All year <input type="checkbox"/>
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Type of user	Migratory <input type="checkbox"/>	Local <input checked="" type="checkbox"/>	Both <input type="checkbox"/>
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f. Catchment Condition		
(i) Catchment condition – soil cover		
Soil cover	Soil cover class	
> 50% of the soils are covered by vegetation	high	<input checked="" type="checkbox"/>
25 - 50% of the soils are covered by vegetation	moderate	<input type="checkbox"/>
< 25% of the soils are covered by vegetation	low	<input type="checkbox"/>
(ii) Catchment Condition - Soil type and erosivity		
Soil type (colour, texture and type)		
Erosive <input type="checkbox"/> disperses and/or breaks up in water easily	Non-erosive <input checked="" type="checkbox"/> stable to water flow	
(iii) Catchment Condition - Slope		
Slope (degrees)	Slope steepness class	
<10°	Gentle	<input type="checkbox"/>
10° – 30°	Moderate	<input type="checkbox"/>
> 30°	Steep	<input checked="" type="checkbox"/>
Catchment Condition – Summary (Use the catchment condition class box below to get the average condition for the block)		
Less critical <input checked="" type="checkbox"/>	Moderately critical <input type="checkbox"/>	Highly critical <input type="checkbox"/>

Catchment Condition Class Box			
Slope category	Soil erosivity	Cover class	Condition class
Flat	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	any	Less critical
Moderate	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	Moderate or high	Less critical
		Low	Moderately critical
Steep	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	Moderate or high	Moderately critical
		Low	Highly critical

g. Fauna	
Local name	Scientific name
Phap (Dz), wild pig (Eng.)	Sus scrofa
Dhom (Dz), Himalayan black bear (Eng.)	Ursus thibetanus laniger
Kasha (Dz) barking deer (Eng.)	Muntiacus mutjac

h. Biotic Pressures			
Fire	common	occasional	absent
Grazing	heavy	limited	absent
Shrub layer	dense	moderate	absent
Fodder collection (list main species used)	common	limited	absent
NWFP collection (list the main products including bamboo & cane)	common	limited	absent
Leaf litter collection	common	limited	absent
Encroachment	common	occasional	absent
Pole harvesting	common	occasional	absent
Fuel-wood harvesting	common	occasional	absent
Timber harvesting	common	occasional	absent
Hunting	common	occasional	absent
Others (describe)			

i. Management Options (list any potential management options (activities) for the block)	
1	Harvesting of timber and fire-wood should follow silvicultural principles irrespective of its location and road accessibilities.
2	Avoid harvesting around wetland/marshy land, water sources and stream buffer
3	Initiate oak forest conservation for sloth bear management in the CF
4	Consistent patrolling is required against timber harvesting above Tsimalakha area
5	Consideration of sustainable harvesting of NWFPs (bamboos, fern shoots, mushrooms, etc.) in the CF

1.3.2b: Map of Sisikha Block

The given map shows the net-operable area of 145.01 ha of which 7.00 ha are under stream buffers protection. The block has four type of forests mostly dominated by broadleaf (131 ha) followed by mixed conifer (16.28 ha), meadow (3.72 ha) and blue pine (1 ha). This block is the most potential forest in terms of timber production as the most north-western parts of the block comprise of blue pine, hemlock and spruce forests.

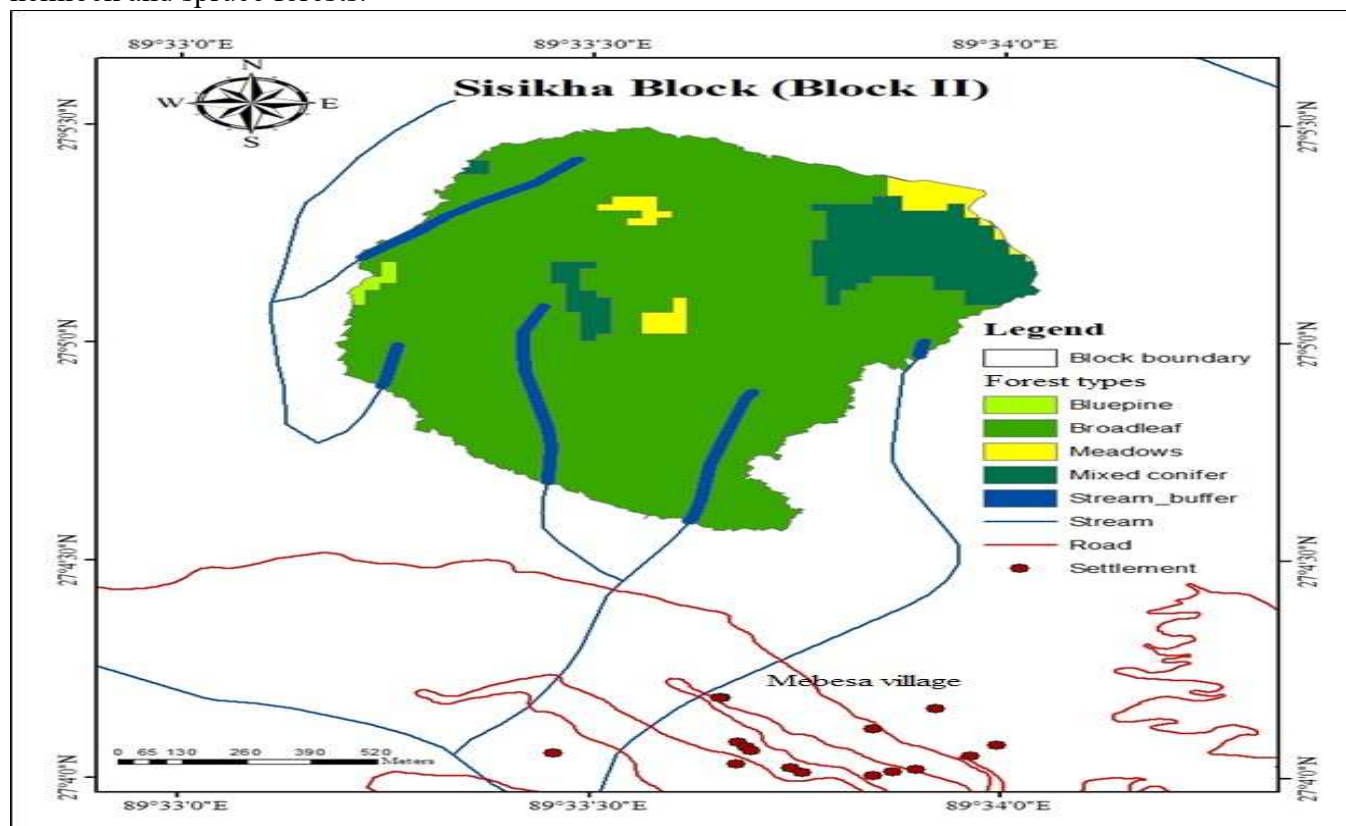


Figure 4: Management Map of Block II

Table 6: Forest Produces Ranking

Products/services	Timber	Firewood	Mushroom	Fodder	Leaf litter	Water	Grazing
Timber	x						
Firewood	Timber	x					
Mushroom	Timber	Firewood	x				
Fodder	Timber	Firewood	Mushroom	x			
Leaf litter	Timber	Firewood	Leaf litter	Leaf litter	x		
Water	Water	Water	Water	Water	Water	x	
Grazing	Timber	Firewood	Mushroom	Grazing	Leaf litter	Water	x
Total	5	4	1	0	2	6	3

Ranking result: 1st=water (6), 2nd=timber (5), 3rd=firewood (4), 4th=leaf litter (3), 5th=mush room (2), 6th=grazing (1), 7th=fodder (0).

Table 7: Species Preference Ranking

Species	Uses	Drashing	Cham	Fencing posts	Firewood	Flag poles
Blue pine	Preference	xxxxx	xxxxx	-	-	-
	Availability	**	***	**	**	**
Hemlock	Preference	xxx	xxx	-	-	-
	Availability	**	**	*	**	*
Spruce	Preference	**	****	-	-	-
	Availability	**	**	*	*	*
Oak (Q. lamellose)	Preference	x	xx	xxx	xxxxx	x
	Availability	*****	***	***	*****	*
Alnus	Preference	x	xx	x	xx	-
	Availability	***	****	**	***	*
Oak (Castanopsis)	Preference	x	xx	xxx	xxxxx	-
	Availability	***	***	***	*****	*

Note: symbols to show rating:

xxxxx-high preference
*****-highly available

x-low preference
*-less available

Table 8: Climate Hazard Assessment

Climate Hazard Matrix						
	Landslide	Flood	Drought	Forest fire	Animal diseases	Reduced crop yields
Landslide	x	Landslide	Drought	Landslide	Animal diseases	Reduced crop yields
Flood		x	Drought	Flood	Animal diseases	Reduced crop yields
Drought			x	Drought	Drought	Drought
Forest fire				x	Animal diseases	Reduced crop yields
Animal diseases					x	Reduced crop yields
Reduced crop yields						x

Result: 1st=Drought (5), 2nd=Reduced crop yields (4), 3rd=Animal diseases (3), 4th=Landslide (2), 5th=Flood (1), 6th=Forest fire (0).

1.4: Overall Forest management objectives

- Sustainable management and utilization of forest resources for future generation
- Protection of water sources, stream buffers and wetland/marshy lands for long-term sustained of water resources for the down living communities
- Sustainable management of NWFPs resources for self-consumption and commercial marketing

1.4.1: Sisinabu Block (Block I) management procedure

Table 9: Block-wise Management Procedure (Block I)					
1	Produce/services	Drashing	Cham	Firewood	Fencing/flag posts
2	Main Species	Blue pine, Alnus, Oak	Blue pine, Alnus, Oak	Oak and Alnus	Oak and Symplocos
3	Problems	Dominated by oak and alnus species which is not much desirable for drashing	Alnus and oak species are not much preferred by the communities	Harvesting focuses mostly nearby the roadside areas	Accessible areas are over harvested while others remain untouched
4	Opportunities	Avail permit from SRF land to compensate the shortages of timber from CF	Compensate this requirement from SRF land	Over harvesting of fuel wood nearby the road roadside leads to preserve some stock in distant areas	Thinning operation and coppice felling can supply fencing posts and even flag poles to some extent
5	Management Objectives	Plantation of desired timber species in the face of timber shortages in future	Encourage the plantation of desirable species by replacing the unwanted one	Follow silviculture principle irrespective of its accessibilities	Carry out thinning operation and coppice singling to supply flag/fencing posts
6	Activities	Initiate bush clearing and plantation of desirable species in barren land and harvesting opening	Clearing of bushes and plantation of desirable species	Marking should be carried out uniformly throughout the block following single tree selection system	Initiate above activities if requires flag/fencing posts
7	Procedure	Mobilization of CFMG members to carry out bush clearing and plantation activities	Mobilization of CFMG members to carry out bush clearing and plantation activities	Focus mainly on forked, dead, moribund and diseased trees while carry out marking	Mobilization of CFMG members to carry out thinning operation and coppice singling in the

					block
8	Responsibilities	CF executive members, CFMG members and concerned forest office			

1.4.2: Sisikha block (Block II) management procedure

Table 10: Block-wise Management Procedure (Block II)					
1	Produce/services	Drashing	Cham	Firewood	Fencing/flag posts
2	Main Species	Blue pine, hemlock, spruce, oak	Blue pine, spruce, hemlock, oak	Oak, alnus	Oak, symplocos
3	Problems	Desired species/sizes are unavailable and also face illegal harvesting	Desired species/sizes are unavailable	Harvesting of oak forest leads to human-bear conflicts in the area	Bush clearing and thinning operation requires labour forcers from the CMG members
4	Opportunities	Obtain additional timber from SRF Land	Obtain drashing in lieu of cham sized trees to reduce the number	Acron bearing oak trees are left for bear conservation	Obtain flag/fencing posts required by the CFMG members
5	Management Objectives	-Protection from illegal harvesting by conducting regular patrolling	Encourage to allot drashing in lieu of cham sized trees. Initiate plantation of desired trees spp.	Encourage the protection of oak forest by reducing the harvesting of acron bearing trees	Ensure to compensate the supply of flag/fencing posts from thinning operation
6	Activities	Mobilization of CFMG members to conduct regular patrolling	-Marking of drashing in lieu of cham sized trees. -Carry out plantation in open and barren land	Mark the fuel wood trees (oak) away from the incidences of bear habitat sites	Carry out bush clearing and thinning activities during marking season to supply flag/fencing posts
7	Procedure	The executive members lead the patrolling team on rotational basis	Mobilization of CFMG members to carry out plantation activities	Avoid marking especially of those acron bearing oak trees	Mobilization of CFMG members to carry out thinning operation
8	Responsibilities	CF executive members, CFMG members and concerned forest office			

1.5. Forest Produce Demand Assessment

Table 11: Forest Produce Demand Assessment

Produce	Annual requirement (estimated)		Number of HH that require produce annually (C)	Total requirement of the produce (Annually)		Total requirement of the produce in 10 years	
	Number (A)	Volume (in cfts) (B)		Number (A*C)=D	Volume (in cfts) (B*C)=E	Number (D*10)	Volume (in cfts) (E*10)
For new construction							
Drashing	18		5	90		900	
Cham	40		5	200		2000	
For renovation							
Drashing	3		7	21		210	
Cham	15		7	105		1050	
For other construction (cowshed, toilet, kitchen, store-house, etc.)							
Drashing	1		7	7		70	
Cham	5		7	35		350	
For other produce							
Firewood	2		73	146		1460	
Fencing posts	50		14	700		7000	
Mushroom billet	2500		6	15000		150000	
Flag poles	108		7	756		7560	

1.6. ACC and Demand Assessment**Table 12:** AAC of each block

AHL/AAC	Dangchung		Tsim		Cham		Drashing		Firewood		Fencing Posts	
	nos.	m3	nos.	m3	nos.	m3	nos.	m3	nos.	m3	nos.	m3
Block I	2	0.23	9	2.75	10	7.36	47	228.8	60	194.0	100	41.43
Block II	18	1.44	31	8.89	41	28.4	69	737.4	127	733.7	193	71.79
Total AHL/AAC	20	1.67	40	11.6	51	35.7	116	966.2	187	927.8	293	113.2

Table 13: AHL/AAC vs Demand Assessment

Produce	Total AAC		Total Annual Demand		Difference		Comments
	Number of trees	Volume (in cfts)	Number of trees	Volume (in cfts)	Number of trees	Volume (in cfts)	
Drashing	116		118		-2		Will be met from SRF
Cham	51		340		-289		-do-
Tsim	40		0		+40		
Dangchung	20		0		+20		
Firewood	187		146		+41		
Fencing posts	293		700		-407		Supply 1 f/wood tree in lieu of 30 f/posts

Note: The annual demand of 15000 nos. of mushroom billets will be met through sustainable lopping of Quercus/Castanopsis branches from unrestricted areas following silviculture and other forestry operation manual 2016.

The supply of 108 nos. of flag poles during death cases will be met through harvesting of Symplocos and other spp. from thinning sites

1.7: Participatory environmental impact assessment

Table 14: Participatory Environmental Assessment

Activity proposed in CFMP	Potential Environmental Effects				Potential Socio-Economic Effects			
	Soil	Water	Wild Animals	Plants	Traditional forest use	Cultural and religious values	Local employment	Local benefits from the forest products
Plantation establishment	+++	+++	++	0	0	0	+	++
Fuel wood harvesting	--	--	--	-	0	0	+	+++
Flag pole harvesting	-	-	-	0	+	+++	0	++
Timber harvesting	---	--	--	0	-	0	+++	+++
Grazing control	++	+	++	++	0	0	0	-
Fire control	+++	++	+++	+++	+	+	0	+++
NWFP collection	-	-	--	+	0	0	+	++
Forest protection	++	++	++	+	+	+	-	--
Soil & water conservation activities	+++	+++	+	+	+	+	+	++

Note: Positive effects shown by +++, Negative effects shown by ---, NO effects shown by 0

Table 15: Procedure to address potential negative effects

Activity	Procedures
Fuel wood harvesting	-Harvesting of fuel wood on steep slope or landslide sites are restricted -Avoid harvesting of fuel wood near water sources, stream buffers and marshy lands
Timber harvesting	-Controlling of timber harvesting nearby spiritual heritage and cultural monuments sites -Avoid harvesting near water catchment, degraded land, steep slope and erosional areas
NWFP collection	Over harvesting of NWFPs (bamboos, fern shoot, mushroom) near degraded areas, wildlife habitat sites and water sources should be restricted
Forest protection	-The illegal harvesting of timber, transit of stone boulders and wildlife poaching within the CF should be controlled

1.8: Participatory Monitoring Plan

Table 16: Participatory Forest resource impact monitoring plan

Activity	Indicator	How it will be monitored	Responsibility	Comments
Protection of water sources or stream buffers	Enhancement of water sufficiency in the villages	Initiate plantation and avoid harvesting of timber near water sources/buffers	CFMG members	Monitoring of work by concerned forest office
Protection of bear habitats in the CF	Protection of acorn bearing oak forest sustained	Regular patrolling of the habitat sites	CFMG members	-do-
Bush clearing and thinning	The quality of thicket stands	Carry out thinning operation	CFMG members	-do-

operation	improved			
Protect outsiders from illegal harvesting of forest produce	The number of illegal activities reduced in the CF	Carry out regular patrolling	CFMG members	Field report should be submitted to the concerned forest

Table 17: Participatory social and institutional impact monitoring plan

Activity	Indicator	How it will be monitored	Responsibility	Comments
Providing loan for CFMG members	Number of households provided with loan	Records in CF Fund Management book	CFMG members with concerned forest office	Carried out during loan repayment
Resource allocation based on equity	Number of single headed women and disadvantaged households benefits from this share	Records in CF utilization book	CFMG management committee	Monitor by concerned forest office
Revision of socio-economic survey	Number of single headed women and disadvantaged households included	Participatory review meeting	CF management committee and concerned forest office	
CFMG general meeting	Number of CFMG members attended	Meeting minutes and attendance register	CF management committee	Requires to present concerned CF focal officer
CF management committee meeting	Number of women selected as an office bearer	CF management officer bearer name list	CFMG to elect woman for the officer bearer post	

Table 18: Participatory environmental impact monitoring plan

Possible negative impact	Indicator	How it will be monitored	Responsibility	Comments
Water shortages in the down living villages	Reduction of discharge flow during lean season	Carry out discharge calculation bi-annually or annually	CF management committee	Technical backstopping given by concerned CF focal officer
Forest crops damage by windstorm, landslides, etc.	Number of tree damaged or the area being lost to such disaster	Carry out joint verifications and assessment by involving concerned CF focal officer	CFMG committee	-do-
Forest losses to rural developmental activities	The number of trees and the area being lost to such developmental activities	Carry out joint verifications and assessment by involving concerned CF focal officer	CFMG committee	-do-

1.9. Work plan

Table 19: Work Plan

Objective	Year	Activity	Qty	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Improve boundary accountability	2022	Boundary demarcations of block I	6.7 km												
Initiate forest & wildlife protection	2023	Patrolling in block I													
Improve boundary accountability	2024	Boundary demarcation in block II													
Improve forest condition	2025	Thinning operation in block I	5 ha												
Encourage desired tress species	2026	Plantation in barren lands (block I)	5 ha												
Protection of water sources	2027	Plantation near water sources	4 ha												
Improve forest condition	2028	Thinning operation in block II	5 ha												
Encourage desired tree species	2029	Gap filling plantation (block I)	5 ha												
Sustainability supply of fuel wood/posts	2030	Thinning operation in block I	6 ha												
Initiate forest & wildlife protection	2031	Patrolling in block II													

Table 20: Annual Work Plan (AWP) and progress report (1st year only)

Year : 2022		Gyelwaringa Community Forest					Dzongkhag: Chukha	
Annual Work Plan							Annual Progress Report	
Objective	Sl. No	Activity	Block location	Qty	Unit	Month	Qty achieved	Remarks
Improve CF boundary accountability	1	Boundary clearance and demarcation	Block I	6.7	km	Jan		

1.10: CF Networking

Gyelwaringa Community Forest can participate in CF networking programs initiated by DoFPS to encourage development of CF cooperation with other CFs in the Geog, Dzongkhag and CFs of Bhutan.

1.11: Monitoring, review and evaluation

110. The concern Forest Officer shall conduct regular monitoring of plan activity and submit the report on half yearly basis to the Department.
111. The CFO shall conduct annual monitoring of CF which shall include verification of records on physical and financial achievements. The annual report shall be submitted to the Department. The Monitoring and Evaluation of CF shall be carried out as per the prescription in the Management Plan and as per technical guidelines in the forest management code. The Department shall, on a regular basis, evaluate the effective implementation of the Management Plan. The evaluation report which requires technical intervention shall be presented to Technical Advisory Committee of the Department for review.

The annual work plan and progress report of the CF shall be submitted to the concerned forest office based on Annexure 2, reporting format 1. The monitoring of CF activities and maintaining of the records should be carried out jointly by the concerned forest office with CF management committee. It should be carried out with reference to the guidelines of monitoring and evaluation for CF, 2016.

A mid-term review shall be carried out at the last quarter of the 5th year plan period and the final evaluation shall be done at the last quarter of the 9th year plan period. The review and final evaluation report shall be based on the Annexure 6: monitoring and reporting format from forestry field manual 2018 (3rd edition).

2. SECTION B: COMMUNITY BY- LAWS**2.1. CFMG membership**

- i. The name of the Community Forest Management Group is designated as Gyelwa Ring Nga Community Forest Management Group. The CF management group is formed by the interested households/Community of the Bjabcho, Tashi Gatshel and Mibesa village.
- ii. It shall come into effect after the formal approval by the Department of Forest and Park services.
- iii. Current group consists of 75 households who are permanently residing in the Bjabcho Tashi Gatshel and Mibesa village.
- iv. The non-members but genuine resident of Bjabcho, Tashi Gatshel and Mibesa village is allowed to join CFMG upon payment of Nu.20,000 (Twenty Thousand only) as entry fee without having to pay the amount equivalent to the numbers of day that the old members have contributed in developing CF.
- v. New membership due to family fragmentation (Kew-Gosha) from the original Thram and Gung holder who was a member of the CFMG will be allowed if found genuine upon payment of Nu. 5,000 (Five Thousand only) upon production of separate Thram and Gung numbers.
- vi. All enrollments of new CFMG members shall be done only after consulting the existing CFMG members during meeting.
- vii. Those non-member / outsiders without land and house number will not be allowed to join the Gyelwa Ring Nga CFMG.
- viii. CFMG members will contribute Nu.300/-annually as the member fee.

2.2. Withdrawal of membership.

- i. Any member wishing to withdraw their membership can do so after prior approval of CF Chairperson, with the written application but will not be allowed to join again.
- ii. No benefits shall be paid for those leaving the group in any form.
- iii. If any CFMG member wants to resign after availing timber for construction from CF, he/she will have to repay Nu.20,000/-(Fifteen thousand only) as compensation and withdrawal fee.
- iv. Those resigned member/family member will not be allowed to rejoin in CF membership at all times to come.

2.3. Management Committee Formation.

- i. Executive committee comprises of Chairperson, Secretary and Treasurer to oversee the day-to-day activities of the CF.
- ii. The terms of executive members shall be for five years. The same person can be re-elected if the service rendered by him/her is found satisfactory by the members or else can be subject to termination even before the term is complete on disciplinary ground
- iii. Once elected, committee member has to serve for five years

2.4 Annual compensation for Management Committee members.

- i. Management Committee members (Chairperson, Secretary and Treasurer) are entitled with Nu. 500 (Five Hundred only) per day as incentive while travelling or attending the CF related works within and beyond the Bjabcho, Tashi Gatshel and Mibisa village.

2.5 Eligibility of the management committee members

Every member has the right to become the executive committee member unless he or she meets the following criteria:

- He/she should be the legal member of the CFMG
- He/she should be able to read and write
- Preference will be given to experienced members
- He/she should be mentally sound

2.6 Terms of Reference for CF Management Committee.

Sl. No	Title	Responsibilities
1	Chairperson	<ol style="list-style-type: none">1. Plan and initiate CF activities.2. Coordinate meetings.3. Report progress of the Community Forest.4. Issuance of permit and maintenance of CF books.5. Sign joint accounts for transaction.6. Monitor CF fund utilization.7. Overall monitoring of CF activities as per the plan and reporting.8. Sanction loans.9. Work as per the Community Forest Management Plan.
2	Secretary	<ol style="list-style-type: none">1. Assist Chairperson in his/her absence and coordinate the work.2. Minutes keeping3. Sign on permit together with Chairperson as required in the permit.4. Sign joint accounts for transaction.5. Crosscheck Community Forest fund utilization.6. Sign the loan sanction letter.7. Respect the bylaws framed here in this management plan.
3	Treasurer	<ol style="list-style-type: none">1. Maintain cash book and report Community Forest fund annually to Forest office.2. Receive fines and penalties and deposit into CF accounts.3. Keep detail accounts of the CF funds.4. Withdraw and deposit of funds.5. Sign the loan sanction letter.6. Respect the bylaws framed here in this management plan.7. Work as per the Annual Work plan of this management plan.

4	Resoop	<ol style="list-style-type: none"> 1. Shall conduct patrolling in the CF on regular basis. 2. Monitor utilization of timber and check if trees are properly marked. 3. Inform illegal activities to Chairperson. 4. Shall conduct proper handing taking of CF area to the newly elected resoops
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2.7. Roles and responsibilities of CFMG members.

- i. Play roles in protection and management of Community Forest as per management plan.
- ii. Monitor closely and report any illegal activities in Community Forest area.
- iii. Crosscheck and audit Community Forest accounts if needed be.
- iv. Judge the performance of executive members and vote for re-election.
- v. Participate in Community Forest activities and respect bylaws framed here in this management plan.
- vi. Work towards achieving the target activities of this plan.
- vii. Perform check and balance on equitable sharing of the CF fund and resources.

2.8. Benefit Sharing Mechanism.

- i. No timbers trees will be granted free of cost. The permit shall be issued for each produce at the prescribed rate to generate adequate revenue/income for the group.
- ii. The executive members should ensure all the revenues generated are properly recorded and all the group members of the CF are well informed. This will ensure free and fair benefit sharing later.
- iii. No single person should take advantage and try to derive individual benefit from the group's hard-earned funds.
- iv. Every single produce that are supposed to go out of the Community Forest area should be declared to group members. The executive committee members together with representative from forestry department should ensure that this happens at any cost.
- v. To sell any produces to the outsiders, a unanimous decision and agreement is a must. Executive members shall not reserve the right to decide these of their own.
- vi. If any executive member does not comply with these By-Laws, he/she will be terminated from the post (Present post) and should pay Nu.5000 (Five Thousand) as a fine and penalties, but will be consider as members.
- vii. Every forest produces in Community Forest areas shall be supplied to community members only after realization of royalty at prescribed rate.
- viii. Loan within members shall be granted equally at the prescribed interest rate. The sanction of loan shall be granted only after due consent from all the active members of the group. The rate of interest for loan will be based on rate applied by financial institutions.
- ix. Concerned forestry officials and executive members together shall ensure that benefit sharing is just and fair.

2.9 Royalty for forest produces.

Sl.	Types of	Royalty Rate (Nu)	Remarks
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No	products	Within CFMG	Outsiders	
1.	Drashing	Nu. 150/standing tree	As per auction rate with NRDCL. In case of bulk selling, rate shall be decided after meeting, involving representative from Forest and Geog administration.	Free of cost for genuine case
2.	Firewood	Nu. 100/standing tree		
3.	Cham	Nu. 80/standing tree		
4.	Tsim	Nu. 20/standing tree		
5.	Dangchung	Nu. 10/ Pole		
6.	Flag poles/fencing post	Nu.6/ flag poles/fencing post		
7.	Stone/sand/soil	According to prevailing government rate		Available from CF
8.	NWFP (Mushroom, Ferns)	No royalty	Outsiders are not entertained	Nonmembers shall be fined as per FNCRR
9	Mushroom Billets	Nu.1/Billets	Nu.5/Billets for outsiders	
10	Leaf litter	No royalty	Outsiders are not entertained	
11	Top soil	No royalty	Outsiders are not entertained	
12	Lopping of trees	Not allowed	Not allowed	
13.	Bamboo	50 head loads	Not allowed	
14	Wood burr	Not allowed	Not allowed	
15	Leaf Mold	No royalty	Nu.20/Sack (Bora)	

2.10 Timber extraction procedure.

- i. Every member has the rights to utilize the forest product from Community Forest. However, they need to obtain the permit from the chairman and trees have to be marked.
- ii. Application for timber needs by CFMG members shall be entertained as per government time schedule (July to December) annually. For new house construction, construction approval shall be availed by the applicant from Dzongkhag Administration in advance.
- iii. Periodicity criteria as per Government Rules and Regulation shall be applied for approval of timber.
- iv. However, any emergencies on the need of timber shall be considered at any time of the year.
- v. Validity of the timber permit shall be only for 2 year and may lapse after 2 years. That means the timber has to be extracted completely within 2 year from the date of issue of the permit. For house renovation 12 months or 1 year will be valid.
- vi. To extract remaining timbers after 2-year validity, the applicant/members will have to apply for new permit and the permit shall be issued only upon on field investigation.
- vii. New permit issued will be meant for extraction of those remaining timbers only and doesn't allow the applicant to extract timbers beyond their allotted timber. Same fees will be realized.

- viii. Any timber extraction after the lapse of the permit shall be considered illegal and will be subject to realization of fines and penalties as per the FNCRR 2017
- ix. Same rules shall apply even for extraction of any other forest products from CF area.
- x. Priority during the timber allotment will be given to those having no proper house and those houses struck by natural calamities. For natural calamities timber will be issued free of royalty. This can be verified by the committee members.
- xi. Every individual CFMG member is allowed to collect dry fuel wood from CF area as and when required, irrespective of the quantity without royalty.
- xii. Outsiders and Non-members will not be allowed to collect any types of firewood from the designated CF forest areas.

2.11. Fines and Penalties.

- i. Any illegal activities in the CF by members or the outsiders shall be dealt as per FNCRR, 2017.
- ii. All fines and penalties shall be registered and compounded by dealing Forest office and the amount collected will be deposited to the CF account.
- iii. Any wild life related crime shall be dealt by concerned forest office and compounded based on FNCRR, 2017 or any rule that supersedes it.
- iv. All members, including the executive members are required to make their presence in meetings and group activities compulsorily.
- v. Any absentees from work will be fined Nu.1000 and Nu.500 for meeting. However, consideration for unavoidable circumstances such as death, sick and attending other important works related legal issues will be considered.
- vi. No person below the age of 18 years will be entertained for work and as well for attending the meeting. Concerned household will be marked as absentee.
- vii. Any executive members or other members found misusing the community funds will be first terminated from the post. He/She shall be liable to pay double the amount being misused and together with the interest on the amount prescribed in this rule.
- viii. The misuse of power by the executive committee members shall be liable for fine and penalties and shall be treated as par with illegal doers. Thus, fine and compensation on the misused produces will be levied against them as per FNCRR, 2017 and rules that supersedes it.
- ix. Concerned forest office shall assist in collecting fines and compensation for the above-mentioned penalties.

2.12 Managing CFMG Fund and Credit

2.12.1. Sources of funds.

The fund shall be gathered from the following list of activities.

- i. Fines and penalties.
- ii. Revenue from sale of timber and NWFPs.
- iii. Interest charged on loans and advances.
- iv. Donations and soelra (gift), if any.

2.12.2. Managing CF funds.

- i. The fund will be loaned to those in need with interest.

- ii. Loan service shall be granted to CFMG members only and not entitled to nonmembers.
- iii. Rate of interest on loans shall be equivalent to the rate of any financial institutions in the country per annum.
- iv. All the CF accounts will be compiled and report annually for transparency.

2.13. Record Keeping

Following records shall be maintained for all time for transparency.

- i. Detail record of revenue and accounts.
- ii. Detail record of savings and expenditures.
- iii. Proper records of all the activities in the books issued to them.
- iv. All permit issued shall be properly maintained for transparency.
- v. All the donations and gifts received shall be declared and recorded to ensure equity.
- vi. All the records of activities and maintain proper minutes.
- vii. Plantation record.
- viii. Record of illegal activities and fine and compensation claimed thereof.

2.15. Meetings.

- i. CFMG members shall meet once in a year and discuss on the performance, issues and opportunity to ensure transparency. However, the members will attend any ad-hoc meetings as and when needed.
- ii. Executive committee will meet two times in a year to plan activities for CF. They will also attend any ad-hoc meetings as and when deemed necessary.
- iii. The detail minutes of all the meetings will be maintained by the Secretary and ensure the minutes are shared to CFMG members after arranging a meeting with them.

2.16: Conflict management

- i. The chairman is responsible for any conflict management occurred in the CF
- ii. If a chairman alone couldn't able to solve the conflict, then it is responsible for the management committee to solve the issues
- iii. Further if the management committee couldn't able to solve the conflicts, the case shall be forwarded to concerned forestry officer for necessary actions
- iv. If the concerned forestry officer couldn't able to solve the conflicts, then the case will be forwarded to Range Office
- v. If it even Range Office couldn't able to solve the conflicts, the case will be forwarded to Divisional Forest Office and then to the Department for necessary action
- vi. In case if the Department couldn't able to solve the conflicts, then the case will be forwarded to concerned Dzongkhag court for final resolution
- vii. The case related to wildlife, forest fire and land encroachment like farm road clearance, transmission alignment, road buffer clearance and illegal settlement in CF should be directly forwarded to concerned forest office

2.17: Amendment of CFMP and by-laws

- i. CFMG members are required to follow and carry out all the activities as per management plan and by-laws certified and approved by the Director, Department of Forest and Park Services (DoFPS) in prescribed Annexure VII.
- ii. Therefore, it serves as a legal document for managing the CF and is necessary to follow while implementing the CF activities.

- iii. But however, in some cases, if the members faced difficulties or inconveniences to follow the plan, the minor points can be amended with the submission of well justified meeting minutes.
- iv. The amendment points can be made in consultation with concerned forest office and the amended points should be submitted to the Divisional Forest Office for necessary recommendation and approval
- v. The amended points can be only incorporated into the management plan after recommendation and approval received from the Division or Department.
- vi. The implementation of the amended plan and by-laws are only allowed once the amended points are incorporated in the management plan.

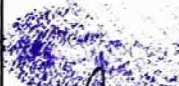




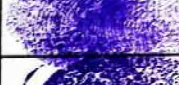
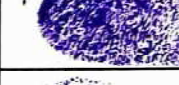

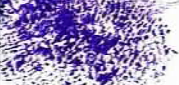
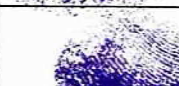




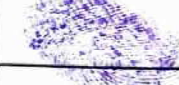
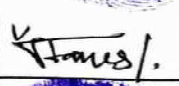
2.18: Powers of the Department




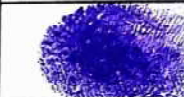

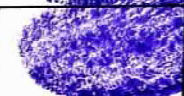
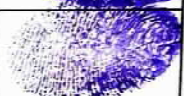

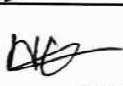
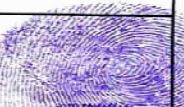
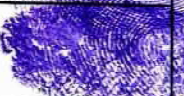
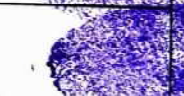
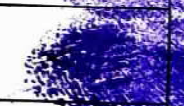


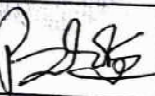
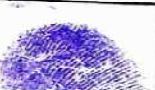
Notwithstanding the powers of the CFMG as described in FNCRR 2017, the Department is fully empowered to take action with regard to both forestry and other developmental activities in part or whole of the Community Forest. The Department fully reserves the power to cancel, suspend and reinstate of CF certificates if the implementation is not done as per the management plan and FNCRR 2017:-

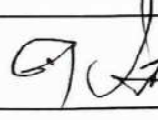

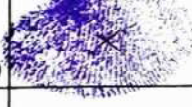

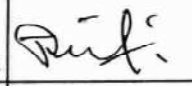
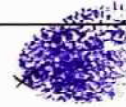
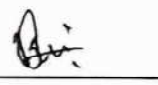


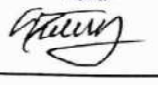

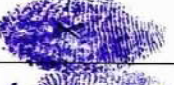
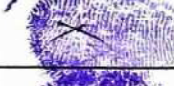

- 102. In the event the members of the CFMG decide to cancel CF certificate in accordance with Rules, the Community Forest Certificate shall be cancelled with effect from the date of notification of the decision to the CFO. The CFMG shall then surrender the Certificate to the Department.
- 103. The CFO shall have the right to enquire about the reason for such cancellation to ensure that no offence has been committed, as outlined under this Rules.
- 104. In the event the number of member household in the CFMG fall below five or the group ceases to meet the requirements under this Rules; the CFO shall notify the CFMG that its certificate shall be cancelled.
- 105. The Department shall suspend the rights and privileges of the CFMG to control, manage and utilize the CF upon the recommendation of the CFO, in the event of the following:
 - 1) The CFMG is unable to manage the Community Forest according to its management plan or otherwise fails to meet their responsibilities; and
 - 2) The CFMG has engaged in any activity in contravention of the provisions of the Act, Rules, by-laws or the management plan.
- 106. The suspension shall be for a minimum period of 3 years. During the suspension period, the CFMG members shall not be eligible for any forest produce from the SRF.













Annexure 1: CFMG membership list

Gyelwaringa Community Forest List

Sl. #	Name	CID #	House #	Thram #	Signature
1	Sithub Mo	10202001472	Kha-2-104	19	
2	Ugyen Samdup	10202000385	Kha-2-53	53	
3	Sangay Zangmo	10202000049	Kha-2-106	55	
4	Tempa Phub Dorji	10202000533	Kha-2- Nil/10	56	
5	Phub Gem	10202000105	Kha-2-54	58	
6	Khalum	10202000519	Kha-2-Nil /08	59	
7	Tangsimo	10202000237	Kha-2-69	60	
8	Gyeltshen	10202000726	Kha-2-79	62	
9	Rinchen Mo	10202000009	Kha-2-101	64	
10	Namgay Dorji	10202000169	Kha-2-61	64	
11	Chaphab	10202000144	Kha-2-58	65	
12	Lekum	10202000490	Kha-2-97	66	
13	Tashi Phuntsho	10202000075	Kha-2-50	67	
14	Sonam Pelden	10202000265	Kha-2-72	68	
15	Dorji	10202000129	Kha-2-56	70	
16	Tashi	10202000068	Kha-2-110	72	

17	Domchu	10202000118	Kha-2-55	72	
18	Sangchu	10202000196	Kha-2-64	73	
19	Gangla	10202000460	Kha-2-93	74	
20	<i>Mapa</i> Kipchu	10202000479	Kha-2-96	74	
21	Phutam	10202000332	Kha-2-80	75	
22	Dorji	10202000131	Kha-2-57	76	
23	Gangto	10202000508	Kha-2-99	77	
24	Tongki	10202000370	Kha-2-84	78	
25	Nado	10202000474	Kha-2-95	80	
26	<i>Nima Dam</i> Kalay	<i>10202000390</i> 10202000394	Kha-2-87	82	
27	Penki	10202000447	Kha-2-92	83	
28	Namsay	10202000215	Kha-2-66	85	
29	Tshering Penjor	10202000100	Kha-2-53	86	
30	Pangku	10202000188	Kha-2-63	87	
31	Pasang Lhamo	10202000491	Kha-2-89	90	
32	Pasang	10202000355	Kha-2-82	91	
33	Sha Makhu	10202000432	Kha-2-432	92	

34	Phub Gyeltshen	10202000285	Kha-2-73	95	
35	Paldom	20202000424	Kha-2-78	96	
36	Sangay Phub	10202000314	Kha-2-77	97	
37	Gyeltshen	10202000380	Kha-2-85	98	
38	Chagay	10202000041	Kha-2-104	99	
39	Karma Dorji	10202000310	Kha-2-76	103	
40	Tshering Dorji	10202000244	Kha-2-70	104	
41	Mika Dorji	10202000469	Kha-2-94	106	
42	Paga Zam	10202000164	Kha-2-60	107	
43	Wangchuck	10202000340	kha-2-81	109	
44	Chungdu Lham	10202000406	Kha-2-88	112	
45	Nakimo	10202000221	Kha-2-67	113	
46	Tsamchu	10202000272	Kha-2-73	115	
47	Sipamo	10202000026	Kha-2-102	116	
48	Dema	10202000230	Kha-2-68	118	
50	Penjor	10202000442	Kha-2-91	130	
51	Khachu	10202000646	Kha-2-31	135	

52	Kachum	10202000629	Kha-2-29	136	
53	Gyeitshen	10202000617	Kha-2-28	137	
54	Khentse Wangmo	10202000565	Kha-2-24	139	
55	Jagar Dorji	10202000588	Kha-2-26	140	
56	Sanam	10202000198	Kha-2-137	414	
57	Tshering Dorji	10202000354	Kha-2-123	447	
58	Lobzang	10202000277	Kha-2-Nil-63	471	
59	Daw Zangmo	10202000346	Kha-2-Nil-89	480	
60	Makhu	10202000095	Kha-2-52	486	
61	Nima Gyeltshen	10202000185	Kha-2-62	506	
62	Zemkom	10202000589	Kha-2-Nil-59	545	
63	Nima Tshering	10202000574	Kha-2-25	Nil	
64	Tshulthrim	10202000148	Kha-2-Nil-272	Nil	
65	Penjor Dorji	10202000027	Kha-2-103	100	

66. Sonam Wangmo 10202000206 Kha-2-65 81

67 Pema Lhamo 10202000642 Kha-2-30 137

68 Pasang Mo 10202000155 Kha-2-59 71

~~Dawa Zangmo 10202000346 Kha-2-Nil-89 480~~

69 Dawa Zangmo 10202000261 Kha-2-71 63

70 Tashi 10202000068 Kha-2-110 72

71 Karma Thinley 10202000616 Kha-2-27 244

72) Zalcoma 10202000589 kha-2-Nil/Sg 100
 73) Phuntsho 10202000364 kha-2-83 Gg
 74) Dechen Wangmo 10202000567 kha-2-24 139
 75) Sigma Dorji

Annexure 3. Block wise Annual Allowable Cut (AAC) per year of forest products

Stand stock table results

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
	0.24	2	2.75	9	7.36	10	228.84	47

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	25.68	214	294.25	963	787.52	1070	24486	5029

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	0.21	1.78	2.45	8.03	6.56	8.92	204.05	41.91
Total	0.21	1.78	2.45	8.03	6.56	8.92	204.05	41.91

N-Trees

Block wise Annual Allowable Cut
(AAC) per year for forest products

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	2.50	28	9.71	32	29.22	40	194.04	60

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos

Block I	267.393	2996	1038.97	3424	3126.54	4280	20762.3	6420
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AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	2.43	27.24	9.45	31.13	28.42	38.91	188.75	58.36
Total	2.43	27.24	9.45	31.13	28.42	38.91	188.75	58.36

T_Trees

Block wise Annual Allowable Cut (AAC) per year for forest products

Stand stock table results

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	1.44	18	8.89	31	28.36	41	737.4	69

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	226.08	2826	1395.73	4867	4452.52	6437	115772	10833

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	2.06	25.69	12.69	44.25	40.48	58.52	1052.47	98.48
Total	2.06	25.69	12.69	44.25	40.48	58.52	1052.47	98.48

N-Trees

Block wise Annual Allowable Cut (AAC) per year for forest products

Stand stock table results

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	5	60	22.00	74	44.79	59	733.72	127

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	785	9420	3454	11618	7032.03	9263	115194	19939

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	7.14	85.64	31.40	105.62	63.93	84.21	1047.22	181.26
Total	7.14	85.64	31.40	105.62	63.93	84.21	1047.22	181.26