

GASEYLO COMMUNITY FOREST MANAGEMENT PLAN (1st Revision)



**Gakidling Gewog
Sarpang Dzongkhag**


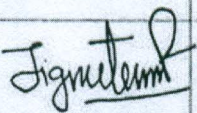

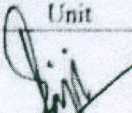

Plan Period: December 2022 to November 2032

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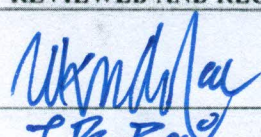
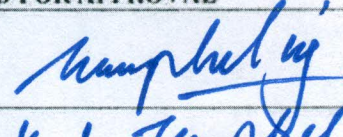
ANNEX 3: APPROVAL SHEET

Name of Community Forest	Caseylo	Caseylo
Village	Ijungarey, Churgari, Homedara & Kagatey	
Chiwoq	Lhaling	Lhaling
Gewog	Gakidling	Gakidling
Dzongkhag	Sarpang	Sarpang
Production area (Hectare/Acre)	34.18 Ha/84.42 Acres	34.18 ha.
Protection area (Hectare/Acre)	7.06 Ha/17.44 Acres	7.06 ha.
Total Community Forest Area (Hectare/Acre)	41.24 Ha or 101.86 Acres	41.24 ha
Total CFMG Member (No. of HH)	34 HHs	34 HH

Prepared and submitted for approval

	Community Forest Management Group	Forestry Representative (CFMP Facilitator)	Gewog Administration	Social Forestry Extension Unit	Division/Park Office
Signature					
Name	Manoj Rai	Jigme Tenzin	Nim Dorji Sherpa	Sonam Dorji	Phub Dhendup
Title	Chairperson	FR II	Gakidling Gewog Sarpaang	Head	Chief Forestry Officer

REVIEWED AND RECOMMENDED FOR APPROVAL

Signature		
Name	P. B. Rai	K. J. Tamphel
Title	Forestry Officer	Chief Forestry Officer
Division	Social Forestry and Extension Division	Social Forestry and Extension Division

APPROVED BY:



DIRECTOR/DIRECTOR GENERAL
DEPARTMENT OF FORESTS AND PARK SERVICE

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ACRONYM

AAC	Annual Allowable Cut
BHU	Basic Health Unit
CBNRM	Community-based Natural Resources Management
CF	Community Forest
CFMG	Community Forest Management Group
CFMP	Community Forest Management Plan
CFO	Chief Forestry Officer
Cft	Cubic feet
COSDTMO	Certificate of Origin Sources to Depot Timber Movement Order
DBH	Diameter at Breast Height
DFO	Divisional Forest Office
DoFPS	Department of Forests & Park Services
ECCDC	Early Child Care & Development Centre
FBO	Forest Beat Officer
FNCR	Forest and Nature Conservation Rules, 2006
FNCA	Forest and Nature Conservation Act, 1995
FNCRR	Forest & Nature Conservation Rules & Regulation, 2017
FRO	Forest Range Office
FRDD	Forest Resources Development Division
HH	Household
Ha	Hectare
H/L	Head Load
ITMO	Internal Timber Movement Order
Km	Kilometer
NFE	Non-Formal Education
NFI	National Forest Inventory
NWFP	Non Wood Forest Product
NRPC	Natural Resources Pricing Committee
Nu	Ngultrum (Bhutanese Currency) (1 US\$= Nu.49)
M	Meter
PES	Payment for Ecosystem Services
PFMP	Participatory Forest Management Project
RO	Range Officer
SFM	Sustainable Forest Management
SRF	State Reserve Forest
SFED	Social Forestry & Extension Division
SFEU	Social Forestry & Extension Unit
TV	Television

GLOSSARY

Resup	Village Forest Guarder from CFMG
Chewog	Sub-block
Drashing	Tree/Log having DBH beyond 50 cm
Cham	Beam/Rafter having DBH ranging from 30-49.9 cm
Tsim	Roof Strut having DBH ranging from 20-29.9 cm
Dangchung	Pole sized tree having DBH ranging from 10-19.9 cm
Dzongkhag	District

Executive Summary

Gaseylo community forest has a total area of 41.24 ha. (101.86 acres) divided into three blocks (Zhado: 12.66 Ha; Dophuchen: 10.61 Ha & Churumphey: 17.97 Ha), out of which 34.18 ha (84.42 acres) are net operable area and 7.06 Ha (17.43 acres) as net protection area. It is managed by 33 households from Kagatey, Ijungari, Chargari & Homidara in Laling Chewog under Gakidling gewog, Sarpang. It was established in 2011 with funding support from PFMP. However, management plan was expired in 2020 and further it was revised its first management plan with the objectives to ensure Sustainable Forest Management (SFM) through Community-based Natural Resources Management (CBNRM) program. It is located within sub-tropical forests with elevation ranges from 343 to 830 masl.

Forest resources assessment (FRA) was done using systematic sampling methods. Total of 600 sample plots (10x25m) with 100 m inter-plot distances were laid within the net production area. Sampling were done only in production forest within the CF and Annual Allowable Cut (ACC) were calculated for Dangchung (10-20 cm), Tsim (20-30 cm), Cham (30-50 cm) & Drashing (>50 cm) respectively. ACC for Dangchung was 327.72 cfts, Tsim (948.39 cfts), Cham (948.0 cfts) and Drashing (6806 cfts) for entire blocks/year. However, inadequate drashing sizes timbers due to exceeding demand from CFMG and requires readjustment from cham sizes stocks and other N-trees without exceeding ACC. Nonetheless, Dophuchen and Churumphey block has good deposits of surface collection (stones & boulders). On other hand, quantity demanded for Drashing was 1600 cfts (New construction) and 1200 cfts for repairing/HH/year. Likewise, CFMG demanded 264 m³ of firewood; 250 cfts for poultry and other farm constructions and 72 no's fencing posts for entire CFMG/year. Overall, there is mismatch of quantity demanded and quantity produce from CF especially in case of Drashing (-1987.64 cfts) and fencing posts (-49 no's) for entire CFMG/year. While, CF has excess N-trees and abundant surface collection aggregates (stones) whereby CF can meet their demand for both sands and boulders for entire CFMG. Nonetheless, CF constitutes open canopy density (<10%) with very few regeneration having less than 10 seed trees /Ha especially in Zhado blocks than Dophuchen and Churumphey. However, CF serves as a prime habitat for endangered golden Langur and great hornbill. Besides these, CF also possesses adequate area of eroded area (more than 10%) whereby CFMG have to continue to create plantation program.

The CFMG can also sale those excess N-trees and surface collection aggregates (stones) for income generation without exceeding ACC. Beside this, CFMG must explore community-based furniture house to engaged school dropouts as well as generates revenue. Meanwhile, CFMG needs to depend for bamboo and fencing posts from State Reserve Forest as per FNCRR 2017. Existing excess stocks and inferior trees must be harvested & dispose to wood-based industries (WBI) for generating revenue. Re-vegetation program, Enterprises development & habitat management are equally potential besides executing stringent monitoring and evaluation for balancing conservation and development during entire management plan period.

Part 1. Community Forest Management Plan

1. Introduction

Gaseylo Community Forest is located within the sub-tropical forest with elevation ranging from 343 to 830 masl. It has 33 registered CFMG members distributed into four distinctive villages (Kagatey, Ajingarey, Chargharey & Homeydera) under Gakidling gewog. Initially it was approved in 2011 with 25 CFMG members and complete their first term management plan periods in December of 2020. Protection and utilization was the main focused during first management plan period (2011-2020) and about 7 ha of eroded land within the CF was rehabilitated with bamboo rhizomes and other first growing seedlings plantation. More than Nu. 3, 16,765 revenue (2011-2020) had been generated through the sale of timbers, NWFPs, lops and tops fallen along the newly constructed Kagatey-Muga farm road in 2015. A total of 13 households have been newly constructed, and repaired 5 households, constructed and repaired 4 kitchens, 6 backyard poultry farms and 4 cowsheds (out of 25 CF members within first management plan period).

CF constitutes of broadleaved forest covering the total area of 41.24 ha. (101.86 acres), out of which 34.18 ha (84.68 acres) is net production area excluding protection area (barren area, gorges, eroded area, river buffers) and rest were falls within the protection area 132.68 Ha (327.74 acres). However, CF area for second management plan period was slightly increased since most of the vicinity areas were included inside the LFMP area and couldn't encroached those surveyed area due to legal obligation.

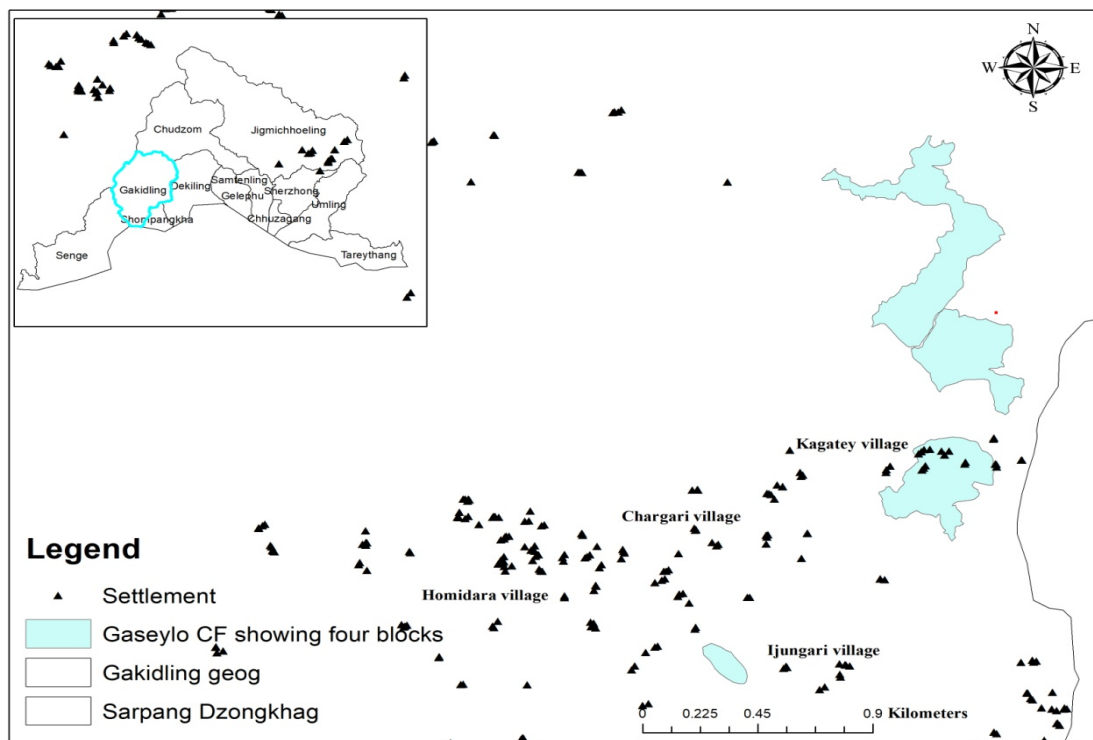


Figure 1 Map showing spatial location of four blocks of Gaseylo CF.

CF area is dominated by broadleaved species such as Maina (*Tetrameles nudiflora*), gokul (*Alanthus grandis*), simal (*Bombex ceiba*), Hatipoila (*Pterospermum ascerifolium*), Lampatey (*Daubanga grandiflora*), Chelawni (*Schima wallichii*) and Odal (*stericula vilosa*), Lapsi (*Choerospondias axillaris*) and Amp (*Mangifera sylvestica*) and other tropical bamboo species such as Malbans (*Bambusa nutans*) and Choya bans (*Dendrocalamus hamiltonii*). Nevertheless, fodder species and wild vegetables (fern, damburu & orchids) are also abundantly grown within the CF.

The management of community forestry for 10 years has realized the CFMG on the importance of sustainable management and utilizations of CF, besides meeting daily needs from the CF without depending on the State Reserved Forest (SRF). Nonetheless, forest condition and species composition inside erosion sites and spring shed areas were significantly improved and stabilized the structured of the forests aftermath of CF establishment. Therefore, CFMG has come up with other dynamic management objectives for second term management plan period:

- To improve the health and vigor of forest and bamboo stands through silvicultural operations which will contributes towards ensuring sustainable forest management
- To generate income through sales of N-trees, finished products, lops & tops, bamboo culms, surface collections & environmental services (PES) for enabling sustainable utilizations of Forest resources;
- To enhance the technical capacity of the CFMG through engaging in participatory Forest management (PFM) program;
- To establish micro-enterprises (community-based wood Fabrication unit) for generating incomes as well as local employment which can promotes their livelihoods development of CFMG.

Further, collective conservation work of CFMG will not only contributes towards sustainable forest management and utilization of CF, but also directly address poverty alleviation through balancing socio-economic development, environmental conservation and good governance (improve the human capital) at the community in the future.

2. Community Forest boundaries

Gaseylo CF has a total area of 41.24 ha (101.86 acres), of which the net production area constitutes of 34.24 ha (84.42 acres) and 7.06 ha (17.43 acres) protection area.

Overall CF Boundary information

Boundaries	Permanent features
West	Dopjikholchi
East	Sarpangkhola
South	Laringkhola
North	Gangadara



Figure 2 CF showing spatial location of blocks.

3. Social Information

Details social information about the CFMG

Name of the villages	Kagatey, Ijungari (Ajingarey), Chagari & Homadara
Ethnic groups with CFMG	Lhotshampa (Rai & Mongar) Sharchop
Basic amenities	ORC, electricity, rice mill, Bolero car, irrigation canal, power chain & power tiller
Total Household (HH) number of CFMG	33 HH
Population of CFMG	165
% male and % female	60% male & 40% female
Main source of income	Orange & off-farm,
Cattle population of the CFMG	40
Main crops	Rice, millet, maize and bettle nuts
Cropping pattern	Mixed cropping
Any other information	

4. Forest Information and Resources Assessment

Template shows the blocks description of three blocks. The overview of blocks includes, forest resources assessment describing forest & habitat types vegetation; forest condition with respects to age, canopy density, regeneration and density of seedlings were reflected besides elaborating on catchment condition, wildlife fauna and biotic pressure indicators which are shown below:

4.1. Zhado block

Format 1. Forest Resources Assessment Format	
Name of CF	Gaseylo CF
Date of assessment	10 th June 2020
Name of Block	Zhabdo
Block area	27 Acres
Name of recorder	Jigme Tenzin, SFR-III & Sonam Dorji SFR-I

Forest & Habitat Types

Forest <input checked="" type="checkbox"/>	Thicket/pole stage <input type="checkbox"/>	Scrubland <input type="checkbox"/>	
Grassland <input type="checkbox"/>	Plantation <input type="checkbox"/>	Other <input type="checkbox"/> <input checked="" type="checkbox"/>	Mixed species forest

Vegetation types

Sub-tropical forest <input checked="" type="checkbox"/>	Chirpine forest	Warm broadleaved forest	Blue pine forest
Cool broadleaved forest	Mixed conifer forest	Fir forest	Other

Forest Conditions

Write the name of main species	
Local name	Scientific name
Simal	<i>Bombex ceiba</i>
Maina	<i>Tetramelus nudofolia</i>
Hatipaili	<i>Pterospermum aserifoliam</i>
Plantation	
Is there any plantation	Approximate height of planted trees (m)
Yes	Under-stoke <input type="checkbox"/>
No <input checked="" type="checkbox"/>	Stock <input type="checkbox"/>
	Over-stoked <input type="checkbox"/>

Forest Condition- Age

Mature <input type="checkbox"/>	Pole stage <input type="checkbox"/>	Shrub land <input type="checkbox"/>	Any <input checked="" type="checkbox"/>
Main canopy of mature trees	Main canopy of pole-stage trees	Main canopy of shrubs, young trees or regeneration	No continuous canopy. Isolated trees only

Forest Condition-Canopy density

Dense <input type="checkbox"/>	Open <input checked="" type="checkbox"/>	Very open <input type="checkbox"/>
Canopy density > 70%	Canopy density < 70%	No real canopy. Isolated trees only

Forest Condition and Regeneration

Abundant <input type="checkbox"/>	Scattered/few <input checked="" type="checkbox"/>	None <input type="checkbox"/>
Regeneration easy to find in most places	Regeneration only in some places and hard to find	No regeneration

Write the names of the 3 main tree species in the regeneration

Simal	2) Odal	3) Maina
-------	---------	----------

Regeneration: Seedlings > 30cm and < 1.3m height

Forest Condition- Approximate density of seed tree (if any)

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

Block Condition

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

Catchment Condition

Soil cover	Soil cover class
> 50% of the soils are covered by vegetation	High <input type="checkbox"/>
25 - 50% of the soils are covered by vegetation	moderate <input checked="" type="checkbox"/>
< 25% of the soils are covered by vegetation	Low <input type="checkbox"/>

Slope	
Slope (degrees)	Slope steepness class
<10°	Gentle <input checked="" type="checkbox"/>
10° – 30°	Moderate <input type="checkbox"/>
> 30°	Steep <input 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"/>

Use table to decide on catchment conditions

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
Steep		Low	Moderately critical
	Erosive	Moderate or high	Moderately critical
		Low	Highly critical
	Non erosive	Moderate or high	Moderately critical
		Low	Highly critical

Wildlife Fauna

Local name	Scientific name
Barking deer	<i>Muntiacus mutjak</i>
Wild pig	<i>Sus scrofa</i>
Golden Langur	<i>Trachypithecus geei</i>

Biotic Pressure indications (Which of the following biotic pressures are present)

Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
NWFP collection (list the main products including bamboo & cane)	Common	limited	absent
Encroachment	Common	occasional	absent
Hunting	Common	occasional	absent

Others (describe)	Common	Occasional	Present
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4.2. Dophuchen block

Format 2. Forest Resources Assessment Format

Name of CF	Gaseylo CF
Date of assessment	12 th June 2020
Name of Block	Dophuchen
Block area	26.24 acres
Name of recorder	Mr. Jigme Tenzin, SFR-III

Forest & Habitat types

Forest <input checked="" type="checkbox"/>	Thicket/pole stage <input type="checkbox"/>	Scrubland <input type="checkbox"/>	
Grassland <input type="checkbox"/>	Plantation <input type="checkbox"/>	Other <input type="checkbox"/>	Bamboo with scatter trees forest
Vegetation types			
Sub-tropical forest <input checked="" type="checkbox"/>	Chirpine forest	Warm broadleaved forest	Blue pine forest
Cool broadleaved forest	Mixed confer forest	Fir forest	Other

Forest Conditions

Write the name of main species	
Local name	Scientific name
Chelawni	Schima wallichii
Hatipaila	Pterospermum aserifoliam
Katus	Castranopsis hystrix
Plantation	
Is there any plantation Yes No <input checked="" type="checkbox"/>	Approximate height of planted trees (m) Under-stoke <input type="checkbox"/> Stock <input type="checkbox"/> Over-stoked <input type="checkbox"/>

Forest Condition- Age

Mature <input checked="" type="checkbox"/> Main canopy of mature trees	Pole stage <input type="checkbox"/> Main canopy of pole-stage trees	Scrubland <input type="checkbox"/> Main canopy of shrubs, young trees or regeneration	Any <input type="checkbox"/> No continuous canopy. Isolated trees only
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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
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Forest Condition and Regeneration

Abundant <input checked="" type="checkbox"/> Regeneration easy to find in most places	Scattered/few <input 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		
Katus	2) Hatipaila	3) Maina
Regeneration: Seedlings > 30cm and < 1.3m height		

Forest Condition- Approximate density of seed tree (if any)

(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

Use the forest condition class box below to get the average condition for the block

Poor ☐ Average ☐ Good ☐ Very Good ☒

Does the main forest canopy consist of large, mature trees?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
---	------------------------------	--

Catchment Condition

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"/>

Slope

Slope (degrees)	Slope steepness class
<10°	Gentle <input checked="" type="checkbox"/>
10° – 30°	Moderate <input type="checkbox"/>
> 30°	Steep <input 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"/>
---	--	--

Use table to decide on catchment conditions

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

Wildlife Fauna

Local name	Scientific name
Barking deer	<i>Muntiacus mutjak</i>
Wild pig	<i>Sus scrofa</i>
Golden Langur	<i>Trachypithecus geei</i>

Biotic Pressure indications (Which of the following biotic pressures are present)

Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
NWFP collection (list the main products including bamboo & cane)	Common	limited	absent
Encroachment	Common	occasional	absent

Hunting	Common	occasional	absent
Others (describe)	Common	Occasional	Present

4.3. Churumpay block

Format 3. Forest Resources Assessment Format	
Name of CF	Gaseylo CF
Date of assessment	14 th June 2020
Name of Block	Churumpay
Block area	44.42 acres
Name of recorder	Mr. Jigme Tenzin SFR-III & Sonam Dorji, Sr. FR-I

Forest & Habitat types

Forest <input checked="" type="checkbox"/>	Thicket/pole stage <input type="checkbox"/>	Scrubland <input type="checkbox"/>	
Grassland <input type="checkbox"/>	Plantation <input type="checkbox"/>	Other <input type="checkbox"/>	Bamboo with scatter trees forest

Vegetation types

Sub-tropical forest <input checked="" type="checkbox"/>	Chirpine forest	Warm broadleaved forest	Blue pine forest
Cool broadleaved forest	Mixed conifer forest	Fir forest	Other

Forest Conditions

Write the name of main species	
Local name	Scientific name
Lampatey	<i>Daubanga grandiflora</i>
Panisag	<i>Terminalia myriocarpa</i>
Champ	<i>Mechilia champacca</i>
Plantation	
Is there any plantation	Approximate height of planted trees (m)
Yes	Under-stoke <input type="checkbox"/>
No <input checked="" type="checkbox"/>	Stock <input type="checkbox"/>
	Over-stoked <input type="checkbox"/>

Forest Condition- Age

Mature <input checked="" type="checkbox"/>	Pole stage <input type="checkbox"/>	Scrubland <input type="checkbox"/>	Any <input type="checkbox"/>
Main canopy of mature trees	Main canopy of pole-stage trees	Main canopy of shrubs, young trees or regeneration	No continuous canopy. Isolated trees only

Forest Condition-Canopy density

Dense <input checked="" type="checkbox"/>	Open <input type="checkbox"/>	Very open <input type="checkbox"/>
Canopy density > 70%	Canopy density < 70%	No real canopy. Isolated trees only

Forest Condition and Regeneration

Abundant <input checked="" type="checkbox"/>	Scattered/few <input type="checkbox"/>	None <input type="checkbox"/>
Regeneration easy to find in most places	Regeneration only in some places and hard to find	No regeneration
Write the names of the 3 main tree species in the regeneration		
Panisag	2) Lampatey	3) Maina
Regeneration: Seedlings > 30cm and < 1.3m height		

Forest Condition- Approximate density of seed tree (if any)

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

Block Condition

Use the forest condition class box below to get the average condition for the block

Poor <input type="checkbox"/>	Average <input type="checkbox"/>	Good <input type="checkbox"/>	Very Good <input checked="" type="checkbox"/>
Does the main forest canopy consist of large, mature trees?		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Catchment Condition

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"/>

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"/>
---	--	--

Use table to decide on catchment conditions

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

Wildlife Fauna

Local name	Scientific name
Barking deer	<i>Muntiacus mutjak</i>
Wild pig	<i>Sus scrofa</i>
Golden Langur	<i>Trachypithecus geei</i>

Biotic Pressure indications_(Which of the following biotic pressures are present)

Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
NWFP collection (list the main	Common	limited	absent

products including bamboo & cane)			
Encroachment	Common	occasional	absent
Hunting	Common	occasional	absent
Others (describe)	Common	Occasional	Present

5. Forest Management metrics (including objectives)

The forest management includes forest management, forest management procedures matrix and overall forest management objectives. The forest management matrices shown/reflected in Table 1, 2 & 3 below:

Forest management and procedures matrices for Zhado block

Product /services	Timber	Firewood	Fencing post/poles	Water sources
Main species	Champ, Panisaj, Lampatey, Chelawni, Poiley, Tooni, Chokrasi, Mandaney, Sheti, khamari, Gokul	Katus, Hatipailey, Gemiri, Patpatry Khoreney, Jamuna, Ambakey, Malati, Ratey	Chelawni, Gayo, Kalikat, Kawlo, Jamuna	Drinking water
Problems	<ul style="list-style-type: none"> Eroded sites in the past with fragile soil structures Depredate seedlings by the wild animals (bamboo shoots eaten by wild pigs) Sapling (Champ species) affected by the insects (pest) Lack timber sizes trees Poor management of bamboo (<i>Bambusa nutan</i> & <i>Dendrocalamus hamitronii</i>) stands Haphazard dumping of household wastes in Zhado area Poor management of water resources & its recharge area Lack of silviculture applications Lack of basic equipment's (secateurs, pruning saw, boots) Poor survival of seedlings due to eroded & poor soil nutrients 			
Opportunity	<ul style="list-style-type: none"> Initiate Land management campaign (check dam (log & stone) & bamboo plantation to stabilize the soil structures Forgo bamboo plantation and resort other species which is not palatable by the wild animals Outsources the pest resilient seedlings from the CF area or nearby community Retain existing pole-sizes stands (Chokrasi and Lampatey species) without harvest to suffice future needs Training on bamboo harvesting need to imparted to entire CFMG to ensure proper management of existing bamboo stands Waste management campaign as well as awareness need to carry out on half yearly basis to clean the waste dump sites Potential to promote community-based micro-PES scheme with Sheychamthang satellite town in future & identify the 			

Product /services	Timber	Firewood	Fencing post/poles	Water sources
	recharge area through hydro-geological survey in consultation with DFO Sarpang <ul style="list-style-type: none"> • Opportunity to upscale mass silviculture application and promote the quality of the stands • Adequate equipment important for conducive implementation of silviculture applications • Nurture the plantation sites. 			
Management objectives	<ul style="list-style-type: none"> • Sustainable management, utilization & production of forest products and services 			
Activities	<ul style="list-style-type: none"> • Carry out land management campaign (check dam, bamboo plantation, plantation fodder plantation) (1 years) • Seedling selection and outsource seedlings within their CF area • Manage & protect the existing mid-aged stands for future timber productions using silvicultural applications • Capacity development for CFMG (2-3yrs) regarding bamboo rhizomes selection, plantations and silvicultural applications • Carry out waste management events two times per year along the dumping sites • Carry out primary consultation & feasibility study with Thromdey Thuemi of Shechamthang satellite town • Fencing plantation sites on shift basis • Silvicultural applications in Zhado blocks with adequate tools and silvicultural gears. 			
Procedures	<ul style="list-style-type: none"> • Survey, design and implement the land management interventions with CFMG & Forestry staffs under the spearhead of CF committee • Meeting with CFMG, identify the species, design the SOP and then outsourced the seeding within the CF • Outsource resource persons and carry out systematic silviculture application of stands in consultation with CFMG • Outsource resource person to impart capacity development regarding bamboo rhizomes selection, plantations and silvicultural applications • Inform the CFMG during any CFMG meeting and confirm the day and carry out mass cleaning campaign at least two times a year within the major dumping sites • Seek technical support from Social Forestry & Extension Unit, DFO Sarpang and then carry out Carry out primary consultation & feasibility study with Thromdey Thuemi of Shechamthang satellite town • Consult with the CFMG and carry out barbed wire fencing of plantation sites on shift basis • Outsource resource person and carry out annual silviculture application in Zhado blocks with appropriate tools and silvicultural gears 			

Product /services	Timber	Firewood	Fencing post/poles	Water sources
Responsibility	<ul style="list-style-type: none"> Overall coordination has to be done by Chairman/Secretary in consultation with Forestry staffs from nearby Range Office Any technical support has to be imparted by Forestry staffs (Sarpang Forest Range & Divisional Forest Office, Sarpang/ Social Forestry & Extension Division (SFED), Department of Forests & Park Services, Thimphu; Any technical and financial supports must seek from Social Forestry & Extension Unit, Divisional Forest Office, Sarpang/ SFED, Thimphu/Gewog Administration/ NGO/Projects/donors. 			

Forest management & procedures matrix for Dophuchen block

Product /services	Timber	Firewood	Post/ poles	Surface collections
Main species	Champ, Panisag, Lampatey, Chelawni, Tooni, Chokrasi, Mandaney, Sheti, khamari, Gokul	Katus, Hatipailey, Gemiri, Patpatry Khoreney, Jamuna, Ambakey, Malati, Ratey	Chelawni, Gayo, Kalikat, Kawlo, Jamuna	stones and boulders
Problems	<ul style="list-style-type: none"> Eroded sites at Dophuchen area Stony areas and stones deposits randomly distributed across the block Lack timbers species & silviculture applications Poor management of water resources Plenty of N-trees in Dophuchen block 			
Opportunity	<ul style="list-style-type: none"> Sustainable land management campaign needs to upscale especially in those eroded & landslide area Surface collection of stones & boulders within designated area with minimum environmental impacts Collection of stones using eco-friendlier methods by CFMG for income generation purposes Silviculture applications of both mature as well as pre-mature stands in Dophuchen blocks Sustainable management of water sources 			
Management objectives	<ul style="list-style-type: none"> Sustainable management, production and utilization of forest products and services 			
Activities	<ul style="list-style-type: none"> Carry out sustainable management of degraded forests through land management activities Assessment of sites and carry out small-scale-based collection of stones and boulders in Churumphey block without environmental impacts to meet the needs of the 			

Product /services	Timber	Firewood	Post/ poles	Surface collections
	CFMG and if adequate sale to outsiders <ul style="list-style-type: none"> • Carry out mass silviculture operation (Thinning, singling and cuttings of tangling climbers) of young and mature stands • Carry out sustainable management of water resources and formation of water user association (WUA) within CFMG • Conduct feasibility study to construct forest roads inside the CF to ease transportation of forest products 			
Procedures	<ul style="list-style-type: none"> • Site selections, survey, prepare estimates and carry out the land management campaign Assessment of sites and carry out small-scale-based collection of stones and boulders in Churumphey block. • Site selections, survey, seek approval from DFO and carry out the small scale-based collection of stones and boulders from Dophuchen block. • Identify the sites, arrange the equipment's, train our CFMG and then carry out mass silviculture operation (Thinning, singling and cuttings of tangling climbers) of young and mature stands • Identify the main water sources of CFMG, carry out interventions (hydro geological survey) and form WUA to ensure sustainable management of water sources • Site survey, prepare estimates and carry out forest roads construction inside the CF to ease transportation of forest products 			
Responsibility	<ul style="list-style-type: none"> • Land management & surface collection activities had to initiated by CFMG, seek technical support from nearest Forest office and all the documents has be processed by the CF committee members • Entire activities had to done by CFMG under the surveillances of CF committee members headed by Chairman, but they should seek technical support from Social Forestry & Extension Unit under DFO Sarpang • Any technical and financial supports related to silviculture application must seek from Social Forestry & Extension Unit, Gewog Administration, NGOs & SFED, Thimphu; • Seek public clearance, forest Clarence & other administrative approval from DFO office, Gewog & Dzongkhag Administration (water sources & forest road). 			

Forest management & procedures matrix for Churumpay block

Product /services	Timber	Firewood	Post/ poles	Water sources	Sand/ gravels/ boulders

Product /services	Timber	Firewood	Post/ poles	Water sources	Sand/ gravels/ boulders
Main species	Champ, Lampatey, Chelawni, Tooni, Chokrasi, Mandaney, Sheti, khamari, Gokul	Katus, Hatipailey, Gemiri, Patpat ry Khoreney, Jamuna, Ambakey, Malata, Ratey	Chelawni , Gayo, Kalikat, Kawlo, Jamuna	Water	stones and boulders
Problems	<ul style="list-style-type: none"> • Stoney area in Churumphey block • Lack quality timber species • Poor stand management • Lack of forest road network in Chargari and Churumphey area. 				
Opportunity	<ul style="list-style-type: none"> • Surface collection of stones (Churumphey block) without environmental impacts • Stand management to improve the quality of forest • Silviculture applications in Churumphey blocks • Forest road with eco-friendlier roads within CF. 				
Management objectives	<ul style="list-style-type: none"> • Sustainable management, production and utilization of forest products and services 				
Activities	<ul style="list-style-type: none"> • Carry out site feasibility for surface collection (stones) in consultation with CFMG and SFEU, DFO Sarpang in Churumphey block, • Conduct silviculture operation training cum operation to improve the quality of forest • Conduct site survey; design the eco-friendlier road, inside the Churumphey block. 				
Procedures	<ul style="list-style-type: none"> • Site survey, identify sites, quantify the amounts to be collected/year and decide on resources distribution methods in consultation with CFMG and SFEU, DFO Sarpang in Churumphey block, • Design the training needs, seek technical expertise, and conduct silviculture operation training cum application. • Conduct site survey, design the eco-friendlier road inside the Churumphey block and ease the system of transportation within CFMG. 				
Responsibility	<ul style="list-style-type: none"> • Overall coordination has to be done by CFMG, spearheaded under Chairman/Secretary; • Any technical support has to be imparted by Forestry staffs from Social Forestry and Extension Unit under DFO Sarpang. • For any financial supports, CFMG must seek support SFED, Thimphu, DoFPS through SFEU, DFO Sarpang for seek support from Gewog Administration, NGO & Project; 				

Product /services	Timber	Firewood	Post/ poles	Water sources	Sand/ gravels/ boulders
	<ul style="list-style-type: none"> Seek administrative approval and clearances Gewog & Dzongkhag Administration. 				

6. General Management Objectives

- Improve the health, hygiene and condition of forest, & bamboo stands;
- Sustainable protection & utilization of forest and water resources through enterprise development and PES program;
- Income generation through sales of bamboo culms, n-trees, sand and boulders and services (PES).
- Enhance the capacity of the CFMG through various technical trainings, workshop and seminars;
- Promote employment opportunity for school dropouts through community-based enterprise developments (Community-based fabrication unit).

7. Annual Harvesting Limits (AHL) and Demand Assessment

Annual Allowable Cut (AAC) for three blocks are/is calculated as per CF manual 2018. Meanwhile, ACC for T & N trees are/is separately calculated to ease CFMG in execution of the forest products.

Annual harvesting limits for three blocks

Name of block	Types & ACCs	Forest products(unit in m3 & cfts)							
		Dangchun g (m3)	Dangchun g (cfts)	Tsim (m3)	Tsim (cfts)	Cham (m3)	Cham (cfts)	Drashing (m3)	Drashing (cfts)
Zhado block	T species	0.23	8.12	2.99	105.77	4.08	144.11	3.67	129.62
	ACC (m3)	0.07	2.31	0.85	30.13	1.16	41.05	1.05	36.92
	N species	19.32	682.38	19.12	675.22	116.46	4113.30	85.85	3032.14
	ACC (m3)	5.50	194.37	5.45	192.33	33.17	1171.60	24.45	863.65
Dophuchen	T species	1.92	67.70	4.28	151.17	1.02	35.90	55.88	1973.68
	ACC (m3)	0.55	19.28	1.22	43.06	0.29	10.23	15.92	562.17
	N species	4.79	169.24	16.55	584.52	55.31	1953.60	9.87	348.68
	ACC (m3)	1.36	48.21	4.71	166.49	15.75	556.45	2.81	99.32
Churumhey	T species	0.14	4.80	1.03	36.52	15.51	547.71	21.20	748.75
	ACC (m3)	0.04	1.37	0.29	10.40	4.42	156.01	6.04	213.27
	N species	6.18	218.32	50.29	1776.24	150.47	5314.50	500.12	17664.34
	ACC (m3)	1.76	62.19	14.32	505.93	42.86	1513.75	142.45	5031.39

Comparison of Annual Allowable Cut (ACC) & Demand assessment

The tables compares between the ACC and quantities demanded by the CFMG members with subsequent variances between them. Specific recommendations were also highlighted for future interventions as shown below:

Annual allowable Cut (AAC) and demand assessment

Product		Total ACC		Total Annual Demand		Difference		Comments
		No. of trees	Vol.(cfts/ m3)	No. of trees	Vol. (cfts or m3)	No. of trees	Vol. (cft or m3)	
Dashing	New	11	812.36 cft	7	1600	1	-1987.64	-400 cfts/HH *4HH/year
	Repair			3	1200			-200 cfts/HH *6 HH/year
Cham		15						Prevailing practice they meet all from Drashing
Tsim		24						
Dangchu		13						
Firewood		84	2000	33	264	51	+1736	8m ³ /HH *33HHs
Bamboo		50		132 culms		82		-4 culms/HH * 33HHs in a year.
Sands				3 trips*per 10 HHs	80 m3			-4HH(new const.) 6HH (repairing)
Boulder				5 TL/HH*	50 m3			-4HH (new const.) 6HH (repairing)
Broom		100		65 bundles		65 bundles		-35 bundles/HH in a year
zFerns				12 bundles				35 bunches/HH /in a/ year
Fodders				30back loads				35 HL/HH in a year
Farms (poultry, piggery & dairy)	New /Repair	15	207.28		200 cfts		+3250	3 HHs/year
					50 cfts			2 HHs/year
Prayer flags			23	72 no's		-49		Need to meet from SRF as per existing system.
Calocia species				50 backloads				20HHs
Herbal plants (Pipla and other species)				100 kgs				35HHs
Mushroom billets			305	50 kgs				35 HHs & billets meet

								from N-trees.
Betel leaves				20 backloads				35 HHs
Wild fruits (banana, kusum, bamboo shoots)				10 kgs				35 HHs
Horney				6 liters				20 HHs
Timber				100 kgs				35HHs

8. Participatory Environment Assessment including procedures to address negative environmental effects

According to CF manual (2004), participatory environmental assessment was only assessment been done in the past. Likewise, Participatory Environmental Assessment along with the mitigation measures to address negative impacts which will be brought about during the courses of implementing the CF activities including the development activities within the CF as shown below:

Activities proposed in CFMP	Potential Environmental Effects				Potential Socio-economic Effects			
	Soil	Water	Wild life	Plants	Traditional forest use	Cultural & religious use	Local employment	Local benefits from forest products
Plantation establishment	+++	++	+++	++	++	++	++	+++
Fuelwood harvesting	---	---	---	+-	---	---	+++	++
Timber harvesting	---	---	---	+-	---	---	+++	++
Grazing	--	--	---	+-	+++	++	+++	++
Surface collection/stone extraction	---	---	---	+-	---	---	+++	++
Forest protection	+++	+++	+++	+++	+++	+++	+++	+++
Soil & water conservation	+++	+++	+++	+++	+++	+++	+++	+++
Development activities in CF	-	--	--	---	+++	++	+++	+++

9. Addressing Potential Negative Effects

Those activities which are likely to bring potential negative effects to the CF are identified and come up with mitigation plan against the identified activities to address those potential negative effects during the course of implementing the CF plan activities as shown below:

Activity	Procedure
	1. Felling direction will be strictly follow depending upon the topography

Activity	Procedure
Timber/Fuel wood harvesting	2. Felling is strictly prohibited within 30 m left and rights of the streams 3. Felling trees more than 45° is strictly prohibited. However, if needed to fell, then single tree selection system will be strictly followed to minimize the destruction. 4. Replace the fell trees with native species plantation immediately, in case if there is not natural regeneration. 5. Tree selection systems must be strictly followed to avoid bigger opening. 6. No haphazard harvesting of trees shall be practice.
Surface collection of stones & boulders	1. Conduct proper feasibility study from where to collect the stones & boulders and map them within the CF area; 2. Seek technical approval from DFO through SFEU and then implement the operation as per the guidelines issued by the DoFPS or CFMP. 3. Highly efficient and low impacts machines must be encouraged to avoid disturbances to soil and surround forests including wildlife habitats; 4. As soon as the excavation is completed, initiate fast growing plantations (native species) to avoid surface erosion or landslips; 5. Boulder collection will be prohibited within the periphery of water sources, eroded or landslides areas, wildlife habitats and steep gradients to avoid erosions.
Grazing	1. Light grazing is allow in those area where trees are well-established in CF 2. Grazing will be strictly prohibited within plantation area 3. Grazing within the stream courses and regenerated area will be strictly prohibited 4. Lopping and pollarding of fodder trees must be allow, but must retain 20% as un-pollard to avoid physiological and anatomical disturbances.
Development activities within CF (Fabrication Unit, forest road etc.)	1. Development activities will be allowing as per the guidelines circulated by the DoFPS 2. Proponent of the development activities such as transformer lines, road and electric lines within CF must realize the compensation as per NRPC rates and then allow to initiate those activities 3. Development activities must meet the minimum disturbance standard pegged by the CF committee members and DoFPS.

10. Climate Hazard Assessment

Climate hazard assessment was conducted to ascertain the types of climate hazard been occurred within their communities as results of climate change over the years. Crop disease, HWC, animal diseases, hail storm, erratic rainfall, alien species reduce crop yield & drying water sources are the main hazards been reported within their community. Depending upon the degree of effects sizes, it was further prioritizing as shown below:

Climate hazard assessment for CFMG members

	Crop disease	HW C	Cattle disease	Hail storm	Wind storm	Erratic rainfall	Alien species	Yield reduction
Crop disease	X							
HWC	HWC	X						
Cattle disease	Crop disease	HW C	X					
Hail storm	Crop disease	HW C	Cattle disease	X				
Wild storm	Crop disease	HW C	Cattle disease	Wind	X			
Erratic rainfall	Erratic rainfall	HW C	Erratic rainfall	Erratic rainfall	Erratic rainfall	X		
Alien species	Crop disease	HW C	Cattle disease	Hail storm	Wind storm	Erratic rainfall	X	
Yield reduction	Yield reduction	HW C	Yield reduction	Yield reduction	Yield reduction	Erratic rainfall	Yield reduction	X

Assessment scores reveals that, human-wildlife conflict (HWC) is the highest hazards ($n = 7$), followed by erratic rainfall ($n = 6$), yield reduction ($n = 5$), crop diseases ($n = 4$), animal diseases ($n = 3$) & wind and hail storm ($n = 1$) each. Overall, it indicates that HWC has dominated the scores, while wind and hail storm are the lowest hazards been recorded within the communities.

Climate Vulnerability Assessment

Social group/sector	HWC	Erratic rainfall	Yield reduction	Crop diseases	Wind & hail storm
Rich	2	2	2	2	2
Medium	3	3	4	4	5
Poor	5	5	5	5	5
Forest	2	2	2	2	0
Livestock	4	4	4	4	4
Agriculture	5	5	5	5	5

The table suggested that entire social group (rich, medium and poor) who depend on agriculture sector were mostly being affected by the HWC, yield reduction, erratic rainfall, crop diseases and wind and hailstorm respectively. However, richer and middle incomes group could able to cope with the effects of climate change through various means of capital investments, while poorer groups couldn't cope because they doesn't have adequate capitals to cope with climate hazards due to poorer socio-economic background. On other hand, among the three sectors, Agriculture sector experiences the heaviest implications from climate change than livestock and forestry sectors. Therefore, poorer people who depend their livelihoods on agriculture sector were the most vulnerable to climate hazard which requires separate projects or funding supporters to support that vulnerable section of people in the communities.

Mitigation measures for Climate Vulnerability

Most climate vulnerability	Mitigations to reduce climate vulnerability	Remarks
Human-wildlife Conflicts (monkey and wild pigs)	<ul style="list-style-type: none"> • Electric fencings focusing on primate & wild pigs • Culling problem of species (wild pigs) as per the guidelines issued by DoFPS • Restore fallow land through other productive means of agriculture practices • Initiate crop insurance scheme to cushion HWC. 	Forest and Agriculture sector
Erratic rainfalls	<ul style="list-style-type: none"> • Change the cropping season or cropping patterns • Explore climate smart technologies through projects • Encourage climate resilience seedlings & crops as well. 	Agriculture sector
Yield reductions	<ul style="list-style-type: none"> • Explore other alternative income generating works • must be outsources such as surface stone collection • Promote sale of lops and tops and PES program in consultation with relevant agencies • Initiate community-based Furniture house. 	Agriculture sector
Crop disease	<ul style="list-style-type: none"> • Develop bio-pesticides within villages • Promote Integrated Pest management training • Supply improvised seedlings 	Agriculture & Forest
Wind & hail storms	<ul style="list-style-type: none"> • Initiate crop insurance schemes 	Agriculture sector

11. Forest Product Prioritization Matrix

Normally, timbers, firewood, mushroom, leaf mould, water, grazing land, boulders and poles are availed from the proposed CF area. Among all, products were prioritized based upon the degree of dependency by the CFMG members as shown below:

Forest product prioritization matrix

	Timber	Firewood	Post/poles	Fodder	Mushroom	Sand	Stone	Water
Timber	x							
Firewood	Firewood	x						
Post/poles	Post	Firewood	x					
Fodder	Fodder	Fodder-firewood	Fodder	X				
Mushroom	Timber	Firewood	Post	Fodder	X			

	Timber	Firewood	Post/poles	Fodder	Mushroom	Sand	Stone	Water
Sand	Timber	Firewood	Post	Fodder	Sand	x		
Stone	Timber	Firewood	Post/poles	Fodder	Stone	Stone	x	
Water	Water	Water	Water	Water	Water	Water	Water	x

Meanwhile, metric score results shown that timbers & water are highly prioritized ($n=7$) by the CFMG members, followed by firewood ($n = 6$), fodder ($n =5$) & timber ($n=3$) boulder ($n = 1$) respectively. While, stone & sand were least prioritized ($n =1$). This indicates that, most of the CFMG prefers water, followed by firewood, fodder and timbers which are indispensable to their socio-livelihood of CFMG members.

12. Forest Products Preference Ranking

Species preferences and stock availability ranking was done to ascertain the most preferred species by the CFMG against the species availability within their CF area as shown below:

Forest product preference ranking done by CFMG.

Local species	Use	Construction	Incomes	Firewood	Fodder	Flag post	Furniture
Gokul	Preference	XXX	XXX	XX	XX	X	0
	Availability	XXX	XXX	XX	XXX	XXX	0
Maina	Preference	XXX	XXX	XX	XX	XXX	0
	Availability	XXX	XXX	XX	XX	XXX	0
Chokrasi	Preference	XXX	XXX	X	XX	XX	0
	Availability	XX	XX	XX	XX	XX	0
Champ	Preference	XXX	XXX	X	XX	XXX	0
	Availability	XX	XXX	X	XX	XX	0
Hatipoila	Preference	XXX	XXX	X	XXX	0	XXX
	Availability	X	X	X	X	0	X
Panisag	Preference	X	X	X	0	0	X
	Availability	XX	XX	XX	XX	XX	XX
Ambakey	Preference	XX	XX	X	0	0	0
	Availability	XX	XX	XX	XX	XX	XX
Chelawni	Preference	XX	0	X	X	0	0
	Availability	X	X	X	X	X	X
Tooni	Preference	X	X	X	X	X	X
	Availability	X	X	X	X	X	X

XXX: Highly preferred & available; **XX:** Moderately preferred & available; **X:** Less preferred and available, **0:** No preferred & available.

13. Monitoring Plans

Generally, CF manual (2004) ascertain only participatory forest monitoring. However, CF manual (2018) had added three more monitoring protocols which are made mandatory to monitor while implementing CFMP: participatory forest resources impact monitoring, social and institution impacts and environmental impact monitoring as shown in below tables:

Participatory Forest Resources Impact Monitoring

This monitoring is basically focus on how the forest resources-based impact monitoring including the marketing aspects will be undertake, during the course of implementing the CFMP as shown below:

Activity	Indicator	How to monitor	Responsibility	Comment
Plantation in barren area	Survival percentages of seedlings	Survey the survival percentage of seedlings	CF management committees to monitor	Forest Range office & SFEU will support
Patrolling within the CF area to stop illegal activities	Patrolling frequency & culprit apprehended	Regular patrolling and monitoring of CF area	CF Secretary will document all the records	Resup shall submit the report to CF Secretary
Silvicultural operation within CF area	Total area of CF being cleared	Monitor the CF area and record the area being taken silvicultural operation	CF Secretary will collect the reports	Forest Range Office & SFEU will support the CFMG
Marketing of surface collection (gravel & boulders)	No. of truck trip marketed or excavated	Record book	CF secretary & Treasurer will document the record	Forest Range Office & SFEU will support the CFMG
Marketing of inferior/ tress & bamboo	No. of cft/culm/logs marketed & name of species	Record book	CF management committees' members	Forest Range Office & SFEU will support the timber transactions
Soil/water conservation	No. of water sources protected, PES formulated & soil conservation initiated	Record keeping books	CF management committees' members	Forest Range office & SFEU will technically support those exploring projects
Eco-friendlier road connection inside CF	Length of roads being constructed, road construction sites.	Record keeping books	CF management committees' members	Forest Range Office & SFEU will support the CFMG.
Timber & fuelwood harvesting	Cfts/no. of standing trees felled	Record keeping books	CF management committees' members	Forest Range Office & SFEU will support the CFMG.
Marketing of finished products from Fabrication house.	Quantity of finished products sold & revenue generated	Record keeping books	CF management committees' members	Forest Range Office & SFEU will monitor the CFMG.

Participatory Social and Institutional Impact Monitoring

This monitoring will basically highlight on what and how to monitor especially in social and institutional aspects of CF during the course of implementing the CFMP as shown below:

Activity	Indicator	How to monitor	Responsibility	Comment
Provide loan to CFMG members	No. of HH availed loan from CF	Record in fund management/loan record	CFMG with FRO staff's facilitation	Treasurer must maintain details of loan availed
Resources allocation with equity	No. of single headed or disadvantaged members	Record book	CFMG committee members	
CFMG general meeting	No. of man & women attended, frequency	Meeting record	CFMG committee members	
CF committee meeting	No. of meeting frequency & women attended	Meeting Record	CF management committees	
Capacity development program	Types and no. of training availed	Record book	CFMG management committees	
Community Support program	No. of initiatives taken	Record keeping book	CF Management committees/CFMG	
Services from Development activities	Types of services availed; No. of HHs benefitted	Record keeping books	CF management committee members	

Participatory Environmental Impact Monitoring

Basically, this monitoring aspects will focus on environmental impacts such as land, water, air and forest including the ecosystems on what and how to monitor those potential negative environmental impacts as shown in below:

Potential environmental risks	Indicator	How to monitor	Responsibility
Erosions/area washes away by swelling rivers	No. of area being eroded, acreages of damage	Inventories the eroded area within CF area	CFMG committee must collaborate with RO Sarpang & SFEU.
Damage to natural regeneration	Acreages of damage	Monitor the damage within CF	CFMG committee must collaborate with FRO, Sarpang.
Habitat destruction	No. of habitat being destructed	Monitor the wildlife habitat within CF	CFMG committee must collaborate with Forest Beat Office/RO Sarpang/SFEU.
Destabilize the land due to surface collection	Acreages being affected	Monitor the affected area within CF	CFMG committee must collaborate with Forest Beat Office/RO Gelephu.
Water pollution	Water test and discharge rates	Monitor the spring & streams within CF	CFMG committee must collaborate with FRO Gelephu.
Noise pollutions	No. of complain cases reported	Monitor the impacts from nearest communities	CF management committees members
Pollution by wastes	Types of wastes, area affected	Monitor the impacts to surrounding environments	CF Management committees members

14. Annual Work Plan

This schedule basically describes what and when such identified activities (plan) to be implemented during the management plan period as shown below:

Activities	Locations	Years										Remarks
		1	2	3	4	5	6	7	8	9	10	
Plantation of bamboo rhizomes and fuel wood plantations	Zhabo											Technically support from RO & SFEU
Harvesting of N-trees	Churumphey & Dophuchen											Annually basis
Electric fencings	Kagatey											Trail basis
Crown thinning of woof trees	Dophuchen & Churumphey											
Silviculture operations of bamboo stands	Zhabro, Churumphey & Dophuchen											2 times/years
Land management activities	Dophuchen & Zhabdro											Eroded sites & instable sites
Extraction and marketing of surface collection (boulder extraction) & marketing	Dophuchen & Churumphey											Aggregates deposits sites
Local Tourism feasibility study	Dophuchen											In consultation with DFO
Erection of CF sign boards	Three blocks											
Plantation of timbers species	Dophuchen & Zhabro											In consultation with SFEU.
Construction of Fabrication Unit	Kagatey											In consultation with DFO
Eco-friendlier road construction inside CF	Dophuchen & Churumphey											In consultation with DFO.

15. Monitoring and Evaluation of the CF

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.

Part II – CFMG By-Laws

1. Membership

Gaselo Community Forest is designated for 34 households who are permanently resident of Kagatey village in Lharing Chewog under Gakidling gewog. However, any households who are later willing to join, after the issuance of CF certificates, must have census, thram and house number registered in the Chewog under Geog Administration. Nevertheless, newly joint members (he/she) have to pay or bear the sum of amounts expensed by the CFMG (calculate the cost of daily labour contribution; miscellaneous contributions made by the CFMG till date). Those total amounts must pay to CFMG with interest rate equivalent to the existing interest rate of BDBL.

Terms and condition to become a new membership

- New member (son/daughter and other new comers) must submit the application (Annexure I) addressing to CF Chairman with required documents (CID, Thram & house no), & also pay membership fees simultaneously with interest rate of BDBL.
- Chairman or Secretary will conduct general meeting with CFMG comprising not less than 2/3rd of the CFMG members and accordingly approve or disapprove the membership proposal.
- New membership is accepted after paying entry fee of sum of Nu.500 (Five hundred) to Treasurer and must issue the money receipt for the aforementioned years by the Treasurer.
- Beside membership fees, new member must pay equivalent amounts for labour contribution & other miscellaneous contributions made by CFMG till date as per the existing interest rates of BDBL.

Terms and condition for withdrawal from membership

- Any member has a right to discontinue his membership through submission of application to the chairman, if he/she has genuine problems,
- He/she will relieve from the CFMG upon investigation by the CF committee members in writing
- Any members willing to withdraw from the CF membership due to loss of interest will not entitle any benefits; instead he/she should pay the withdrawal penalty of sum of Nu.1000 (one thousand only) and then leave the CFMG.
- Any members who are withdrawing from CFMG on genuine ground (single headed, less manpower, disable), has to verify their problem by CF committee members & if genuine, then the proponent will entitle 50% of his shares accumulated in the CFMG account

Termination from memberships

If any member from CFMG disobey or violate the rules incorporated in the By-laws, then he/she will be terminated without entitling any benefits or shares accumulated till dates. Nevertheless, he/she is liable for penalty of sum of Nu.1000 (One thousand) and simultaneously, CF Chairman or Secretary will issue termination letter from the CFMG.

2. Management Committee formation

Generally, members of CF management Committee will be nominated through democratic system of voting by the members to ensure free and fair election of the management committee. Committee members constitute 6 members including Chairman, Secretary, Treasure, and two representatives from CFMG members. CFMG has to be instituted with the

principle of Good governance (transparency, accountable, responsive, equitable Participatory, legal and efficient) to ensure effectiveness and sustainability. Following are the members of Management committee.

- a. Chairman: Mr. Mandos Rai
- b. Secretary: Mr. Somnath Rai
- c. Treasurer: Mr. Barat Rai

Representative members

- i. Mr. Tshering
- ii. Mr. Ram Bahadur Rai

Audit team will comprise of Audit Tshogpa (two members) from CFMG and Forestry staffs from nearest Range Office. They will audit on annual basis, prior to annual General CFMG meeting and report the findings during the annual CFMG meetings.

Meanwhile, Chairman will reign for the period of 5 years, provided that there is a good services record. While, Secretary and Treasurer will serve for 3 years and 1 year for Audit Tshogpa. If the elected members couldn't perform their duty as per Terms of Reference (ToR), he/she will be terminated from the assigned post and new members will be appointed immediately through democratically process. However, if the elected members are victimized due to natural calamities (accident, blind, diseased, old aged, chronic sickness), then member have to resigned from the post & elect new member within one week with proper justification.

Terms of References (ToR) for CF Management Committee

- i. Represents CFMG to other agencies
- ii. Represent CFMG during the preparation and implementations of the CF management plan
- iii. Any members from the CFMG can be eligible to become committee member, but must attend 18 years above.
- iv. Coordinates and organize CF activities and ensures that CFMG members fulfill their management responsibility
- v. Responsible for equitable distribution of benefits among the CFMG members
- vi. Responsible for management of forest resources (Bamboo, timbers, NWFPs, sand and boulders and any other resources)
- vii. Responsible for enforcing the by-laws, follow up and collection of fines, penalties and compensations for any development activities taken places inside the CF
- viii. Responsible for ensuring all the legal requirements for CF are met (including all the types of records)
- ix. Responsible for establishing and maintaining the CFMG fund using the cash collected from various sources
- x. Responsible for organizing and conducting CFMG meetings when required
- xi. Coordinate and entertain any guest/tourers on behalf of CFMG who were came for study tour or others excursions
- xii. Conduct monitoring and review of CF plan and program on annually basis and also conduct mid-term review (5 years) and final evaluation (9th years)
- xiii. Quantity fixation for forest produces allotment for each allottees on annually basis
- xiv. Time fixation for collecting forest produces from CF

- xv. Outsources market for any marketable CF produces, prices fixation, marketing tasks will be handling by CF Management committee.
- xvi. Monitor all the impacts of development activities within the CF in consultation with nearby Forestry staffs and inform accordingly to CFMG and relevant agencies for corrective intervention, if negative implications appear;
- xvii. Plan, proposal write-up and prepare road map projection plan (Development activities) for CFMG
- xviii. Discuss matters such as issuances of forestry clearances, awarding micro-loan etc. on behalf of CFMG and thoroughly discussed in the interest of CF.
- xix. Any resign of Committee members must give authenticate handing taking charge notes (annexure 15) to incumbent CF management committee members and then resign.

Terms of Reference for Chairperson

- i. Heads the CFMG.
- ii. Calls meetings whenever necessary and informs concerned persons about date, time, place and the reasons for the meeting.
- iii. Chairs and facilitates meetings to speak, thereby giving everyone a fair chance to speak and raise issues.
- iv. Approves applications for forest produces, CF clearance and others activities.
- v. Explore marketing opportunities for CF with consultation with relevant agencies.
- vi. Countersigns financial transaction and authorization to draw cash from the bank account (with Treasurer).
- vii. Prepare road map for CFMG and advices CF management Committee and CFMG members accordingly
- viii. Well-versed in policies, Acts, Rules and regulations about any development activities which is to be implemented within CF
- ix. Liaison and coordinate with relevant stakeholders/agencies and address the issues associated to the CF
- x. Monitor the annual CF operational plan activities and advices accordingly.
- xi. Issue forestry clearance for any development activities within CF base on the decision of Executive Committee members (Section 87, chapter iii).
- xii. Coordinate project proposal writing and seeking financial supports from various agencies.

Terms of Reference for Secretary

- i. Assists the Chairperson and officiate him/her during his/her absence
- ii. Manages the correspondence (writing of letters, office order, work order, supply order and minutes of meetings) for the CFMG
- iii. Maintain the office files of the CFMG
- iv. Maintains the detail information about the CFMG members,
- v. Maintain the stock information associated CF assets and development activities checklist of CF
- vi. Approves applications for forest products (with Chairperson)
- vii. Maintain all the forest produces transaction lists and information of CF
- viii. Keeps minutes of CFMG meetings.
- ix. Prepares Annual Progress Report (with other CF Management Committee members).
- x. Maintain all the records associated to disaster of CFMG
- xi. Resolve conflicts or disputes between CFMG members

- xii. Maintain visitor registrar
- xiii. Liaison and coordination require with other different agencies should be handle on behalf of CFMG

Terms of Reference for Treasurer

- i. Looks after any financial transactions
- ii. Keeps records of expenditure and labor contribution of each members during CF activities
- iii. Gives a detailed account of how much money or labor has been contributed, how much has been spent and how much is remaining as balance during every CFMG meeting
- iv. Prepares the Annual Financial Progress Report with assistance from CF Management Committee and submit to Division Forest Office
- v. Countersigns financial transaction and authorization to draw cash from the bank account (with Chairperson).
- vi. Keep record of incoming revenue generated through CF Development Activities (Wood Fabrication, sale of excess timbers, sand and boulders, PES)
- vii. Conduct Quarterly or half year meeting with CFMG and present the financial progress (expenses and revenue)
- viii. Maintain all the expenses bills/cash memo/hand receipt/donation receipt and other adjusted documents of CF
- ix. Follow up all the unpaid dues (membership fees, absentees, loan amount) of the CFMG.

3. Sources of CF funds

Sl.#	Name of Forests products	Royalty rates
1	Drashing	Nu.50
2	Tsim	Nu. 20
3	Dangchung	Nu.10
4	Firewood (lops & tops)	Nu. 10
5	Firewood (dried standing trees)	Nu.50
6	Broom	Nu.2/bundle
7	Stones and pebbles	Nu.60/
8	Wild vegetables(fern, damburu)	Nu.5/bundle
9	Collection of Pipla	Nu.10/kg
10	Collection of agriculture tools & implements	Nu.
11	Fodder	Nu.20/bundle
12	Collection of leave mold	Nu.20/half quantal bag
13	Bamboo	Nu.25/culm
14	Sale of finished products	
15	Membership fees	
16	Fines and penalties	
17	Donations	
18	Community Loan & interest	
19	Service charges from PES	

4. Managing CFMG Fund

Procedures in CF Fund Management

- All CFs should open a bank account within one month from the day of awarding CF Ownership Certificate
- The account shall be operated under the joint signatory of the Chairperson, Secretary and Treasurer,
- Money receipts should be issued for all payments received for any CF activities
- Contingency fund of Nu. 2,000 shall be kept with the Treasurer as revolving fund
- Amount up to over Nu. 5,000 (five thousand only) should be deposited within 10 days. If not, Treasurer should pay the interest rate and deposit in the CF account.
- All money received should be recorded in the Cash Book by the Treasurer and update the account monthly or quarterly basis
 - Treasurer shall collect all contributions, fees, fines, donations and issue money receipt and accordingly update the account
 - Treasurer shall present the schedule of any collections to the CFMG or CF management committee on half yearly basis
- There should not be any over-writing, use of correction fluid, tearing of pages, etc. in any record keeping books and money receipts including permit books
- All financial records should be made transparent and available to any authorize auditing team or inspection team as and when require.

CF Fund Utilization Areas

The followings are some of the areas where CFMG can utilize their CF fund. Based on the table below, the CFMG shall allocate the CF fund on different priority areas.

Sl.#	Area of Fund use	Limit (%)
1	CF development activities (CF review, nursery creation, plantation, silviculture operation)	Not less than 25%
2	Loan to CFMG members	Not more than 50%
3	Reserve fund in the Bank (security)	Not less than 20% of total fund amount
4	Incentive to CF management Committees Any committee members gone for meeting/workshop/training on behalf of CFMG must entitle from CFMG, only if the training organization doesn't pay any DSA or mileage for above training: He/she shall entitle taxi fares (to & from) as per existing rate in the locality. He/she shall entitle cost of meal (Nu. 250/day per person). However, he/she should submit supporting documents such as bills/Chelan/cash memo/hand receipt to Treasurer upon reaching back to their station. Voucher allowance will be given on quarterly with sum of Nu.200/person.	Incentives for CFMG Chairman: Secretary: Treasurer: Tshogpa:
4	“Semso” for disaster (deceased, major accident, houses razed by the fire). Timbers and boulders will be issued immediately from the CF to the victims.	Not more than 5%

Fund Disbursement Procedures

- Once the money in CF account reaches more than Nu.100,000.00, CFMG shall give loan
- Avail loan only by CF member, wife, son and daughter, but if the daughter is away from village, due to marriage, shall not avail loan
- Applicants shall be double check the status of the family before giving loan.
- Disaster: CFMG will verify the members: Nu.10,000, without interest (Semso: dead case),(disaster cases: fired house, wind damage);
- However, Supporting document(hand receipt) will be updated by the Treasurer
- Loan can be given after congregation of CFMG committee, not with entire CFMG.
- Loan will be given at Nu.7/Nu.100 per annum for the period of 6 months;
- 24% per annum will be imposed from the day 1 to the defaulter till he/she cleared those dues.
- Treasurer shall maintain detail expenditure records (receipts, vouchers, bills, including minutes of meetings, etc.). All such expenses shall be immediately recorded in the cash book.
- Treasurer shall present the details of expenditure to the CFMG members during annual General CFMG meeting and concerned inspection team(s).
- Concerned Forestry staffs from nearby Range office shall ensure the compliance of above provisions.

CFMG Fund for Loans and its Procedures

The CF by-law has provisions to facilitate CFMG fund for loan. The borrower shall submit an application as per Annexure 9.

Eligibility Criteria for Loan

- Every CFMG member shall be given opportunity to avail loan from their respective CFMG fund.
- Loan from CFMG fund shall not be given to non CFMG members
- The borrower must be of 18 years and above
- Along with application, he/she should submit copy of CID to CF management Committee (Treasurer)
- Only one member from the household is eligible for loan at a time
- Should not have any outstanding loan in the CFMG
- The borrower should have his/her census in a household who is member of the CF
- Any CFMG members applying for second loan must liquidate the earlier loan and only after 6 months to ensure equality;

Interest Rates

CFMG members shall decide on the interest rate during general meeting/assemblies with 2/3rd majority following the provisions mentioned in the CF by-laws. Interest rates of 7 % /annum will be imposed per year. However, the interest rate should not exceed 15 % per annum in accordance with Section 17 (1) of the Movable and Immovable Property Act of Bhutan 1999. CFMG may apply different interest rate e.g. lower interest or interest-free loan for members of disadvantaged and single woman headed households.

Loan Term

The loan term shall be decided by the CFMG depending on the repayment capability of the borrower. Loan term will be for the period of 1 year. However, all loans and other dues must

be cleared before the expiry of the CFMP. Meanwhile, loan shall be entertain till 9 years and beyond 9th year is strictly prohibited to avoid complication during the revision of CFMP.

Repayment Schedule and Process

The borrower shall pay the principal amount including the interest on instalment basis annually. It is the duty of the CF Management Committee (Treasurer) to maintain proper records of all financial transactions. Fresh loan can be availed only after repayment of the previous loan.

Penalties

The CFMG shall decide penalties in case of non-repayment of the loan and it should be reflected in the loan agreement and in the CF by-laws. Refer Annex 10 for loan agreement. However, the penalties charge shall not exceed 24% per annum as per financial rules. If the borrower has serious financial trouble, but assures the CF Management Committee that the loan will be repaid, the CF Management Committee can exceptionally decide to reschedule the loan after an evaluation of the repayment problems. However, the CF Management Committee shall ensure that the borrower repays loan and other dues before the expiry of the CFMP period.

Mortgage and Guarantor (witness)

Requirement of mortgage and guarantor shall be decided by the CFMG. In case they decide to have mortgage, the minimum mortgage value shall be 150% of the loan amount. Mortgage value shall be assessed by the CF Management Committee prior to loan approval as follows:

- Detailed description of the collateralized goods.
- Valuation of the goods on the basis of their market value.
- Collateral agreement signed during the loan request.
- The applicant shall produce “No Objection Certificate” from household members in the event of mortgaging the collateral.

Allowable collateral

- House, buildings and land with legal property documents
- Cars, vehicles with the official government certificate of the property
- Livestock (Cattle/pigs/poultry)
- Poultry/dairy farms
- Agriculture machineries (power tiller, rice mill, etc.).

Loan Approval and Disbursement Process

Upon fulfilling the eligibility criteria, the CFMG shall approve the loan based on general consensus or with 2/3rd majority. The borrower and the lender shall sign the loan agreement before the loan disbursement. The loan agreement is prepared in two copies, one for CF Management Committee and one for the borrower. The CF Management Committee shall withdraw/transfer the amount from their respective bank account and disburse to the borrower.

Loan Review

At the end of each year, the CF Management Committee shall review all the loans and repayments. The information shall be shared during the CFMG general meetings/assemblies.

5. Benefit Sharing Mechanism

Equity is important aspect of CFMG governance because Bhutan's policy on community forestry now emphasizes that community forestry should specifically benefit poorer people. This means that benefits from CFs should be targeted at poor people. Equity concerns the distribution of benefit; participate in CFMG decision-making process and contributions of labor by CFMG member.

- Forest products will be equitably distributed among CFMG members – this means according to their requirements, rather than their ability to pay by the CFMG.
- If there is high demand for forest products within CFMG members, those CFMG members who are socio-economically disadvantaged have priority over others.
- Particular attention needs to be given to ensuring that all CFMG members are involved in decisions making process – especially during distribution of forest products & fixation of rates, quantities, timing etc.
- Contributions of labor e.g. during plantation activities, should be equitable – this means that disadvantaged households should not be expected to contribute more labor than richer CFMG members.
- Annually entire members must collect sum of Nu. 200/registered CF members as a membership fees. This money has to be collected by the Treasurer and issues money receipt accordingly.
- Entire CF members must contribute equal labors during the course of the surface collection (stone & boulder). Revenue accumulated will be credited to CF fund and certain % of amounts will be equally divided among the CFMG.
- Certain numbers of skilled carpenter from the CFMG will be selected and employ in operating the CF Furniture house. Nominal or ransom amount from the revenue generated will be withdrawn and make payment to the carpenter.
- In summary, Standard Operating Procedures (SOP) for community furniture house, surface collection, micro-PES and collection of Lops and tops, bamboo and brooms will be developed after CF approval. Based on these SOP, both working modality and benefit sharing mechanism will be separately developed in consultation with CFMG, RO & SFEU.

6. Fines and Penalties

Fines and penalties for forest products including NWFPs, sand, boulders, wildlife kills, and other general offenses which are reflected below:

Sl.#	Offences	Fines (Nu.)	Compensations
1	Felling of tree, poles within spring sources & right of way of road and transmission Line.	Nu. 200/ cft	Fair Market Value for felling of tree and pole on log volume as NRPC rate
2	Goat rearing within CF is strictly prohibited	Nu. 200/goat for CFMG & Nu.300/goat for outsiders	After second time, goat shall be auctioned and fund generated will be credited in CF account
3	Cattle graze within plantation area inside CF shall not be	Nu. 100/cattle (first time to	However, fodder grown within the block will be auctioned on area basis

Sl.#	Offences	Fines (Nu.)	Compensations
	permitted.	CFMG & Nu.200/cattle to outsiders); Second times: defaulter shall bear restoration costs as per FNCRR 2017	and fund generated will be credited in CF account.
3.1	Free release of cattle for grazing inside CF	Nu.50/cattle for CFMG & Nu.100 for outsider	Controlled grazing (tethered grazing in non-plantation sites are allowed.
4	Conduct any research & studies within CF (besides DoFPS, MoAF)	Nu.1000/research or study	Researcher should submit a Copy of thesis/technical report as well as give one day seminar talk to CFMG member.
5	Collection of fuel wood and NWFP species from CF	Nu. 500/occasion	Seize the products & sale thereof by CFMG
6	Construction of water tanks, water pipes and irrigation channels by outsiders in CF area	Nu. 5000	Defaulter must seek Forest clearances, no objection letter and approval letter from CFMG. If not shall be fine as reflected.
7	Illegal felling of trees and poles by CFMG/outsiders in CF	Nu.100/ cft on log volume	NRPC rate on log Volume and sale thereof by CFMG
8	Felling of trees without marking even if offender possess valid permit	Nu. 5,000/ tree	Seizure of the forest produce and sale thereof by CFMG
9	Felling of poles without marking even if offender possess valid permit	Nu. 500/pole	Seizure of the forest produce and sale thereof by CFMG
10	Transit of sand/gravel and boulders by outsiders without permits	Nu.1500/TL	NRPC rate per TL & Seizure of the forest produce
11	Any removal of forest produces from CF without consent of the CFMG	Nu. 100/cft	Defaulters shall be liable for a fine base on log volume and compensation at NRPC rate shall also be levied (Section 409, chapter 13). CFMG in return should issue an acknowledging receipt of fine & compensation.
12	Any CFMG members selling, leasing and mortgaging CF in violation of management prescription and bylaws shall be an offence and shall be liable for fine	Nu. 10,000/case	Compensation at NRPC rate of the forest produce involved, and (c) Restoration of the damaged area, or (d) Suspension of Rural Subsidized Timber entitlement from CF and SRF for 3 years.
13	Clearing corridor for new transmission and distribution line for electricity, telephone,	Nu. 100/ meter	NRPC rate and sale thereof by CFMG

Sl.#	Offences	Fines (Nu.)	Compensations
	etc.		
14	Any offence committed in relation to Totally Protected Species shall be criminal offence of fourth degree felony under Bhutan Penal Code, 2004 or shall be liable for fine and compensation	(a) Golden Langur Nu.10000/animal © Others species will be treated as per FNCRR 2017 & 2021	Restricted to wild animals which are found within CF area. Existing evidence suggested that golden langur, deer, monkey, wild pig and kaljak peasant were found within the CF
15	Non-compliances of Terms of References (ToR) by CF management Committees		Members must terminate without benefits and handover the task to other new members with proper handing taking notes.
16	Misused of CF funds by CF management Committees		Defaulter will have to compensate 100% within a week and terminated without benefits.
17	Absentees in CF meetings/training/workshop/seminar	Nu.100/day	After three times, member will be terminated without benefits accumulated till dates.
18	Absentees during CF activities	Nu. 215/day	However, after third time, this rate will increase and impose as per existing local rate/day.
19	Non-compliances to instruction of CF management Committee members		-First times warning in verbal form -second times in written order & -Third terminated from CFMG without benefits.
20	Littering and disposing of garbage/wastes material and polluting water body and CF area	Nu. 100/case	Defaulters should further dispose of into designated area. If defaulter repeated, then will be fined sum of Nu.1000/cases
21	Littering and disposing of urban wastes/construction wastes along CF area or road located within CF	Nu. 500/case	Defaulter should further dispose of into designated area.
22	Dumping of construction waste including excavated material and structure demolition wastes within CF	Nu. 9000/truck trip	Defaulter should further dispose of into designated area
23	Honey collection within CF by outsider is strictly prohibited	Nu.2000/case	However, honey collection within the CF will be done by CFMG and market the honey.
24	Transport of forest produces without permit CFMG	Nu. 500/occasion	Seize products and sale thereof and money acquired will be deposited in CF account.
25	Misuse of harvested/fallen trees within CF by CFMG members	Nu. 100/cft	NRPC rates on log/sawn volume and seize the forest produces and tools
26	Removing or destroying or setting traps or snares or	Nu. 5000/defaulters	Confiscation of specimens and equipment and handover to nearest

Sl.#	Offences	Fines (Nu.)	Compensations
	capturing of any wildlife/plants in CF		Forest office
27	Construction of any road/ Transmission lines/village water tanks and other structures in CF by any agencies	Nu. 200/m	Agencies must seek clearances from CF Chairman. If not fine plus bear the restoration costs as per NRPC rate at log/sawn volume.
28	Absentees due to Medical ground	Nu.500/day	Medical leaves shall be granted only after showing the medical prescriptions, if not, mark as absents & shall fine sum of Nu.500/day. Leave will be granted ((dead, marriage, sickness, puja).
29	Any fines/penalties/compensations shall be paid within 5 days		Defaulter will be penalized with sum of Nu.500/day and terminated from the CFMG, if defaulter repeats beyond three times.

Total of 20% from total fine amount will be deducted & rewarded to the informers and rest 80% should be deposited in CF accounts.

7. Meetings

Generally, meeting is one of the platforms to share information among the members through participating in inclusive decision-making process. There are two types of meeting: Annual CFMG and CF Management Committee meeting.

Annual CFMG Meeting

Annually, the CFMG will convene for general CFMG meeting in the month of December. However, if required, Chairperson has a right to call CFMG for meeting at any time. Basically, meeting will deliberate on the following thematic topics:

- Review past minutes & resolutions
- Present physical and financial progress of particular fiscal year
- Deliberate on emerging constraints and issues
- Present annual audit reports
- Finalization of annual progress reports of the CF
- Prepare Annual work plans
- Approval of budget from CF revenue
- Other miscellaneous activities

For any decision to final and binding, at least $\frac{3}{4}$ (three fourth) of the member's consensus is require. After the annual CFMG meeting, final progress report will be submitted to the Social Forest and Extension Unit under Divisional Forest Office with copy to nearest Range Office and Gewog Administration for information.

CF Management Committee Meeting

The CF Management committee shall meet on quarterly basis to review the progress and also discuss on the upcoming CF plans & program which need to be implemented. Following thematic topic will be cover during Committee meeting:

- Review previous minutes & resolutions
- Deliberates on the work progress and status
- Issues and constraints
- Drawing of quarterly work plan & monitoring plans.

Meanwhile, the conflicts and issues occurred during the course of implementing CF plan and program will be deliberated and address accordingly in consultation with CFMG members & Forest staffs from nearest Range office.

8. Conflict Management

Conflict Management Conflict resolution is another area which CFMG needs to develop their capacity and skills. Conflict management is a complex process. Identifying and categorizing types of conflict is essential before attempting to resolve. Some conflicts require different strategies to resolve while some can be resolved by CFMG themselves.

How to resolve conflicts

The approach to conflict resolution is based on consensus building. This involves identifying common ground and working voluntarily towards finding a mutually acceptable solution to the problem. Conflicts are initially solved by the CF Management Committee. However, when the CFMG calls on the concerned forestry official(s) to resolve the conflict he/she can act as the mediator. The followings are the suggested procedures to help in resolving the conflicts:

1. The mediator calls the conflicting parties together to discuss the problem. The parties define the problem as they experience it and agree that it needs to be resolved (this is important).
3. The mediator presents the formulated and defined problem on a chart and asks both parties if it is correctly defined.
4. The mediator then asks the parties to work separately and propose solutions to the problem. Chart paper is given and they are asked to note their proposed solutions.
5. The parties present their proposed solutions in turn.
6. After the first solution is presented the mediator asks the other party if the solution proposed is acceptable to them. If yes, then the problem is solved. If no, then the mediator asks for amendments to the proposed solution (more discussion may be needed for this). If the second party outrightly rejects the proposed solution, then they are asked present their proposed solution.
7. If all the solutions are exhausted and there is no agreement, then the session is adjourned for further reflection by both parties.
8. A time is fixed for another meeting and they are asked to return with ideas for further discussion.
9. This process may take several meetings to resolve.

The mediator must stay neutral at all times and cannot propose a solution – this must come from the 2 parties involved. Any disputes within the CFMG or outsiders with regard to CF

will be sort out and solved by CF management Committees headed by Chairperson or Secretary. However, if the case is beyond their capacity, cases will be forwarded to the nearest Forest Range Office, Division Forest Office, Gewog Tshogdey (GT), Dzongkhag Tshogdu (DT), High court and Supreme High Court if deemed necessary.

9. Amendment of CFMP and by-laws

The CF management plan is prepared for 10 years and the CFMG is obligatory to implement accordingly. The revision shall be done in the ninth year of the plan period as per evaluation report and approved only by the head of the department with the consultation of the Social Forestry & Extension Unit (SFEU) under Divisional Forestry Office. However, if there are any omissions or genuine requirement for better management of CF and general welfare of the CFMG, the proposal may be put up through annual CFMG meeting and submit Division which in turn /submit to the Department of Forests and Park Services for approval.

10. 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.

Annex 1. Application and list of CFMG members

Annexure VI: Application to Establish Community Forests

**ROYAL GOVERNMENT OF BHUTAN,
MINISTRY OF AGRICULTURE & FORESTS
Department of Forests & Park Services**

APPLICATION TO ESTABLISH COMMUNITY FOREST

PART A (To be filled by the applicant)

The Gup,

In accordance with the Forest and Nature Conservation Rules and Regulations, the Chairman of the Community Forest Management Group of Kagate villages(s) consisting of 34 households, would like to establishment of Community Forest. (map attached)

a) Gewog: Gatkidling

b) Description of the State Forest land proposed for establishment of Community Forest:

i) Name of the forest:

ii) Boundary description:

N Muga Khola Stream.

S Lasingkhola.

E Saspaingkhola.

W Chasghasay Village.

iii) Estimated area: (ha)

iv) Forest type: Broadleaf

Name list of Gaselo Community Forest Members

Sl.No.	Name	CID No.	House No.	Thram No.	Signatures
1	Bir Bdr Rai	11307001591	Pa-7-76	111	
2	Golan Rai	11307001592	Pa-7-76	111	
3	Nar Bdr Samal	11307001680	Pa-7-86	106	
4	Santa Kumar Samal	11307001671	Pa-7-85	107	
5	Dawa Zangmo	11309001988	Pa-7-313	1507	
6	Som Nath Rai	11307001580	Pa-7-75	105	
7	Ram Bdr Rai	11307001791	Pa-7-378	627	
8	Mon Bdr Rai	11307001794	Pa-7-98	83	
9	Jagat Bdr Rai	11307001794	Pa-7-379	628	
10	Aruna Maya Moktan	11806000286	Pa-7-380	629	
11	Pema Yuden	11307001424	Pa-7-306	500	
12	Karna Bdr Rai	11307001713	Pa-12-91	788	
13	Birkha Bdr Rai	11307000205	Pa-7-495	1529	
14	Choedra	11307001411	Pa-7-287	522	
15	Hem Raj Samal	11307001611	Pa-7-78	99	

Sl.No.	Name	CID No.	House No.	Thram No.	Signatures
16	Mon Bdr Samal	11307001526	Pa-7-68	99	
17	Mondhoj Rai	11307001365	Pa-7-102	1387	
18	Lok Bdr Rai	11307001367	Pa-7-498	1389	
19	Kiran Dath Rai	11307001369	Pa-7-104	86	
20	Bir Dath Rai	11307001370	Pa-7-104	86	
21	Karna Bdr Rai	SRP 31307000107	Pa-7-Nil-06	140	
22	Sarman Rai	11307001406	Pa-7-283	60	
23	Aum Tshering	11307000972	Pa-7-290	657	
24	Naresh Rai	1307001384	Pa-7-107	118	
25	Bhuda Bir Rai	11802001155	Pa-7-460	02	
26	Dr. T.B Rai	11307001466	Pa-7-64	89	
27	Dr. Surja Rai	11307001467	Pa-7-64	89	
28	Jai Maya Rai	11802001160	Pa-7-640	02	
29	Tek Bdr rai	11307001390	Pa-7-135	118	
30	Yangchen dema	11307000968	Pa-7-289	651	

31	Shri Bdr Rai	11803000136	Pa-7-283	60	
32	Lal Bdr Rai	11307003154	Pa-7-Nil-9	Nil	
33	Bhakti Man Samal	11307001356	Pa-7-103	102	
34	Karna Bdr Samal	11307001545	Pa-7-71	119	
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