

# **Phakheygang Community Forest Management Plan (1<sup>st</sup> Revision)**



**Villages: Thongjazor & Kencholing**  
**Gewog: Shompangkha**  
**Dzongkhag: Sarpang**

**Plan period: 2023-2033**





དཔལ་ལྷན་འབྲུག་གཞི་རྒྱུ་།  
 ལྷན་ཁག་དང་རང་བཞིན་ཐོན་སྐྱེད་ལག་ཁྲམས་ཚལ་དང་སྤྱི་ཁྱེད་ཀྱི་འཕེལ་འགྲེལ་ལྟུང་སྤྱོད་  
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 ROYAL GOVERNMENT OF BHUTAN  
 MINISTRY OF ENERGY & NATURAL RESOURCES  
 DEPARTMENT OF FORESTS & PARK SERVICES  
**FOREST RESOURCES PLANNING AND MANAGEMENT DIVISION**



No. DoFPS/FRPMD/FRPIS/CF\_1(b)/2022-2023/ 50

July 25, 2023

**NOTE SHEET**

**Sub: Approval of Revised Community Forest Management Plans (CFMPs)**

Following community forests (Table 1) upon completion of its 10-year management plan period have been revised and submitted for review and approval from the department. The community forest management plans (CFMPs) have been developed by Sarpang Forest Division in collaboration with Community Forest Management Groups.

Sl.No	Name of CF	Gewog	Office	Area(ha)	CFMG	AAC (m <sup>3</sup> )	Plan-Period
1	Raidangra	Gelephu	Sarpang Division	91.35	34	278.92	2022-2032
2	Phakheygang	Shompangkha		97.61	28	95.654	2033-2033

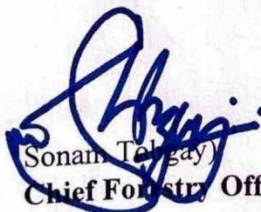
CFMPs adhere to guidelines and requirements set under Forest and Nature Conservation Code of Best Management Practices of Bhutan, Volume III Sustainable Forest Management and Forest and Nature Conservation Rules and Regulation, 2017 (FNCRR, 2017).

The revised CFMPs reflect the priorities and needs of the CFMG while also considering environmental and social safeguards. Stakeholder engagement ensured transparency and collaboration with a commitment to accountability, transparency, and long-term success.

The revised CFMPs include vision, objectives, strategies, proposed activities and framed by-laws. It also includes detailed information on forest inventories, biodiversity conservation measures, resource utilization plans, benefit-sharing mechanisms, and community capacity building strategies.

Technical assessment and review conducted by Forest Resources Planning and Implementation Section, FRPMD, DoFPS. The revised CFMP's emphasize community participation, to promote conservation, sustainable resource utilization, community development, and the integration of traditional knowledge with modern scientific practices.

Therefore, the CFO and the Director jointly approved the revised Community Forest Management Plans (CFMP) after thorough review and discussion. They acknowledged its importance in fostering sustainable forest management practices, preserving biodiversity, and ensuring the well-being of the local community.

  
 Sonam Tshenpa  
 Chief Forestry Officer

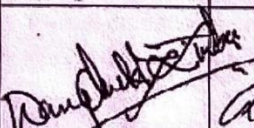
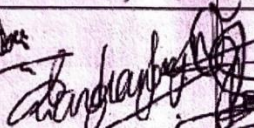
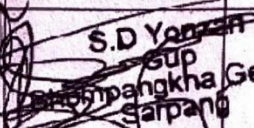
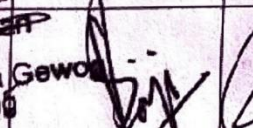
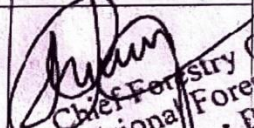
  
 (Director)  
 Department of Forest and Park Services



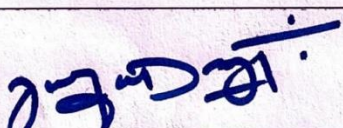

### ANNEX 3: APPROVAL SHEET

Name of Community Forest	Phakheygang CF
Village	Thongjazar & Kencholing
Chiwog	Kencholing
Gewog	Shompangkha
Dzongkhag	Sarpang
Total Community Forest Area (Hectare/Acre)	97.61
Total CFMG Member (No. of HH)	28


### Prepared and Submitted for Approval

	Community Forest Management Group	Forestry Representative (CFMP facilitator)	Gewog Administration	Social Forestry Section	Divisional/Park Office
Signature			 S.D Yonzon GUP Shompangkha Gewog Sarpang		 Chief Forestry Officer Divisional Forest Office Phub Dzonang : Bhutan
Name	Wangchu Dorji	Wangdi	Suk Dorji Yonzon	Sonam Dorji (SFR4)	Phub Dzonang
Title	Chairperson	FO, Facilitator	GUP	Head	Chief Forestry Officer

### Reviewed and Recommended for Approval

Signature		
Name	Mr. Tsheltrim Dorji	Mr. Sonam Tobgay
Title	Focal Officer (Forestry Officer)	Chief Forestry Officer
Division/Section	Forest Resources Planning and Implementation Section	Forest Resources Planning and Management Division

Approved By:



Director/Director General  
Department of Forests and Park Services

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## Acronyms

AAC	Annual Allowable Cut
CF	Community Forest
CFMG	Community Forest Management Group
DoFPS	Department of Forests and Park Services
DFO	Divisional Forest Office
DzFS.	Dzongkhag Forestry Sector
F&NCRR	Forest & Nature Conservation Rules and Regulation
Ha.	Hectare
HHs	Households
NWFP	Non-Wood Forest Product
CFMP	Community Forest Management Plan
GRF	Government Reserved Land
SRF	State Reserve Forest Land

### **Executive summary**

The Pakhaygang community forest is situated near Pakhey village in the Shompangkha geog of Sarpang Dzongkhag. It is bordered by Karshing-dara to the north, Baradara to the east, Chain-dara to the south, and Amaru-Pakhara to the west. The Phakheygang CF covers a total area of **97.61 hectares** of subtropical forest with sparse forest conditions. The CF is divided into three blocks: Lungsiphu, Bjilikhop and Kharshong. The general aspect of the forest area is southeast. The Community Forestry Management Group (CFMG) consists of interested members from Thongjazor and Kencholing villages, totalling 28 households. The community forest exhibits a rich forest vegetation with sustainable regenerative growth.

The people of Phakhay chiwog have recognized the significance of the Community Forest since 2013. They initiated the establishment of CF to facilitate easier access to forest products through sustainable management. They are concerned that if forest resources continue to be utilized without proper management using scientific methods, it may lead to severe degradation and potential environmental disasters. As a result, the community has warmly embraced the revision and continuation of the Community Forestry Management Group (CFMG). The community aims to enhance and diversify the availability of forest resources by implementing plantation programs and implementing proper management practices within the area. Their objective is to improve the productivity of the community forest.

The CF area is a well-stocked forest with desired timber species, as it had been under planned management for the past 10 years. The management plan is generally prepared by the Community Forestry Management Group (CFMG) in close consultation among themselves, with facilitation from the Divisional Forest Office. The revised plan is designed for a duration of 10 years and comprises two parts. Part I focuses on the management of the Community Forest (CF) area, outlining the procedures and guidelines that CF members will follow to achieve the objectives of the CF.

Part II encompasses the by-laws formulated by the members of the Community Forestry Management Group (CFMG). This management plan is designed to be environmentally sound and caters to the requirements of the CFMG members. The plan aims to facilitate sustainable management of forest resources and enhance conservation strategies for the overall improvement of the forest condition.

## **Part I: Management Planning**

### **Introduction**

Pakheygang Community Forest is situated near Phakhey village in the Shompangkha Geog of Sarpang Dzongkhag. The forest area has a general south-eastern aspect and covers a total area of **97.61** hectares including barren patches and degraded forests. The community has named this forest as Phakheygang CF, which translates to "land that fulfills their desires," as it has high potential for generating income through the sale of non-wood forest products (NWFP) and timber, thereby meeting their expectations.

The CF is located 5 kilometres away from the Gelephu-Sarpang highway, which passes through Dargaythang village. It takes approximately 2-3 hours to reach the CF from the Dzongkhag headquarters. The average basal area of the whole CF is **13.385 m<sup>2</sup>/ha** with Annual Allowable Cut (AAC) of **95.654 m<sup>3</sup>/ha** which is equivalent to **3378.30 cft**.

The villagers of Phakhey realized the importance of the CF and voluntarily came forward to review and continue its management. The main objective is to cultivate a sense of ownership among the local community regarding the forest resources and fulfil their basic requirements related to the utilization of these resources. The CF aims to educate people about the general aspects of forest management and also support their rural livelihoods.

**The objectives of the Community Forest (CF) are as follows:**

- 1. To manage the forest for the sustainable utilization of timber and non-wood forest products (NWFP).*
- 2. To generate income by selling furniture made from excess timber.*
- 3. To safeguard water resources to ensure a sustainable supply of drinking and irrigation water.*
- 4. To promote equitable distribution of natural resources derived from the forest.*



## 1. Community Forest Map

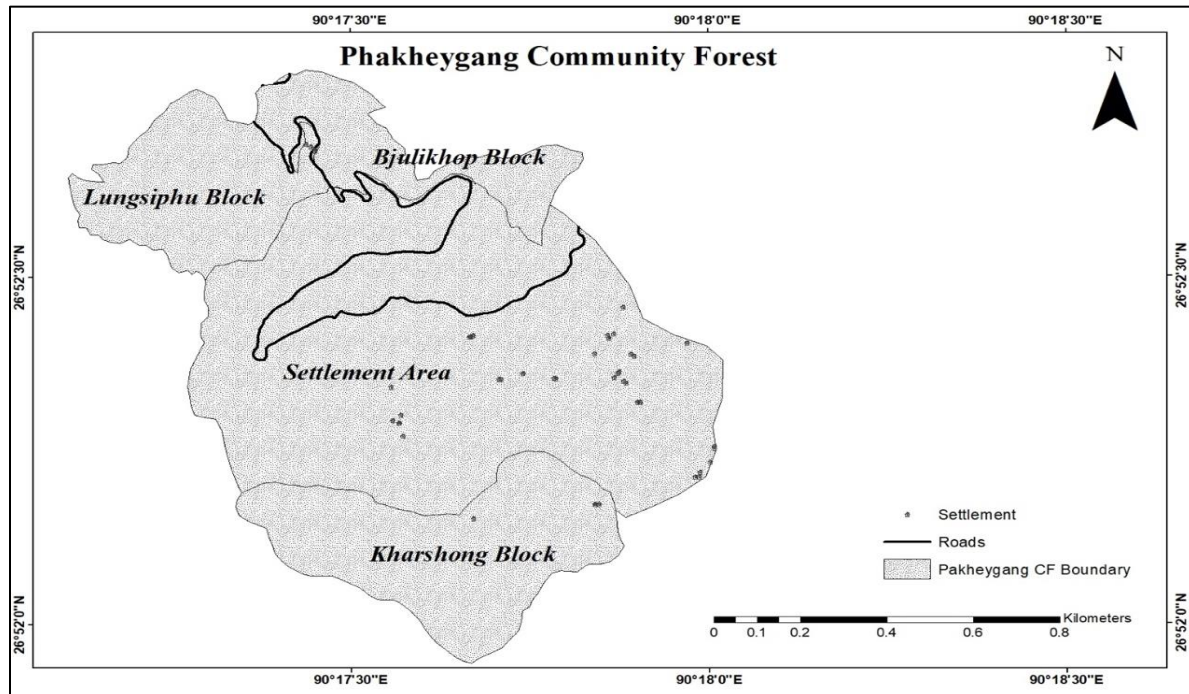


Figure No. 1: Map of Community Forest showing different blocks

Phakheygang CF is divided into three blocks. Lungsiphu block in the north-west, Kharshong block in the South and Bjulikhop block in the North-east of Phakhey Village.

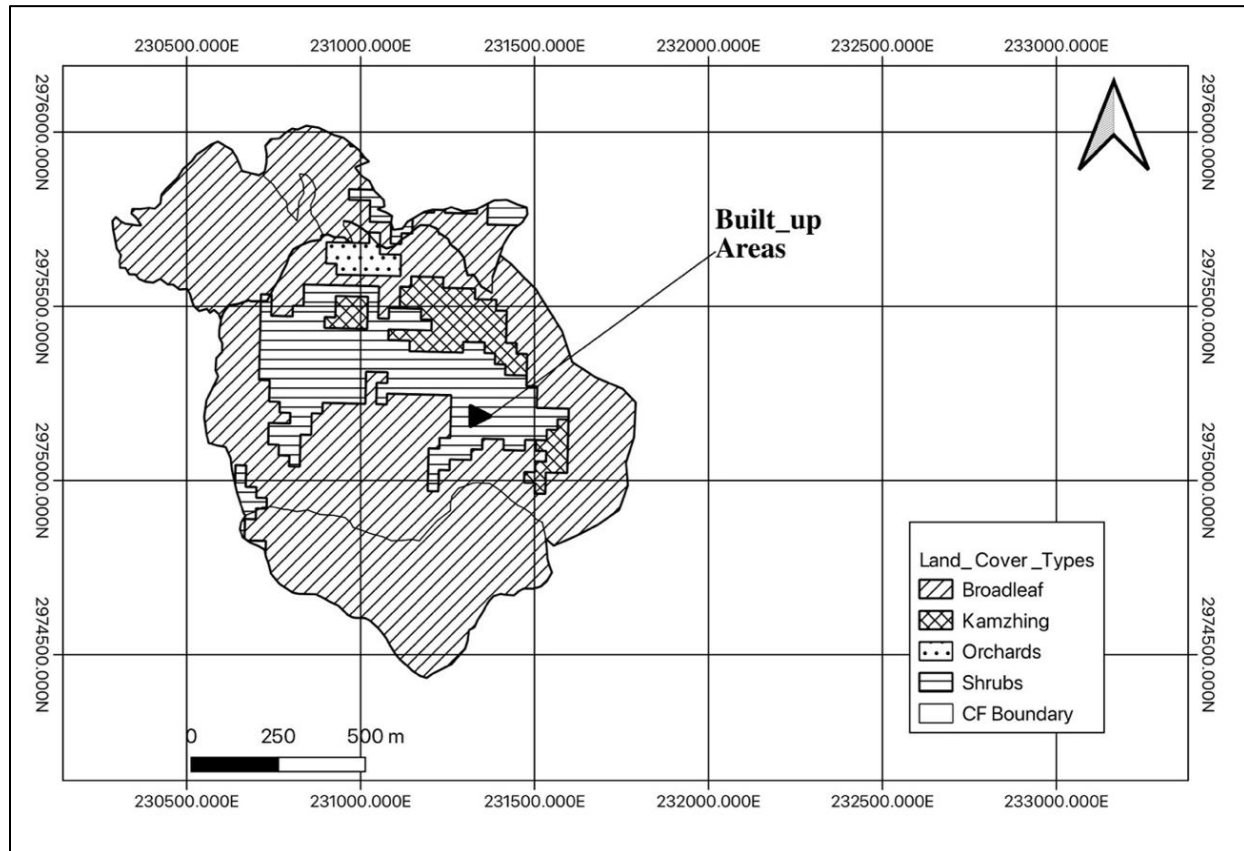




### Community Forest Boundary

Boundaries	Permanent features
East	Bara-Dara
West	Amaru-Pakhara
North	Karshing-Dara
South	Chain-Dara

### Land-use and Landcover map of CF



### Details of Land Use and Land Cover of CF

Landuse type	Area (Ha)
Broadleaf	99
Shrubs	25
Kamzhing	15.39
Orchards	2
<b>Total</b>	<b>133</b>

### Map of protection areas of CF

Protection area of CF	Area (Ha)
Road Buffer	7
Stream buffer/Drainage Buffer	11

<b>Total</b>	<b>18</b>
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Net production/operable area	Area (Ha)
Protection area	18
Kamzhing/orchard/ (Built up areas)	17.39
Total CF area	133
<b>Total operable areas= [Total CF area- (Protection areas + built up areas)]</b>	<b>97.61</b>

## 2. Traditional Forest Management and responsibilities

Products	Rights	Responsibilities	Traditional Management system
Timbers	People of Phakhey and nearby villages	People of Phakhey and nearby villages	Boundaries Based on Traditional Demarcation (Physical Features)
NWFP			Boundaries Based on Traditional Demarcation (Physical Features)
Fodder			Collected based on accessibility
Firewood			Collected only dry woods
Grazing			They Protect their Grazing land from free grazing

## 3. Major community forest planning steps

Steps	Date	Activities	Collaborations
1	December, 2008	Awareness on CF establishment procedure and FNC Rules 2006	Erstwhile DzFS and DFO, Sarpang
2	September, 2010	CF site identification	Erstwhile DzFS, CFMG & Range Office
3	November, 2010	PRA exercises like Formation of CFMG and Participatory activities like Resource use mapping and planning. Field Survey such as Boundary survey and preliminary forest resources assessment	Erstwhile DzFS, AFEOS and Range Staff
4	December, 2010	Preparation of Management plan	Erstwhile DzFS, Forest Range, Geog adm. & CFMG
5	December, 2010	Submission of management plan to Erstwhile DzFS and DoFPS for approval	Erstwhile DzFS & DoFPS
6	October 2010	Review & final submission of CFMP	Erstwhile DzFS & SFD
7	November 2022	Revision of CFMP	DFO, Sarpang
8	June 2022	Handing of CFMP booklet to CFMG	DFO, Sarpang & CFMG



#### 4. Social information

Name of the village	Phakhey, Thongjazar & Kencholing
Ethnic groups with CFMG	Lhotsham, Sharchop
Basic amenities	Electricity, Road, BHU, School
Total Households (HH) number of CFMG	28
Population of CFMG	192
% male & % female	54% male & 46 % female
Main source of income	Sale of Areca nut, Agriculture & Livestock products
Cattle population of the CFMG	123
Main crops	Areca Nut, Paddy & Vegetables
Cropping pattern	Mixed cropping
Any other information (Average income)	60000.00

#### 5. Forest information

Forest falling within CF boundary was classified as warm broadleaved forest with dominant broadleaved tree species like *Schima wallichii*, *Castonopsis indica*, *syzygium cumini*, *Alostonia scholaris*, *Albizza procera*, *Duabanga grandiflora* and *Chukrasia tabularis* with undergrowth of undesirable weeds which hamper the natural regeneration.

The community forest is divided into three blocks: Lungsiphu, Bjilikhop and Kharshong which are separated by the farm road of Phakhey Village. There is good vegetation cover in 3 blocks with thick undergrowth covered by vines and fern species. The CF area is source of irrigation and drinking water supply for the downstream villages of kencholing, Dagaythang and Sarpang tar under Shompangkha geog.

##### 5.1. Block wise information: Lungsiphu block

Format 1. Forest Resource Assessment Format	
Name of Community Forest	Pakheygang CF
Date of Assessment	18/11/2022-19/11/2022
Name of block	Lungsiphu block
Block area	
Name of recorder	Wangdi, FO

Forest & Habitat Type			
Forest	<input checked="" type="checkbox"/>	Thicket/pole stage	<input type="checkbox"/>
Grassland	<input type="checkbox"/>	Plantation	<input type="checkbox"/>
		Shrubland	<input type="checkbox"/>
		Other	<input type="checkbox"/>

Vegetation type					
Subtropical forest	<input checked="" type="checkbox"/>	Chir pine forest	<input type="checkbox"/>	Warm broadleaved forest	<input type="checkbox"/>
Cool broadleaved forest	<input type="checkbox"/>	Mixed conifer forest	<input type="checkbox"/>	Fir forest	<input type="checkbox"/>
				Other	<input type="checkbox"/>

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

Forest Condition	
Write the names of main tree species	
Local name	Scientific name
Katus	<i>Castanopsis spp</i>
Haiteypailay	<i>Plerosoermum acerifolium</i>
Chilauney	<i>Schima walluchii</i>
Plantation	
Is there any plantation?	Approximate height of planted trees (m)
Yes <input type="checkbox"/>	
No <input checked="" type="checkbox"/>	
Year planted	Is the plantation? Under stocked <input type="checkbox"/> Stocked <input type="checkbox"/> Overstocked <input type="checkbox"/>



Forest Condition -Age			
Mature <input checked="" type="checkbox"/>	Pole stage <input type="checkbox"/>	Shrubland <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 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 – 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		
1) <i>Plerosoermum acerifolium</i>	2) <i>Castanopsis spp</i>	3) Chagrashey
Regeneration: Seedlings > 30cm and < 1.3m height		

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

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

Forest Condition Class Box				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature forest	Dense	Abundant		
		Scattered/few	Few	Good
	Open	Abundant		
		Scattered/few		Average
Pole stage forest	Dense	Abundant		
		Scattered/few	Low	Average
	Open	Abundant		
		Scattered/few		
	Dense			Moderate
	Open			Average
Any	Very open	None		

Open spaces	
Approximate total open space area (ha)	None
Dominant vegetation type in the open space	NA
Cause of open space e.g. grazing, fire, harvesting, etc.	NA

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

Main fodder species being used ( <i>list 3 only</i> )	
Local name	Scientific name
Gamari	<i>Gmelina Arborea</i>
Lali	<i>Ammora Walichii</i>
Katus	<i>Castanopsis spp</i>

Pasture quality (list the 3 dominant species in the grassland)		
Local name	Scientific name	Palatable/unpalatable
Use pattern	Seasonal <input type="checkbox"/>	All year <input type="checkbox"/>

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



Catchment Condition Class Box			
Slope category	Soil erosivity	Cover class	Condition class
Flat	Erosive	<b>Moderate or high</b>	Moderately critical
		Low	Highly critical
	<b>Non erosive</b>	Any	<b>Less critical</b>
Moderate	Erosive	<b>Moderate or high</b>	Moderately critical
		Low	Highly critical
	<b>Non erosive</b>	Any	<b>Less critical</b>
Steep	<b>Erosive</b>	Moderate or high	<b>Moderately critical</b>
		<b>Low</b>	Highly critical
	Non erosive	Any	Low critical

Fauna			
Local Name		Scientific name	
Deer		<i>Muntjacs Muntiacus</i>	
Wild pig		<i>Sus scrofa</i>	
Monkey		<i>Macaca mulatta</i>	
Elephant		<i>Elephas maxima</i>	
Hornbill		<i>Buceros bicornis</i>	
Leopard		<i>Panthera pardus</i>	
Wild dog		<i>Cuon alpinus</i>	
Biotic Pressures			
Fire	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>
Grazing	Heavy <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fodder collection (list main species used)	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
NWFP collection (list the main products including bamboo & cane)	Common <input type="checkbox"/> Mushroom & Bamboo	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Leaf litter collection	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Encroachment	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>
Pole harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fuelwood harvesting	Common <input checked="" type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input type="checkbox"/>
Timber harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Hunting	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>

Potential Management Options (list any potential management options for the CF/block)	
1	Plantation and thinning are recommended
2	Single tree selection is must while extracting trees for timber and firewood.

## 5.2. Block wise information: Bjulikhop Block

### Format 1. Forest Resource Assessment Format

Name of Community Forest	Pakheygang CF
Date of Assessment	18-19/09/2022
Name of block	Bjulikhop Block
Block area	
Name of recorder	Karma Yangzom FR II, Namgo, Jigmy Zangmo SFR I

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

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

Forest Condition	
Write the names of main tree species	
Local name	Scientific name
Katus	<i>Quercus spp</i>
Lali	<i>Ammora wallichii</i>
Churasia	<i>Chukrasia tabularis</i>
Plantation	

Is there any Yes <input type="checkbox"/> plantation? No <input checked="" type="checkbox"/>	Approximate height of planted trees (m)
Year planted	Is the plantation? Under stocked <input type="checkbox"/> Stocked <input type="checkbox"/> Overstocked <input type="checkbox"/>

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

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

Forest Condition – Regeneration		
Abundant <input type="checkbox"/> Regeneration easy to find in most places	Scattered/few <input checked="" type="checkbox"/> Regeneration only in some places and hard to find	None <input type="checkbox"/> No regeneration
Write the names of the 3 main tree species in the regeneration		
1) <i>Schima wallichii</i>	2) <i>Pterospermum acerifolium</i>	3) <i>Chukrasia tabularis</i>
Regeneration: Seedlings > 30cm and < 1.3m height		

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

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

Forest Condition Class Box				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature forest	Dense	Abundant		
		Scattered/few		
	Open	Abundant		
		Scattered/few		Average

Pole stage forest	Dense	Abundant		
		Scattered/few		
	<b>Open</b>	Abundant	Low	
		Scattered/few		
	Dense		<b>Low</b>	Moderate
	Open		<b>Low</b>	Average
Any	Very open	None		

Open spaces	
Approximate total open space area (ha)	None
Dominant vegetation type in the open space	NA
Cause of open space e.g. grazing, fire, harvesting, etc.	NA

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

Main fodder species being used (list 3 only)	
Local name	Scientific name
Khamari	<i>Gmelina arborea</i>
Angarey	<i>Phoebe Altenuata</i>
Katus	<i>Castanopsis spp</i>

Pasture quality (list the 3 dominant species in the grassland)		
Local name	Scientific name	Palatable/unpalatable
Use pattern	Seasonal <input type="checkbox"/>	All year <input type="checkbox"/>

Type of user	Migratory <input type="checkbox"/>	Local <input checked="" type="checkbox"/>	Both <input type="checkbox"/>
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Catchment Condition	
(i) Catchment condition – soil cover	
Soil cover	Soil cover class
> 50% of the soils are covered by vegetation	high <input checked="" type="checkbox"/>
25 - 50% of the soils are covered by vegetation	moderate <input type="checkbox"/>
< 25% of the soils are covered by vegetation	low <input type="checkbox"/>
(ii) Catchment Condition - Soil type and erosivity	
<b>Soil type</b> (colour, texture and type)	
Erosive <input type="checkbox"/> disperses and/or breaks up in water easily	Non-erosive <input checked="" type="checkbox"/> stable to water flow
(iii) Catchment Condition – Slope	
Slope (degrees)	Slope steepness class
<10°	Gentle <input type="checkbox"/>
10° – 30°	Moderate <input type="checkbox"/>



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

Catchment Condition Class Box			
Slope category	Soil erosivity	Cover class	Condition class
Flat	Erosive	<b>Moderate or high</b>	Moderately critical
		Low	Highly critical
	<b>Non erosive</b>	Any	<b>Less critical</b>
Moderate	Erosive	<b>Moderate or high</b>	Moderately critical
		Low	Highly critical
	<b>Non erosive</b>	Any	<b>Less critical</b>
Steep	<b>Erosive</b>	Moderate or high	<b>Moderately critical</b>
		<b>Low</b>	Highly critical
	Non erosive	Any	Low critical

Fauna			
Local Name		Scientific name	
Deer		<i>Muntjacs Muntiacus</i>	
Wild pig		<i>Sus scrofa</i>	
Monkey		<i>Macaca mulatta</i>	
Elephant		<i>Elephas maxima</i>	
Hornbill		<i>Buceros bicornis</i>	
Leopard		<i>Panthera pardus</i>	
Wild dog		<i>Cuon alpinus</i>	
Biotic Pressures			
Fire	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>
Grazing	Heavy <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fodder collection (list main species used)	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
NWFP collection (list the main products including bamboo & cane)	Common <input type="checkbox"/> Mushroom & Bamboo	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Leaf litter collection	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Encroachment	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Pole harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fuelwood harvesting	Common <input checked="" type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input type="checkbox"/>
Timber harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Hunting	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>

Potential Management Options (list any potential management options for the CF/block)
---

1	Plantation and thinning are recommended.
2	Single tree selection is must while extracting trees for timber and firewood.
3	Prescribed burning in few areas is recommended

### 5.3. Block wise information: Kharshong Block

Format 1. Forest Resource Assessment Format	
Name of Community Forest	Pakheygang CF
Date of Assessment	18-19/09/2022
Name of block	Kharshong Block
Block area	
Name of recorder	Tshering Dorji, SFO, Jigme Dorji

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

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

Forest Condition
------------------

Write the names of main tree species	
<b>Local name</b>	<b>Scientific name</b>
Tooni	<i>Toona Ciliata</i>
Chilauney	<i>Schima wallichii</i>
Churasia	<i>Chukrasia tabularis</i>
<b>Plantation</b>	
Is there any Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Approximate height of planted trees (m)
Year planted	Is the plantation? Under stocked <input type="checkbox"/> Stocked <input type="checkbox"/> Overstocked <input type="checkbox"/>

<b>Forest Condition -Age</b>			
Mature <input type="checkbox"/> Main canopy of matured trees	Pole stage <input checked="" type="checkbox"/> Main canopy of pole-stage trees	Shrubland <input checked="" type="checkbox"/> Main canopy of shrubs, young trees or regeneration	Any <input type="checkbox"/> No continuous canopy. Isolated trees only
Fir and Hemlock			

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

<b>Forest Condition – Regeneration</b>		
Abundant <input type="checkbox"/> Regeneration easy to find in most places	Scattered/few <input checked="" type="checkbox"/> Regeneration only in some places and hard to find	None <input type="checkbox"/> No regeneration
Write the names of the 3 main tree species in the regeneration		
1) <i>Schima wallichii</i>	2) <i>Macaranga</i>	3) <i>Chukrasia tabularis</i>
Regeneration: Seedlings > 30cm and < 1.3m height		

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

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

Forest Condition Class Box				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature forest	Dense	Abundant		
		Scattered/few		
	<b>Open</b>	Abundant		
		<b>Scattered/few</b>		Average
Pole stage forest	Dense	Abundant		
		Scattered/few		
	Open	Abundant		
		Scattered/few		
	Dense		<b>Low</b>	Moderate
	Open		<b>Low</b>	Average
Any	Very open	None		

Open spaces	
Approximate total open space area (ha)	None
Dominant vegetation type in the open space	NA
Cause of open space e.g. grazing, fire, harvesting, etc.	NA

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

Main fodder species being used ( <i>list 3 only</i> )	
Local name	Scientific name
Khamari	<i>Gmelina arborea</i>
Mawa	<i>Engelhardia spicata</i>
Katus	<i>Castanopsis spp</i>

Pasture quality (list the 3 dominant species in the grassland)		
Local name	Scientific name	Palatable/unpalatable
Use pattern	Seasonal <input type="checkbox"/>	All year <input type="checkbox"/>

Type of user	Migratory <input type="checkbox"/>	Local <input checked="" type="checkbox"/>	Both <input type="checkbox"/>
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Catchment Condition	
(i) Catchment condition – soil cover	
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"/>
(ii) Catchment Condition - Soil type and erosivity	



Soil type (colour, texture and type)	
Erosive <input type="checkbox"/>	Non-erosive <input checked="" type="checkbox"/>
disperses and/or breaks up in water easily	stable to water flow
(iii) Catchment Condition – Slope	
Slope (degrees)	Slope steepness class
<10°	Gentle <input type="checkbox"/>
10° – 30°	Moderate <input checked="" 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"/>

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

Fauna			
Local Name		Scientific name	
Deer		<i>Muntjacs Muntiacus</i>	
Wild pig		<i>Sus scrofa</i>	
Monkey		<i>Macaca mulatta</i>	
Elephant		<i>Elephas maxima</i>	
Hornbill		<i>Buceros bicornis</i>	
Leopard		<i>Panthera pardus</i>	
Wild dog		<i>Cuon alpinus</i>	
Biotic Pressures			
Fire	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>
Grazing	Heavy <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fodder collection (list main species used)	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
NWFP collection (list the main products including bamboo & cane)	Common <input type="checkbox"/> Mushroom & Bamboo	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>

Leaf litter collection	Common <input type="checkbox"/>	Limited <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Encroachment	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>
Pole harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Fuelwood harvesting	Common <input checked="" type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input type="checkbox"/>
Timber harvesting	Common <input type="checkbox"/>	Occasional <input checked="" type="checkbox"/>	Absent <input type="checkbox"/>
Hunting	Common <input type="checkbox"/>	Occasional <input type="checkbox"/>	Absent <input checked="" type="checkbox"/>

Potential Management Options ( <i>list any potential management options for the CF/block</i> )	
1	Plantation and thinning are recommended.
2	Single tree selection is must while extracting trees for timber and firewood.
3	Prescribed burning in few areas is recommended

## 6. Forest management

Block I : Bjilikhop block				
1	Produces /Services	Drashing	Firewood	NWFP
2	Main Species	<i>Amoora wallichii</i> , <i>Castanopsis tribuloides</i> , <i>Albizza lebbeck</i> , <i>Schima wallichii</i>	<i>Castanopsis spp</i> <i>Schima wallichii</i>	Mushroom, ferns, orchids, black pepper
3	Problems	Low quality, Stunted growth, wind-twisted trees, growth affected by Climbers	Not clean bole, pole stage and lots of dried trees	Less quantity
4	Opportunity	Cleaning operations and thinning operations	Removal of dead and dying trees, thinning and clearing of areas for afforestation	
5	Management Objective (reflecting problems and or opportunities)	To manage forest for sustainable utilization of timber and NWFP.		
6	Activities to achieve the objective (mark s H, M or L)	H	H	M
7	Procedures	Cleaning	Thinning	Collect only for domestic consumption. Regular monitoring should be carried out for sustainability.
8	Responsibilities	CFMG members	CFMG members	

Block II Lunsiphu Block				
1	Produces /Services	Drashing	Firewood	NWFP

2	Main Species	<i>Chukrasia tabularis</i> , <i>Duabanga grandiflora</i> , <i>Alnus nepalensis</i> , <i>Amoora rohituk</i>	<i>Castanopsis spp</i> , <i>Schima wallichii</i> , <i>Pterospermum</i> <i>acerifolium</i>	Mushroom and ferns, peppers
3	Problems	Less quantity	Not clean bole and are in pole stage. Trees are mostly immature.	Less quantity
4	Opportunity	Timber extraction through thinning operations	Removal of dead and dying trees, thinning and clearing of areas for afforestation	
5	Management Objective (reflecting problems and or opportunities)	To manage forest for sustainable utilization of timber and NWFP.		
6	Activities to achieve the objective (mark s H, M or L)	H	H	M
7	Procedures	Cleaning/sanitation feeling	Thinning	Collect only for domestic consumption. Regular monitoring should be carried out for sustainability.
8	Responsibilities	CFMG members	CFMG members	CFMG members

Block II Kharshong block				
1	Produces /Services	Drashing	Firewood	NWFP
2	Main Species	<i>Schima Wallichii</i> , <i>Alostonia scholaris</i> , <i>Albizza procera</i> , <i>Duabanga grandiflora</i> , <i>Chukrasia tabularis</i>	<i>Castanopsis spp</i> , <i>Schima wallichii</i>	Mushroom and ferns, peppers
3	Problems	Less quantity	Not clean bole and are in pole stage. Trees are mostly immature.	Less quantity
4	Opportunity	Plantation of preferred tree species such as <i>Tectona grandis</i> and <i>Shorea robusta</i>	Removal of dead and dying trees, thinning and clearing of areas for afforestation	
5	Management Objective (reflecting problems and or opportunities)	To manage forest for sustainable utilization of timber and NWFP.		

6	Activities to achieve the objective (mark s H, M or L)	H	H	M
7	Procedures	Plantation	Thinning	Collect only for domestic consumption. Regular monitoring should be carried out for sustainability.
8	Responsibilities	CFMG members	CFMG members	CFMG members



## 7. Forest Management and procedure

Objective	Activities	Priority (H,M, L)	Procedure	Responsibilities
To manage forest for sustainable utilization of timber and NWFP.	Plantation (Seedlings, Fencing)	H	1.-Identification of barren land. 2.- Establish preferred species in June.	CFMG
	Cleaning/ Thinning	M	1- Removal dead, diseased, dying and deformed trees. 2 - Removal of climbers and parasites.	CFMG
	3.NTFP Collection	L	Harvest as per NTFP harvesting Guidelines	CFMG
	5. Timber/Firewood Extraction	H	1. Timber/fencing post/firewood allotment/permit/marketing- Dec -Jan. 2. Felling/extraction- Feb – April.	CFMG
To protect watershed area for sustainable supply of drinking/Irrigation water.	1. Water source Protection	H	1. Fencing of water sources. 2. Plantation of plants that help in water retention. 3.Restriction of marking trees nearby water sources.	CFMG
	4.Controlled Grazing	M	1. Fencing of critical water sources. 2. Preventive grazing in recently established plantation areas.	CFMG

**8. Forest Produce Demand Assessment**

Produce	Annul requirement estimated)		No of Households that require produce annually (C)	Total requirement of the produce (annually)		Total requirement of produce in 10yers	
	Number (A)	Volume in cft or m³ (B)		Number (A*C)=D	Volume (in cft or m³) (B*C)=E	Number (D*10)	Volume (in cft or m³) (E*10)
For new Construction							
Drashing	4	800 cft	2	16	1600 cft	160	16000 cft
Repair and Renovation							
Drashing	2	500 cft	4	8	2000	80	20000 cft
For Other constructions (Kitchen, Toilet, Cowshed, etc)							
Tshim	10	50 cft	5	50	250 cft	500	2500 cft
Others...							
Firewood	2 Trees	----	28	56	----	560 Trees	---
Bamboo	10 Nos.	---	5	50	----	500 Nos.	--
Fencing post	10 tress	---	28	280	---	2800 Poles	

Forest Produce Demand Assessment		
Produce	Annual HHs requirement (Estimated)	
	No. of trees	Volume (Cft or M3)
	No. of HH using the Produce (if all then write all)	

Drashing	24	3600 cft	6
Tshim	50	250 cft	5
Firewood	56	----	28
Fencing post	2800 poles		28
Bamboo	50	----	5

### 9. Annual Allowable Cut

The table given below shows the Annual Allowable Cut after calculating and analysing the data compiled during forest resources assessment inside CF. CF has less timber that can be supplied to meet the demand of the CF members.

Annual Allowable cut table								
Block	Annual Allowable cut table (AAC)	Dangchung	Tsim	Cham	Drashing	Firewood	Flag post	Fencing Post
Bijulikhop	Stand and stock data	1.51	8.89	12.33	70.00	15.91	1.26	12.44
	(Volume M3)	0.10	0.59	0.82	4.68	1.06	0.08	0.83
	in cft	3.56	20.98	29.10	165.23	37.56	2.97	29.36
	No of trees	2	6	2	2	2	2	25
Lungsiphu	Stand and stock data	0.18	9.56	33.07	188.33	15.44	0.53	4.98
	(Volume M3)	0.02	0.96	3.31	18.86	1.55	0.05	0.50
	in cft	0.64	33.82	116.99	666.24	54.62	1.87	17.62
	No of trees	0	10	8	9	1	1	15
Kharshong	Stand and stock data	7.74	12.03	52.73	306.59	13.55	20.41	8.49
	(Volume M3)	1.14	1.78	7.78	45.26	2.00	3.01	1.25
	in cft	40.35	62.72	274.91	1598.42	70.64	106.41	44.26

Phakheygang Community Forest Management Plan (1<sup>st</sup> Revision)- Plan Period 2023-2033

	No of trees	23	18	19	23	3	60	38
Whole CF	(Volume M3)	1.26	3.33	11.92	68.80	4.61	3.15	2.58
	in cft	44.55	117.52	421.00	2429.90	162.82	111.26	91.25
	No of trees	25	33	30	34	6	63	78

### 10. Annual Allowable Cut and Demand Comparison

Annual Allowable Cut And Demand Format							
Produce	Total ACC		Total Annual Demand		Difference		Comments
	No of trees	Volume (in cft)	No of trees	Volume (in cft)	No of trees	Volume (in cft)	
Drashing	34	2429.9	24	1715.2	10	714.68	Excess Drashing
Cham	30	421	0	0.0	30	421.00	No, demand for cham
Tsim	33	117.52	50	178.1	-17	-60.54	Extra Drashing and Cham can be sawn into Tsim
Dangchung	25	44.55	0	0.0	25	44.55	The dangchung is in excess
Firewood	6	162.82	56	1519.7	-50	-1356.83	Firewood insufficiency can be meet lops and tops of drashings
Fencing posts	78	91.25	280	327.6	-202	-236.31	The fencing post can be met from flag poles
Flag poles	63	111.26	0	0.0	63	111.26	Excess flag poles



## 11. Participatory Environment assessment

Activities proposed in CFMP	Potential Environmental effects				Potential Socioeconomic effects			
	Soil	Water	Wild animals	Plants	Traditional forest use	Cultural and religious values	Local employment	Local benefits from forest produces
Plantation establishment	+++	+++	+++	0	++	++	++	++
Cleaning/ Thinning	--	0	--	++	0	0	+	+
NTFP Collection	-	-	---	0	0	0	++	++
Controlled Grazing	++	++	+++	++	+	0	0	0
Timber/Firewood Extraction	---	--	--	---	+	-	++	+
Fencing & protection of water source	++	+++	++	++	++	++	+	++

Positive effect shown by +++, Negative effect ---, No effect (or not relevant) shown by 0

## 12. Procedure to address potential negative environment effect

Activity	Procedure
1. Timber/Firewood Extraction	1. Avoid damage to surrounding vegetation and regeneration through careful extraction and following best practices of felling methods. 2. Extraction of dead, diseased and deformed trees during allocation
2. Cleaning/ Thinning	1. Extraction of dead, diseased and deformed trees during allocation which encourages growth of best trees
3. NTFP Collection	1. Collection as per NWFP guidelines

### 13. Climate hazard matrix

	Land slide	Flood	Drought	Forest Fire	Animal diseases	Reduced crop yields
Land slide	X	Flood	Landslide	Landslide	Landslide	Landslide
Flood		X	Flood	Flood	Flood	Flood
Drought			X	Forest fire	Animal Diseases	Reduced crop yields
Forest Fire				X	Animal Diseases	Reduced crop yields
Animal diseases					X	Reduced crop yields
Reduced crop yields						X

**Result:** Flood- 5, Landslide-4, Reduced crop yields- 3, Animal diseases-2, Forest fire-1.

### 14. Forest Produces Prioritization and Ranking Matrix

	Timber	Firewood	Mushroom	Fodder	Water	Grazing
Timber	X	Timber	Timber	Timber	Water	Timber
Firewood		x	Firewood	Firewood	Water	Firewood
Mushroom			X	Fodder	Water	Grazing
Fodder				x	Water	Grazing
Water					x	Water
Grazing						x

**Water – 4, Timber – 4, F/wood-3, Grazing-2, Fodder-1,**

Water is found to be the most crucial resources for the CFMG members followed by timber, firewood. Fodder have been ranked as least priority for the members. Therefore, it is necessary for the members to carry out relevant activities to protect and preserve resources that are more of important to them.

### 15. Species preferences and availability

The reasons for carrying out species preferences and availability is mainly to understand which species are preferred most against the availability of that species by the CF members. Accordingly, CF members will understand what species of timber need to be planted, protected or removed depending on their requirement. This will also help in decision making of forest management for the CFMG.

Species/Local name	Uses →	Timber	F/wood	Fencing	Fodder	Agri implements
Sal	Preferences	XXXXXX	0	XXX	0	XXXXXX
	Availability	*	*	***	0	***
Champ	Preferences	XXXXXX	X	0	0	0
	Availability	*	*	0	0	0
Teak	Preferences	XXXXXX	XXX	XXX	0	X
	Availability	*	***	*	0	*
Sas	Preferences	XXXXXX	XXX	0	0	0
	Availability	***	***	***	0	0
Lampatey	Preferences	XXX	X	0	0	0
	Availability	***	***	***	0	0
Tooni	Preferences	X	X	0	X	0
	Availability	*	*	*	*	0
Chagrashey	Preferences	XXXXXX	XXX	XXX	0	X
	Availability	***	***	***	*	*
Katus	Preferences	XXX	XXX	0	0	X
	Availability	*****	*****	*****	0	*****
Hateypailey	Preferences	XXX	XXX	XXX	X	X
	Availability	***	***	***	***	***
Gamari	Preferences	XXXXXX	0	XXX	XXXXXX	XXX
	Availability	***	*	*	***	*
Schima Wallichhi	Preferences	XXX	XXXXXX	XXX	0	XXX
	Availability	*****	*****	*****	0	*****
Khakar	Preferences	XXX	X	XXX	XXX	XXX
	Availability	***	***	***	***	***
Mandaney	Preferences	XXX	0	0	0	0
	Availability	***	***	***	0	0
Shaytey	Preferences	XXX	0	0	0	0
	Availability	***	*	*	*	0

XXXXXX=high preferences, \*\*\*\*\* = highly available XXX= Average prefer and X=low preferences, \* =less available

**16. Monitoring plans (Forest Resources monitoring plan) Social & Institutional monitoring plans)**

Activities	Indicator	How it will be monitored	Responsibilities	Comments
Patrolling	Report	Patrolling of CF will be conducted once every 2 months by Resups	Resups	Resups appointed during plan revision
Plantation maintenance	Field work and report	The maintenance will be carried out every year after plantation	All CFMG members	
Waste management	Reports	Waste should be disposed properly. Defaulters will be imposed fines and penalties.	All CFMG members	

**17. Waste management**

All members shall be responsible for prevention of waste disposal in their vicinity. Any individuals carrying out any type of activities in the CF shall be responsible for managing waste at the particular site. The CFMG have decided to initiate installment of signboards at three strategic points in CF (1: Chautara-dara, 2: Chamlingkhola, 3: Bjilidangra) to prevent disposal of waste in CF.

**18. Operational plan for 10 years**

BLOCK	Activities	1	2	3	4	5	6	7	8	9	10	Responsibilities
Block 1- (Bijulikhop)	1. Plantation (Seedlings,Fencing)											CFMG
	1. Fencing of water sources											
	2. Cleaning/ Thinning											
	3. Plantation Maintenance											
Block 2- (Lungsiphu)	1.Cleaning/ Thinning											

[illegible]

**Note:**

CF whole area physical demarcation will be carried out in the 1<sup>st</sup> year.

CFMG will establish tree seedling nursery in the 1<sup>st</sup> year.

CFMG must inform to nearest Forest Office prior to execution of prescribed burning.

## 19. Annual Work Plan

The annual work plan will be discussed during Community Forest Management Group General meeting. The activities reflected in operational plan for 10 years will be broken down and implemented as per the meeting resolution and convenience.

## **Part II: By-Laws**

### **1. Membership Arrangement**

Currently there are 28 Households as Phakheyhang CFMG members from Thongjazu and Kencholing villages. Pertinent rules for membership arrangement for CFMG are as follows:

1. Those wishing to become a new CF member should have separate Thram no and House no and should be permanent residents of the village.
2. Existing CFMG who are without Thram no and Houses no and had made equal contributions so far will remain as CFMG members and receive equal benefits. However, they should process Thram and house number at the earliest to avoid any future quandary.
3. Every CFMG members must pay membership pay 200/- per year.
4. New households wishing to join as a new CF member shall pay nu. 2000/- for every year completed plus entry fee of Nu. 200 every year in addition to total accumulated amount of work and meeting conducted earlier.
5. New member shall join CF after duly filling application form and submit it to the CF committee members.
6. An existing member wishing to be separated from CFMG should pay Nu. 1500 with appropriate withdrawal form. Anyhow if his/her son/daughter wish to join CFMG in future, they shall do so as a new member.
7. Every member leaving CFMG must submit duly filled withdrawal application to the Executive members before withdrawing.
8. Any Executive member of CFMG defaulted should repay CFMG funds misused within 3 months of time frame and won't be allowed to join as member in future.

### **2. Membership Committee formation**

CFMG members will be nominate and elect only competent candidates as Committee members of the CF. The committee members will be elected either through voting or on majority basis or whichever is convenient.

The Committee members of CF are as follows:

1. Wangchu Dorji, Chairman
2. Migma Dorji Tamang, Secretary
3. Saita Rai, Treasurer
4. Lal Bdr. Rai, Prem Kumar Tamang, Ram Lal - Resup



**3. Tenure of committee members:**

- ✓ The term for all committee members will be for 5 years
- ✓ After 5 years the CFMG shall review the committee members' performances and if found satisfactory the members shall contest for another term.
- ✓ If any members do not carry out their responsibilities up to the expectation of CFMG members, CFMG members have right to terminate and conduct election for the replacement.
- ✓ Any committee members or CF members found to have misused or embezzle CF fund shall be immediately terminated from the position and terminate from the membership as well.

**4. Terms of References for CFMG Committee members**

- ✓ Coordinate meeting as and when required
- ✓ Coordinate CF activities and operations as per CFMP
- ✓ Responsible for enforcing by-laws of the CFMP.
- ✓ Coordinate Forest Products allotment from the CF area
- ✓ Conduct annual audit for better management of CF

**5. Terms of References for Chairman**

- ✓ Chair the CF meeting
- ✓ Sanction forest produces as per the management plan
- ✓ Coordinate with other stakeholders
- ✓ Monitor and review the plan activities
- ✓ Resolve conflict and disputes associated with CF
- ✓ Join signatory for revenue deposit with treasurer and secretary

**6. Terms of References for Secretary**

- ✓ Official Correspondences related to CF
- ✓ Record keeping
- ✓ Chair the meeting in absence of chairman
- ✓ Assist chairman

- ✓ Assist in financial management
- ✓ Maintain the minutes of meeting
- ✓ Join signatory for revenue deposit with treasurer and secretary

#### **7. Terms of References for Treasurer**

- ✓ Accounting for any financial matter related to CF
- ✓ Maintain financial records
- ✓ Collect the membership fees and deposit in the bank
- ✓ He/she shall deposit the collected amount latest by last week of the same month.
- ✓ Present the account status during the half yearly CFMG meeting
- ✓ Join signatory for any financial transaction with Chairman/Secretary

#### **8. Terms of References for Re-sup**

- ✓ Conduct **Patrolling** of CF once in every 2 months and report accordingly to CFMG members.

##### **a. Source of fund**

- ✓ Annual membership fee collections
- ✓ Royalty/fee collection
- ✓ Collection of fines for illegal activities within CF
- ✓ Sale of surplus timber and NWFPs

#### **9. Roles and responsibility of CFMG**

- ✓ Contribute manpower and funds as and when necessary
- ✓ Abide by the existing and future government rules with regard to CF
- ✓ Election/Nomination/Appointment of CFMG committee members
- ✓ CFMG must recommend/propose any activities needed to develop
- ✓ Implement Annual work plan as per the management plan

## 10. Royalty & Fees

The royalty for any forest products will be realized as per the Forest and Nature Conservation Rules and Regulation of Bhutan (FNCRR 2017) and its amendment 2021, 2022.

## 11. Fines and Penalties

For any illegal activities related to natural resources and wildlife inside CF area, offender(s) shall be dealt as per the Forest and Nature Conservation Rules and Regulation of Bhutan (FNCRR 2017).

CFMG also decided to levy fines and penalties for offence mentioned below:

Sl no	Particular	Fines Amount (Nu.)	Penalty(Nu.)	Remarks
1	Absentees in meeting	500		Emergency, Urgent and unavoidable situations (Sick, death and others) will be excused with written application to Executive members
2	Absentees in work (CF development activities)	500		Emergency, Urgent and unavoidable situations (Sick, death and others) will be excused with written application to Executive members
3	Littering/Disposal of trashes inside CF	1000 per occasion		Defaulter shall be given 15 days to clean the littered area prior to levying of cited fine
4	Grazing inside plantation area	100 per cattle	Replaced of damaged seedlings by cattle owner	

**Note:**

*Failing to fell trees within time frame-The permit will be canceled. Failing to extract felled tree within time should be fined Nu.100 as per tree, while timber shall be allotted to defaulter.*

## **12. Managing CFMG Fund and Credit**

### **a. CF fund management**

- ✓ Seedling procurement for valuable timber species
- ✓ Procurement of office stationeries
- ✓ Expenditure for any activities related to Phakheygang CF

## **13. Benefits Sharing Mechanism**

Committee members will ensure equity and transparency in sharing benefits from Community Forest. The quantity of harvesting will be depend on the Annual Allowable Cut prescribed in the management plan. The CFMG may loan the timber among themselves with written agreement in presence of committee members. CFMG will maintain free and fair timber allotment to all members. CFMG may sale surplus timbers in align with the CF marketing guidelines. Any houses hold affected with nature disasters like Earth quakes, Fire incidences, Flood/landslides will be given a tree provided there is remaining balances in AAC.

## **14. Meetings**

### **General meeting (CFMG)**

The CFMG had decided to meet twice in a year and however if needed Chairman has right to call CFMG for meeting at any time. The meeting will focused on CF related activities such as CF issues, plantation inside CF, allotment of forest produce from CF, presentation of financial status etc. For any decision making, at least three fourth of the total members should agree in the meeting.

### **Management Committee meeting**

The CFMG committee meeting will be held every after three months (Quarterly). The members may designate the activities based on the field convenience to overcome constraints. Conflict and issues related to CF raised by the members of other stake holders have to be addressed in the meeting and resolved it accordingly.

### **Conflict Management**

Any discrepancies, conflicts, issues shall be resolved first within Committee members, if it cannot be resolved within committee members it shall be forwarded to Divisional Forest office, if DFO cannot solve, it will be forwarded to Court with copies forwarded to Geog Office each time.

### **15. Amendments of CFMP and bylaws**

The CF management plan is prepared for 10 years and CFMG is obligatory to implement the plans accordingly. The revision will be done in the ninth year of the CF plan period on consultation with the Divisional Forest Office, Sarpang. If there are any amendments required by the CFMG before the time of revision, they can propose for changes by putting up letter to concern Chief Forestry Officer, Division Forest Office, Sarpang.

### **16. Power of Department**

Department is empowered to take action with regards to both forestry and other development activities as a whole. In addition, department is specifically empowered to:

- ✓ Take action against violators of the act, rules or Management plan, regardless of whether requested by the CFMG or not.
- ✓ Inspect, monitor, review the records, others wise supervise the activities of the CFMG, and take actions (including revocation of the certificate where warrant under these rules) against the CFMG or any of other members who may be acting in violation of the provision of the Management plan or any other provisions of the FNCRR 2021.
- ✓ Establish record keeping and financial reporting obligations.

The Department shall suspend the right and privilege of the CFMG to control, manage and utilize the CF upon the recommendation of the CFO, in the event of the following:

- ✓ The CFMG is unable to manage the community forest according to its management plan or otherwise fails to meet their responsibilities: and
- ✓ The CMFG has engaged in any activity in contravention of the provision of the act, Rules, by-laws or the management plan.

**Pakheygang- Community Forest Management Group members name list**

Sl no	Name	CID no	House no	Thram no
1	Migmar Dorji Tamang	11311000555	Pa-11-75	1078
2	Birkha Bdr Tamang	11311000631	Pa-11-81	209
3	Bhim Bdr Pakrin	11311000645	Pa-11-82	210
4	Nigma Dorji Tamang	11311000556	Pa-11-267	1013
5	Phurba Dorji Tamang	11311000558	Pa-11-268	1014
6	Dawa Dorji Tamang	11311000634	PA-11-265	770
7	Phurba Dorji Tamang	11311000636	Pa-11-350	772
8	Indra Raj Gholay	11311002484	Pa-11-77	185
9	Suk Bdr Tamang	11311000665	Pa-11-226	818
10	Kul Bdr Rai	11311001840	Pa-11-57	142
11	Prem Kumar Tamang	11311000672	Pa-11-84	181
12	Prakash Rai	11311000715	Pa-11-100	780
13	Mongal Dorji Tamang	11311000611	Pa-11-229	389
14	Lhakpa Dorji Tamang	11311000604	Pa-11-78	184
15	Nima Tamang	11311000616	Pa-11-79	221
16	Phurba Dolma Tamang	11311000708	Pa-11-87	199
17	Tashi Wangchuk	11311000505	Pa-11-163	264
18	Pemba Dorji Tamang	11311002527	Pa-11-74	179
19	Dhanlal Yonzon	11311000691	Pa-11-86	204
20	Dil Bdr Golay	11311000596	Pa-11-77	185
21	Nar Bdr Rai	11311001613	Pa-11-33	97

22	Kul Bdr Rai	11311001947	Pa-11-345	422
23	Asit Maya Zimba	11311000905	Pa-11-332	862
24	Prem Kumar Tamang	11311000603	Pa-11-254	511
25	Wangchuk Dorji Zimba	11311000661	Pa-11-83	208
26	Budhi Maya Zimba	11311000625	Pa-11-80	186
27	Ram Lal Tamang	11311002608	Pa-11-77	605
28	Passang Dorji Zimba	11311000657	Pa-11-nil/87	802