

WANGKHA RISUM COMMUNITY FOREST MANAGEMENT PLAN (1st Revision)



TOTAL AREA:	53 HECTARES
NO. OF H/H:	11
VILAGE:	WANGKHA
GEWOG:	BJABCHO
DZONGKAG:	CHUKHA

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

APPROVAL SHEET

DOFPS/SFED/SFS/2-2/2022-23/292 Dec 20, 2022

APPROVAL SHEET: WANGKHA RISUM COMMUNITY FOREST MANAGEMENT PLAN

Name of Community Forest	Wangkha Risum
Village	Wangkha
Chiwo	Wangkha
Gewog	Bjabcho
Dzongkhag	Chhukha
Production area (Hectare/Acre)	Ha
Protection area (Hectare/Acre)	Ha
Total Community Forest Area (Hectare/Acre)	53 Ha
Total CFMG Member (No. of HH)	11

	Community Forest Management Group	Forestry Representative (CFMP facilitator)	Gewog Administration	Social Forestry Section	Divisional/Park Office
Signature					
Name	Dorji Gyeltshen	Dany	Tashi	Pema Gyeltshen	Pema Wangda
Title	Chairperson ཡང་ཁ་རི་སུམ་གྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་ཀྱི་འཕུལ་ཁུངས་	Sr.FR II	Sr. FR II	SFES	Chief Forestry Officer

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

APPROVED BY:

DIRECTOR/DIRECTOR GENERAL
 DEPARTMENT OF FORESTS AND PARK SERVICES
 Ministry of Agriculture and Forests
 Thimphu : Bhutan

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ACRONYMS

AAC.....	Annual Allowable Cut
AD.....	Annual Demand
AHL.....	Annual Harvesting Limit
CF.....	Community Forest
CFMG.....	Community Forest Management Group
CFMP.....	Community Forest Management Plan
CFO.....	Chief Forestry Officer
DoFPS.....	Department of Forest and Park Services
FNCRR	Forest and Nature Conservation Rules and Regulations 2017
FO.....	Forest Officer
HH.....	Household
Nu.....	Ngultrum
RO.....	Range Officer
SFED.....	Social Forestry and Extension Division
SRF.....	State Reserved Forest

SUMMARY

The Wangkha Rigsum Community Forest Management Group is composed of heterogeneous ethnic groups from as far as Tashigang, Kurtoe and Zhemgang Dzongkhags unlike other Community Forest in Bjabcho Geog. The Community Forest was approved in 2013 with an area of 62 ha only to be managed by 15 households from the Wangkha village. The CF area is located above Thimphu-Phuntsholing National Highway nearby old Chhukha Check point. The revision was based on final monitoring and evaluation reports Annexure 6 and the application submitted by CFMG members for necessary renewal of CF management plan. As per evaluation report, all the activities in prescribed management plan were not implemented for entire period of 9 years as CF area falls in very high prone area for landslide. As a result the CF management decided not to extract any timber and awaited for 9 years to relocate the CF location. Still then CF management protected from illegal extraction by monitoring sometimes.

The Community Forest area relocated from south to north where there is less prone area for landslide and reduced the area from 62 ha to 53ha as most of the forest area with rugged terrain where not feasible for resources extraction later. The revised plan is based on forestry field manual for CF in Bhutan 2018 (3rd edition) with aligning its regulation norms with FNCRR 2017 and 2020 and Forest and Nature Conservation Act 1995.

The whole CF area covering all 53ha with an average basal area of 17.09m²/ha is made into three blocks namely Churalum with 18ha, GyemJangtey I with 20 ha and GyemJangtey II with 15ha respectively with a primary objective for protection and sustainable management of forest, fulfilling the annual requirement of members for house construction and fuel wood. The CF members will be constructing one new house and one house will be renovated in a year. The total annual timber demand is 23 numbers of Drashing for new constructions, renovation and other construction. 22nos. of Non-timber trees for fuel wood purposes annually.

The CF has an average Basal Area of 17.09 m²/ha. Annual Allowable Cut (AAC) calculation shows CF has a capacity to supply 73.73 numbers of forest produce ('T' and 'N' trees) annually from three blocks. However, the stock in the CF cannot meet the demand of CFMG for flag post and fencing post, still then CFMG can substitute fencing post with inferior timber size trees and avail flag post from SRF during the plan period.

The revised plan included the protection of CF from illegal harvesting & improvement of forest conditions by removal of diseased and un-preferred trees for fuel wood and other construction. Further to improve the quality of stand, thinning operations and bushes clearing will be carried out in production areas.

1. Community Forest Management Plan

1.1. Introduction

The Department of Forest and Park Services has accorded approval for 62ha of SRF land to be managed as Community Forest by 15 households from Wangkha village. However, during the revision, the 4 households have voluntarily resigned from CFMG due to their personal obligations. With the maximum coverage of rugged terrain and land slide prone area the Community Forest area is reduced from 62ha to 53 ha. The whole CF area is divided into three blocks namely Churalum with 18 ha, Gyemjantey I with 20ha and Gyemjantey II with 15ha respectively. The CF is located 100-200 meter above the Thimphu-Phuntsholing National Highway.

The villagers had been practicing subsistence farming and were mostly dependent on agriculture, livestock and forestry activities. Their main cash crops are maize, potatoes, chilli and other vegetables. The communities mainly depend on farming system with Agriculture, Livestock and Forestry playing a vital role in sustaining their daily livelihood. Nevertheless, the community's livelihoods are mainly supported by agricultural farming. Unlike other CFMG groups about 60% of the Community members depended mainly on road side business like taking up mini-farms, shops and bars and only remaining 40% depend fully on agricultural and livestock rearing activities. The basic facility such as farm road, electricity and mobile services are provided. With the coming of development activities like easy accessibility, the community witnessed the pressure on the forest which contributed in realizing the need to review their community forest and claiming the ownership of CF products.

By nature of forest the Wangkha Risum community forest is located in warm-broad leaved forest, it is very rich in Non-Wood Forest Products (NWFP) like Ferns (Nakey & Toenkey), Patsa (*Plectocomia* spp), Namna, Damru and many different varieties of orchids. The Wangkha Risum Community Forest covers total area of 53 ha of GRF without any Tsamdruk (grazing land), Sokshing (land designated for leaf litter collection) or private land. The whole 53ha CF area is divided into three blocks to avoid stream and very steep rugged areas for proper management by only 11 household.

The CFMGs has generated only a minimal income of Nu.15000/- (Fifteen thousand) only through annual fees and fines for members not being able to attend the meeting and works. As short of fund for CF management the members decided to raise the annual fees, absentees' fines and royalty for timber and other forest produces.

Based on the urgent need of CF area relocation as appealing frequently by CFMG, the revision exercise was carried out by the Division and Range staff in June, 2022. The CF has a total area of 53ha with a basal area of 17.09m²/ha. The Wangkha Rigsum CF composes of warm-broadleaved forest. The species found are Dhongday (*Quercus* spp), Dhomshing (*Symplocos* spp.) Khashing, Walnut, Kawla, Tsenday, Taap, Chalam and Chamtsey as dominant

species. The forest is also habitat for Wild boar, Bear, Deer, Monkey, Wild pig, Procupine and birds like Monal pheasant etc.

The CFMG have agreed to be guided by the following sustainable and harvesting of forest products from CF areas:

1. Protection from outsiders
2. Conservation and Protection of water sources
3. Conservation and Protection of Wild Life habitat
4. Sustainable utilization of forest resources
5. Income generation through sale of excess timber in future.

1.2. Community Forest Boundaries

The CF boundaries are clearly demarcated and marked on the permanent features to ascertain the CF boundary for monitoring of encroachment into CF and out of CF. The detail boundary is explained in the table I below:

Table 1 : Community Forest Boundaries

Boundaries	Permanent features
East	GyemJangte Ju
West	GyemJangtey Lum
South	TsechuDolayLamtag –TsechuDolay Toe
North	GyemJangtey Toe

Table 2: Social Information

Specification	Description
Name of the villages	Wangkha
Ethnic groups with CFMG	Bhutanese
Basic amenities	National highways, access road, rural water supply, electricity, mobile network
Total household (HH) number of CFMG	11
Population	75
%male and %female	37.33%M, 62.67% F
Main source of income	Dairy and poultry farming and off farm activities
Main crops	Maize and vegetables
Cropping pattern	Mix Farming
Any other information	

1.3. Location map of CF

The CF location in relation to its beneficiary settlements are given in the google map. The map showed the detail location of CF area.



Figure 1: CF Location Map

1.4. Land use map of CF

The land use map showing the total CF area of 53ha with majority area covered with warm broadleaf forest.

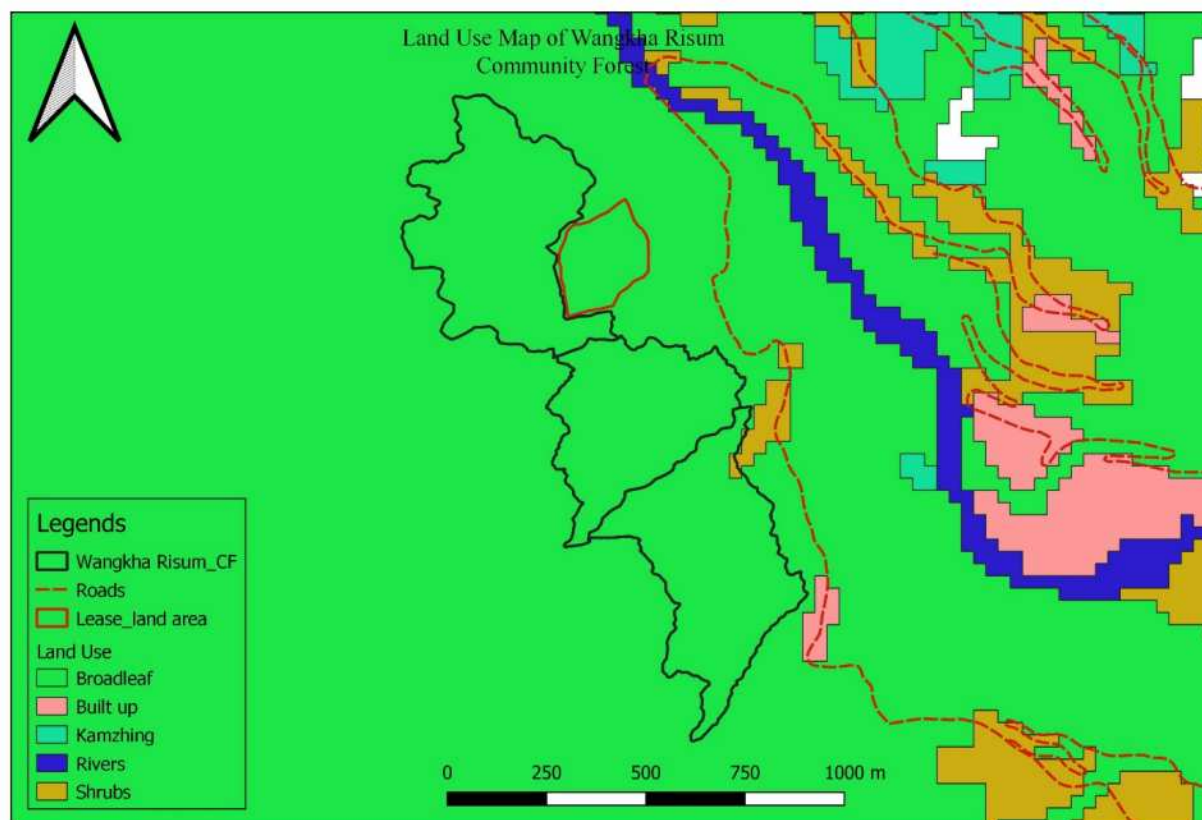


Figure 2: Land use map of CF

1.5. Forest information over whole block

WangkhaRigsum CF has an area of 53 ha and it is divided into three blocks viz. Block I Churalum with 18ha, Block II GyemJantey 1 with 20 ha and Block III GyemJantey II with 15 ha respectively. The main vegetation type of the block is warm broadleaved forest comprising main tree species such as Dhomshing (*Symplocus spp.* and Dhongday (*Quercus spp.*)

The prominent wild animals present in CF areas are, wild pig, Deer, monkey, Serow and birds.

1.5.1. Block I: Churalum

Table 3: Forest Resource Assessment (Block I)	
Name of Community Forest	WangkhaRigsumCommunity Forest
Date of Assessment	7/06/2022 to 8/06/2022
Name of block	Churalum
Block area	18ha
Basal Area	27.38m ² /ha
Name of recorder	KelzangJurmey

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

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

b. Forest Condition			
Write the names of the 3 main tree species			
Local name		Scientific name	
(Dz):Sokay		<i>Castanopsis spp.</i>	
(Dz): Deyshing.		<i>Daphne phyllum</i>	
(Dz),Shagu shing		<i>Persia spp.</i>	
(i) Plantation			
Is there any Yes plantation? No <input checked="" type="checkbox"/>		Approximate 2 meters height of planted trees (m)	
Year planted		Is the plantation? Under stocked <input type="checkbox"/> Stocked <input type="checkbox"/> Overstocked <input type="checkbox"/>	
(ii) Forest Condition –Age			
Mature <input checked="" type="checkbox"/> Main canopy of mature trees	Pole stage 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
(iii) Forest Condition - Canopy density			
Dense <input checked="" type="checkbox"/> Canopy density > 70%	Open <input type="checkbox"/> <input checked="" type="checkbox"/> Canopy density < 70%	Very open <input type="checkbox"/> No real canopy. Isolated trees only	

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

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

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

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

d. Open spaces	
Approximate total open space area (ha)	0.5ha
Dominant vegetation type in the open space	<i>Brassiopsisspp</i>
Cause of open space e.g. grazing, fire, harvesting, etc.	Timber and firewood harvesting

e. Grazing and fodder				
Grassland type				
Natural <input type="checkbox"/>	Man-made <input type="checkbox"/>	Mixture <input type="checkbox"/>	Predominantly forest <input checked="" type="checkbox"/>	
Main fodder species being used				
Local name		Scientific name		
Challam (Dz.), Acer (Eng)		<i>Acer spp.</i>		
Tapshing (Dz.)		<i>Betula spp.</i>		

Pasture quality		
Local name	Scientific name	Palatable/unpalatable
	<i>Chimonobambusacallosa</i>	Palatable
	<i>Solonum spp.</i>	Palatable

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

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

g. Fauna	
Local name	Scientific name
Shaw (Sambar)	<i>Cervus unicolor</i>
Dhom (Dz), Himalayan black bear (Eng.)	<i>Ursus thibetanus laniger</i>
Ka sha (Dz) Barking deer (eng)	<i>Muntiacus muntjak</i>
Jha(Himalayan Sero)	<i>Capricornis sumatraensis thar</i>

h. Biotic Pressures (underline those present and level of severity)			
Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
Shrub layer	Dense	moderate	absent
Fodder collection	Common	limited	absent
NWFP collection	Common	occasional	absent
Leaf litter collection	Common	limited	absent
Encroachment	Common	occasional	absent
Pole harvesting	Common	occasional	absent
Fuel-wood harvesting	Common	occasional	absent
Timber harvesting	Common	occasional	absent
Hunting	Common	occasional	absent
Others (describe)			

i. Management options	
1	Thinning and removal of unwanted spp to promote the growth of young stand
2	Reduce continuous harvesting of timber and firewood to regain its stock capacity by following AHL and ACC strictly
3	Regular patrolling and monitoring are required against illegal harvesting of timber and NWFPs
4	

Block II: GyemJangtey I

Table 4: Forest Resource Assessment (Block II)	
Name of Community Forest	WangkhaRigsum Community Forest
Date of Assessment	7/06/2022 to 8/06/2022
Name of block	GyemJangtey I
Block area	20 ha
Basal Area	17.69m ² /ha
Name of recorder	Bhudha Singh Tamang and Pema Gyeltshen

a. Forest & Habitat Type

Forest	<input checked="" type="checkbox"/>	Thicket/pole stage	Shrubland	<input checked="" type="checkbox"/>
Grassland	<input type="checkbox"/>	Plantation	Other	<input type="checkbox"/>
Vegetation type				
Subtropical forest	<input type="checkbox"/>	Chir pine forest	Warm broadleaved forest	Blue pine forest
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cool broadleaved forest		Mixed conifer forest	Fir forest	Other
		<input type="checkbox"/>	<input type="checkbox"/>	<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 metres tall but greater than 30cm tall
Seed trees	Mature trees with healthy crowns capable of producing flowers and seed
Soil Cover	The percentage of the area with soil surface covered either by live vegetation or a layer of other plant vegetation

b. Forest Condition	
Write the names of the 3 main tree species	
Local name	Scientific name
(Dz):Sokay	<i>Castanopsis spp.</i>
(Dz):Deyshing.	<i>Daphne phyllum</i>
(Dz),Thomshing	<i>Quercus spp.</i>
(i) Plantation	
Is there any Yes	Approximate 2 meters

plantation?	No	✓	height of planted trees (m)
Year planted	Is the plantation? Under stocked <input type="checkbox"/> Stocked Overstocked <input type="checkbox"/>		
(ii) Forest Condition – Age			
Mature	Pole stage	✓	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
(iii) Forest Condition - Canopy density			
Dense Canopy density > 70%	Open <input checked="" type="checkbox"/> Canopy density < 70%	Very open <input type="checkbox"/> No real canopy. Isolated trees only	

(iv) 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>Dhapnephyllum</i>	2) <i>Quercus spp.</i>	3) <i>Schema wallichiaspp</i>
Regeneration: Seedlings > 30cm and < 1.3m height		

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

Block Condition Summary			
Use the forest condition class box below to get an average condition for the block			
Poor <input type="checkbox"/>	Average <input type="checkbox"/>	Good <input 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"/>	

Forest Condition				
Age	Canopy density	Regeneration & coppice	Seed tree class	Condition
Mature	Dense	Abundant		Very good

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

d. Open spaces	
Approximate total open space area (ha)	0.5ha
Dominant vegetation type in the open space	<i>Dhapnephylum, Schimawallich</i> <i>and Quercus spp</i>
Cause of open space e.g. grazing, fire, harvesting, etc.	Timber and firewood harvesting

e. Grazing and fodder				
Grassland type				
Natural <input type="checkbox"/>	Man-made <input type="checkbox"/>	Mixture <input type="checkbox"/>	Predominantly forest	<input checked="" type="checkbox"/>
Main fodder species being used				
Local name		Scientific name		
Challam (Dz.), Acer (Eng)		<i>Acer spp.</i>		
Omshing (Dz.)		<i>Ficus spp</i>		
Tapshing (Dz.)		<i>Betula spp.</i>		

Pasture quality		
Local name	Scientific name	Palatable/unpalatable
Bamboo	<i>Salix spp</i>	Palatable
	<i>Solonum spp.</i>	Palatable

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

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

g. Fauna	
Local name	Scientific name
Phap (Dz), wild pig (Eng.)	<i>Sus scrofa</i>
Dhom (Dz), Himalayan black bear (Eng.)	<i>Ursus thibetanus laniger</i>
Bja (Dz) Goral (Eng.)	<i>Naemorhedus goral</i>
Ka sha (Dz) Barking deer (eng)	<i>Muntjack</i>
Shaw(Dz) Sambar (eng)	<i>Axis axis</i>

h. Biotic Pressures (underline those present and level of severity)			
Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
Shrub layer	Dense	moderate	absent
Fodder collection	Common	limited	absent
NWFP collection	Common	limited	absent
Leaf litter collection	Common	limited	absent
Encroachment	Common	occasional	absent
Pole harvesting	Common	occasional	absent
Fuel-wood harvesting	Common	occasional	absent
Timber harvesting	Common	occasional	absent
Hunting	Common	occasional	absent
Others (describe)			

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

i. Management options	
1	Thinning and removal of unwanted spp to promote the growth of young stand
2	Reduce continuous harvesting of timber and firewood to regain its stock capacity by following AHL and ACC strictly
3	Regular patrolling and monitoring are required against illegal harvesting of timber and NWFPS
4	

Block III: GyemJangtey II

Table 5: Forest Resource Assessment (Block III)	
Name of Community Forest	WangkhaRigsum Community Forest
Date of Assessment	7/06/2022 to 8/06/2022
Name of block	GyemJangtey II
Block area	15 ha
Basal Area	6.205m ² /ha
Name of recorder	Penden Tshering and Dargay

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

broadleaved forest	conifer forest			
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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 metres tall but greater than 30cm tall
Seed trees	Mature trees with healthy crowns capable of producing flowers and seed
Soil Cover	The percentage of the area with soil surface covered either by live vegetation or a layer of other plant vegetation

b. Forest Condition			
Write the names of the 3 main tree species			
Local name	Scientific name		
(Dz):Sokay	<i>Castanopsistribulodes</i>		
(Dz): Deyshing.	<i>Daphne phyllum</i>		
(Dz),Shagu shing	<i>Persia spp.</i>		
(i) Plantation			
Is there any Yes plantation? No ✓	Approximate height of planted trees (m)	2 meters	
Year planted	Is the plantation?	Under stocked <input type="checkbox"/>	
		Stocked	
		Overstocked <input type="checkbox"/>	
(ii) Forest Condition –Age			
Mature ✓	Pole stage	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
(iii) Forest Condition - Canopy density			
Dense <input checked="" type="checkbox"/> Canopy density > 70%	Open <input checked="" type="checkbox"/> Canopy density < 70%	Very open <input type="checkbox"/> No real canopy. Isolated trees only	

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

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

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

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

and young growth	Dense	Low	Low	Average
	Open	Moderate	Low	Poor
Any	Very open	None	Low	Poor

d. Open spaces	
Approximate total open space area (ha)	0.5ha
Dominant vegetation type in the open space	<i>Erythrianaspp</i>
Cause of open space e.g. grazing, fire, harvesting, etc.	Timber and firewood harvesting

e. Grazing and fodder	
Grassland type	
Natural <input type="checkbox"/>	Man-made <input type="checkbox"/> Mixture <input type="checkbox"/> Predominantly forest <input checked="" type="checkbox"/>
Main fodder species being used	
Local name	Scientific name
Challam (Dz.), Acer (Eng)	<i>Acer spp.</i>
Tapshing (Dz.)	<i>Betula spp</i>
	.

Pasture quality		
Local name	Scientific name	Palatable/unpalatable
Bamboo	<i>Salix spp</i>	Palatable
	<i>Solonum spp.</i>	Palatable

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

<10°	Gentle	<input type="checkbox"/>
10° – 30°	Moderate	√
> 30°	Steep	<input type="checkbox"/>
Catchment Condition Summary		
Less critical	√	Moderately critical <input type="checkbox"/> Highly critical <input type="checkbox"/>

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

g. Fauna	
Local name	Scientific name
Dhom (Dz), Himalayan black bear (Eng.)	<i>Usus thibetanus laniger</i>
Barking Deer	

h. Biotic Pressures (underline those present and level of severity)			
Fire	Common	occasional	absent
Grazing	Heavy	limited	absent
Shrub layer	Dense	moderate	absent
Fodder collection	Common	limited	absent
NWFP collection	Common	limited	absent
Leaf litter collection	Common	limited	absent
Encroachment	Common	occasional	absent
Pole harvesting	Common	occasional	absent
Fuel-wood harvesting	Common	occasional	absent
Timber harvesting	Common	occasional	absent
Hunting	Common	occasional	absent
Others (describe)			

i. Management options	
1	Thinning and removal of unwanted spp to promote the growth of young stand
2	Reduce continuous harvesting of timber and firewood to regain its stock capacity by following AHL and ACC strictly
3	Regular patrolling and monitoring are required against illegal harvesting of timber and NWFPs

Table 6: Forest Produce Ranking

Products/services	Timber	Firewood	NWFP	Flag post	Leaf litter	Water	Fencing post	Grazing
Timber	x							
Firewood	Firewood	x						
NWFP	Timber	Firewood	x					
Flag post	Timber	Firewood	Flag post	X				
Leaf litter	Timber	Firewood	NWFP	Flag post	x			
Water	water	water	water	water	water	x		
Fencing post	Timber	Firewood	NWFP	Flag post	Leaf litter	water	x	
Grazing	Timber	Firewood	Fencing post	Flag post	Fencing post	water	Fencing post	x
Total	5	6	2	4	1	7	1	0

Ranking result: 1st=water (7), 2nd=Firewood (6), 3rd=Timber (5), 4th=flag post (4), 5th=Fencing post (2), 6th=Grazing(0)

Table 7: Species Preference Ranking

Species	Uses	Drashing	Tsim	Fencing posts	Firewood	Flag post	Dangchu ng	Furniture
Toona spp	Preference	Xxx	o	o	o	o	o	xx
	Availability	**	o	o	o	o	o	xx
Chem nam	Preference	xxx	x	x	x	o	o	xx
	Availability	***	oo	*	**	x	o	o
Schimawalichi	Preference	xx	xx	xxx	o	o	o	xx
	Availability	xx	x	xx	xx	o	o	o
Neolitisea(Kom to shing)	Preference	xxx	o	xx	xxx	o	x	o
	Availability	xxxx	o	xxx	xx	o	o	xx
Magnolia	Preference	xxxx	o	xxx	x	x	xx	xxxxx

spp(Khashing)	Availability	xxx	o	o	o	o	o	xx
Quercus spp	Preference	o	o	o	xxxxx	xx	xx	o
	Availability	xxx	x	o	xxx	xx	xx	xxx
Betulaspp	Preference	xxx	o	o	o	xx	xx	xxxx
	Availability	xxxx	xx	o	o	xx	xx	xxxx
Symplocusspp	Preference	o	xxxxx	xxxx	xx	xxx	xxxx	o
	Availability	o	o	o	o	0	x	o
walnut	Preference	o	o	o	o	o	o	xxxxx
	Availability	o	o	o	o	o	o	xxxxx

Note: symbols to show rating:

xxxxx-high preference

x-low preference

*****-highly available

*-less availabl

Table 8: Forest Produces Demand Assessment

Produce	Annual requirement (estimated)		Number of HH that require produce annually ©	Total requirement of theproduce (Annually)		Total requirement of the produce in 10 years	
	Number (A)	Volume (in cfts) (B)		Numbe r (A*C)= D	Volume (in cfts) (B*C)=E	Numbe r (D*10)	Volume (in cfts) (E*10)
For new construction							
Drashing	18		1	10		180	
For renovation							
Drashing	3		1	10		30	
For other construction (cowshed, toilet, etc., kitchen, store-house)							
Drashing	1		2	10		20	
For other produce							
Firewood	2		11	10	...	220	
Fencing posts	1		2	10		10	1 drashing in lieu of 50nos of fencing post
Flag posts	108		1	10		1080	
Lungdhar	5		7	10		350	
Mushroom Billets	5000 billets		1	10		50000	

Table 9: AAC vs Demand Assessment

Produce	Total AAC		Total Annual Demand		Difference		Comments
	Number of trees	Volume (in cfts)	Number of trees	Volume (in cfts)	Number of trees	Volume (in cfts)	
Drashing	28	3016.61	23		5		Excess
Cham	6	133.84	0		6		Excess
Firewood	40	2080.76	26		14		Excess
Fencing posts	45	482.76	100		-55		Insufficient can be

							adjusted from Drashing and cham
Flag posts	26	74.87	143		-117		Insufficient can be avail from SRF

Note:-All the above excess timber shall be sold to other stakeholders as per the management plan.

Table 10: Climate Hazard Assessment

Climate Hazard Matrix						
	Landslide	Flood	Drought	Animal diseases	Human Wildlife conflict	Reduced crop yields
Landslide	x	Landslide	Landslide	Landslide	Human Wildlife Conflict	Reduced crop yields
Flood		x	Drought	Animal diseases	Human Wildlife Conflict	Reduced crop yields
Drought			x	Animal diseases	Human Wildlife Conflict	Reduced crop yields
Animal diseases				x	Human Wildlife Conflict	Human Wildlife Conflict
Human Wildlife conflict					x	Human Wildlife Conflict
Reduced crop yields						x

Result: 1st=Reduced crop yield (5), 2nd=Human Wildlife Conflict (4), 3rd=Landslide (3), 4th=Animal diseases(2), 5th=Drought (1)

Table: 11 Environmental Assessments

Environmental Assessment								
Activity proposed in CFMP	Potential Environmental Effects				Potential Socio-Economic Effects			
	soil	water	Wild animals	plants	Traditional forest use	Cultural and religious	Local employment	Local benefits from forest produce
Plantation establishment	++++	+++++	++++	++	+	-	++++	++++
Timber harvesting	-----	---	---	+++ +	-	-	++++	++++
Grazing Control	+++	++++	+++	++++	0	0	-	0
NWFP collection				++	0	0	+	+++
Forest protection	+++	+++	+++	++++	+++	-	+	++
Soil and water conservation activities	+++++	+++++	+++++	++++	++	+	+++	+++
Bush clearing(thinning operation)	-	--	---	+++ +	0	0	++	+++

1.6. Overall Forest management objectives

1. Protection from outsiders
2. Conservation and Protection of water sources
3. Conservation and Protection of Wild Life habitat
4. Sustainable utilization of forest resources
5. Income generation through sale of excess timber in future.

Table 12: Procedure to address potential negative effects

Activity	Procedures
Firewood harvesting	-Harvesting of firewood >45° slope gradient should be restricted -Avoid harvesting of fuel wood along farm road and stream buffers
Timber harvesting	-Harvesting of timber near spiritual or cultural heritage sites should be restricted -Avoid harvesting of timber along stream, farm road and transmission line buffers

NWFP collection	Illegal harvesting of <i>Paris polyphylla</i> should be restricted to both the CFMG members and outsiders
Forest protection	-Protection of CF from illegal harvesting, wildlife poaching, stone or boulders transit and NWFPs collection by outsiders.

1.7. Participatory Monitoring Plan

Table 13: Participatory Forest resources impact monitoring plan

Activity	Indicator	How it will be monitored	Responsibility	Comments
Protect CF from illegal harvesting and poaching of wild animals	Number of illegal cases reduced	Regular patrolling and monitoring of CF	Resoop and CFMG members	-do-
Promote growth of young stand	Thinning of trees following silvi-culture practices once in a year done	Area of forest covered under silviculture operation	CFMG members	-do-

Table 14: Participatory social and institutional impact monitoring plan

Activity	Indicator	How it will be monitored	Responsibility	Comments
Sanctioning of loan for CFMG members	Number of households benefited	Refers to fund management book	CFMG members with forest officer	Carry out during loan repayment meeting
Resource allocation based on equity	Number of single headed women or disadvantaged households benefited	Records in CF utilization book	CF management committee	Monitor by concerned forest officer
Revision of socio-economic survey	Number of single headed women and disadvantaged households included	Participatory review meeting	CF management committee and concerned forest officer	Refers to socio-economic survey sheet
CFMG general meeting	Number of CFMG members attended	Refers to meeting	CF management committee	Monitor by concerned

		minutes & attendance register		forest officer
CF management committee meeting	Number of women elected as CF management committee members	Refers to CF management committee name list	CFMG members are responsible for the election of committee members	-do-

Table 15: Participatory environment impact monitoring plan

Possible negative impact	Indicator	How it will be monitored	Responsibility	Comments
Damage of CF through excessive harvesting	Area of CF damaged	Carry out salvage operation assessment	CFMG members	Support by concerned forest officer

Table 16: Annual Workplan

Objective	Activity	Year									
		1	2	3	4	5	6	7	8	9	10
Protection from outsiders	CF Boundary demarcation	Block I II& III									
	Patrolling in CF areas	In all the blocks									
Improvement in seedling growth.	Initiate bush clearing or thinning activities		Block I	Block II	Block III						
Conservation and Protection of water sources	Avoid marking in stream buffer and landslide prone area	In all the blocks									
Income generation through sale of excess timber in future.	Sale of excess timber, fuelwood and NWFPs										
Conservation and Protection of Wild Life habitat	Participatory patrolling	In all the block									
Sustainable utilization of forest resources	Silvicultural operation activities	Selection system will be followed for marking in all the blocks									

1.8. Monitoring, review and evaluation

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

The annual work plan and progress report of the CF shall be submitted to the concerned forest officer based on Annexure 2 format 1. The monitoring of CF activities and maintaining of the records should be carried by concerned forest officer jointly with CF management committee. A mid-term review shall be carried out at the last quarter of the 5th year plan period and the final at the last quarter of the 9th year plan period. The review and final evaluation report shall be based on Annexure 6 from forestry field manual for Bhutan 2018 (3rd edition).

1.9. CF Networking

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

2. Community By-Laws

2.1. CFMG membership

- i. The revised CF bylaws supersedes all sections of 2013 CF by-laws however the name of CF remains unchanged (Wangkha Risum CF).
- ii. The name of the CFMG shall be known as Wangkha Risum Community Forest Management Group.
- iii. The management group comprises of 11 from Wangkha village.
- iv. It shall come into effect after the formal approval by the Department of Forest and Park services.
- v. Any new members within the CFMG due to family nuclearization willing to join in CF are allowed with paying Nu.5000 and in addition he/she should pay daily wages, Government rate (both meeting and field work) as entry fee. They shall be accessed for any forest product rights from the date of joining as CFMG. They can join the group at any time.
- vi. Non-member who purchased the land and settled in the village with his/her own legitimate gung & thram shall be allowed to join the membership upon payment of Nu.15000.00 as entry fee and in addition he/she should pay local daily wages (Nu.1000) (both meeting and field work) amounting to the numbers had worked till date. But only allowed to join the membership after midterm review.
- vii. A copy of new membership application should be forwarded to concerned forest officer for necessary updating of the membership list.
- viii. All enrollments of new CFMG members shall be done only after consulting the existing CFMG members during the time meeting.

2.2. Withdrawal of membership.

- i. Any members wishing to withdraw their membership can do so after prior approval of CF Chairperson, with the written application and withdrawal fee of Nu. 10,000.00 (Ten Thousand) only if he has not availed timber. He/she has to pay Nu.20, 000 as withdrawal fee incase has availed timber. No benefits shall be paid for those leaving the group in any form but allowed to rejoin the CFMG during midterm review with entry fee of Nu 50,000(Fifty thousand) only and in addition has to pay local daily wages Nu.1000.
- ii. The committee members are allowed to serve for 5 years if he /she is not interested to serve as committee member without any benefits but they will remain as CFMG members.
- iii. A copy of resignation of membership application should be forwarded to concerned forest officer for necessary updating of the membership list.

2.3. Composition of committee members

The Committee members were selected amongst the member based on the qualification and experience by the members during CF planning meeting in presence of forestry officials.

- i. Committee comprises of Chairperson, Secretary, Treasurer and another two Resoops to oversee the day-to-day activities of the CF.
- ii. The terms of committee members shall be for 5 years. The same person can be re-elected if the service rendered by him/her is found satisfactory by the members or else can be subject to termination even before the term is complete on disciplinary ground.

Table 17: Name list of CF management committee

Sl No	Name	Contact Numbers	Sex	Designation	Tenure
1	Mr. Dorji Gyeltshen	77789355		Chairman	5
2	Mr. Rinzin	17809552		Secretary	5
3	Mr. PassangBhida	17644183		Accountant	5
4	Mr.YoezerGyem	17389659		Resoop	1
5	Mr.Drukpa	77466310		Resoop	1

2.4. Election of the committee members

The CF management committee will be elected among CFMG members every after 5years. However, they can be terminated and the election shall be carried out through unanimous decisions of the group. The election will be conducted during general meeting in the presence of concerned forestry officer.

2.5. Annual compensation for Management Committee members.

Committee Management Members viz Chairperson, Secretary and accountant will be provided with an annual incentives of Nu. 500.00 (Five Hundred) only for their services rendered to CFMG, however committee members will be also provided DSA Nu.1000 and mileage for travel within Geog and out of Geog for community forest related task only.

For Resoops lump sum marking fees of Nu.500/-per permit holder shall be paid during the time of marking regardless of any products by the permit holder.

2.6. Eligibility of the management committee members

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

- i. He/she should be the legal member of the CFMG
- ii. He/she should be able to read and write
- iii. Preference will be given to experience members
- iv. He/she should be mentally sound

- v. He/she should be 18 years and above and below 65 years of age
- vi. He/she should be living in the village permanently

2.7. Terms of Reference for CF Management Committee.

Sl. No	Title	Rights and Responsibilities
1	Chairperson	<ol style="list-style-type: none"> 1. Plan and initiate CF activities. 2. Coordinate meetings. 3. Report progress of the Community Forest. 4. Issuance of permit and maintenance of CF books. 5. Sign joint accounts for transaction. 6. Monitor CF fund utilization. 7. Overall monitoring of CF activities as per the plan and reporting. 8. Sanction loans. 9. Work as per the Community Forest Management plan.
2	Secretary	<ol style="list-style-type: none"> 1. Assist Chairperson in his/her absence and coordinate the work. 2. Minute keeping 3. Sign on permit together with Chairperson as required in the permit. 4. Sign joint accounts for transaction. 5. Crosscheck Community Forest fund utilization. 6. Sign the loan sanction letter. 7. Respect the bylaws framed here in this management plan.
3	Treasurer	<ol style="list-style-type: none"> 1. Maintain cash book and report Community Forest fund annually to Forest office. 2. Receive fines and penalties and deposit into CF accounts. 3. Keep detail accounts of the CF funds. 4. Withdraw and deposit of funds. 5. Sign the loan sanction letter. 6. Respect the bylaws framed here in this management plan. 7. Work as per the Annual Work plan of this management plan.
4	Resoops	<ol style="list-style-type: none"> 1. He/she has the right to patrol the CF area and report any illegal activities taking place in the CF areas. 2. He/she has the right to question any member for CF product utilization. 3. He/she be rewarded with the 25% of the amount in case if they apprehend any culprit

		4. Assist the marking officer during marking and ensure the sanitation of the forest after the extraction.
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2.8. Procedure for leaving the Committee

- i. The chairman, secretary and treasurer are not allowed to leave their post for a period of 5 years. However, he/she will be allowed for the genuine reasons like death case, long term sickness, etc. with the submission of application to CFMG members. The approval is accorded only after the election and replacement of his/her post with the proper handing taking of CF accounts, properties and records based on Annexure 15. The same shall be applied to rest of the committee members.
- ii. A copy of handing taking charge sheet note along with a name list of newly elected members should be submitted to the concerned forest officer for necessary information and updating the records.

2.9. Roles and responsibilities of CFMG members

All the CFMG members must have following responsibilities:

- i. Every individual has to participate in the CF related activities and has equal rights to access over the resources;
- ii. The equity and justice among members shall be maintained instead of focusing on equal share;
- iii. Every individual shall have equal opportunity to elect the management committee members and shall have rights to speak and share concerns and suggestions;
- iv. Each individual is responsible to inspect, verify and report illegal activities to the management committee and or to forestry officer;
- v. Everyone has equal opportunity to hold the post of management committee if he/she fulfills the above eligibility criteria;
- vi. The members shall have rights and access to CF accounts and auditing the documents;
- vii. The every CF members shall support committee members for waste management. In case found CF members or outsiders littering in the CF shall fine Nu.100/- per head per occasion.

2.10. Benefit sharing mechanism

- i. The resource sharing shall be based on equity and the primary priority will be given to the members who do not have a house to live in or affected by disaster;
- ii. The Quantity of timber to be allotted and the number of applicants is clearly prescribed in the management plan by comparing the AHL and the Demand assessment.
- iii. No timbers trees will be granted free of cost. The permit shall be issued for each produce at the prescribed rate to generate adequate revenue/income for the group.
- iv. The secondary priority shall be given to single headed women;

- v. The timber granted for rural house construction shall be strictly prohibited for commercial sale and if any members are being found in such activities shall be guilty of an offence and dealt as per FNCRR 2017 and FNCRR, 2020 and FNCA 1995.
- vi. Timber shall not be entertained for exchanging or borrowing among members and outsiders;
- vii. The transit of timber shall be restricted to the concerned village only and shall not be allowed to reach at any construction sites, hotels and restaurants in the urban areas or along national high way;
- viii. The CFMG shall not contribute timber for any community constructions like the construction of community temple, school or BHU, etc. in the village if there is external fund support, however, timber may be allotted considering the AAC in their prescribe management plan;
- ix. The committee members should ensure all the revenues generated are properly recorded and all the group members of the CF are well informed. This will ensure free and fair benefit sharing later.
- x. No single person should take advantage and try to derive individual benefit from the group's hard-earned funds.
- xi. Every single produce that are supposed to go out of the Community Forest area should be declared to group members. The committee members together with representative from forestry department should ensure that this happens at any cost.
- xii. Every forest produces in Community Forest areas shall be supplied to community members only after realization of royalty at prescribed rate in this management plan.
- xiii. Fuel wood shall be met from the lops and tops and deformed tree as far as possible for firewood, if there are no dry woods.
- xiv. Benefit sharing will be just and fair and the committee members together with concerned forestry officials should make sure this to happen by any means.
- xv. Loan will be dispersed to interested individuals who wish to obtain it with the minimum interest rate of 9 % per annum.
- xvi. Water resources; individuals or institutions can use the water resources from CF areas upon payment of minimum monetary incentives to the CFMG which is agreed by both the parties.

2.10.1. Timber

- i. Members are entitled for timber as per the prescribed CF plan for construction of rural house and for other rural purposes;
- ii. The Chairman shall grant and allot permit for rural house construction from CF areas only if CF member submits rural house construction approval from concerned authority;
- iii. The management committee shall review applications and approve or reject the application based on the above section 2.7.1(ii) and supporting documents indicating requirement of timbers;

- iv. The priority shall be given to the members who have no proper houses or the houses which were affected by the disaster;
- v. The renovation or other construction purposes also have to submit the application to the chairman; however, the construction approval is not required;
- vi. The permit validity shall be 2 years from the date of issue of permit, after which the applicant should renew the permit and extend the dateline if collection and transit of timber is not completed.
- vii. The permit will be extended only for a period of 1 year upon payment of royalty. Failure to extract the timber on extended period will lead to allotment of timber to other needy individuals.
- viii. Members are eligible to apply for the second quota for new construction or renovation purposes as per the FNCRR 2017 and FNCRR, 2020.

2.10.2. Fuel wood

- i. Members are allowed to collect standing tree dry firewood paying royalty;
- ii. Each member shall be given with two standing trees as firewood every year.
- iii. Firewood shall be sometimes met from lops and tops or twigs/branches from timber harvesting & thinning operations with no obtaining collection permit.
- iv. Firewood allotment shall be focused on non-timber species;
- v. Outsiders shall not be entertained to collect any firewood from CF areas;

2.10.3. Fencing posts

- i. All CFMG members are entitled to get fencing posts based on their genuine cases;
- ii. Fencing posts shall be allotted with the maximum ceiling of 50nos./ head or one Drashing in lieu of 50nos.of fencing posts.
- iii. Timber species shall not be entertained for fencing posts;
- iv. Fencing posts can be sometimes met from bush clearing & thinning operation of CF block;
- v. Only malformed, diseased or inferior species should be allotted for fencing posts;
- vi. Outsiders are not allowed to harvest any fencing posts;

2.10.4. Grazing in CF areas

- i. Grazing shall be permitted but restricted inside plantation areas;
- ii. Outsiders are not allowed to graze their animals within the CF area;
- iii. Owner of the livestock should pay for damaged seedlings Nu.50/seedling.

2.10.5. Non-wood Forest Product

- i. Collection of *endangered NWFP species* shall be restricted to both CFMG members and outsiders if found in CF areas;

- ii. Collection of mushroom or other NWFPs for self-consumption will be allowed without any royalty;
- iii. Members are allowed to collect leaf litters or top soil free of royalty;
- iv. Stones or boulders collection will be met from SRF land as there are no surface collection sites in the CF area;
- v. Selling of NWFPs shall be permitted in a group but not as individual member;
- vi. Outsiders are not allowed to collect any leaf litters, top soil or NWFPs from CF area;

2.10.6. Loan disbursement procedures

CFMG member can avail the maximum loan amount decided by committee members as per the RMA norms. The decision shall be made by 2/3 majority of the CFMG members during general meeting;

- The treasurer shall maintain all the expenditure records like receipts, vouchers, bills, minutes of meeting, etc. All such expenses should be recorded to cash book immediately;
- The treasurer shall present the details of expenditure to the CFMG members and concerned inspection team as and when required;
- The concerned forest officer shall ensure the compliance of above provisions;

2.10.6 (a): CFMG fund for loans and its procedures

The CFMG can allocate fund for loaning not more than 50% of the total fund. The borrower should submit an application as per Annexure 9 and draw an agreement based on Annexure 10 with the detail records of loan in Annexure 2, format 10.

2.10.6 (b): Eligibility criteria for loan

Every CFMG members shall be given opportunity to avail loan from their CF fund with the fulfillment of following criteria:

- i. The loan amount shall be approved and released without mortgage;
- ii. Loan from CFMG fund shall not be given to non CFMG members;
- iii. The borrowers must be of 18 years and above;
- iv. Only one member from the households is eligible for loan at a time;
- v. Should not have any outstanding loan with CFMG;

2.10.6 (c): Interest rate and loan term

All CFMG members are eligible to avail loan from the CF fund. The members shall be given an interest rate of 9% per annum. The loan shall be given on annual basis and every member should clear their loan dues annually. The loan shall not be given to any members before 1 year of its expiry date of plan period and to non-members at any cost;

2.10.6 (d): Repayment schedule and process

The borrower shall pay the principal amount including its total interest on annual basis. Upon the completion of its deadline, management committee shall conduct a general meeting whereby all

the CFMG members are required to clear their annual loan dues. The fresh loan can be approved only after the repayment of its previous loan;

2.10.6 (e): Penalties

Any member who fails to repay his/her loan in a given time shall be liable to pay a penalty from the date of expiry with reference to Annexure 2 format 10. The borrower should be liable to repay the loan amount with the interest rate of 20% per annum.

2.10.6 (f): Loan approval and disbursement process

Any member who wants to avail a loan should fulfill the above eligibility criteria. The general meeting will approve the loan based on general consensus. The borrower and the management committee shall sign a loan agreement as per Annexure 10 before sanctioning of any loan. The loan agreement is prepared in two copies with one for CF management committee and another for borrower.

2.10.6 (g): Loan review

At the end of each year, the CF management committee shall review all the loans and repayments. The information of the review shall be shared during CFMG general meeting.

2.11. Fees (products/service fees, membership fees, etc)

Table 18: Royalty rates of forest produces

Sl.No	Types of products	Royalty Rate (Nu)	
		Within CFMG	Outsiders
1.	Drashing	Nu. 200/standing tree	As per NRDCL rate.
2.	Tsim	Nu.30	
4.	Fencing Poles	Nu.200. for 1 drashing in lieu of 50 nos of fencing post	
5	Flag posts	Nu. 10for others, Nu. free royalty for death case	
6.	Firewood	Nu.150 /standing tree	
7	Leaf mould	Free of royalty for members	Nu.100/per sack for outsider with ready to supply and Nu.50 incase collect by buyer themselves
8	Bamboo	Nu.1/per piece	
9	Stone and boulders	50 T/L	
10	Woodburr	As per FNCR 2020	NRDCL rate
11	Drum	As per FNCR 2020	NRDCL rate
12			

2.12. Fines and Penalties.

- i. Any illegal activities carried out inside the CF by CFMG members or the outsiders shall be dealt as per FNCRR, 2017 amended rules 2020.
- ii. All cases related to offence shall be registered with CF committee members and compounded by the CF committee members as per FNCR 2017 and amended rules 2020. In the event of not willing to settle the case by the defaulter the case will be forwarded to the concern forestry official for taking further steps to compound the case.
- iii. The fines and penalties collected either by CF committee members or by forestry officials should be deposited in joint CF account within 10 days receipt of fines.
- iv. Any wild life related crime shall be dealt by concerned forest office and compounded based on FNCRR, 2017 and amended rules 2020 or any rule that supersedes it. The fines so collected from it will go to Govt. revenue.
- v. All members, including the committee members are required to make their presence in meetings and group activities compulsorily.
- vi. Any absentees from work will be levied of fined Nu. 700/- (Three Hundred) only and 500/- in case of absentee of meetings which is at per prevailing daily wage in the community. However, consideration will be given in the event of unavoidable circumstances such as death, sick and attending other important works related legal issues will be exempted and treated as kidu after informing chairperson.
- vii. Under age below 18 years will not accept in work or in meeting, the concerned household will be marked as absentee and levy fine as prescribed above.
- viii. Any committee members or other members found misusing the community funds will be terminated from the post. He/She shall be liable to pay double the amount being misused and together with the interest on the amount prescribed in this rule.
- ix. The misuse of power by the committee members shall be liable for fine and penalties and shall be treated at par with illegal doers. Thus, fine and compensation on the misused produces will be levied against them as per FNCRR, 2017 and rules that supersedes it.
- x. Collection of any NWFP from CF by CFMG members are permitted for domestic/home consumption.
- xi. Collection of any NWFP from CF area by non CFMG members will be considered as an offence and will be fined as per the FNCRR, 2017 and 2020
- xii. Grazing in the plantation area is strictly prohibited and is liable to carry out the replantation of saplings in double the numbers that was destroyed.
- xiii. Decided to contribute Nu.500 as annual membership fee.

2.13. CF Fund Management

2.13.1: Source of fund

The probable sources of CF funds are as follows

- i. Membership fees
- ii. Royalties from the forest products
- iii. Fines and penalties
- iv. Interest returns from loan released to members and bank deposit
- v. Sale of forest products for commercial purposes

2.13.2: Procedure in CF fund management

- i. CFMG should continue with same bank account maintained with any financial institutions in the previous terms;
- ii. The account shall be operated under a joint signatory of chairman, treasurer and a secretary;
- iii. Money receipt should be issued for all the payments received;
- iv. Treasurer should collect all contributions, donations, fees, fines and maintain detail records for references;
- v. All financial records should be made available to authorized auditing team or inspection team at any time of the year.

2.13.3: CF fund utilization areas

Table 19: Areas where CFMG funds can be utilized

Areas of fund use	Limit (%)
CF development activities (CF review, nursery creation, plantation, thinning, cleaning, salvage operation, boundary demarcation, fire line creation, etc.	Not less than 25%
CFMG enhancement (loan, capacity building, study visits, meeting, workshops, net-working, visitors in CF, income generation, enterprise development, etc.).	Not more than 50%
Reserved fund in the bank (security deposit)	Not less than 5 %

2.14. Record and book keeping

The management committee shall maintain the detail records of CF. All the CF official books should be kept under the safe custody of management committee and shall be available for reference at any time. The secretary is responsible for recordkeeping activities whereas the treasurer for bookkeeping activities in CF. The verification and overall maintenance of records should be done by chairman whereas the timely monitoring and technical support should be given by concerned forest officer

2.15. Meeting**2.15.1: General meeting**

- i. All members are required to present during general meeting;
- ii. The general meeting will be conducted in the month of June and December every year;
- iii. The meeting agenda shall be on annual work plan and activities periodization as per operational plan reflected in the management plan and fund management;
- iv. The meeting also reviews the achievement of fiscal year activities;
- v. The meeting discusses the CF related issues like insufficiency of timber, members conflict, illegal harvesting, by-laws incompatibilities and so on;

2.15.2: Executive members meeting

- i. All committee members are required to present during committee meeting;
- ii. The meeting shall be conducted at any time of the year if required necessary;
- iii. Any management issues which are to be managed at committee level shall be discussed and resolve in the meeting;
- iv. 2.15: Conflict management
 - i. The chairman is responsible for management of any conflict of CFMGs;
 - ii. If Chairman fails to manage the conflict, he /she will put the issues in the CF general meeting for discussion and resolution and to higher authorities if the CF general meeting fails to manage the conflict;
 - iii. The conflict related to wildlife, forest fire and developmental activities like farm road construction, land encroachment, etc. shall be directly forwarded to concerned forest officer for further necessary follow-up;

2.16. Developmental Activities within or through CF Area

- i. The community will not restrict or object any developmental activities such as construction of farm road, transmission lines, water supply etc taking place within the CF area. However, clearance has to be obtained from CFMG and concerned agencies shall have to compensate the damaged caused by the developmental activities as per the FNCRR, 2017 and 2020. The assessment will be carried out by the Forestry officials in presence of CFMG and parties concerned.

CFMG can incorporate with any other groups which could benefit and generate income to the CFMG as whole in future

2.17. Amendment of CFMP and by-laws

- i. The approved and certified management plan serves as a legal document for managing the CF and its bylaws by CFMG members;
- ii. All the management activities are required to be carried out as per management plan and by-laws;

- iii. The CFMG shall have right to amendment some sections or criteria if found genuine by conducting general meeting in presence of forestry officials;
- iv. The members will be allowed to incorporate the amendment parts into the management plan and implement accordingly after receiving the recommended notification from the Department;

2.18. Powers of the Department

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

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

Annexure

Annex 1: CFMG membership list

CFMG member list of Wangkha Risum CF; Wangkha Village, Bjabcho

Sl. No	Name	CID number	H/H No	Thram No	Remarks
1	Pela	10202001136	Kha-2-39	01	①
2	Nangay Wangmo	10202001072	Kha-2-112	276	②
3	Rinchun Khandu	10202001023	Kha-2-31	08	③ ④
4	Dorji Deme	10202001224	Kha-2-47	273	
5	Wangpo	10202001108	Kha-2-37	105	⑤
6	Tshering	10202001268	Kha-2-NIL	116	⑥
7	Yozar Gyam	10202001131	Kha-2-A3	100	⑦
8	Danchoy Gyeltshen	10202001272	Kha-2-NIL/02	124	⑧
9	Kuenzang	10202001224	Kha-2-NIL	NIL	⑨
10	Drukpa	10202001180	Kha-2-NIL	NIL	⑩
11	Lhamo (Gyembo)	10202001210	Kha-2-NIL	460	⑪

Annex 2. AAC for Blocks

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

Stand stock table results for T Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	0.162	2	4.016	14	7.828	12	91.555	36

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	2.916	36	72.288	252	140.904	216	1647.99	648

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	0.03	0.33	0.66	2.29	1.28	1.96	14.98	5.89
Total	0.03	0.33	0.66	2.29	1.28	1.96	14.98	5.89

*** 1 m3 =
35.32 Cft

Basal Area
= 21.17

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

Stand stock table results for N Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	6.797	84	26.661	94	32.326	48	232.72	88

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	122.346	1512	479.898	1692	581.868	864	4188.96	1584

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I	1.11	13.75	4.36	15.38	5.29	7.85	38.08	14.40
Total	1.11	13.75	4.36	15.38	5.29	7.85	38.08	14.40

*** 1 m3 = 35.32
Cft

Basal
area=33.58

AAC for Block II

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

Stand stock table results for T Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	0	0	0	0	1.16	1.82	340.84	98.18

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I I	0	0	0	0	23.2	36.4	6816.8	1963.6

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I I	0.00	0.00	0.00	0.00	0.21	0.33	61.97	17.85
Total	0.00	0.00	0.00	0.00	0.21	0.33	61.97	17.85

*** 1 m3 = 35.32
Cft

Basal Area =
26.78m²

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

Stand stock table results for N Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I I	4.16	49.09	37.12	114.55	15.94	27.27	16.55	12.73

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I I	83.2	981.8	742.4	2291	318.8	545.4	331	254.6

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block I I	0.76	8.93	6.75	20.83	2.90	4.96	3.01	2.31
Total	0.76	8.93	6.75	20.83	2.90	4.96	3.01	2.31

*** 1 m3 = 35.32
Cft

Basal
area=8.60m²

AAC for Block III

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

Stand stock table results for T Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block III			5.83	20	16.89	24.44	62.1	33.33

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block III	0	0	87.45	300	253.35	366.6	931.5	499.95

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block III	0.00	0.00	0.80	2.73	2.30	3.33	8.47	4.55
Total	0.00	0.00	0.80	2.73	2.30	3.33	8.47	4.55

*** 1 m3 = 35.32
Cft

Basal Area =
7.29m²

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

Stand stock table results for N Trees

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	1.62	20	8.06	28.89	32.98	51.11	37.66	24.44

Stock available for 10 years

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	24.3	300	120.9	433.35	494.7	766.65	564.9	366.6

AAC per year

Blocks	Dangchung 10-19		Tsim 20-29		Cham 30-39		Drashing 40 +	
	m3	Nos	m3	Nos	m3	Nos	m3	Nos
Block II	0.22	2.73	1.10	3.94	4.50	6.97	5.14	3.33
Total	0.22	2.73	1.10	3.94	4.50	6.97	5.14	3.33

*** 1 m3 = 35.32
Cft

Basal
area=5.12