



DoFPS

ଭୁବନ୍ଦୁ ମହାରାଜା
ଶ୍ରୀ ରାଜ୍ୟ କର୍ମଚାରୀ ମନ୍ତ୍ରାଳୟ
Royal Government of
Bhutan
Ministry of
Agriculture and
Forests



RSD



Annual Forestry Statistics 2020

Editors

Jamyang Choden

Forestry Officer

Forest Information and Management Section

Forest Resource Management Division

Choney Wangmo

Forest Ranger

Forest Information and Management Section

Forest Resource Management Division

Kinlay Wangmo

Forest Ranger

RNR Statistics Division

Norbu Wangdi, Ph.D

Chief Forestry Officer

Forest Information and Management Section

Forest Resource Management Division

Tobden Tobden

Chief Statistical Officer

RNR Statistics Division

Joint Publication by:

Forest Resource Management Division,

Department of Forest and Park Services

RNR Statistics Division,

Department of Directorate Services

Ministry of Agriculture and Forests

Copyrights © June 2021 MoAF

All rights reserved.

FOREWORD

Forests resources are fundamental natural capital that are critical for sustenance of the human population. Forests provides a range of ecosystem services and sustainability of forests and these services are under immense pressure from the effects of climate change and anthropogenic activities.

The sustainable conservation and management of forests resources have become a top priority globally. Even in Bhutan, sustainable management of forests is very critical for the sustenance of livelihood as well as for the socioeconomic development process. Thus, data and information on these natural resources are very critical for policy makers, researchers and decision makers to make informed decisions and devise efficient strategies and interventions to enhance sustainable management of natural resources.

With the joint efforts of everyone, we have been able to achieve many things. Therefore, I would like to take the opportunity to sincerely acknowledge the collective efforts put in by all the colleagues in the field as well as functional offices towards fulfilling the mandates and goals of Department. Further, I congratulate Forest Resources Management Division (FRMD) and RNR Statistics Division (RSD) for taking lead in publishing this report for the benefit of all stakeholders.

Tashi Delek!

A handwritten signature in blue ink, appearing to read "Lobzang Dorji", is placed above a solid blue diagonal line.

**(Lobzang Dorji)
DIRECTOR**

ACKNOWLEDGEMENT

The Department Forests and Park Services (DoFPS) in collaboration with RNR Statistics Division is pleased to publish Annual Forestry Statistics, 2020. The information contained herein are those compiled and analysed from the data accrued for the year 2020, through Forest Information Reporting and Monitoring System (FIRMS), a centralised data sharing system updated on real-time basis from the field offices.

This report provides the most recent and reliable data and information on forest management, resource utilization, various services and the challenges faced by the Department. This publication also provides an account of Human Resources based on gender. I am optimistic that this information will be useful to decision makers, researchers, academicians, conservationist, planners and all other stakeholders.

As the MoAF strives to improve its statistical publications and services, we would like to welcome comments and feedbacks on the contents and format of this publication. I on behalf of the RSD and colleagues from FRMD, DoFPS, I would like to convey our appreciation and gratitude to all the field officials for their continued support and cooperation in providing the information on time.



(Chewang Jurmi)
DIRECTOR
Directorate Services

CONTENTS

<i>Foreword</i>	<i>ii</i>
<i>Acknowledgement</i>	<i>iii</i>
<i>Contents</i>	<i>iv</i>
<i>Tables</i>	
	<i>v</i>
<i>Figures</i>	<i>vii</i>
1. <i>Introduction</i>	1
1.1 Key facts	2
1.2 Organizational Structure	4
2. <i>Forest cover</i>	9
3. <i>Sustainable forest management</i>	10
3.1. Protected Area Management.....	10
3.2. Forest Management Unit Management	
	13
3.3. Local Forest Management Area.....	15
3.4. Community Forest Management	21
3.5. Non-wood Forest Product Management.....	
	22
4. <i>Resource utilization</i>	26
4.1. Allotment of Timber by Department.....	26
4.2. Production of Timber from FMU and outside FMU	33
4.3. Timber allotted by NRDCL for various purposes	34
4.4. Non-wood Forest Products.....	35
5. <i>Forestry services</i>	37
5.1. Forestry Clearance	37
5.2. Wood-based industries.....	38
5.3. Plantation	40
5.4. Revenue from Fees	43
5.5. Wildlife Rescue Operation	45
6. <i>Challenges</i>	49
6.1. Human Wildlife Conflict.....	49
6.2. Forest Offences	50
6.3. Forest Offences	54
7. <i>Human Resources</i>	55

LIST OF TABLES

Table 1: Divisional Forest Office-Gewog Jurisdiction.....	5
Table 2: District-wise forest cover	9
Table 3: Protected Area Network.....	10
Table 4: List of FMUs and annual allowable cut (AAC).....	13
Table 5: List of existing Local Forest Management Areas	15
Table 6: Dzongkhag-wise distribution of community forest in Bhutan	21
Table 7: Community Forest established in 2020	21
Table 8: Dzongkhag-wise distribution of Non-wood Forest Product Groups in Bhutan	22
Table 9: Non-wood Forest Product Groups formed in 2020	23
Table 10: Timber allotted for different purposes	26
Table 11: Timber allotted by offices.....	27
Table 12: Firewood allotted by offices	30
Table 13: Timber production from Forest Management Units and Action Plans in 2020	33
Table 14: Timber production from outside FMUs and adhocs areas in 2020.....	33
Table 15: Timber allotted by NRDCL for various purposes	34
Table 16: NWFPs extracted and royalty realized in 2020.....	35
Table 17: NWFPs extracted and royalty realized in 2020.....	36
Table 18: Forestry clearance issued by offices .	37
Table 19: Number of wood-based industries in Bhutan	38
Table 20: Plantation creation in 2020.....	40
Table 21: Fees collected by offices	43
Table 22: Types of fees.....	44
Table 23: Fees collected by Royal Takin Preserve	44
Table 24: Rescue and Rehabilitation	45
Table 25: Crop Damages.....	49
Table 26: Livestock Depredation.....	49

Table 27: Types of forest offence reported in 2020	50
Table 28: Office-wise forest offence reported in 2020	51
Table 29: Types of forest offence reported in 2020	54
Table 30: Gender-wise distribution of Staff.....	55
Table 31: Gender-wise distribution of technical staff based on designation	55

LIST OF FIGURES

Figure 1: Organogram of DoFPS.....	4
Figure 2: Area under sustainable forest management.....	12

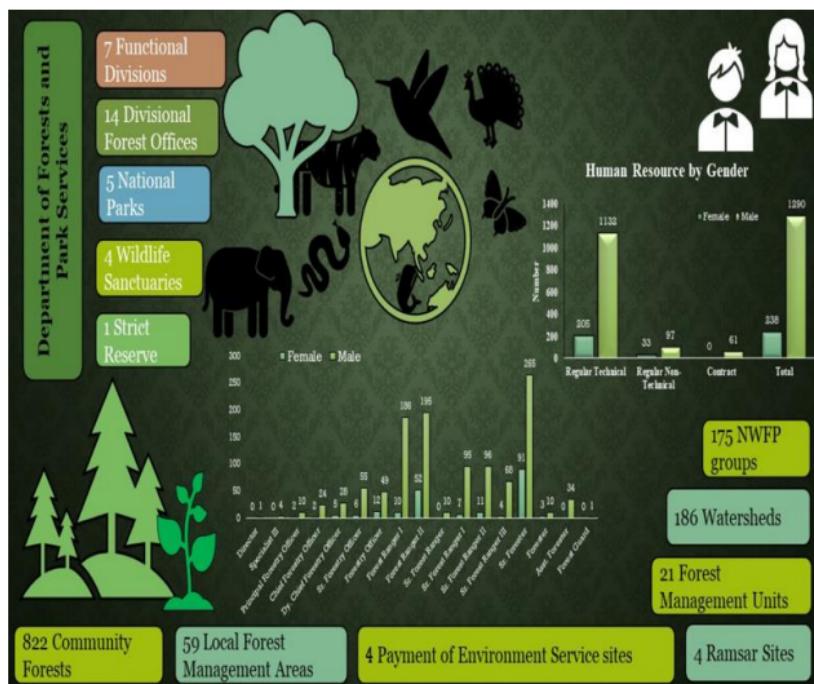
1. INTRODUCTION

Annual Forestry Statistics 2020 provides an account of the administrative functions, services and various programs implemented by the Department of Forests and Park Services (DoFPS). The information outlined in this report are based on the data collected from the Forest Information and Reporting Management System (FIRMS) database, which is an online repository of information collected from 14 Divisional Forest Offices and 10 Park Offices. Additional information was sourced from Functional Divisions for further analysis and validation.

AFS 2020 presents critical information on forest types and cover, total biomass and carbon stock, in addition to total areas under different forest management regimes and the resources utilization scenarios. It contains status of Protected Areas, Forest Management Units (FMUs), Local Forest Management Units (LFMPs), Community Forests (CFs) and Non-Wood Forest Management (NWFP).

In addition, information on plantations and private forests are also reflected. Forest resource allocation is one of the critical services, the majority of which is the allotment of timbers for various construction purposes. It presents the volume of timber allotted in last one year both through Natural Resources Development Corporation Limited (NRDCL) & Department and the revenue collected thereof through realization of royalties. It also captures information on Wood-based Industries and challenges faced in managing resources of Bhutan.

1.1 Key facts



Forest Cover		Protected Area Network	
Area (Ha)	2730889.00	Protected Area (%)	43.48
Percent (%)	71.00	Biological Corridors (%)	7.73
Basal area (5% MoE) (m ²)	114791541.00	Conservation areas (RBP) (%)	0.24
Total Growing Stock (6% MoE) (mil m ²)	1001.00	Protected Area Network (%) *	51.44
Total Biomass Stock (forest) (Mt)	972.91	National Parks (No.)	5.00
Total Carbon (forest) (Mt)	457.00	Wildlife Sanctuaries (No.)	4.00
Total Organic Carbon (Mt)	188.00	Strict Nature Reserve (No.)	1.00
Total Forest Carbon Stock (Mt)	645.00	Biological Corridors (No.)	8.00
Forest Type (%)		Biodiversity (No.)	
Subtropical Forest	6.00	Tiger	103.00
Fir Forest	9.00	Snow Leopard	96.00
Warm Broadleaved Forest	18.00	Golden Langur	2516.00
Blue Pine Forest	4.00	Elephant	678.00
Chir Pine Forest	3.00	<i>Rododendron</i> spp.	46.00
Cool Broadleaved Forest	26.00	Orchid	477.00
Evergreen Oak Forest	1.00	Fern	411.00
Spruce Forest	1.00	Fungus	690.00
Hemlock Forest	2.00	Bird	747.00
Juniper-Rhododendron Scrub	1.00	Globally threatened bird	31.00
Total No. of NWFP Group (No.)	175.00	Amphibian	59.00
Household involved in NWFP Group (No.)	6660.00	Reptiles	122.00
Total No. of CF(No.)	822.00	Butterflies	768.00
Household involved in CF(No.)	34124.00	Moth	1300.00
Area of CF(Ha)	105099.27	Fish	125.00
Total Ramsar sites (No.)	4.00	Local Forest Management Area (Nos)	59.00
Total Ramsar site Area (Ha)	1225.00	Local Forest Management	23392.3.50

		nt Area (Ha)	
Payment for Environment Services (No.)	4.00	Forest Management Units (No.)	21.00
Payment for Environment Services Area (Ha)	2973.00	Forest Management Units Area (Ha)	19840 6.84
Total watershed (No.)	186.00	Wood-based industries (No.)	441.00
Functional & Field Office (No.)			
Functional Division	7.00		
Divisional Forest Office	14.00	Park/ Strict Reserve/ Wildlife Sanctuaries	10.00
Range Office	42.00	Range Office	33.00
Beat Office	75.00	Beat Office	10.00
Forest Check Post	38.00	Forest Check Post	6.00
Outpost	1.00	Outpost	13.00
* Protected Area Network (%) is the total of Protected Areas (%), Biological Areas (%) and Conservation Areas (%)			

1.2 Organizational Structure

DoFPS is one of the oldest Departments established.

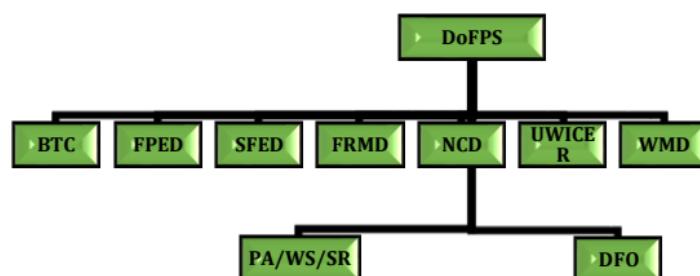


Figure 1: Organogram of DoFPS

BTC-Bhutan Tiger Center; FPED-Forest Protection and Enforcement Division; SFED-Social Forestry and Extension Division (SFED); FRMD-Forest Resources and Management Division; NCD-Nature Conservation Division; UWICER-Ugyen Wangchuk Institute for Conservation and Environment Research; and WMD-Watershed Management Division.

Table 1: Divisional Forest Office-Gewog Jurisdiction

Sl. No	Office	Dzongkhag	Range Office	Forest Management Unit (FMU)	Beat Office	Checkpost	
1	Divisional Forest Office, Bumthang	Bumthang	Bumthang	Rodungla FMU	Tang		
					Drakteng		
		Trongsa	Chumey	Karshong FMU	Tashiling		
					Dawathang FMU	Langthel	
2	Divisional Forest Office, Dagana	Dagana	Drujeygang			Sunkosh	
			Dagapela			Lhamoizingkha	
			Lhamoizingkha				
			Dagana				
3	Divisional Forest Office, Gedu	Chhukha	Phuentsholing	Metabchu FMU	Pasakha	Phuentsholing	
					Chapcha	Phuentsholing, Checkgate II,	
			Tsimasham		Darla	Bjigmechhu	
					Bongo		
			Gedu		Suntolakha	Rinchhending	
4	Divisional Forest Office, Mongar	Mongar	Mongar	Korila FMU	Chaskhar	Sherichu	
					Drametse		
			Gyelpozhing	Lingmethang FMU	Salaphu		
					Kengkhar	Kurizampa	
		Lhuentse		Rongmachu FMU	Nagor		
		Lhuentse			Yadi		
					Autsho	Tangmochu	
		Longchu FMU	Tangmochu				
5	Divisional Forest Office, Paro	Paro	Paro	Zoglela FMU	Jitsephu		
				Bitekha FMU			
				Haa East FMU			
		Haa	Haa	Selela FMU			
				Longchu FMU			
6	Divisional Forest Office, Pema Gatshel	Pema Gatshel	Pema Gatshel	Khengzor FMU	Dungmin	Kherigonpa	
			Nganglam		Nanong	Potonal	
7	Divisional Forest Office, Samdrup Jongkhar	Samdrup Jongkhar	Samdrup Jongkhar		Dewathang	Pinchina	
					Orong		
					Gomdar	Border Checkpost	
8	Divisional Forest Office, Samtse	Samtse	Tashicholing		Tendruk	Jiti	
			Norbugang		Sangacholing	Amochu	
					Yoeseltse	Gomtu	

			Samtse		Phuntshop elri	Pugli
					Tading	Samtse
9	Divisional Forest Office, Sarpang	Sarpang	Sarpang		Chhudzo m	Hilley
			Gelephu		Dekiling	Sershong
					Norbuling	
					Jigmechol ing	Dadgari
					Samtenlin g	
10	Divisional Forest Office, Thimphu	Thimphu	Thimphu	Gidakom FMU	Hongtsho	Hongtsho
			Khasadrachhu		Simtokha	Chhuzom
				Chamgang FMU	Dechench oling	Domsangye
					Genekhha	Chamgang
11	Divisional Forest Office, Trashigang	Trashigang	Radhi	Khaling Karungla FMU	Bidung,	Tshozor
			Warmrong		Shongphu	
			Trashigang		Phongme y	
					Thrimshin g	
					Lumang	
					Khaling	
					Kangpara	Kheri
					Samkhar	
					Udzorong	
					Yangner	
					Kanglung	
					Bartsham	
			Duksum	Dongdeychu FMU	Jamkhar	Zangpozor
			Yangtse		Tongzhan g	
					Ramjar	
					Yallang	
					Khamdan g	
					Toetsho	
12	Divisional Forest Office, Tsirang	Tsirang	Tsirang	Sergithan g		Damphu
			Tsirangtoe			
			Mendrelgang			
13	Divisional Forest Office, Wangdue	Wangdue	Wangdue	Kotokha FMU	Chuzomsa	Chuzomsa
			Lobesa		Gasello	
					Kamichu	
					Toebisa	
					Talo	
					Guma	

			Punakha		Samdingkha	Wangdue Zampa
		Punakha		Gogona FMU	Kabisa	
			Nobding		Shegna	
					Dzomi	
					Tshochasa	
					Phobjikha	
					Sephu	
14	Divisional Forest Office, Zhemgang	Zhemgang	Zhemgang	Wangdigang	Buli	Mangdechu
					Tali	
			Khomshar		Mangdechu	
					& Digala	
					Shingkhar	
			Pangbang		Nimshong	
					Gonshing	
					Jokha	
15	Bumdeling Wildlife Sanctuary	Trashiyangtse	Dungzam		Shingphel & Womanan g	Tsarzam
		Mongar	Serzhong		Aja	
		Lhuentse	Khomo		Singyedzo ng	
16	Jigme Dorji National Park	Thimphu	Soe			
			Lingzhi			
			Gasa			
		Gasa	Laya Range			
			Lunana			
			Ruenchena			
17	Jigme Khesar Strict Nature Reserve	Haa	Sombay Range			Lolithang Outpost
			Gakiling Range			
			Bjee Range			
18	Jigme Singye Wangchuck National Park	Trongsa	Langthel		Chendebji	
			Nabji			
		Zhemgang	Tingtibi		Adha	
		Wangduephodrang	Taksha			
19	Jomotsangkh a Wildlife Sanctuary	Samdrup Jongkhar	Samdrupcholing		Menjiwong	Jomotshangkh a
			Jomotshangkha			
20	Phibsoo Wildlife Sanctuary	Sarpang	Phibsoo			Phibsoo Outpost
			Nichula			
21	Phrumsengla National Park	Bumthang	Western Park		Sengor	
		Mongar	Central Park		Tsamang	
		Lhuentse	Eastern Park		Zangkhar	
22		Sarpang	Manas			Pangbang

	Royal Manas National Park		Gongphu				
			Umling				
23	Sakteng Wildlife Sanctuary	Trsahigang	Merak		Thraktri		
			Sakteng				
			Joenkhar				
24	Wangchuck Centennial National Park	Bumthang	Choekhar		Nasiphel & Dhur		
		Trongsa	Nubi		Ney		
		Lhuentse	Dungkar				
		Wangduepho drang	Sephu				

2. FOREST COVER

Table 2: District-wise forest cover

Sl.No.	Dzongkhag	Forest Cover (%)	Forest Area (Ha)
1	Bumthang	0.52	139356.70
2	Chhukha	0.89	166151.10
3	Dagana	0.89	152086.10
4	Gasa	0.20	60853.00
5	Haa	0.67	125772.40
6	Lhuentse	0.65	183421.00
7	Mongar	0.91	175886.90
8	Paro	0.52	66282.70
9	Pema Gatshel	0.91	91926.70
10	Punakha	0.84	91894.90
11	Samdrup Jongkhar	0.91	168689.70
12	Samtse	0.81	105203.20
13	Sarpang	0.90	146852.30
14	Thimphu	0.40	71213.80
15	Trashigang	0.79	172757.70
16	Trashi Yangtse	0.70	100400.00
17	Trongsa	0.86	153725.10
18	Tsirang	0.88	55265.10
19	Wangdue Phodrang	0.66	264061.90
20	Zhemgang	0.94	225361.50
Total			2717161.70
Source: LULC, 2016			

3. SUSTAINABLE FOREST MANAGEMENT

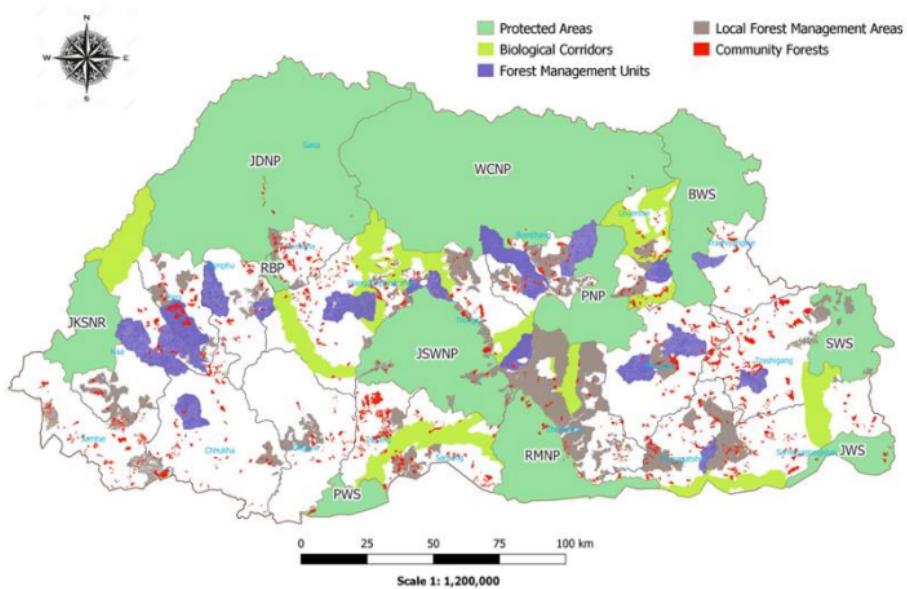
3.1. Protected Area Management

Table 3: Protected Area Network

Sl. No.	Protected Area Network	Notification year	Establishment year	Dzongkhag	Area (km sq)
1	Bumdeling Wildlife Sanctuary (BWS)	1993	1998	Lhuentse	1534.24
				Mongar	
				Trashiyangtse	
2	Jigme Dorji National Park (JDNP)	1993	1995	Gasa	4374.06
				Paro	
				Punakha	
				Thimphu	
3	Jigme Khesar Strict Nature Reserve (JKSNR)	1993	2010	Haa	784.22
				Samtse	
4	Jigme Singye Wangchuck National Park (JSWNP)	1993	1995	Sarpang	1730.06
				Trongsa	
				Tsirang	
				Wangdue Phodrang	
				Zhemgang	
5	Jomotsangkha Wildlife Sanctuary (JWS)	1993	1993	Samdrup Jongkhar	362.49
6	Phrumsengla National Park (PNP)	1993	2000	Bumthang	906.65
				Lhuentse	
				Mongar	
				Zhemgang	
7	Phipsoo Wildlife Sanctuary (PWS)	1974	1993	Sarpang	286.83
				Dagana	
8	Royal Manas National Park (RMNP)	1993	1996	Pema Gatshe	1057.40
				Sarpang	
				Zhemgang	
9	Sakteng Wildlife Sanctuary (SWS)	1993	2003	Trashigang	742.46
10	Wangchuck Centennial National Park (WCNP)	2008	2008	Bumthang	4914.65
				Lhuentse	
				Wangdue Phodrang	
				Gasa	

				Trongsa	
11	Royal Botanical Park (RBP)	2004		Punakha	91.20
				Thimphu	
12	JDNP-JKSNR Biological Corridor (BC1)	1999	2007	Haa	255.55
				Paro	
13	RBP-JSWNP Biological Corridor (BC 2)	1999	2007	Wangdue Phodrang	291.76
14	JSWNP-PWS-RMNP Biological Corridor (BC 3)	1999	2007	Sarpang	407.70
				Tsirang	
15	JSWNP-PNP-RMNP Biological Corridor (BC 4)	1999	2007	Trongsa	594.65
				Zhemgang	
16	JWS-RMNP Biological Corridor (BC 5)	1999	2007	Pema Gatshel	205.84
				Samdrup Jongkhar	
17	JWS-SWS Biological Corridor (BC 6)	1999	2007	Samdrup Jongkhar	232.77
				Trashigang	
18	BWS-PNP-WCNP Biological Corridor (BC 7)	1999	2007	Lhuentse	419.66
				Mongar	
19	JSWNP-WCNP Biological Corridor (BC 8)	1999	2007	Trongsa	558.60
				Wangdue Phodrang	
Total					19750.80

Figure 2: Area under sustainable forest management



3.2. Forest Management Unit Management

Table 4: List of FMUs and annual allowable cut (AAC)

Sl.No.	Forest Management Unit (FMU)	Dzongkhag	Establishment year	Plan Period	Total FMU area (Ha)	Forested area (Ha)	Annual Allowable Cut (AAC) - m ³		
							Commercial	Rural	Total
1	Dawathang	Bumthang	2000	01/01/2011 - 31/12/2020	17541.66	13648.00	9756.00	2424.00	12180.00
2	Rudongla			01/01/2013- 31/12/2023	14686.58	12368.91	12000.00	2999.00	14999.00
3	Karshong			01/01/2020 to 31/12/2029	6008.54	5579.39	6200.00	1500.00	7700.00
4	Metapchhu	Chukha	2007	01/01/2018 - 31/12/2027	10676.53	10099.00	4400.00	630.00	5030.00
5	Haa East	Haa	1987	01/02/2016- 31/01/2026	6580.99	5690.50	0.00	500.00	500.00
6	Lon Chhu			01/01/2020 to 31/12/2029	12664.49	8846.00	5300.00	1000.00	6300.00
7	Sele La			01/01/2011- 31/12/2020	9157.00	8066.76	8886.00	3000.00	11886.00
8	Korila	Mongar	1993	01/11/2016- 31/10/2026	13137.00	6922.00	1100.00	2700.00	3800.00
9	Lingmithang			01/07/2019- 30/06/2029	10490.00	10125.00	8900.00	500.00	9400.00

10	Paro-Zonglela	Paro	1992	01/01/2012-31/12/2021	16155.81	12880.68	6366.00	3000.00	9366.00
11	Bitekha		2006	01/08/2016-31/07/2026	7260.10	6199.00	3600.00	900.00	4500.00
12	Chamgang- Helela	Thimphu	1993	01/08/2017-31/07/2027	4508.78	4320.87	0.00	1800.00	1800.00
13	Gidakom		1977	01/04/2012-31/03/2022	13100.00	9105.00	3670.00	2000.00	5670.00
14	Dongdechu	Trashi yangtse	2001	01/04/2014-31/03/2024	4856.00	3172.00	3965.00	1249.83	5214.83
15	Chendebji	Trongsa	1996	01/01/2018 to 31/12/2027	7852.98	6912.12	4700.00	2000.00	6700.00
16	Khotokha	Wangdue	1984	01/01/2020 to 31/12/2029	9281.00	8785.90	7900.00	1900.00	9800.00
17	Gogona		2005	01/06/2015 to 31/05/2025	8080.60	4490.00	5161.00	1167.00	6328.00
18	Wangdigang	Zhemgang	1992	01/01/2017-31/12/2026	8759.00	7511.25	nil	2100.00	2100.00
19	Rongmanchu	Lhuntse	2007	01/01/2018 - 31/12/2027	6403.13	5713.00	2700.00	500.00	3200.00
20	Khaling Kharungla	Trashigang	1996	01/01/2020 to 31/12/2029	7110.30	5553.68	900.00	400.00	1300.00
21	Khengzore	Pema Gatshel	2019	01/01/2019-31/12/2028	4096.35	4069.15	3700.00	400.00	4100.00
TOTAL					198406.84	160058.21	99204.00	32669.83	131873.83

3.3. Local Forest Management Area

Table 5: List of existing Local Forest Management Areas

Sl.No.	Name of Local Forest Management Area Plan	Geog	Dzongkhag	Period	Area covered by Plan (Ha)	AAC (m ³ /yr)
1	Management plan for Areas Outside FMU System Tsenkhar Geog	Tsenkhar	Lhuentse	01/07/2012 to 30/06/2021	na	na
2	Management plan for Areas Outside FMU System Shari Geog	Shari	Paro	01/07/2012 to 30/06/2021	1600.00	946.00
3	Management plan for Areas Outside FMU System Barp Geog	Barp	Punakha	01/07/2012 to 30/06/2021	2300.00	1442.00
4	Management plan for Areas Outside FMU System Thangrong Geog	Thangrong	Mongar	01/07/2012 to 30/06/2021	1421.00	704.00
5	Management plan for Areas Outside FMU System Nangkor Geog	Nangkor	Zhemgang	July 2012 to 30th June 2022	24334.00	19938.00
6	Management plan for Areas Outside FMU System Shermung Geog	Mongar (BWS)	Mongar	01/07/2012 to 30/06/2022	2100.10	1832.00
7	Management plan for Areas Outside FMU System Bumdeling Geog	Bumdeling	Trashi Yangtse	01/07/2012 to 31/06/2022	na	na

8	Management plan for Areas Outside FMU System Toeb Geog	Toeb	Punakha	01/07/2012 to 30/06/2022	2562.00	4492.00
9	Management plan for Areas Outside FMU System Dogar Geog	Dogar	Paro	01/07/2014 to 30/06/2024	1263.00	591.00
10	Management plan for Areas Outside FMU System Shaba Geog	Shaba	Paro	01/07/2014 to 30/06/2024	769.00	713.00
11	Management plan for Areas Outside FMU System Bjee Geog	Bjee	Haa	01/07/2014 to 30/06/2024	1732.00	723.00
12	Management plan for Areas Outside FMU System Katsho Geog	Katsho	Haa	01/07/2014 to 30/06/2024	712.00	837.00
13	Management plan for Areas Outside FMU System Esue Geog	Esue	Haa	01/07/2014 to 30/06/2024	339.00	383.00
14	Management plan for Areas Outside FMU System Sama Geog	Sama	Haa	01/07/2014 to 30/06/2024	325.00	343.00
15	Management plan for Areas Outside FMU System Daga Geog	Daga	Wangdue Phodrang	01/04/2016 to 31/03/2026	21043.90	29403.00
16	Management plan for Areas Outside FMU System Laja Geog	Laja	Dagana	01/07/2016 to 30/06/2026	1000.00	371.00
17	Management plan for Areas Outside FMU System Khebesa Geog	Khebesa	Dagana	01/07/2016 to 30/06/2026	1000.00	320.00
18	Management plan for Areas Outside FMU System	Shingkhar	Zhemgang	01/07/2015 to 30/06/2025	2956.00	1416.00

19	Management plan for Areas Outside FMU System	Trong	Zhemgang	01/07/2016 to 30/06/2026	3386.00	1095.00
20	Management plan for Areas Outside FMU System Kikhorthang Geog	Kikhorthang	Tsirang	01/07/2017 to 30/06/2027	553.20	123.00
21	Management plan for Areas Outside FMU System Phobji Geog	Phobji	Wangdue Phodrang	01/11/2017 to 30/11/2027	3250.40	8247.00
22	Management plan for Areas Outside FMU System Samkhar Geog	Samkhar	Trashigang	01/01/2018 to 31/12/2027	5206.50	3140.00
23	Management plan for Areas Outside FMU System Bardo Geog	Bardo	Zhemgang	01/01/2018 to 31/12/2027	11793.00	17737.00
24	Management plan for Areas Outside FMU System Tang Geog	Tang	Bumthang	01/07/2018 to 31/06/2028	10008.00	5205.00
25	Management plan for Areas Outside FMU System Chumey Geog	Chumey	Bumthang	01/07/2018 to 31/06/2028	5228.00	15357.00
26	Management plan for Areas Outside FMU System Tsento Geog	Tsento	Paro	01/07/2018 to 31/06/2028	1952.00	843.00
27	Management plan for Areas Outside FMU System Lamgong Geog	Lamgong	Paro	01/07/2018 to 31/06/2028	1309.00	1073.00
28	Management plan for Areas Outside FMU System Phuntenchu Geog	Phuntenchu	Tsirang	01/07/2018 to 31/06/2028	2155.00	2569.00
29	Management plan for Areas Outside FMU System Goshing Geog	Goshing	Zhemgang	01/01/2019 to 31/12/2028	2179.00	3210.00

30	Management plan for Areas Outside FMU System Korphu Geog	Korphu	Trongsa	01/07/2018 to 31/06/2028	3543.40	2817.00
31	Management plan for Areas Outside FMU System Tongmajangsa Geog	Tongmajangsa	Trashiyangtse	01/01/2019 to 31/12/2028	1387.00	1305.00
32	Management plan for Areas Outside FMU System Ura Geog	Ura	Bumthang	01/01/2019 uo 31/12/2028	5187.00	4237.00
33	Management plan for Areas Outside FMU System Doteng Geog	Doteng	Paro	01/01/2019 do 31/12/2028	3240.00	973.00
34	Management plan for Areas Outside FMU System Nangla Geog	Nangla	Zhemgang	01/01/2019 no 31/12/2028	3862.00	5155.00
35	Management plan for Areas Outside FMU System Chokor Geog	Chokor	Bumthang	01/07/2019 to 31/06/2029	3450.00	6897.00
36	Management plan for Areas Outside FMU System Yangtse Geog	Yangtse	Trashiyangtse	01/01/2019 to 31/12/2028	8340.00	13079.00
37	Management plan for Areas Outside FMU System Yangneer Geog	Yangneer	Trashigang	01/01/2019 to 31/12/2028	2907.00	1470.00
38	Management plan for Areas Outside FMU System Yallang Geog	Yallang	Trashigang	01/07/2019 to 30/06/2029	2209.00	3892.00
39	Management plan for Areas Outside FMU System Bjokha Geog	Bjokha	Zhemgang	01/01/2020 to 31/12/2029	2540.00	1323.00
40	Management plan for Areas Outside FMU System Dekiling Geog	Dekiling	Sarpang	01/07/2019 to 30/06/2029	3767.00	1740.00

41	Management plan for Areas Outside FMU System Gakidling Geog	Gakidling	Sarpang	01/07/2019 to 30/06/2029	3884.00	1587.00
42	Management plan for Areas Outside FMU System Sompangkha Geog	Sompangkha	Sarpang	01/07/2019 to 30/06/2029	1536.00	438.00
43	Management plan for Areas Outside FMU System Orong Geog	Orong	Samdrup Jongkhar	01/07/2019 to 30/06/2029	8700.00	2970.00
44	Management plan for Areas Outside FMU System Drepong Geog	Drepong	Mongar	01/04/2019 to 31/03/2029	4181.00	1565.00
45	Management plan for Areas Outside FMU System Gakiling Geog	Gakiling	Haa	01/07/2019 to 30/06/2029	5442.00	1875.00
46	Management plan for Areas Outside FMU System Gangtey Geog	Gangtey	Wangdue Phodrang	01/07/2019 to 30/06/2029	1377.00	1749.00
47	Management plan for Areas Outside FMU System Kabji Geog	Kabji	Wangdue Phodrang	01/07/2019 to 30/06/2029	3219.00	2681.00
48	Management plan for Areas Outside FMU System Geney Geog	Geney	Thimphu	01/07/2019 to 30/06/2029	3805.00	1805.00
49	Management plan for Areas Outside FMU System Menbi Geog	Menbi	Lhuntse	01/04/2019 to 31/03/2029	4617.00	2363.00
50	Management plan for Areas Outside FMU System Mongar Geog	Mongar	Mongar	01/04/2019 to 31/03/2029	3101.00	1835.00
51	Management plan for Areas Outside FMU System Nubi Geog	Nubi	Trongsa	30/09/2019 to 31/08/2029	10403.00	9163.00

52	Management plan for Areas Outside FMU System Saleng Geog	Saleng	Mongar	01/07/2019 to 30/06/2029	2116.00	2391.00
53	Management plan for Areas Outside FMU System Sombgyakha Geog	Sombgyakha	Haa	01/10/2019 to 31/09/2029	4960.00	1848.00
54	Management plan for Areas Outside FMU System Shongphu Geog	Shongphu	Trashigang	01/07/2019 to 30/06/2029	2821.00	933.00
55	Management plan for Areas Outside FMU System Yurung Geog	Yurung	Pema Gatshel	01/07/2019 to 30/06/2029	2833.00	950.00
56	Management plan for Areas Outside FMU System Dunglagang Geog	Dunglagang	Tsirang	01/07/2019 to 30/06/2029	1645.00	762.00
57	Management plan for Areas Outside FMU System Wangphu Geog	Wangphu	Samdrup Jongkhar	01/07/2020 to 30/06/2030	7153.00	1873.00
58	Management plan for Areas Outside FMU System Geteyna Geog	Geteyna	Chukha	01/07/2021 to 30/06/2031	5089.00	1681.00
59	Management plan for Areas Outside FMU System Lajab Geog	Samrang	Samdrup Jongkhar	01/07/2020 to 30/06/2030	4132.00	1794.00
Total					233923.50	206204.00

3.4. Community Forest Management

Table 6: Dzongkhag-wise distribution of community forest in Bhutan

Sl. No.	Dzongkhag	Community Forest (No.)	Member household (No.)	Area (Ha)
1	Bumthang	37.00	1056.00	3823.69
2	Chukha	62.00	2030.00	4540.18
3	Dagana	31.00	1324.00	2891.82
4	Gasa	7.00	186.00	556.08
5	Haa	19.00	584.00	1839.73
6	Lhuntse	37.00	1095.00	3576.86
7	Mongar	36.00	2141.00	10792.77
8	Paro	30.00	1590.00	4842.92
9	Pemagatshel	57.00	2873.00	5615.65
10	Punakha	44.00	1493.00	4519.63
11	Samdrupjongkhar	50.00	2454.00	7141.80
12	Samtse	63.00	2557.00	6824.22
13	Sarpang	35.00	1455.00	4539.91
14	Thimphu	22.00	898.00	3039.07
15	Trashigang	54.00	3112.00	11177.81
16	Trashiyangtse	36.00	1685.00	4820.03
17	Trongsa	30.00	1009.00	3579.70
18	Tsirang	50.00	2869.00	9500.23
19	Wangdue Phodrang	89.00	2423.00	7010.26
20	Zhemgang	33.00	1290.00	4466.92
Total		822.00	34124.00	105099.27

Table 7: Community Forest established in 2020

Sl. No.	Community Forest	Gewog	Dzongkhag	Member household (No.)	Area (Ha)
1	Chutoe	Tang	Bumthang	15.00	38.69
2	Namkha			10.00	34.66
3	Petekha	Tsangkha	Dagana	88.00	35.03
4	Phuensum			64.00	320.00
5	Thanamkhaid zong	Lajab		28.00	108.00
6	Chuli Gonpa Norbu Chushel			62.00	432.00

7	Damkhar Chiwog	Gongdue		73.00	653.76
8	Khenadang Yenchiri	Zobel	Pemagatshel	47.00	156.87
9	Dongkokha	Talo	Punakha	19.00	31.54
10	Tsheringang	Norbugang	Samtse	52.00	94.96
11	Thongjabi – Yueling	Chuzagang	Sarpang	32.00	72.40
12	Nangbu Azhi	Bumdeling	Trashiyangtse	14.00	70.00
13	Rigsum	Bumdeling		21.00	105.75
14	Solomang	Bumdeling		23.00	115.60
15	Haathi Degini	Dunglagang	Tsirang	28.00	196.66
16	Mewangang	Goshing	Zhemgang	26.00	141.20
17	Nyakhar Dung	Nangkhor		35.00	160.00
Total				637.00	2767.12

3.5. Non-wood Forest Product Management

Table 8: Dzongkhag-wise distribution of Non-wood Forest Product Groups in Bhutan

Sl. No.	Dzongkhag	NWFP Group (No.)	Member Household (No.)
1	Bumthang	6.00	197.00
2	Chhukha	8.00	175.00
3	Dagana	9.00	455.00
4	Gasa	1.00	263.00
5	Lhuentse	1.00	51.00
6	Lhuntse	5.00	122.00
7	Mongar	18.00	529.00
8	Paro	3.00	60.00
9	Pemagatshel	28.00	758.00
10	Punakha	1.00	37.00
11	Samdrup Jongkhar	25.00	986.00
12	Samtse	5.00	137.00
13	Sarpang	9.00	364.00
14	Tashigang	1.00	17.00
15	Trashiyangtse	2.00	68.00
16	Thimphu	5.00	346.00
17	Trashi Yangtse	5.00	173.00
18	Trashigang	9.00	333.00
19	Trongsa	7.00	236.00
20	Tsirang	3.00	39.00

21	Wangdue	8.00	773.00
22	Zhemgang	16.00	541.00
Total		175.00	6660.00

Table 9: Non-wood Forest Product Groups formed in 2020

Sl. No.	NWFP Group	Dzongkhag	Gewog	Member household (No.)	Species
1	Rubia Management and Marketing Group	Gasa	Laya	263.00	<i>Nardostachys</i> sp.(Pangpoe (Dz)), <i>Neopicrorhiza</i> sp. (Puti/Putashing (Dz)), <i>Meconopsis</i> sp. (Tshernyom meto (Dz))and other medicinal plants
2	Paeati Group	Punakha	Kabjisa	37.00	<i>Diplazium esculatum</i> (Nakay (Dz)), <i>Pteridium</i> sp. (Tenkey (Dz)), <i>Pogostemon amaranthoides</i> (Namdha (Dz)), <i>Rubia cordifolia</i> (Tshoth (Dz)), mushroom, <i>Luculia gratissima</i> (Younten dem (Dz)), <i>Piper</i> sp. (Pipla (Lho)), <i>Docynia indica</i> (Tong (Dz)) and <i>Tupistra nutans</i> (Wangpem (Dz))
3	Mangling NWFP Management and marketing group	Mongar	Saling	14.00	Cane and bamboo
4	Mawong Chirphen Shingmein Thuenked Tshogpa	Samdrup Jongkhar	Martshal a	40.00	<i>Rubia cordifolia</i> (Tsoed (Dz)), <i>Pouzolzia</i> sp. (Yongjiba (Sh)), <i>Elatostema lineolatum</i> (Damru (Dz)), <i>Plectocomia</i> sp. (Patsha (Dz)), Mushroom (Shamu (Dz), <i>Diplazium</i> sp. (Wangla (Dz.) , <i>Viscum</i> sp. (

					Nyashing jurmo (Dz), <i>Dioscorea</i> sp. (Rekay (Dz)), <i>Thysanolaena</i> sp. (Tsakusha (Dz), <i>Daphne</i> sp. (Shokap (Dz), <i>Tupistra nutans</i> (Wangpem (Dz)
5	Bimkhar bamboo management group	Trashi Yangtse	Yangtse	49.00	Bamboo
6	Litchen Daphne Management Group	Trashi Yangtse	Yangtse	19.00	<i>Daphne</i> sp. (Deykap (Dz))
7	Rubia Management and Marketing Group	Trashigang	Khamdang	17.00	<i>Rubia cordifolia</i> (Tshoed (Dz))
8	Gorgoen Shingmen Thoenketh Management group	Wangdue Phordang	Gangtey	37.00	<i>Aconitum laciniatum</i> (Bongna (Dz)), <i>Aconitum orochryseum</i> (Bongkar (Dz)), <i>Rhododendron anthopogon</i> (Balu (Dz)), <i>Rhododendron setosum</i> (Sulu (Dz)), <i>Juniper</i> sp. (Tshub (Dz)), <i>Exidia</i> sp. (Seuchu Shamo (Dz)), <i>Borinda grossa</i> (Ba (Dz)), <i>Paris polypylla</i> (Thokarpa (Sh))
9	NWFP group management and Marketing plan	Zhemgang	Dali	28.00	<i>Piper pedicellatum</i> (Pipla (Lhot), <i>Piper longum</i> (Pipla (Lhot)), <i>Piper mullesua</i> (Pipla (Lhot), <i>Rubia cordifolia</i> (Tshoed (Dz)), <i>Plectocomia himalayana</i> (Patsha (Dzo)) and Mushroom (Shamu (Dzo))
Total				504.00	

4. RESOURCE UTILIZATION

4.1. Allotment of Timber by Department

Table 10: Timber allotted for different purposes

Sl.No.	Purposes	Commercial volume (m ³)	Concession volume (m ³)	Free volume (m ³)	Commercial royalty (Nu.)	Concessional royalty (Nu.)	Free royalty (Nu.)	Total Volume (m ³)	Total royalty (Nu.)
1	Fencing posts	1250.28	4541.62	52.00	178818.5	403430.91	0.00	5843.90	582249.42
2	Firewood	24840.29	72835.99	600.87	316295.9	946072.21	2925.00	98277.15	1265293.11
3	Flag poles	424.04	2722.50	0.34	65763.00	117182.46	0.00	3146.87	182945.46
4	House Renovation or Extension	662.08	7572.91	267.05	124221.0	170903.54	0.00	8502.04	295124.55
5	New Dzong Construction	2156.55	465.96		531649.5	17222.14		2622.51	548871.71
6	New House Construction	1165.37	40723.97	1463.68	252337.2	809889.30	0.00	43353.02	1062226
7	Others	26724.27	4891.35	805.55	4691962.86	300033.25	1270.00	32421.17	4993266.11
8	Renovation of Lhakhang	1200.38	1705.37		224192.83	47596.20		2905.75	271789.03
Total		58423.26	135459.67	3189.49	6385240.96	2812330.01	4195.00	197072.41	9201765.97

Table 11: Timber allotted by offices

Sl. No.	Office	Commercial volume (m ³)	Concessional volume (m ³)	Free volume (m ³)	Commerical royalty (Nu.)	Concessional royalty (Nu.)	Free royalty (Nu.)	Total Volume (m ³)	Total royalty (Nu.)
1	Divisional Forest Office, Bumthang	4095.51	7500.24		792732.44	149593.39		11595.75	942325.83
2	Divisional Forest Office, Dagana	2157.83	5445.62	13.33	86886.54	108052.51	180.00	7616.78	195119.05
3	Divisional Forest Office, Gedu	5698.35	2581.14	307.50	269734.30	43633.28	180.00	8586.99	313547.58
4	Divisional Forest Office, Mongar	5498.47	16706.60	19.02	300688.26	366786.60	0.00	22224.08	667474.86
5	Divisional Forest Office, Paro	2762.74	2550.12		468633.13	24382.51		5312.86	493015.64
6	Divisional Forest Office, Pema gatshel	2029.96	1981.90		63874.49	31478.46		4011.86	95352.95
7	Divisional Forest Office, Samdrup Jongkhar	2107.71	798.57	0.00	45945.55	14524.94	0.00	2906.27	60470.49
8	Divisional Forest Office, Samtse	515.08	13808.81	556.80	105979.78	230729.70	1440.00	14880.70	338149.48
9	Divisional Forest Office, Sarpang	2864.13	2650.69		407525.51	45518.73		5514.82	453044.24

10	Divisional Forest Office, Thimphu	4963.46	3126.62	91.50	715646.00	52919.99	0.00	8181.58	768565.99
11	Divisional Forest Office, Trashigang	977.50	17961.91	143.33	36597.60	401256.99	1800.00	19082.75	439654.59
12	Divisional Forest Office, Tsirang	568.44	1989.08	6.67	30354.70	32670.93	90.00	2564.19	63115.63
13	Divisional Forest Office, Wangdue	8022.25	15316.32	272.57	1053852.51	398619.20	10.00	23611.15	1452481.71
14	Divisional Forest Office, Zhemgang	612.68	6722.10	0.08	100677.41	121784.00	315.00	7334.86	222776.41
15	Bumdeling Wildlife Sanctuary	509.94	3608.09	46.40	136562.91	127157.02	0.00	4164.43	263719.93
16	Jigme Dorji National Park	10717.26	12943.92	1640.98	1130092.28	297094.35	0.00	25302.16	1427186.63
17	Jigme Khesar Strict Nature Reserve	292.72	33.53		47730.90	2333.60		326.24	50064.50
18	Jigme Singye Wangchuck National Park	182.10	263.44		50537.46	6349.69		445.54	56887.15
19	Jomotsangkha Wildlife Sanctuary	489.04	1925.82	62.39	45042.26	50319.32	180.00	2477.25	95541.58
20	Phibsoo Wildlife Sanctuary	1173.31	30.15		360876.20	3400.00		1203.46	364276.20

21	Phrumsengla National Park	1308.33	8115.13		77720.12	114307.78		9423.46	192027.90
22	Royal Manas National Park	10.05	762.97	28.90	4008.00	19053.42	0.00	801.92	23061.42
23	Sakteng Wildlife Sanctuary	866.42	4759.37		53542.61	104863.60		5625.79	158406.21
24	Wangchuck Centennial National Park		3877.54			65500.00		3877.54	65500.00
Total		58423.26	135459.67	3189.49	6385240.96	2812330.01	4195.00	197072.41	9201765.97

Table 12: Firewood allotted by offices

Sl. No.	Office	Commercial volume (m ³)	Concessional volume (m ³)	Free volume (m ³)	Commerical royalty (Nu.)	Concessional royalty (Nu.)	Free royalty (Nu.)	Total Volume (m ³)	Total royalty (Nu.)
1	Divisional Forest Office, Bumthang	1176.2	874.3033333		19455	13561.88		2050.50333	33016.88
2	Divisional Forest Office, Dagana	1577.05	4186.256667	13.33333333	20924.88	55587.48	180	5776.64	76692.36
3	Divisional Forest Office, Gedu	4695.314286	1335.466667	307.5	63157.87	18291.57	180	6338.280952	81629.44
4	Divisional Forest Office, Mongar	4161.833333	11026.615		59335.04	151602		15188.44833	210937.04
5	Divisional Forest Office, Paro	173.3333333	1959.166667		1510.79	9203.2		2132.5	10713.99
6	Divisional Forest Office, Pema gatshel	1688.333333	1199.346667		16749.42	15950		2887.68	32699.42
7	Divisional Forest Office, Samdrup Jongkhar	1693.283333	533.3333333		23037.75	7200		2226.616667	30237.75
8	Divisional Forest Office, Samtse	7.616666667	10112.69167	40.76666667	540.9	148931.69	180	10161.075	149652.59

9	Divisional Forest Office, Sarpang	6.666666667	2412.986667		90	32807.2		2419.6533 33	32897.2
10	Divisional Forest Office, Thimphu	1493.333333	1003.31	39.16	9033.76	4665.8592	0	2535.8033 33	13699.619 2
11	Divisional Forest Office, Trashigang	731.7916667	10019.17	143.33333 33	9897.5	134407.58	1800	10894.295	146105.08
12	Divisional Forest Office, Tsirang	483.3333333	1550.726667	6.6666666 67	6525	24528.93	90	2040.7266 67	31143.93
13	Divisional Forest Office, Wangdue	26.16666667	5238.788333		590.96	86564.72		5264.955	87155.68
14	Divisional Forest Office, Zhemgang	75.225	185.125	0.0833333 33	9126.45	6837.96	315	260.43333 33	16279.41
15	Bumdeling Wildlife Sanctuary	96.4	2803.76	30.03	10575.38	66023.43	0	2930.19	76598.81
16	Jigme Dorji National Park	4995.833333	5426.325		46698.53	29817.82		10422.158 33	76516.35
17	Jigme Khesar Strict Nature Reserve		15.1			1229.6		15.1	1229.6
18	Jigme Singye Wangchuck National Park	40	69.33333333		160	1080		109.33333 33	1240

19	Jomotsangkha Wildlife Sanctuary	153.3333333	1473.333333	20	2069.99	19620	180	1646.666667	21869.99
20	Phibsoo Wildlife Sanctuary	113.3333333			1536.68			113.333333	1536.68
21	Phrumsengla National Park	924.24	6608.243333		7990	56510		7532.483333	64500
22	Royal Manas National Park		234.3166667			3600		234.31666667	3600
23	Sakteng Wildlife Sanctuary	527.6666667	2861.62619		7290	48051.29		3389.292857	55341.29
24	Wangchuck Centennial National Park		1706.666667			10000		1706.666667	10000
Total		24840.28762	72835.99119	600.8733333	316295.9	946072.2092	2925	98277.15214	1265293.109

4.2. Production of Timber from FMU and outside FMU

Table 13: Timber production from Forest Management Units and Action Plans in 2020

Sl.No.	Forest Management Unit (FMU)	Standing Vol achieved(m ³)
1	Karshong	5032.24
2	Dawathang	729.07
3	Rodungla	14985.00
4	Chendebji	4635.75
5	Khotokha	6337.95
6	Gogona	5203.00
7	Dongdechu	2319.23
8	Khaling Kharungla	1046.36
9	Khengzore	414.81
10	Zonglela	12150.03
11	Selela	11309.92
12	Lonchu	4562.37
13	Betikha	8024.16
14	Gidakom	6453.10
15	Metapchhu	346.00
16	Lingmithang	2040.00
Total		85588.98

Table 14: Timber production from outside FMUs and adhocs areas in 2020

Sl.No.	Ad-hoc allotment outside Forest Management Unit (FMU)	Volume (m ³)
1	Uruk sanitation	17382.85
2	Khikhar	2712.48
3	Bluepine die back	4721.10
4	Haa East FMU	377.75
5	Korilla FMU	73.19
6	Rongmanchu FMU	57.58
7	Wangdigang FMU	0.00
8	Chamgang FMU	1796.00
9	Fire Burnt area Aetothang, Gasa (JDNP)	3641.21
10	Bark Bettle infestation Batshophu, Haa	108.77
11	Other Adhocs (DFOs and PAs)	18019.19
Total		48890.12

4.3. Timber allotted by NRDCL for various purposes

Table 15: Timber allotted by NRDCL for various purposes

Sl. No	Region	50% AWBI						50% NRDCL						TOTAL TIMBER SUPPLIED (m ³)
		Internal allotment (m ³)	Export Auction/ Special Class Auction (m ³)	Direct Allotment to Sawmills/ Furniture Unit (m ³)	Subsidised (Rural) (m ³)	Others (m ³)	Retail sale (m ³)	Govt. Project (m ³)	Monstery/ Lhakangs (m ³)	Dzongs (m ³)	Gyalsung Project (m ³)	Emergency Project-COVID (m ³)		
1	Rinpung Region	6833.87	0.00	0.00	121.23	794.00	4990.46	351.83	855.91	753.62	0.00	0.00	14700.93	
2	Zhongar Region	0.00	68.25	229.48	11.33	66.11	2096.97	344.54	192.99	0.00	953.22	0.00	3962.88	
3	Sha Region	2172.89	0.00	916.85	0.00	123.59	1255.17	451.18	301.77	14.97	786.50	0.00	8022.92	
4	Phuentsholing Region	114.46	274.53	250.50	0.00	0.00	85.43	356.37	13.88	0.00	0.00	515.37	1610.55	
5	Jakar Region	579.96	0.00	6294.76	70.15	33.01	2540.94	0.00	739.11	1338.92	417.82	4350.5	16365.20	
6	Gelephu Region	236.10	76.11	370.62	0.00	311.10	80.53	72.55	239.19	585.02	0.00	0.00	1971.22	
Total		9937.28	418.89	202.71	1327.81	576.48	2342.86	157.53					4865.90	

4.4. Non-wood Forest Products

Table 16: NWFPs extracted and royalty realized in 2020

Sl. No.	Product Name	Unit	Quantity	Royalty (Nu.)
1	<i>Ajania nubigena</i> (Khamkar (Bum))	Kilogram	31.00	62.00
2	Bamboo shoots	Number	100.00	100.00
3	Banana Leave	Bundle	22.00	110.00
4	<i>Calamus</i> spp	Bundle	197.00	788.00
		Truckload	5.00	4000.00
5	Cane shoot	Bundle	435.00	3342.00
		Truckload	22.00	1680.00
6	Charcoal	Kilogram	54290.00	10858.00
7	<i>Daphne</i> spp (Bark) (Deykap (Dz))	Kilogram	4260.00	2588.00
8	<i>Exidia recisa</i> (Sew-shamong (Dz))	Kilogram	150.00	900.00
9	Fern top	Kilogram	6520.00	6620.00
10	<i>Hippophae rhamnoides</i> (Taray tsang (Dz))	Kilogram	500.00	2000.00
11	<i>Hyparrhenia hirta</i> (Thatch grass)	Bundle	10.00	806.00
12	<i>Juniperus</i> spp.	Truckload	559.70	6384.00
13	<i>Knema</i> spp. (Duruka (Kheng))	Kilogram	50.00	5650.00
14	Large bamboo	Number	47215.00	88270.00
15	Leaf moulds	Truckload	604.50	33290.00
16	Leaves of BP/Fir	Headload	343.00	966.00
17	Leaves of juniper (Incense)	Headload	725.50	2522.00
18	Lemon grass oil	Litre	5.00	25.00
19	<i>Nardostachys jatamansi</i> (Pangpoe (Dz))	Kilogram	43514.00	87028.00
20	<i>Ophiocordyceps sinensis</i> (Yartsey Genbub (Dz))	Kilogram	2013.06	2614353.60
21	<i>Oroxylum indicum</i> (Flower) (Namkaling (Dz))	Kilogram	50.00	100.00
22	Phyllanthus emblica (Amla (Dz))	Kilogram	100.00	500.00
23	<i>Picrorhiza</i> spp (Puta shing (Dz))	Kilogram	866.00	10392.00
24	Pine needle	Headload	364.50	1417.00
25	<i>Piper</i> spp(Pipla (Lho))	Kilogram	332.00	2818.00

26	Pouzolia spp (Yongziba (<i>Sh</i>))	Kilogram	5231.00	7662.00
27	Resin	Kilogram	2927.00	11708.00
28	<i>Rhododendron</i> spp (Etho metho (<i>Dz</i>)))	Kilogram	4306.50	8163.00
29	<i>Rubia cordifolia</i> (Tshoed (<i>Dz</i>)))	Kilogram	10548.00	168768.00
30	<i>Shilajit</i> (Bjaju (<i>Dz</i>)))	Kilogram	35.00	280.00
31	Small bamboo	Number	69682.00	39354.48
32	<i>Thysanolaena latifolia</i> (Tsakusha (<i>Dz</i>)))	Bundle	462.00	1444.00
33	<i>Yushania maling</i> (Hikchu (<i>Dzo</i>)))	Number	100.00	8.00
34	<i>Zanthoxylum armatum</i> (Zhungthey (<i>Dz</i>)))	Kilogram	2400.00	9600.00
35	Others	Kilogram	13.00	36.00
		Truckload	1.00	40.00
		Number	30.00	180.00

Table 17: NWFPs extracted and royalty realized in 2020

Sl. No.	Product Name	Unit	Quantity	Royalty (Nu.)
1	Clay soil	Truckload	199.00	7950.00
2	Color soil	Kilogram	24826.00	54600.00
3	Boulders	m ³	801389.00	4001850.50
		Tractor	2.00	632.00
		Truckload	22499.00	906861.64
4	Stone	Truckload	28775.50	1193650.00
		m ³	16034.00	80260.00
5	Stone dust	m ³	391.00	1420.00
		Truckload	157.00	6240.00
6	Sand	Truckload	33936.00	1498675.00
		m ³	107415.00	535500.00
7	River bed material	m ³	337891.00	1689455.00
		Truckload	95572.00	3763280.00
8	Gravel	Truckload	7869.00	342247.00
		m ³	120205.00	598240.00

5. FORESTRY SERVICES

5.1. Forestry Clearance

Table 18: Forestry clearance issued by offices

SN.	Office	Area (Ha)					
		Exchange Land	Lease Land	Substitute land	Transmission line	Road Construction	Others
1	Divisional Forest Office, Bumthang	0.43	0.00	1.32	0.00	1.13	0.32
2	Divisional Forest Office, Dagana	2.18	4.83	12.04	2.65	4562.90	215.28
3	Divisional Forest Office, Gedu	2.43	0.78	0.00	0.68	6.70	5.84
4	Divisional Forest Office, Mongar	4.53	36.01	4.23	490.92	1009.29	26.25
5	Divisional Forest Office, Paro	0.80	7.31	2.45		9.91	31.84
6	Divisional Forest Office, Pema Gatshel	0.61	7.03	0.46	1.29	26.37	14.99
7	Divisional Forest Office, Samdrup Jongkhar	0.00	0.28	0.00	3.20	11.80	37.14
8	Divisional Forest Office, Samtse	12.27	1.28	1.64	328.38	1749.11	616.07
9	Divisional Forest Office, Sarpang	0.00	1.68	3.72	1631.67	1744.12	1548.25
10	Divisional Forest Office, Thimphu	0.00	10.82	0.06	0.17	5.23	32.38
11	Divisional Forest Office, Trashigang	0.17	5.36	0.62	0.01	6.21	4.33
12	Divisional Forest Office, Tsirang	5.24	0.27	0.89	1.55	15.65	6.21
13	Divisional Forest Office, Wangdue	2.65	10.49	0.00	29.62	22.73	125.47
14	Divisional Forest Office, Zhemgang	0.00	0.00	0.00	0.16	12.50	0.70
15	Bumdeling Wildlife Sanctuary	0.00	0.08	5.05	0.00	39.49	11.61
16	Jigme Dorji National Park	0.16	5.05	1.84	0.00	61.17	3503.84
17	Jigme Singye Wangchuck National Park	0.00	0.00	0.00	0.18	0.14	0.26
18	Jomotsangkha Wildlife Sanctuary	0.00	69.89	3.23	0.13	0.10	168.20
19	Phrumsengla National Park	0.00	0.00	0.00	249.60	10.81	160.54
20	Royal Manas National Park	0.00	0.40	0.00		265.41	5.22
21	Sakteng Wildlife Sanctuary	0.00	0.91	0.00	0.40	5.74	1.37
Total		31.47	162.47	37.55	2740.60	9566.50	6516.11

5.2. Wood-based industries

Table 19: Number of wood-based industries in Bhutan

Sl. No.	Dzongkhag	Briquette factory (No.)	Charcoal factory (No.)	Furniture unit (No.)	Handicraft unit (No.)	Incense factory (No.)	Integrated WBI (No.)	Joinery unit (No.)	Particle board factory (No.)	Plywood factory (No.)	Sawmill (No.) *	Grand Total
1	Bumthang	0.00	0.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	43.00
2	Chhukha	0.00	0.00	15.00	0.00	6.00	1.00	0.00	1.00	3.00	7.00	33.00
3	Dagana	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	8.00
4	Gasa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Haa	0.00	0.00	5.00	0.00	0.00	1.00	0.00	0.00	0.00	23.00	29.00
6	Lhuentse	0.00	0.00	8.00	1.00	3.00	0.00	0.00	0.00	0.00	1.00	13.00
7	Mongar	0.00	1.00	27.00	2.00	4.00	1.00	1.00	0.00	0.00	10.00	46.00
8	Pema Gatshel	0.00	0.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	9.00
9	Paro	0.00	0.00	48.00	0.00	0.00	0.00	0.00	0.00	0.00	27.00	75.00
10	Punakha	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	9.00
11	Samdrup Jongkhar	0.00	0.00	7.00	0.00	0.00	0.00	9.00	0.00	0.00	7.00	23.00

12	Samtse	0.00	0.00	6.00	1.00	0.00	0.00	0.00	0.00	3.00	10.00	
13	Sarpang	0.00	0.00	13.00	0.00	1.00	1.00	0.00	0.00	1.00	6.00	22.00
14	Thimphu	2.00	0.00	8.00	0.00	0.00	4.00	3.00	0.00	0.00	14.00	31.00
15	Trashigang	0.00	0.00	9.00	3.00	3.00	0.00	0.00	0.00	2.00	17.00	
16	Trashiyangtse	0.00	0.00	11.00	17.00	0.00	0.00	0.00	0.00	0.00	1.00	29.00
17	Trongsa	0.00	0.00	4.00		0.00	0.00	0.00	0.00	0.00	2.00	6.00
18	Tsirang	1.00	0.00	6.00	2.00	0.00	0.00	0.00	0.00	0.00	1.00	10.00
19	Wangdue	0.00	0.00	7.00		0.00	0.00	0.00	0.00	0.00	6.00	13.00
20	Zhemgang	0.00	0.00	12.00	1.00	0.00	0.00	0.00	0.00	0.00	2.00	15.00
Total		3.00	1.00	231.00	27.00	17.00	8.00	13.00	1.00	4.00	136.00	441.00
* includes mobile sawmill also												

5.3. Plantation

Table 20: Plantation creation in 2020

Sl. No.	Office	Location	Types of Plantation	Area (Ha)
1	Divisional Forest Office, Bumthang	Thilee Zur-1 Thilee Zur-2	Normal Normal	3.00 2.00
2	Divisional Forest Office, Dagana	Chomsamling Khural Loongsilsa Upper Goshi	Bio-pesticide Habitat Management Bio-pesticide Enrichment	1.00 2.00 1.00 10.00
3	Divisional Forest Office, Gedu	Kothriline Padechu	Bio-pesticide Enrichment	2.00 20.00
4	Divisional Forest Office, Mongar	Babanang Changshing Gonpa Dromazhong to Murmur Tongla Puensum & Dungkargaki CF Zachu	Enrichment Enrichment Afforestation Compensatory Enrichment	6.00 4.00 3.00 2.04 15.00
5	Divisional Forest office, Pema Gatsel	Gamazore Laniri-Paligangpa Zalashing Jhug	Compensatory Enrichment Enrichment	0.61 10.00 1.50
6	Divisional Forests Office, Samdrup Jongkhar	Gerwa	Normal	5.00
7	Divisional Forest Office, Samtse	Nunia	Water Source Protection	1.50
8	Divisional Forest Office, Sarpang	Mal Bans	Bio-pesticide	2.00
9	Divisional Forest office, Thimphu	Sangaygang	Rehabilitation	3.00
10	Divisional Forest Office, Trashigang	Chorten Kardungma Chorten Kardungma, Dung gonpa Duksum	Water Source Protection Water Source Protection Compensatory	1.00 1.00 0.50

	Duksum Range compound	Compound development	1.52
11 Divisional Forests Office, Tsirang	Alay, Tsakaling Norzay CF	Enrichment	2.00
	Changchey, Norbuphensum CF	Enrichment	1.00
	Horangay, Samding CF	Enrichment	1.00
	Kaighai, Sungchop CF	Enrichment	1.00
	Labseydangra, Bulkey CF	Enrichment	2.00
	Lamoilum, Dangreybu CF	Enrichment	2.00
	Norbubangzoe CF, Dharakhop	Enrichment	2.00
	Norjangsa CF	Enrichment	2.00
	Salari	Habitat Management	3.00
	Salari-I	Bio-pesticide	1.00
12 Divisional Forest Office, Wangdue	Sallaree, Himalayan CF	Enrichment	2.00
	Sallari-II	Bio-pesticide	1.00
	Sirisay Gairo, Omchu CF	Enrichment	1.00
	Subbagaon, Sunkosh	Habitat Management	1.00
	Toedsang, Norbucholing CF	Enrichment	2.00
	Tongshingnang, Chithuen CF	Enrichment	2.00
	Yeshy GairoDrashingang CF	Enrichment	1.00
	Zamlingzor CF	Enrichment	2.00
	Chena Nalo (SRF)	Compensatory	20.00
	Damtsangma (Gangju CF)	Compensatory	3.00
13 Divsional Forest	Dechenling CF	Compensatory	1.10
	Jazipang (SRF)	Compensatory	3.00
	Lumsum CF	Compensatory	2.50
	Ngenlung Drechchagling Lhakhang	Normal	0.94
	Norbuding CF	Compensatory	2.50
	Parikha Norbuling CF	Compensatory	1.00
	Tassar CF	Compensatory	1.77
	Tsemalum (SRF)	Compensatory	7.30
	Bechetpo	Normal	1.86
	Burkhoe	Enrichment	0.65

	Office, Zhemgang	Chokor-1	Water Source Protection	0.37
		Chokor-2	Normal	0.35
		Chokor-3	Normal	0.76
		Goshing	Enrichment	3.00
		Kaktong	Enrichment	2.00
		Menchulum	Normal	1.00
		Monglapang	Enrichment	0.71
		Naychagang	Normal	2.00
		Phulabi	Normal	3.00
		Phumithang	Normal	2.00
		Phunsum Pelri CF	Enrichment	1.50
		Talila	Normal	1.65
		Thuenpapunshi CF	Normal	0.55
		Yumdang	Enrichment	2.00
14	Bumdeling Wildlife Sanctuary	Arbrang	Water Source Protection	5.00
15	Jigme Dorji National Park	Barshong	Water Source Protection	5.00
16	Jigme Khesar Strict Nature Reserve	Near Dungkhag Office Nebi gonpa	Afforestation Afforestation	3.00 3.00
17	Jigme Singey Wangchuck National Park	Rangthang	Water Source Protection	6.00
18	Jomotsangk ha Wildlife Sanctuary	Jangsa	Normal	2.00
19	Phrumsengl a National Park	Chokona Gashing	Water Source Protection Water Source Protection	2.69 2.39
20	Phibsoo Wildlife Sanctuary	Balatung	Water Source Protection	3.00
21	Sakteng Wildlife Sanctuary	Khashiteng Talaw	Water Source Protection Rehabilitation	3.00 2.00
Total				231.26

5.4. Revenue from Fees

Table 21: Fees collected by offices

Sl. No.	Office	Visitor (No.)	Revenue (Nu.)
1	Divisional Forest Office, Bumthang	321.00	3330.00
2	Divisional Forest Office, Dagana	194.00	2750.00
3	Divisional Forest Office, Gedu	22141.00	8612845.00
4	Divisional Forest Office, Mongar	0.00	19855.00
5	Divisional Forest Office, Paro	2189.00	642261.41
6	Divisional Forest Office, Pema Gatshel	0.00	160.00
7	Divisional Forest Office, Samdrup Jongkhar	0.00	350.00
8	Divisional Forest Office, Samtse	41.00	12320.00
9	Divisional Forest Office, Sarpang	0.00	82020.00
10	Divisional Forest Office, Thimphu	7790.00	640255.00
11	Divisional Forest Office, Trashigang	16.00	5820.00
12	Divisional Forest Office, Wangdue	0.00	2810.00
13	Divisional Forest Office, Zhemgang	21.00	15821.00
14	Bumdeling Wildlife Sanctuary	3.00	27400.00
15	Jigme Dorji National Park	1367.00	351820.00
16	Phibsoo Wildlife Sanctuary	0.00	20.00
17	Sakteng Wildlife Sanctuary	0.00	610.00
Total		34083.00	10420447.41

Table 22: Types of fees

Sl. No.	Source	Visitor (No.)	Revenue (Nu.)
1	Boating fee	868.00	43125.00
2	Campaigning fee	27.00	1440.00
3	Export permit fee	0.00	142900.00
4	Export service charge	0.00	7434525.00
5	Filming fee	0.00	6000.00
6	Fishing fee	1149.00	519880.00
7	Permit Fee	5600.00	1354297.41
8	Power chain registration fee	62.00	20535.00
9	Power chain renewable fee	35.00	1945.00
10	Sale of Seedlings	1.00	39500.00
11	Service fee	0.00	24200.00
12	Visitors fee	4792.00	261300.00
13	Zoo/Farm fee	21549.00	570800.00
Total		34083.00	10420447.41

Table 23: Fees collected by Royal Takin Preserve

Sl. No.	Office	Visitor (No.)	Revenue (Nu.)
1	Royal Takin Preserve	4021.00	1291620.00

5.5. Wildlife Rescue Operation

Table 24: Rescue and Rehabilitation

Sl. No.	Office	Dzongkhag	Species	Rescue Status							Grand Total
				Rescued (No.)	Dead (No.)	Escaped (No.)	Euthanasia (No.)	Rehabilitation (No.)	Released to wild (No.)	Treatment / antibiotic and Sample collected (No.)	
1	Divisional Forest Office, Pema Gatshel	Pem Gatshel	Tawny Cat Snake)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
			Wild Pig	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
2	Divisional Forest Office, Paro	Paro	Himalayan Serow	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
3	Divisional Forest Office, Sarpang	Sarpang	Great Hornbill	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
			Marbled Cat	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00

4	Divisional Forest Office, Tsirang	Tsirang	Monocelet Cobra	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
5	Divisional Forest Office, Zhemgang	Zhemgang	Sambar Deer	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
6	Nature Conservation Rescue team	Paro	Musk deer	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
		Thimphu	Barking deer	0.00	0.00	0.00	0.00	5.00	0.00	1.00	6.00
			Barn owl	0.00	0.00	0.00	0.00	3.00	0.00	0.00	3.00
			Black Bear	0.00	1.00	0.00	0.00	0.00	1.00	1.00	3.00
			Goat	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
			Goral	0.00	2.00	0.00	0.00	2.00	0.00	5.00	9.00
			Himalayan buzzard	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
			Himalayan Partridge	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
			Himalayan Serow	0.00	0.00	0.00	0.00	1.00	0.00	1.00	2.00

		Kirstel Kite	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
		Monal Phesent	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
		Monkey	0.00	0.00	0.00	0.00	1.00	0.00	1.00	2.00
		Pigeon	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
		Sambar deer	0.00	0.00	0.00	0.00	2.00	1.00	1.00	4.00
		Takin	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
		Wild pig	0.00	0.00	0.00	0.00	1.00	1.00	1.00	3.00
7	Nature Conservation Division and Divisional Forest Office, Gedu	Chhukha	Black Bear	0.00	0.00	0.00	0.00	2.00	0.00	0.00
8	Nature Conservation Division and Divisional Forest Office, Thimphu	Thimphu	Barking deer	0.00	0.00	0.00	0.00	5.00	0.00	0.00
			Black Bear	0.00	0.00	0.00	0.00	3.00	0.00	0.00

			Pigeon	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00
			Sambar deer	0.00	1.00	2.00	0.00	9.00	0.00	0.00	12.00
			Wild pig	1.00	0.00	0.00	0.00	1.00	1.00	0.00	3.00
9	Nature Conservation Division and Jigme Dorji National Park	Gasa	Wild Takin	0.00	0.00	0.00	4.00	0.00	0.00	7.00	11.00
10	Nature Conservation Division and Jigme Khesar Strick Nature Reserve	Haa	Himalayan Serow	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Total				1.00	4.00	2.00	4.00	43.00	10.00	23.00	87.00

6. CHALLENGES

6.1. Human Wildlife Conflict

Table 25: Crop Damages

Office	Wildlife	Crop Affected	Incidents (No.)	Area affected (Ha)
Jomotshangkha Wildlife Sanctuary	Elephant	Banana	5.00	8.58
		Betel nut	6.00	4.63
		Maize	19.00	3.08
		Paddy	5.00	0.11
Royal Manas National Park	Elephant	Betel nut	2.00	1.21
		Maize	4.00	0.61
Divisional Forest Office, Samtse	Elephant	Banana	5.00	0.03
		Betel nut	28.00	10.58
		Maize	4.00	0.12
		Paddy	1.00	0.04
Total			79.00	29.00

Table 26: Livestock Depredation

Office	Predator Type	Livestock Type	Kills (No.)
Bumdeling Wildlife Sanctuary	Tiger	Horse	1.00
Divisional Forest Office, Gedu	Himalayan black bear	Cow	13.00
		Goat	4.00
Jigme Dorji National Park	Snow leopard	Yak (Jeem)	1.00
	Tiger	Cow	1.00
		Cow (Jersey)	1.00
Jigme Singye Wangchuck National Park	Tiger	Cow	1.00
Total			22.00

6.2. Forest Offences

Table 27: Types of forest offence reported in 2020

Offence	Incidences (No.)	Fine & compensation (Nu.)	Reward (Nu.)
Illegal fishing	593.00	3309542.52	3266790.00
Forest fire	4.00	14500.00	2750.00
Illegal Timber	790.00	14351048.49	1753884.64
Illegal NWFPs Harvesting	375.00	4530574.59	727453.82
Illegal Timber Misuse	50.00	1179406.04	112776.33
Land /encroachment	61.00	1045913.26	286986.00
Wildlife Poaching	44.00	589150.00	528999.98
Total	1917.00	25020134.90	6679640.77

Table 28: Office-wise forest offence reported in 2020

Office	Illegal Fishing		Forest fire		Illegal Timber		Land /encroachment		Illegal Timber Misuse		Illegal NWFPs Harvesting		Wildlife Poaching	
	Fine & compensation (Nu.)	Reward (Nu.)												
Divisional Forest Office, Bumthang	201000.00	201000.00	0.00	0.00	1704382.33	205472.35	3595.28	375.00	57518.76	6937.80	164052.10	97895.04	0.00	0.00
Divisional Forest Office, Dagana	220500.00	217500.00	1000.00	0.00	1274217.34	107903.40	100002.30	13640.00	77275.81	8479.45	327378.43	47122.50	130000.00	90000.00
Divisional Forest Office, Gedu	701100.00	705000.00	0.00	0.00	853058.86	63424.24	56250.00	14500.00	10860.46	650.00	1556685.92	281541.20	160000.00	160000.00
Divisional Forest Office, Mongar	8000.00	2000.00	0.00	0.00	441313.34	32111.09	48684.51	8625.00	37756.36	3255.00	242145.28	28468.75	47400.00	31000.00
Divisional Forest Office, Paro	562000.00	559000.00	5000.00	1250.00	2730990.60	396447.72	392265.40	113125.00	2450.00	612.50	326035.46	18775.75	5000.00	5000.00
Divisional Forest Office,	45000.00	45000.00	0.00	0.00	238112.66	45905.05	2000.00	1000.00	17960.80	2725.00	105154.00	15500.00	5000.00	5000.00

Pema Gatshel															
Divisional Forest Office, Samdrup Jongkhar	0.00	0.00	0.00	0.00	659521.76	132186.60	88600.00	22150.00	0.00	0.00	8733654	12750.00	35000.00	35000.00	
Divisional Forest Office, Samtse	21000.00	34000.00	0.00	0.00	192807.22	11287.00	0.00		9999.76	1003.75	71999.09	14000.00	0.00	0.00	
Divisional Forest Office, Sarpang	142000.00	142000.00	0.00	0.00	159704.98	25207.90	0.00		12970.56	875.00	98441.99	18375.00	0.00	0.00	
Divisional Forest Office, Thimphu	541000.00	536000.00	7500.00	1250.00	1952167.38	216009.01	103750.00	38375.00	456262.50	33849.70	400839.88	59771.25	0.00	0.00	
Divisional Forest Office, Trashigang	188543.00	178190.00	0.00	0.00	525101.06	43435.61	3400.00	850.00	1750.00	111.00	158954.20	22020.00	23750.00	20000.00	
Divisional Forest Office, Tsirang	12000.00	12000.00	1000.00	250.00	12424.68	888.00	33296.00	6050.00	0.00	0.00	108053.12	9562.50	0.00	0.00	
Divisional Forest Office, Wangdue	450000.00	440000.00	0.00	0.00	0.00	254618.15	109450.00	44350.00	350677.07	42880.10	545421.36	67175.00	127000.00	127000.00	

Divisional Forest Office, Zhemgang	56000.00	56000.00	0.00	0.00	40753.32	4173.25	0.00		0.00	0.00	61735.28	6562.50	0.00	0.00
Bumdeling Wildlife Sanctuary	9600.00	9600.00	0.00	0.00	148972.25	5775.00	0.00		0.00	0.00	8483.00	1575.00	0.00	0.00
Jigme Dorji National Park	0.00	0.00	0.00	0.00	815678.04	126335.83	104619.80	23946.00	6981.40	1086.78	153656.16	14168.36	21000.00	21000.00
Jigme Khesar Strict Nature Reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77001.78	4863.74	0.00	0.00
Jomotsangkha Wildlife Sanctuary	122000.00	96000.00	0.00	0.00	316259.96	11646.40	0.00	0.00	136942.56	10310.25	0.00	0.00	35000.00	34999.98
Phibsoo Wildlife Sanctuary	3000.00	3000.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phrumsengla National Park	14800.00	18500.00	0.00	0.00	417528.11	37343.36	0.00	0.00	0.00	0.00	15000.00	1000.00	0.00	0.00
Royal Manas National Park	12000.00	12000.00	0.00	0.00	150546.71	33714.68	0.00	0.00	0.00	0.00	22201.00	6327.23	0.00	0.00
Total	3309543.00	3266790.00	14500.00	2750.00	12633540.60	1753884.64	1045913.29	286986.00	1179406.04	112776.33	4530574.59	727453.82	589150.00	528999.98

6.3. Forest Offences

Table 29: Types of forest offence reported in 2020

Office	Dzongkhag	Cause	Species	Fire Incidences	Area Burnt (Ha)
Divisional Forest Office, Mongar	Lhuntse	Rolling boulder	Conifer	1.00	25.25
	Mongar	Unknown	Conifer	1.00	525.20
Divisional Forest Office, Paro	Paro	Unknown	Conifer	1.00	1.26
Divisional Forest Office, Samdrup Jongkhar	Samdrup Jongkhar	Unknown	Non-conifer	4.00	156.30
Divisional Forest Office, Thimphu	Thimphu	Unknown	Conifer	1.00	0.98
Divisional Forest Office, Trashigang	Trashigang	Unknown	Conifer	1.00	98.17
	Trashiyangtse	Unknown	Conifer	1.00	0.40
Divisional Forest Office, Wangdue	Punakha	Electric short circuits	Conifer	1.00	1.07
	Punakha	Unknown	Conifer	5.00	518.28
	Wangdue Phodrang	Agriculture debris burning	Conifer	1.00	0.37
	Wangdue Phodrang	Electric short circuits	Conifer	1.00	108.27
	Wangdue Phodrang	Unknown	Conifer	4.00	935.79
Jigme Dorji National Park	Punakha	Unknown	Conifer	2.00	8.57
Jigme Singye Wangchuck National Park	Wangdue Phodrang	Electric short circuits	Conifer	1.00	6.91
Phrumsengla National Park	Bumthang	Unknown	Conifer	1.00	0.32
Total				26.00	2387.14

7. HUMAN RESOURCES

Table 30: Gender-wise distribution of Staff

Employment Type	Staff category	Female (No.)	Male (No.)	Total (No.)
Regular	Technical	205.00	1132.00	1337.00
	Non-Technical	33.00	97.00	130.00
Contract	Contract	0.00	61.00	61.00
Total		238.00	1290.00	1528.00

Table 31: Gender-wise distribution of technical staff based on designation

Designation	Female (No.)	Male (No.)	Total (No.)
Director	0.00	1.00	1.00
Specialist III	0.00	4.00	4.00
Principal Forestry Officer	2.00	10.00	12.00
Chief Forestry Officer	2.00	24.00	26.00
Dy. Chief Forestry Officer	5.00	28.00	33.00
Sr. Forestry Officer	6.00	55.00	61.00
Forestry Officer	12.00	49.00	61.00
Forest Ranger I	10.00	186.00	196.00
Forest Ranger II	52.00	195.00	247.00
Sr. Forest Ranger	0.00	10.00	10.00
Sr. Forest Ranger I	7.00	95.00	102.00
Sr. Forest Ranger II	11.00	96.00	107.00
Sr. Forest Ranger III	4.00	68.00	72.00
Sr. Forester	91.00	265.00	356.00
Forester	3.00	10.00	13.00
Asst. Forester	0.00	34.00	34.00
Forest Guard	0.00	1.00	1.00
Total	205.00	1,131.00	1,336.00



Forest fire- Our challenge!

Forest Resources
Management Division
DoFPS, MoAF
Tel: +975 2 327723
www.moaf.gov.bt

RNR Statistics Division
DoS, MoAF
Tel: +975 2 331206
rsd@moaf.gov.bt
www.moaf.gov.bt

ISBN-978-99980-907-4-3