

STATISTICAL DATA REPORT

Introduction

1. Forest extent, characteristics and changes
2. Forest growing stock, biomass and carbon
3. Forest disturbances
4. Emissions and Removals from Forests
5. Timber and Fuelwood supply
6. Forest designation, management and ownerships
7. Forestry Students and Employees

1. Forest extent, characteristics and changes

1a. Extent of forest and other wooded land

Categories	Forest Cover Area (ha)	
	2016	2020
Forest (a)	634540	634540
Non-forest land (b=c-a)	19899960	19882500

Categories	Forest Cover Area (ha)	
	2016	2020
Total Land area (c)	20534500	20534500

Data Sources

Year 2004	References	FREL (2020), National REDD+ Office
	Methods Used	Pixel based classification of Landsat Imageries
	Additional comments	

1b. Annual forest expansion, deforestation and net change

Categories	Forest Cover Area (ha)
	2016 - 2020
Forest Expansion (a)	15123.3
...Afforestation	938.3
...Natural regeneration	14185

Categories	Forest Cover Area (ha)
	2016 - 2020
Deforestation (b)	1663.8
Forest area net change (a-b)	13459.5

Data Sources

Year 2012 - 2016	References	a. State of Forest (2016), Pakistan Forest Institute, b. FREL (2020), National REDD+ Office
	Methods Used	a. Official Records of Chief Conservator of Forests, b. Time Series Analysis
	Additional comments	
Year 2016 - 2020	References	a. State of Forest (2016), Pakistan Forest Institute, b. FREL (2020), National REDD+ Office
	Methods Used	a. Official Records of Chief Conservator of Forests, b. Time Series Analysis
	Additional comments	

1c. Annual reforestation

Categories	Forest Cover Area (ha)

Reforestation	938.3
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Data Sources

Year 2004 - 2008	References	N/A
	Methods Used	N/A
	Additional comments	Data of annual reforestation was missing for reference years
Year 2008 - 2012	References	N/A
	Methods Used	N/A
	Additional comments	Data of annual reforestation was missing for reference years

1d. Other land with tree cover

Categories	Forest Cover Area (ha)
Fruit Orchards (a)	
Agroforestry (b)	
Trees in urban settings (c)	

Categories	Forest Cover Area (ha)
Other (specify in comments) (d)	
Total a+b+c+d	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

1e. Degradation

Categories	Area (ha/year)
	2016 - 2020
Degradation	18610.5

Data Sources

Year	References	
	Methods Used	
	Additional comments	

2. Forest growing stock, biomass and carbon

2a. Growing stock

Categories	Growing stock m³/ha (over bark)
Natural Forests	
Irrigated Plantations / Man-made forest	
Other land with tree cover (1f)	

Categories	Total growing stock (million m³ over bark)
Natural Forests	
Irrigated Plantations / Man-made forest	
Other land with tree cover (1f)	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

2b. Growing stock composition by Tree

Categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)
Natural Forests			
#1 Ranked in terms of volume	Pinus roxburghii Sargent	Chandan	
#2 Ranked in terms of volume	Prunus fasciculata	Ber	
#3 Ranked in terms of volume	0	0	
#4 Ranked in terms of volume	0	0	
#5 Ranked in terms of volume	0	0	
Total volume of tree species			N.A
Irrigated Plantations / Man-made forest			
#1 Ranked in terms of volume	0	0	
#2 Ranked in terms of volume	0	0	
#3 Ranked in terms of volume	0	0	
#4 Ranked in terms of volume	0	0	
#5 Ranked in terms of volume	0	0	
Total volume of tree species			N.A
Other Land with Tree Cover			

Categories	Scientific name	Common name	Growing stock in forest (million m³ over bark)
Natural Forests			
#1 Ranked in terms of volume	0	0	
#2 Ranked in terms of volume	0	0	
#3 Ranked in terms of volume	0	0	
Total volume of tree species			N.A

Data Sources

Year	References	
	Methods Used	
	Additional comments	

2c. Biomass stock

Categories	Natural Forest Biomass (tonnes/ha)
Above-ground biomass	
Below-ground biomass	
Dead wood	
Soil Carbon	
Litter	
Total	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

2d. Carbon stock

Categories	Natural Forest Biomass (tonnes/ha)
Carbon in above-ground biomass	
Carbon in below-ground biomass	
Carbon in Dead wood	
Soil Carbon	
Litter	
Total	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

2e. Forest Volume

Categories	Volume (cu ft.)
Above-ground Volume	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

3. Forest designation, management and ownerships

3a. Forest area with management plans

Categories	Area (ha)
Forest area within protected areas	
Forest area with long-term forest management plan	
...of which in protected areas	

Data Sources

Year 2020	References	State of Forest (2016), Pakistan Forest Institute
	Methods Used	Official Records of Chief Conservator of Forests
	Additional comments	Data of Forest are within Protected Area is missing for reference years

3b. Forest ownership and management rights

Categories	Forest area (ha)
A. Government Owned	
State	
Demarcated	
Undemarcated	
Reserved	
Protected	
Unclassed	
Resumed	
B. Private / Community	
Guzara	
Communal	
Section 38	
Section 14b	
Chos Act	
Misc	
C. Private / Individual	
Misc	
Total A + B + C	

Data Sources

Year 2016	References	State of Forestry in Pakistan (2016), Pakistan Forest Institute Peshawar
	Methods Used	Official Records of Chief Conservator of Forests
	Additional comments	Data on records of Private Forests is missing

4. Forest disturbances

4a. Disturbances

Categories	Area (ha)
Forest Fire (a)	
Insects (b)	
Diseases (c)	
Natural disasters (d)	
Other (specify in comments) (e)	
Total (a+b+c+d+e)	

Data Sources

Year	References	
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Methods Used	
Additional comments	

4b. Degraded forests

Categories	Area (ha/year)
Forest Degradation	
..10-30% Canopy Cover	
..31-50% Canopy Cover	
..51-70% Canopy Cover	
..>70% Canopy Cover	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

5. Emissions and Removals from Forests

5a. Emissions

Categories	Average Annual Emissions (tco2e/year)
	2016 - 2020
Deforestation	40500
Forest Degradation	623750
Disturbances	N.A
Total A+ B + C	664250

Data Sources

Year 2004 - 2008	References	FREL (2020), National REDD+ Office
	Methods Used	Pixel based classification of Landsat Imageries
	Additional comments	Data of Removals was not calculated for reference years
Year 2008 - 2012	References	FREL (2020), National REDD+ Office
	Methods Used	Pixel based classification of Landsat Imageries
	Additional comments	Data of Removals was not calculated for reference years

5b. Removals

Categories	Average Annual Removals (tco2e/year)
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2016 - 2020	
Enhancement	249750
SFM	N.A
Conservation	N.A
Total A+ B + C	249750

Data Sources

Year 2004 - 2008	References	N/A
	Methods Used	N/A
	Additional comments	Data of Removals was not calculated for reference years
Year 2008 - 2012	References	N/A
	Methods Used	N/A
	Additional comments	Data of Removals was not calculated for reference years

5c. Net Emissions/Removals

Categories	Net average annual emissions /removals (tco2e/year)
	2016 - 2020
A. Total Emissions	664250
B. Total Removals	249750
Net A-B	414500

6. Timber Fuelwood Supply

6a. Timber and Fuelwood Supply

Categories	Million (m3)
Share of State Forests	
...Industrial Wood Timber	
...Fuel Wood (domestic + commercial + industrial)	
Share of Farmlands	
...Industrial Wood Timber	
...Fuel Wood (domestic + commercial + industrial)	
Imports	
...Industrial Wood Timber	
...Fuel Wood (domestic + commercial + industrial)	
Total A+B+C	

Data Sources

Year	References	
	Methods Used	
	Additional comments	

6b. Forest products and value

Year	Name of Non Woody Forest Product	Key species	Quantity	Unit	Rate	Total Value (PKR)
All other plant products						
All other animal products						
Total						

Data Sources

Year	References	
	Methods Used	
	Additional comments	

7. Forestry Students and Employees

7a. Graduation of students in forest-related education

Categories	Number		
	Total	Female	Male
Doctoral degree			
Master’s degree			
Bachelor’s degree			
Technician certi?cate / diploma			
Total			

Data Sources

Year	References	
	Methods Used	
	Additional comments	