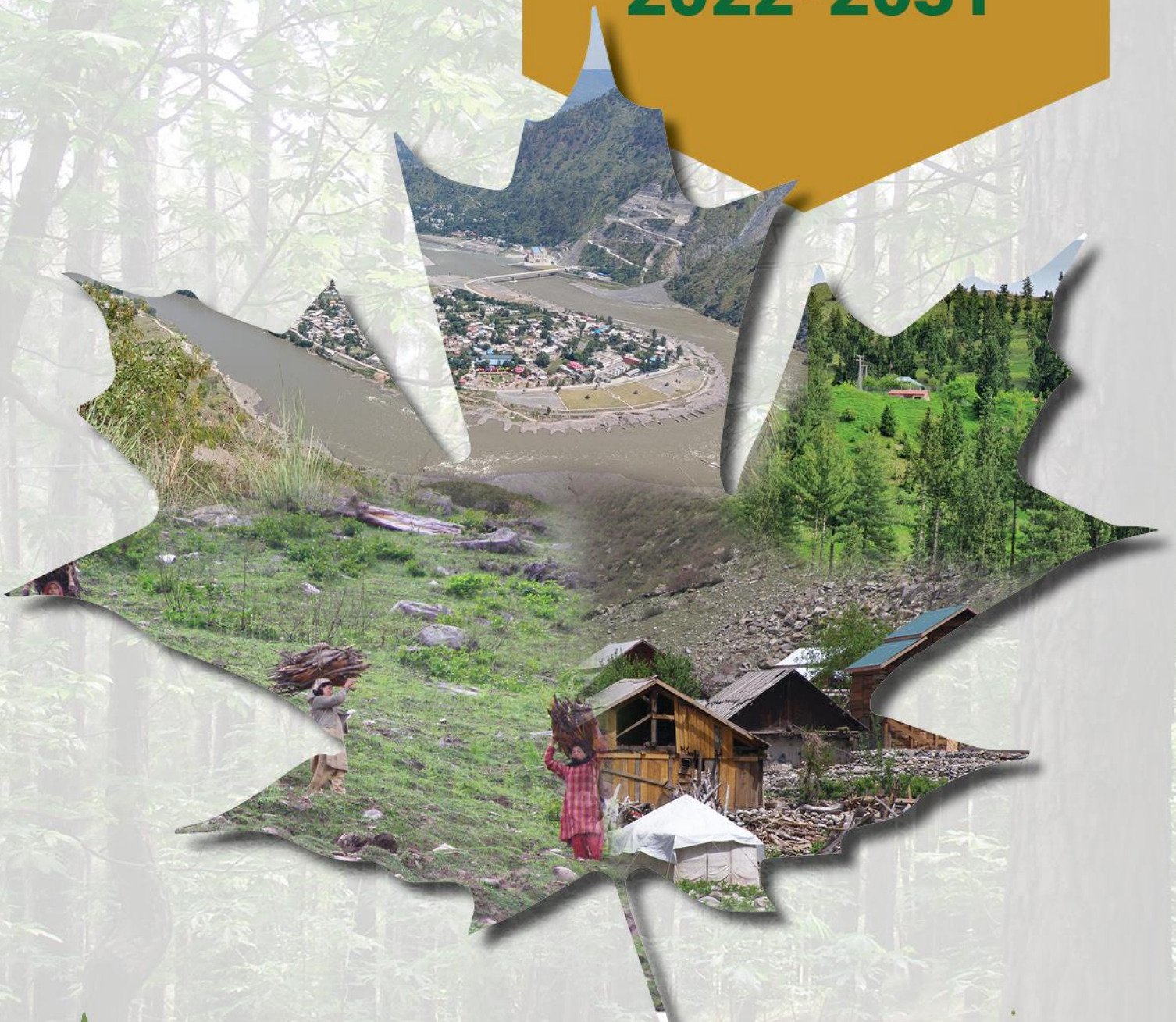
AJK REDD+
ACTION PLAN
Azad Jammu & Kashmir
2022-2031



REDD+ Pakistan

Prepared under the REDD+ Readiness Preparation Project for Pakistan financed by Forest Carbon Partnership Facility (FPCF), implemented by Federal Ministry of Climate Change (MoCC) through National REDD+ Office (NRO), Islamabad.

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Table of Contents

List of Tables

List of Figures

List of Pictures

ACRONYMS

ADB	Asia Development Bank
AJ&K	Azad Jammu & Kashmir
AJ&K RAP	AJ&K REDD+ Action Plan
AJ&K RMC	AJ&K REDD+ Management and Coordination Committees
FAO	Food and Agriculture Organization of United Nations
FCPF	Forest Carbon Partnership Facility
FGD	Focus Group Discussion
FGRM	Feedback Grievances and Redressal Mechanism
FREL/ FRL	Forest Reference Emission Level/ Forest Reference Level
FSMP	Forestry Sector Master Plan
GHG	Green House Gases
GIS	Geographic Information System
ICIMOD	International Centre for Integrated Mountain Development
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land Use Change and Forestry
MoCC	Ministry of Climate Change
MRV	Measurement Reporting and Verification
NFI	National Forest Inventory
NFMS	National Forest Monitoring System
NGOs	Non – Governmental Organizations
NRO	National REDD+ Office
NRS	National REDD+ Strategy
PES	Payment for Ecosystem Services
PFMP	Participatory Forest Management Plans
REDD+	Reducing Emissions from Deforestation and Forest Degradation; and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries
R-PP	REDD+ Readiness Preparation Proposal
SESA	Strategic Environmental and Social Assessment
SFM	Sustainable Forest Management
SIS	Safeguard Information System
SLMS	Satellite Land Monitoring System
SUPARCO	Pakistan Space & Upper Atmosphere Research Commission
TBTTP	Ten Billion Tree Tsunami Project
ToR	Terms of Reference
ToT	Training of Trainers
UNFCCC	United Nation's Framework Convention on Climate Change
WB	World Bank
WGs	Working Groups

Summary

The Pakistan National REDD+ Strategy was approved in 2021. This AJ&K REDD+ Action Plan has been developed to contribute to the strategy's objectives and sustainable management of the forest resources of the state of Azad Jammu and Kashmir.

Preparation of AJ&K REDD+ Action Plan took a multi-stakeholder participatory approach. The overarching purpose of the AJ&K REDD+ Action Plan is to increase benefits from sustainably managed and enhanced forest resources for the people contributing to their livelihood and at the same time mitigating climate change. The specific objective of this document are to (i) Outline actions in line with ground realities to address the prioritized drivers and barriers with context specific actions[1] and related budget (ii) Improve health of the forest ecosystems by reducing deforestation and forest degradation and enhancements of biomass (iii) Define effective implementation and monitoring of REDD+ actions to address the drivers (iv) Identify social and environmental risks associated with proposed actions and suggest risk mitigation (v) Propose a clear benefit sharing mechanism associated with implementation of REDD+ activities, and (vi) Identify areas for enabling policy, legal and institutional arrangements in favour of implementing AJ&K REDD+ Action Plan.

The AJ&K REDD+ Action Plan outlines actions that support investment on improving local livelihoods to address local drivers of deforestation and forest degradation in order to achieve sub national and national REDD+ and forest policy objectives. The AJ&K REDD+ Action Plan identifies measures and interventions that will contribute to national and global goal of reducing emissions. The AJ&K Forests Department as custodian of its forests advocates that REDD+ policies and measures are designed locally and with full involvement of local institutions and communities.

The total area of the AJ&K is 13,297 km² (1.67% of total land cover of Pakistan) and out of this 42.6% (i.e. 5,670 sq.km)[2] is designated forestland under control of forest department representing 11.8% of total forest cover of Pakistan. The forests of AJ&K are divided into three broad categories i.e. (i) montane sub-tropical semi evergreen forests which is further divided into forest types of dry sub-tropical scrub forests and sub-tropical pine forests, (ii) montane temperate forests with forest types of Himalayan moist temperate forests and dry temperate forests and (iii) sub-alpine forests and alpine scrubs with forest types of sub-alpine forests and alpine pastures and scrubs[3]. The Sub-Tropical Pine Forests include Chir Pine (*Pinus roxburghii*) with a mixture of broadleaved species. In moist and dry temperate regions, Blue Pine (*Pinus wallichiana*), Deodar (*Cedrus deodara*), and Spruce (*Picea smithiana*) are the main conifers interspersed with certain broadleaved associates.

The main drivers of deforestation prioritized by the stakeholders included (i) Clearing forestland for large infrastructure projects (ii) rural/urban expansion for housing (ii) mining. Three drivers of forest degradation were prioritized by the stakeholders (i) Use of forests for fuelwood/ energy, (ii) forest fires, (iii) demand for timber needs and (iii) prevalence of forest fires. These drivers were analysed by the stakeholders and several underlying causes were identified.

The AJ&K REDD+ Action Plan proposes several actions to address underlying causes of deforestation and degradation. In addition, it aims achieving energy efficiency and promoting alternative sources of energy to address the main cause of degradation i.e., extraction of firewood for energy. The second

1 A set of interlinked activities that form a coherent actions for counteracting a driver of deforestation, forest degradation and/ or barriers to expansion of a forest carbon enhancement activity.

2 Anwar et.al (2017). Forest carbon inventory of GB. Forest, Wildlife and Environment Department of Gilgit-Baltistan. 2017

3 https://forest.ajk.gov.pk/sub-alpine-forests-and-alpine-scrubs

highest priority is given to land use policy development and amendment of rules to ensure no harm to forest resources. Mapping resources and effective implementation of regulation to curb conversion of land to other land uses are other priority areas identified in this AJ&K REDD+ Action Plan. Other efforts to improve forest resources include improving enabling policy environment for REDD+ implementation (participatory monitoring system, benefit sharing mechanism, forest law enforcement and implementation strengthened, capacity building of actors on forest monitoring system), introducing alternate incomes and livelihood opportunities, promoting sustainable forest-based enterprises and vocational education, and Forest based Payments from Forest Ecosystem Services.

One of the key action identified in this AJ&K REDD+ Action Plan is continuation and refining participatory approach to forest management in which the AJ&K has already travelled a long way. In addition, integration of trees on private lands (as in case of TBTTP) has been emphasized to promote sustainable solutions to energy demands on forests.

The AJ&K REDD+ Action Plan will make a traction through Participatory Forest Management Plans (PFMPs) with an approach that encourages harvesting trees on a rotational basis so that timber and fuel may be produced and used sustainably for local use. The AJ&K REDD+ Action Plan suggests activities aimed at enhancing forest stocks so that forests continue to see improvement for effective REDD+ results. AJK Forest Department will follow a site specific, landscape approach in PFMPs in which various actions are planned and implemented in a coordinated way, aiming at maximizing economic, social and environmental benefits.

The total indicative financial size of this AJ&K REDD+ Action Plan is PKR2,645 million for ten years (2022-2031).

1 INTRODUCTION

Pakistan signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994. Pakistan also initiated a national dialogue on REDD+ in 2010 and submitted its REDD+ Readiness Preparation Proposal (R-PP) to the World Bank Forest Carbon Partnership Facility (FCPF) in 2014. The Federal Ministry of Climate Change (MOCC) through its Office of the Inspector General of Forests (OIGF) has been implementing Readiness activities after approval of R-PP in 2014 with financial and technical support from FCPF along with other bilateral initiatives and UN-REDD target support fund.

One of the key outputs[4] of REDD+ Readiness activities was preparation of a National REDD+ Strategy (NRS) for Pakistan. This strategy was drafted with a vision that forests provide ecosystem services and livelihood support on a sustainable basis. Development of this strategy required an assessment of direct and underlying drivers of deforestation and forest degradation at the national, provincial and local levels, and barriers to enhancement of biomass and forest area. The process for strategy development also required identification of the policies and measures necessary to effectively address these drivers and barriers. For the implementation of recommendations proposed under NRS, it is important to elaborate the drivers and barriers at sub-national and local levels. To undertake these tasks at the sub-national and local level the strategy suggested development of sub national / Provincial REDD+ Actions Plans (PRAPs) and Participatory Forest Management Plans (PFMPs).

The AJ&K REDD+ Action Plan is therefore in line with the recommendation of the NRS. This document provides details on sub national specific drivers of deforestation and forest degradation and describes actions to address them in order to improve forest resources of the AJ&K.

The actions also aim to capitalize on opportunities and address challenges for strengthening REDD+ readiness at the State level.

1.1 Context of Azad Jammu & Kashmir (AJ&K)

1.1.1 Area and Location

AJ&K covers an area of 13,297 square kilometers[5] and situated in the Himalayan belt of Pakistan between longitude 73°-75° and latitude 33°-36°. It borders with Gilgit Baltistan on north, Indian held State of Jammu and Kashmir on east, Punjab Province on south and Punjab & Khyber Pakhtunkhwa (KP) on the west. AJ&K is divided into 10 districts and 183 union councils[6]. Muzaffarabad is the capital of AJ&K and the main economic hub of the territory.

The whole area is mainly hilly and mountainous characterized by deep ravines, rugged, and undulating terrain. The northern part of AJ&K constitutes Himalayan Zone, which is a high-altitude mountain zone with narrow incised valleys. Steep slopes often widening out into upper slopes forming alpine pasture uplands. Glaciers and avalanches are actively eroding the landscape and modifying its topography. The high mountains in the extreme north form the ridges of the Nanga Parbat massif, with highest point at 6,359 meters above mean sea level. The Sub- Himalayas constitute the lower part of Neelum Valley. The lesser Himalayas of the central part of Neelum Valley are separated from Sub-Himalayas by the main boundary thrust exposed near Nauseri in the south and Higher Himalayas in the north.

4 National REDD+ Strategy, National Forest Monitoring System, Safeguard Information System, Forest Reference/ Emission Level

5 https://www.pndajk.gov.pk/uploadfiles/downloads/AJK%20at%20a%20glance%202014.pdf

6 GoP, 2017. Pakistan National Census Report. Government of Pakistan

1.1.2 Demographic and socioeconomic pattern

The AJ&K population as per 2017 Pakistan Census Report is approx. 4.1 million[7] (Male: 49%; Female: 51%) accommodated within 0.63 million households constituting 1.94% of the total population of Pakistan. The rural and urban population constitute 82.60% (3,342,847) and 17.40% (702,520) of the total population of AJ&K, respectively. All of the population of AJ&K follows Islam. The population of AJ&K is increasing at an average 1.64% per annum and will cross 4.97 million by 2030 and 6.31 million by 2050[8], if growth continues at current rates. The territorial economic outlook is reflected in terms of GDP as US$ 6.5 billion compared to national GDP of US$ 314.588 billion which is merely 2.06% of national GDP. The per capita GDP of AJ&K is US$ 1512[9] as compared to US$ 1641 (nominal) for Pakistan.

Sociological data indicated that village families traced their origins to ancestors from such regions as Turkistan; Yaghistan and Ladakh. The dominant religion is Islam and mostly belongs to Sunni, Ismaili and Shia sects. The language spoken in the area is Kashmiri, Hindko, Punjabi, and Urdu. Historically, different tribes and clans traveling through AJ&K settled in its various parts and their descendants now inhibit the State. The descendants from various families and clans come together over a period of time for social, economic, and environmental reasons to reside in the same neighbourhood. The people of the AJ&K live scattered throughout the countryside in houses adjacent to their fields, with few large villages. The population is concentrated in the lower Neelum, Leepa and Jhelum Valleys. There are three main social groups: the land-owning groups who initially established the communities six to ten generations ago; the Syeds who claim descent from the Prophet, and the service groups and landless who were invited to settle by the landowners. Religion plays an important role in everyday life, and religious leaders participate in development related decision-making. The clergy and religious groups are represented in the village body of elders and influential. The religious events are taken as occasions for gathering and school is used as a venue to announce development activities and gather common purpose meetings. The elder in each village is an important focus for gathering and meeting. The people are generally custom living. They believe much in their customs and are governed by a set rule of customs from cradle to graveyards.

The mainstay of AJ&K economy is agriculture, livestock, and forest. The macro-economic setting of AJ&K brings into focus the importance of agriculture sector which at present predominantly depends on rain-fed agriculture with small contribution from land irrigated by means of small diversion channels. The cultivable agricultural area is 172,821 hectares (13 percent) and the area under farm trees and rangeland is 224,912 hectares (17 percent). Of the cultivable land, 69,602 hectares are double cropped (40 percent) in the summer (Kharif) and winter (Rabi) seasons but only 18,712 (11 percent) is under irrigation.

Livestock rearing is an integral part of agriculture of AJ&K. It also gives an indication of the economic position of the farm family. On an average livestock consists of 2 and 1 heads per household for small ruminants and cattle/buffalo, respectively. The livestock and poultry industry make a significant contribution to AJ&K through providing milk, meat, and eggs. According to some estimate, the 60 per cent of farm income is derived from animal husbandry, 30 percent from crop husbandry and horticulture, and only 10 percent from forestry. This underlines the importance of livestock sub sector as one of the major contributors, to the household economy of the rural community. The livestock census reveals that per household number of cattle, buffalo, sheep, goat, and domestic poultry in AJ&K is 3.25, 2.2, 6.83, 5.42 animals and 14 birds respectively and most of this domestic stocks depend on open pastures.

7 https://www.pndajk.gov.pk/uploadfiles/downloads/AJK%20at%20a%20glance%202014.pdf
8 Projection is based on the current rate of population growth reported in census report 2017.
9 https://www.ajk.gov.pk/ajk-at-a-glance

1.1.3 Climate

AJ&K has a wide range of climatic conditions, depending upon the range of altitude, but related to monsoon pattern; the dry sub-tropical climate in the south changes to moist temperate in the north, with considerable variations in precipitation both in amount and distribution. The average annual precipitation ranges from 800 mm to 2,000 mm, distributed throughout the year, but with the principal rainy season from June through mid-September and a small increase in precipitation in late winter. The snow line in winter is around 1,200 meters above sea level, while in summer it rises to about 3,300 meters. In the hilly districts of Muzaffarabad, Poonch and Bagh, 30-60% of the precipitation is received in the form of snow. The mean maximum temperature is from 20° to 32°C, while the mean minimum temperature is between 4° to 7°C. From April through June the weather is hot and dry. Temperatures are greatly modified by altitude. The plains of Mirpur, Bhimber and Kotli are hot in summer and cold and dry in winter. At elevations above 1,500 meters lasting winter snow and frost occur and the vegetation and cropping pattern changes from alpine through temperate to sub-tropical with decreasing altitude. A sharp change in vegetation and cropping pattern can be observed, going from alpine, to temperate to sub-tropical with decreasing altitude. The state of AJ&K may be broadly divided into a number of physiographic regions as described in **Table-1**;

Table 1: Ecological regions of AJ&K

Ecological regions	Altitude (meters above sea level)	WINTER	SUMMER	RAIN (mm)
Northern dry mountain Region	1200 – 4550	Heavy snow	Cool	> 800
Central highland region	1200 – 3000	snow	Hot	> 1,600
Southern upland region	>1800	cold	Hot	1,200
Southern lowland region	> 1000	mild	very hot	800

1.1.4 Overview of forest resources

The total area of the AJ&K is 13,297 km² (1.67% of total land cover of Pakistan) and out of this 42.6% (i.e. 5,670 km^2)[10] is designated forestland under control of forest department representing 11.8% of total forest cover of Pakistan i.e. 4,786,831 ha[11]. As per IUCN, this area is 47.6% including dense forest, sparse forests and shrublands **(Figure 1).**

The forests of AJ&K are divided into three broad categories i.e. (i) montane sub-tropical semi evergreen forests which is further divided into forest types of dry sub-tropical scrub forests and sub-tropical pine forests, (ii) montane temperate forests with forest types of Himalayan moist temperate forests and dry temperate forests and (iii) sub-alpine forests and alpine scrubs with forest types of sub-alpine forests and alpine pastures and scrubs[12].

The sub-tropical Pine forests have Chir pine (*Pinus roxburghii*) forests mixed with some broadleaved species. In moist and dry temperate regions, Blue pine (*Pinus wallichiana*), Deodar (*Cedrus deodara*), and Spruce (*Picea smithiana*) are the main conifers interspersed with certain broadleaved associates (Maple, Horsechestnut, Birdcherry, Palach, Walnut, etc.).

The Government of Pakistan has launched the largest ever afforestation program in the history of the country i.e., the Ten Billion Tree Tsunami Programme (TBTTP). This four-year flagship national program (2019-2023) will increase the existing forest area of the country, including AJ&K. During 2016-2025, 1,262 million plants will be planted and/or regenerated to restore on 1,392 sites over an area of

10 Anwar et.al (2017). Forest carbon inventory of GB. Forest, Wildlife and Environment Department of Gilgit-Baltistan. 2017
11 https://redd.unfccc.int/files/1._unfccc_frel_pakistan__final_with_proofread_-final.pdf
12 https://forest.ajk.gov.pk/sub-alpine-forests-and-alpine-scrubs

283,983 hectares[13] contributing to overall national sequestration potential of 148.76 MtCO2e emissions by the year 2030.

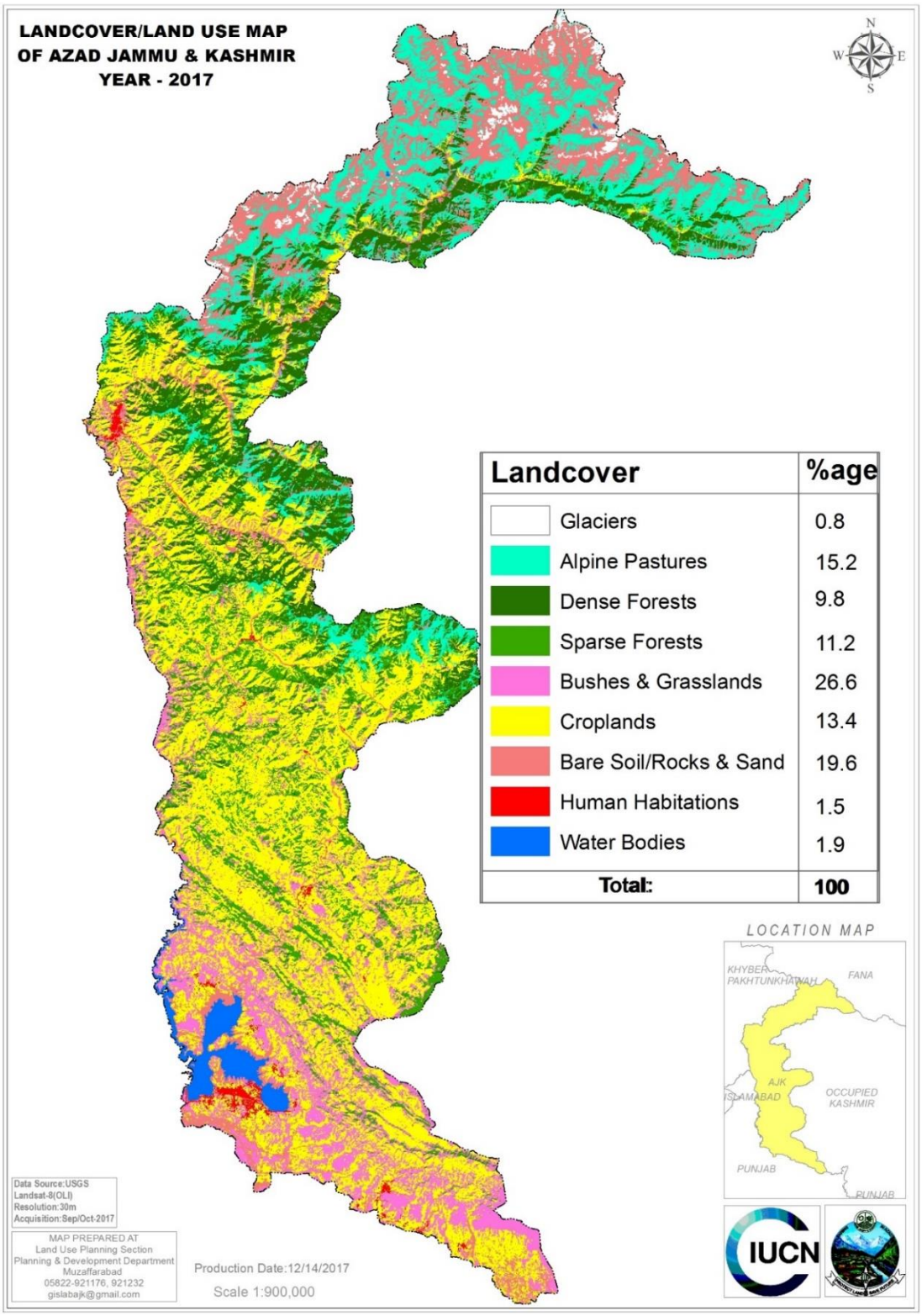

Figure 1: Landcover of Azad Jammu & Kashmir

[13] Source: AJK Forest Department, 2022

In the State of AJ&K, which is predominantly a mountainous region with weather extremes, local people have a high dependence on forest resources. In AJ&K land tenure rights may be classified as 'formal or *de jure*' or 'customary or *defacto*'. Formal property rights are those that are explicitly acknowledged by the State whereas informal property rights are those that lack official recognition and protection. Customary property rights are exercised by indigenous communities by virtue of their historical relationship with the forests on which their survival depends. Some customary rights are given formal recognition thereby blurring the distinction between formally recognized rights and customary rights. Rights and obligations of different forest stakeholders are defined for all demarcated, un-demarcated and privately owned forests and found basis for prospective participants in a REDD+ programme and benefit sharing scheme.

Like elsewhere in Pakistan, land revenue in AJ&K has been defined and documented. Land revenue is not collected from private forest owners or communal forests, but the State charges royalties and taxes from owners and right holders on the income generated from the sale of trees (FAO, 1974). The provisions of the Jammu and Kashmir Forest regulation of 1930 and the Azad Jammu and Kashmir Land Reform Act 1960 remain the main legal instruments that determine the legal aspects of landownership, including of forest land. However, it only covers the existing power system and entitlements to management of forests and lacks clarity on unrecognized claims (carbon pools), legal and customary jurisdictions of rights, access and use patterns with respect to resources and various stake holder categories and their stakes. Table 2 provides an overview of existing forest tenure system in AJ&K.

Table 2: Forest land tenure system of AJ&K

Legal Category / Tenure Regime		Rights	Area and locations	Management Arrangement
Government Forests (Khalsa Land)	State owned Demarcated Forests Chapter – II of Jammu and Kashmir Forest Regulation 1930 (Demarcation of the State Forests is completed and entered in the Revenue Record as such during the last settlement and doesn't exist anymore, except land tracts with disputed ownership)	Timber sale proceed: 100% government Community rights: Usufruct rights[14]: Deadwood, NTFP/ controlled grazing, litter	Currently not exists	Owned (proprietary rights), administered, regulated and managed by the Government through Forest Department. Managed through working plans.
	State owned Un-demarcated Forests Chapter – III of Jammu and Kashmir Forest Regulation 1930	Proprietary rights: Government 100% Community rights: Usufruct rights: Timber for domestic use, deadwood, NTFP, grazing.	All natural forests in Khalsa land except private forests	• Owned (proprietary rights), administered, regulated and managed by the Government through Forest Department. • Managed through working plans.
	Village Forests Chapter III-A (Section 14-A), Jammu and Kashmir Forest Regulation 1930 (Un-demarcated Forests provisions is retained in the Forest Act for; the GoAJ&K has directed to demarcate all those Crown/ Khalsa lands having forest cover as the Village Forests, with equal status of the demarcated forest).	Community rights are subject to prior permission and management agreement: timber, forest produce, pasture	There is no consolidated figure available for the village forests at AJ&K level.	• Owned (proprietary rights), administered, regulated and scientifically managed by the Government through Forest department. • Managed through working plans. • May also be managed through joint Forest Management by Communities and Government.
Private Forests (Shamlat & Malkiat)	Community forests Section 13-A of the Jammu and Kashmir Forest Regulation 1930.	Community rights: Usufruct rights: Timber for domestic use, grazing, deadwood, NTFP, litter, land for agriculture	There is no consolidated figure available for the private Forests at AJ&K level.	• Owned by the local people (an individual or individuals, singly or collectively). However, any forests with more than 18 trees per acre of land will be the property of the government. • Regulated and managed by the AJ&K Forest in accordance with updated section 13-A of the Jammu and Kashmir Forest Regulation 1930.
		Total forest area	**5670 sq. KM**	

14 A usufruct is a legal right accorded to a person or party that confers the temporary right to use and derive income or benefit from someone else's property While the usufructuary has the right to use the property, they cannot damage or destroy it or dispose of the property

1.2 Structure of AJ&K Forest Department

AJ&K Forest department's vision is to protect, sustainably manage and develop State's forests in due recognition of its ecological and economic significance and inestimable value for humanity in future and for retarding global warming through carbon sequestration. The overall mission of the department is to achieve scientific and sustainable management of forestry resource and effective watershed management to serve for reduction in sedimentation, amelioration or environmental services, biodiversity conservation and poverty alleviation.

Thus the department has already included environmental and carbon sequestrations in its roles and description. The department is headed by a principal Chief Conservator Forests (CCF). Two other positions of CCF including CCF Development and CCF Territorial support the department in their respective functions. An organogram of the AJ&KFD is provided in Figure 2.

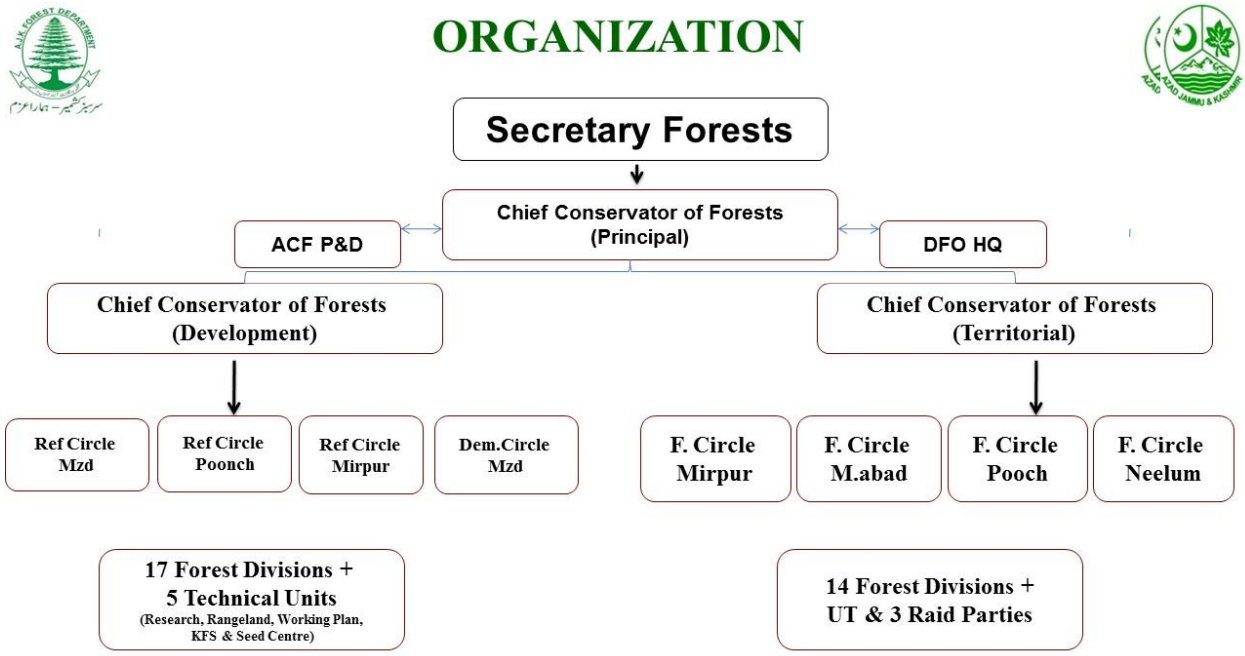

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Figure 2: Organogram of AJ&K forest department

1.3 Stakeholders' roles and responsibilities

This exercise is based on secondary information from research and reports, and discussion with key informants from AJ&K.

The AJ&K FD and local communities are the key stakeholders with the highest stake in REDD+. Scrutinizing illegal activities (mostly forest encroachment and illegal cutting and trafficking of forest trees) mainly entails support to joint forest management activities, implementation of forest enhancement, and coordination with other key agencies. The department also recognizes contribution from local community, other relevant government institutions, and CSOs/NGOs for their engagement in forest development, sustainable management and capacity building activities.

There are five key groups of forests in AJ&K having different social and economic interests and influence in forest management related decisions and their implementation[15]:

1. Forest concessionists in demarcated forests who have legal/ customary rights over the use of certain resources from these forests. Any concessionists who get involved in illegal forest activities, their concession rights are ceased by forest department.
2. Forest owners in un-demarcated forests who control and use forest for their basic needs (timber, firewood, grazing, grass cutting, fodder collection, NTFP collection etc and get revenue through commercial forest sale.
3. Proximate forest communities living in forest vicinities with small land holdings and livestock rearing and NTFP collection as a main source of income. About 82% of AJ&K population inhabits rural areas that are located in or close to forests. These rural communities are often not frequently connected with bigger cities. Thus, a lack of trade and employment opportunities pushes them to rely on many small ventures within the community, including NTFP collection[16]. Most of the rural families own a small farm and because the land is generally degraded, only a small portion of it is cropped on which generally maize is cultivated. The cropped area is in the form of narrow strips of land along the slope, which are usually not terraced. These communities also depend on adjacent forest areas to graze their livestock[17].
4. Forest wood extraction contractors mostly invest in commercial forestry activities for profit purposes. Due to their greater access to high forest officials and control over user groups, they manage to illegally cut forest over and above the prescribed volumes, therefore, major contributor of deforestation and forest degradation.
5. Nomads (Bakarwals) who enter from Punjab and KP to herd their livestock and mostly depend on alpine pastures above 3,500 m MSL. Due to their non-sedentary nature these groups are generally on move to graze their cattle in forest valleys and try to get as many benefits from forests as they can. While there is no reliable data available, it has been estimated that the herds of these groups convert the nutrient value of the alpine pastures into significant weight gains for each animal. They cause forest degradation due to overuse of forests and trampling/grazing of regeneration by animals.

There might be some overlapping responsibilities such as legal permissions from government institutions and customary permissions by owner groups in un-demarcated forests and Shamilat land to the non-owner users. The non-owner users can use forests only on the permission of Forest Department and legal owners under customary arrangements. The power conflict between government institutions and owner groups might weaken the control by forest owners/ writ of the government. In such situations, the forests may be controlled and used by other non-owner user groups giving rise to conflicts between owners and non-users. Another potential conflict could be between government institutions and civil society organizations regarding organizations and strengthening of local communities. The forest department has established several Forest Conservation Committees (FCCs) and strengthened their management capacities from time to time. On the other side, the local NGOs/ CSOs have also established a network of Village Organizations (VOs) with overlapping vested interests. This may create conflicts between VOs and FCCs over resource management issues.

Table 3 presents some of the key stakeholders that are relevant in implementing different REDD+ initiatives in AJ&K. A complementarity among stakeholders may reduce the risk of conflicting uses and overlapping priorities towards forest resources leading to forest degradation.

15 Hussain et al, 2014
16 https://centaur.reading.ac.uk/86295/1/forests-10-00813.pdf
17 AJ&K Forest Policy 2013

Table 3: Key REDD+ stakeholders in AJ&K

Key stakeholder Group	Stakeholders	Roles in Forest Management
Government Institutions	• Forest Department • Wildlife & Fisheries Department • Agriculture Department • Livestock Department • Mineral Department • Planning and Development Department • Tourism Department	• Responsible for implementing REDD+ Action Plan • Providing conducive policy, legal and institutional environment for forest management planning, administration and technical support, monitoring and control of illegal activities, coordination with other government and non-government agencies
Communities	• Forests' Concessionaires / beneficiary communities • Individual households, forest owners, forest users and dwellers • Organized communities • Women organizations in the villages or their apex organizations • Forest Management/ conservation committees organized / facilitated by the Forest department • Organization of forest user/ forest owners	• Have a direct stake in REDD+ benefit and thus conserve forest resources for a longer term while responsibly using forest resources according to *de jure* or customary laws • Forming local community groups to efficiently support planning & implementation of forestry programmes, projects and JFM activities • Provide local knowledge to understand the drivers/ agents of deforestation and forest degradation • Ensuring participatory inputs for development of forest management and operational plans • Implement forest conservation, protection, and management which mainly includes plantations, record of harvesting and preventing forests crimes (illegal cutting and trafficking of forest trees etc.). • Engage in forest monitoring activities and strengthen the participatory monitoring process to ensure transparency of monitoring outputs (e.g. increase or decrease in carbon stocks)
Civil Society Organizations	• Local NGOs interested in development sectors with an implication on communities and forests • Citizens' fora and collectives for opinion building • National NGOs interested in development sectors with an implication on communities and forests	• Organize and strengthen community organizations • Mobilizing civil society for effective public sector development policies in forestry sector • Create platforms for dialogue on forest management issues • Promote rights issues particularly of children, women, youth and marginalized groups living in or adjacent to forest areas • Promote voices/concerns of poor and marginalized social groups • Offer implementation of development interventions when required
International organizations	• International NGOs interested in development sectors with an implication on communities and forests	• Providing advocacy, advisory, and technical roles in developing or modifying policies that grant or protect local people's equitable access to forest resources • Facilitate advocacy for environmental conservation and public awareness • Build capacity of government and local communities to plan, implement and maintain forest protection and conservation activities;

Key stakeholder Group	Stakeholders	Roles in Forest Management
	• Multi-lateral organizations with political power to influence policy and global opinion • International donor organizations	• Helping government institutions and local communities to implement the programmes and specific activities inherent in the forestry sector's changed policies e.g., REDD+ • Generate finances for forest development activities (including research and technology development.
Private Sector	• Wood based industries • Banks/ Micro Finance Institutions • Private investors and traders • Technology developers and vendors	• Investing in sustainable forest management through sustainable business opportunities such as carbon tradeoffs, timber processing and trade; NTFP business; eco-tourism business etc. • Providing access to microfinance services for businesses, local production and promoting jobs • Creating alternative opportunities for local economies through employment and income generation benefits from the market for local communities and forest owners; • Creating linkages through public-private partnership to contribute to participatory planning for reducing illegal and unsustainable activities
Media	• Print media, newspapers • Electronic media including public and private sources • Social media • Institutional communique, newsletters and magazines	• Social watch in justice to weaker stakeholders (women, landless, poor) in forest management by highlighting equity issues • Mentoring and influencing decision making of government and other stakeholders on benefit-oriented forest management • Report illegal activities and highlight good practice • Inform the public on key programmes and activities; and ensure rights to information • Bring opinion-makers, policy makers and implementers, private sector, communities and other stakeholders together through effective communication and information sharing for identifying problems and common solutions.
Academia and research	• All regional public or private universities in agriculture, technology development and social sciences • AJ&K government research institutions • Federal government research institutions with or without local presence	• Developing science of forest exploitation and conservation and providing a steady stream of forestry professionals to both government and industry • Conduct critical and neutral studies on good practices; diversity and environmental changes and trends • Study dynamics of drivers of deforestation and forest degradation and forest enhancement and compare effectiveness of solutions • Study and propose alternatives (to timber, to firewood, income opportunities) and economics • Silvicultural-based sustainable forest management and solutions

2 METHODOLOGY

The main goal of the AJ&K's REDD+ Action Plan is to *serve as a strategic set of options to addressing drivers of deforestation, forest degradation and barriers to enhancement, while ensuring local livelihoods and incentives from REDD+ activities and aligning with National REDD+ objectives of Pakistan.*

2.1 Main objectives

The main objectives of the State REDD+ Action Plan are as follows:

1 Outline strategic options to address the prioritized drivers and barriers with context specific actions[18] and related budget
2 Improve the health of forest ecosystems by reducing deforestation and forest degradation and enhancement of forest biomass
3 Define effective implementation and monitoring of REDD+ actions to address the drivers
4 Identify social and environmental risks associated with interventions and propose mitigation
5 Propose a clear benefit sharing mechanism associated with implementation of REDD+ activities
6 Identify areas for enabling policy, legal and institutional arrangements favoring implementing AJ&K REDD+ Action Plan

2.2 Steps followed for preparing AJ&K RAP

The AJ&K REDD+ Action Plan has been prepared stepwise using a highly interactive process entailing consultations with representatives of the multiple stakeholders and with institutional memory holders of the subnational entity. In addition, updated secondary data, policy documents and research references have been consulted as a founding base for discussions and interventions proposed in this action plan. The methods followed are based on international best practices and examples, particularly within Asian countries[19]. The methodological steps are summarized below.

2.2.1 Review of literature

A detailed review of literature was conducted on drivers of deforestation and forest degradation in AJ&K. This included review of existing documents available with Ministry of Climate Change, the department and online sources. Available maps were reviewed to understand administrative boundaries, land use, land use change, forest cover and forest cover change. This information was then presented to the stakeholders for triangulation and discussions on the drivers of deforestation and degradation.

2.2.2 Multi-stakeholder consultation

A consultation workshop was held in AJ&K to undertake the tasks listed below. Since many of the drivers and barriers originate outside forestry sector, participation of relevant actors, other than the forest sector was ensured in the workshop so that views of all relevant actors are documented (**Annex I**).

18 A set of interlinked activities that form a coherent strategy for counteracting a driver of deforestation, forest degradation and/ or barriers to expansion of a forest carbon enhancement activity.
19 https://lib.icimod.org/record/33717
https://www.unredd.net/documents/un-redd-partner-countries-181/asia-the-pacific-333/a-p-partner-countries/viet-nam-183/communication-knowledge-sharing-2000/communication-and-knowledge-sharing-materials-2002/leaflets-and-brochures-2009/17322-viet-nam-infobrief-series-viet-nams-experience-with-developing-provincial-redd-action-plans-prap.html?path=un-redd-partner-countries-181/asia-the-pacific-333/a-p-partner-countries/viet-nam-183/communication-knowledge-sharing-2000/communication-and-knowledge-sharing-materials-2002/leaflets-and-brochures-2009, https://lib.icimod.org/record/33672

A. Prioritization of already known drivers
   The participants of the workshop shortlisted drivers of deforestation and causal links from the list that was taken from the NRS and literature and prioritize them based on their impact. Following elements were considered while prioritizing drivers:
   - Consider the level of future threat (increasing, decreasing or stay unchanged)
   - Consider its impact on forest quality, biomass density and area
   - Build consensus by scoring prioritization of drivers of deforestation and forest degradation
   - Drivers of deforestation and forest degradation need to be spatially linked with their geographic and socio-economic contexts
   - Establish cause and effect linkages between drivers to identify problem trees (some drivers are more the effects than drivers)
   - Identify barriers to enhancement of forest (biomass) as specifically as possible
   - A consensus-based scoring was conducted for prioritization of drivers of deforestation and forest degradation for further analysis.

B. Causal analysis of the prioritised drivers
   - The drivers of deforestation and forest degradation as well as barriers to enhancement activities prioritised [20] by stakeholders were debated in a moderated group exercise.
   - Cause and effect of all drivers were analysed. The group prepared cause and effect problem trees so that interventions may be defined to remove causes as far as possible.
   - The geographical hotspots of the drivers identified and spatially mapped by experts for quantification.
   - The hotspots of drivers identified by the stakeholders, were randomly verified in the field.

C. Solutions and actions
   - Identify strategic solutions to address causal factors identified in the earlier exercise
   - Identify actions to address prioritised drivers and underlying causes
   - The actions were verified through field visits for their relevance to the geographic contexts.

D. Analysis of social and environmental safeguards
   Social and environmental safeguard analysis of the proposed actions and risk reduction and mitigation measures to address safeguard issues. Potential safeguards of the proposed actions were discussed and analyzed founded on the Social and Environmental Safeguard Assessment (SESA) study conducted under Pakistan's REDD+ Readiness process[21] and tailored to the AJ&K's context.

E. Focus group discussions
   Focus group discussion (FGDs) were also held with local stakeholders (including communities) where the proposed actions were presented, and risk mitigation measures were identified.

2.2.3 Expert group consultations

The analysis from multi-stakeholder session and FGDs was peer reviewed by expert groups and improved. This is the stage where a few important issues related to REDD+ implementation were elaborated including:

- Outline overall distribution mechanism for potential carbon benefits emerging REDD+ activities
- Capacity needs assessment of the stakeholders in connection with REDD+ implementation

20 The participants were encouraged to identify new driver, if any, or split / merge earlier drivers identified before prioritization exercise.
21 https://www.redd-pakistan.org/wp-content/uploads/2021/06/Strategic-Social-and-Environmental-Assessment-PAkistan.pdf

- Identify measures to address capacity gaps and enhance existing capacities
- Monitoring indicators and protocols for proposed actions
- REDD+ benefit sharing mechanism proposed to monitor distribution of benefits
- An indicative budget for interventions

2.2.4 Quantitative analysis of deforestation and degradation

A spatial analysis was conducted to understand changes in forest leading to conversion from forest to other land cover classes (deforestation). In this study, 2008 and 2012 land cover maps at level 1 (6 IPCC classes) were used for the spatial mapping. At the AJ&K level, using a 6x6 land cover change matrix was generated to assess the conversion of the forest area to other land cover land cover classes (i.e., Forest to Cropland, Forest to Grassland, Forest to Settlement, Forest to Wetland and Forest to Other land). No recent studies are available for quantification of degradation. Therefore degradation hotspots were identified by the stakeholders during the interactive session in the AJ&K REDD+ Action Plan workshop and were mapped accordingly after random field verification.

2.2.5 Drafting and endorsement of the AJ&K REDD+ Action Plan

Using the material collected, the AJ&K REDD+ Action Plan was developed which includes immediate, medium and long-term intervention. The AJ&K REDD+ Action Plan also include monitoring protocols, safeguards and actors relevant to implement actions.

The plan was endorsed by the AJ&K REDD+ Management Committee on 12th April 2022 (endorsement note attached in **Annex – II)**, the observations of the PRMC were integrated in the plan and were shared with the AJ&K Forests and Wildlife Department.

3 DESK REVIEW OF DIRECT & INDIRECT DRIVERS OF DEFORESTATION & FOREST DEGRADATION

The AJ&K Government recognized REDD+ as financial incentive-based forest management scheme likely to incentivize ongoing forest management initiatives to address Drivers of Deforestation and forest Degradation (DoDD) and associated behavioral change among the local communities. The intent and approach of the government on REDD+ have been described in this REDD+ Action Plan.

The NRS provided a strong base to initiate the identification and prioritization process of AJ&K specific DoDD and barriers to enhancement. These drivers were further verified through desk review of other studies on DoDD. The summary of these references is given in **Table 4**. It is to be emphasized that AJ&K's forestry resources have received a lot of interest from researchers and, therefore, the references in the table may not be complete. Therefore, a dialogue among major stakeholders was held to further validate this prioritization of drivers for a desk analysis:

Table 4: Drivers of deforestation and forest degradation determined from review of literature

Deforestation	Unsustainable timber extraction	Infrastructure development e.g. roads, dams, transmission lines, habitation etc.	Encroachments for urban and rural expansion and agriculture	Mining
Reference to Literature	• Draft NRS (2018) • Pakistan's R-PP (2013)	• Draft NRS (2018) • Pakistan's R-PP (2013)	• Draft NRS (2018) • Pakistan's R-PP (2013)	• Draft NRS (2018) • Pakistan's R-PP (2013)
Forest Degradation	Agricultural expansion for subsistence	Unsustainable wood extraction (fuelwood and timber)	Livestock grazing	
Reference to Literature	• GoP (1992a and b)	• Qamer et al. (2016) • Shaheen et al. (2016) • Ahmad et al. (2012) • Shaheen et al. (2011b)	• Cochard and Dar (2014) • Shaheen et al. (2011a) • Qureshi et al. (2007) • Misri (2003) • Miller (1999) • Malik (1988) • FAO (1987)	
Barriers to Enhancement	Grazing	Forest Fires	Aggression of exotic species	Surface erosion
Reference to literature	• Amjad et al 2014; • Shaheen et al 2011b; • Qureshi et al 2007; • Misri 2003; • Miller 1999; • Malik 1988	• Siddiqui et al 2010; • Nizami, 2013	• Siddiqui et al 2010	• Amjad et al 2014

4 ANALYSIS OF DIRECT & INDIRECT DRIVERS OF DEFORESTATION & FOREST DEGRADATION

The following sections provide details on direct and indirect or underlying causes of deforestation and forest degradation and barriers to forest (biomass) enhancement.

4.1 Drivers of deforestation

4.1.1 Prioritization of drivers of deforestation

The drivers listed from the literature and the spatial map with quantification of drivers of deforestation were presented to the stakeholders for further discussion and prioritization in the consultation process. Three drivers were qualified by the stakeholders based on their experience and foresight on future threat, biomass and forest area impacts, for further analysis and deliberation in the PRAP (**Table 5**).

Table 5: Ranking of direct drivers of deforestation

Direct Driver	Location (s)	Future Threat	Future Biomass/ Carbon Impact	Future Forest Area Impacted	Total
1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High					
Infrastructure development (roads)	Bagh, Haveli, Poonch, Muzaffarabad (Machiara)	4	3	2	9
Urban and rural expansion (habitation)	Bhimber, Kotli, Mirpur, Sudhnoti	4	2	2	8
Mining	Neelum, Kotli, Bhimber, Muzaffarabad, Haveli	3	2	2	7
Agriculture expansion for subsistence	South, Mirpur, Bhimber, Kotli	2	1	2	5
Encroachment of population on demarcated forest land (land record burnt during 1947, refugees' influx in 1965)	Linked with urban and rural expansion and agriculture				

Table 6 provides description of various drivers and underlying causes. The locations were noted by the participants as hotspots of the prioritized drivers **(Table 7)**.

Table 6: Direct and indirect causes of deforestation

Direct Drivers	Underlying/ Indirect Drivers
High demand of occupancy for mega infrastructure development	• High demand for land associated with construction of mega projects including hydel energy generation • Increased demand for tourism services • Insufficient or lack of land use planning and policy
Urban and rural expansion	• Increased demand for housing facilities with increased population • Limited availability of land or low land holding • Fragmentation of families/ tendency to acquire alternate houses • Cross border migration and emergency camps in forest areas • Poor data management and records to recover land

Unsustainable mining	• Breach of law and expansion beyond allocated land • Weak implementation of EIA guidelines • Weak accountability of mining lease holders • Poor governance and legal protection to prevent violence • Political influence • Weak law enforcement • Lack of cooperation among line agencies

The problem tree with prioritized drivers of deforestation prepared by the participants during consultation workshop is presented in **Figure 3**.

Table 7: Locations/ hotspots of prioritized drivers of deforestation

Locations of prioritised drivers of deforestation		
Clearing of forestland for infrastructure development	**Clearing of forestland for urban and rural expansion (housing)**	**Clearing of forestland for mining purposes**
Bagh, Haveli, Poonch, Muzaffarabad (Machiara)	Bhimber, Kotli, Mirpur, Sudhnoti	Neelum, Kotli, Bhimber, Muzaffarabad, Haveli

Field verification of these drivers on some of the hotspots was conducted and evidence was collected through photos and conversation with local stakeholders.

4.1.2 Quantification of drivers of deforestation

A spatial analysis was conducted to understand the changes from forest to other land cover classes (deforestation).

In this study, 2008 and 2012 land cover maps at level 1 (6 IPCC classes) were used for the spatial mapping. At the AJ&K level, a 6x6 land cover change matrix was generated to assess the conversion of the forest area to other land cover classes (i.e., Forest to Cropland, Forest to Grassland, Forest to Settlement, Forest to Wetland and Forest to other land).

According to analysis, out of the total forest land use changed to non-forest land use during 2008-2012, 17% changed to crops, 30% to grassland, 0.18% to settlement and 52% to other land uses which includes infrastructure and mining (**Figure 4**). Field verification of these drivers on some of the hotspots was conducted and evidence was collected through photos and conversation with local stakeholders.

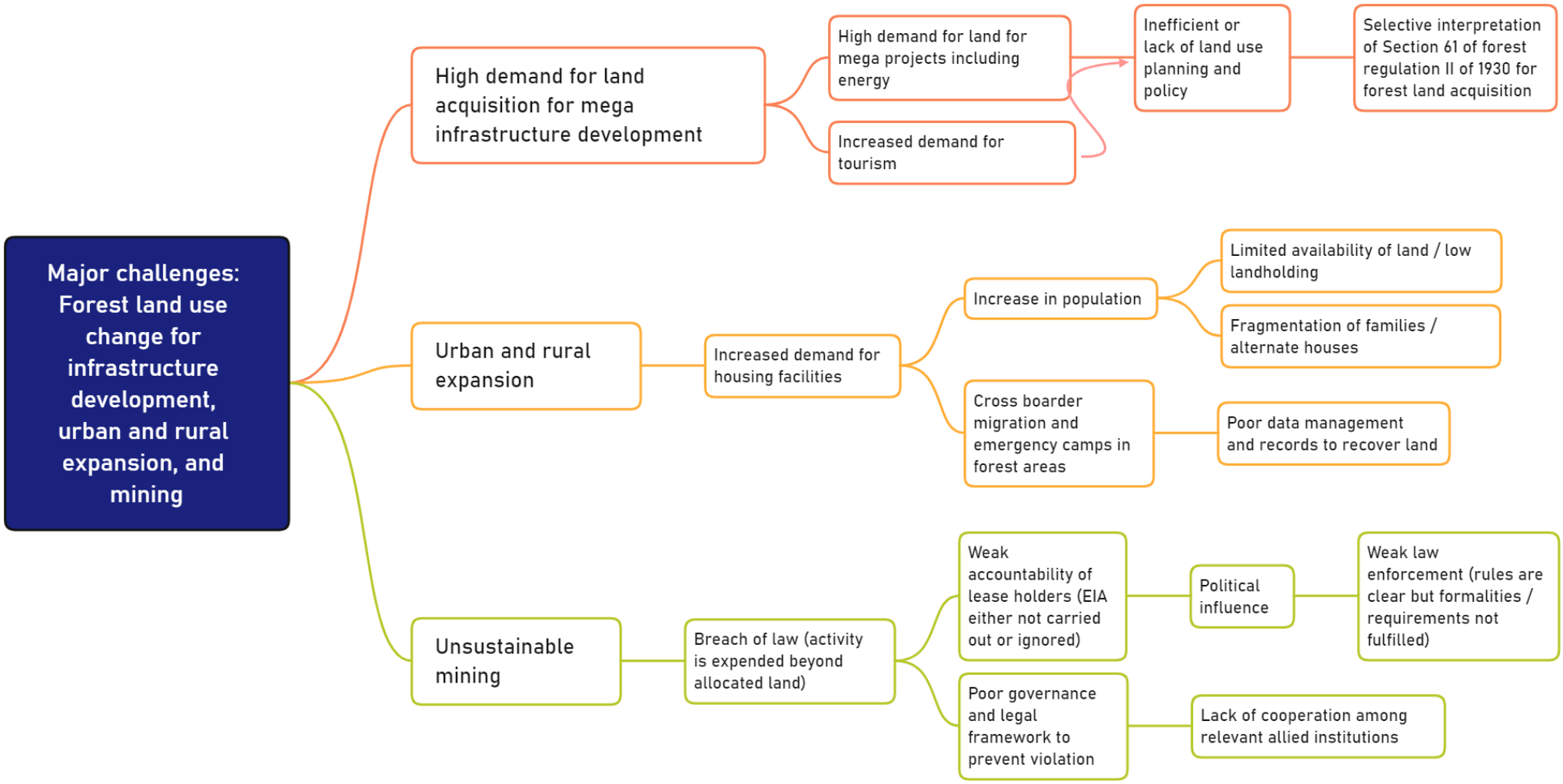


Figure 3: Problem tree of Deforestation

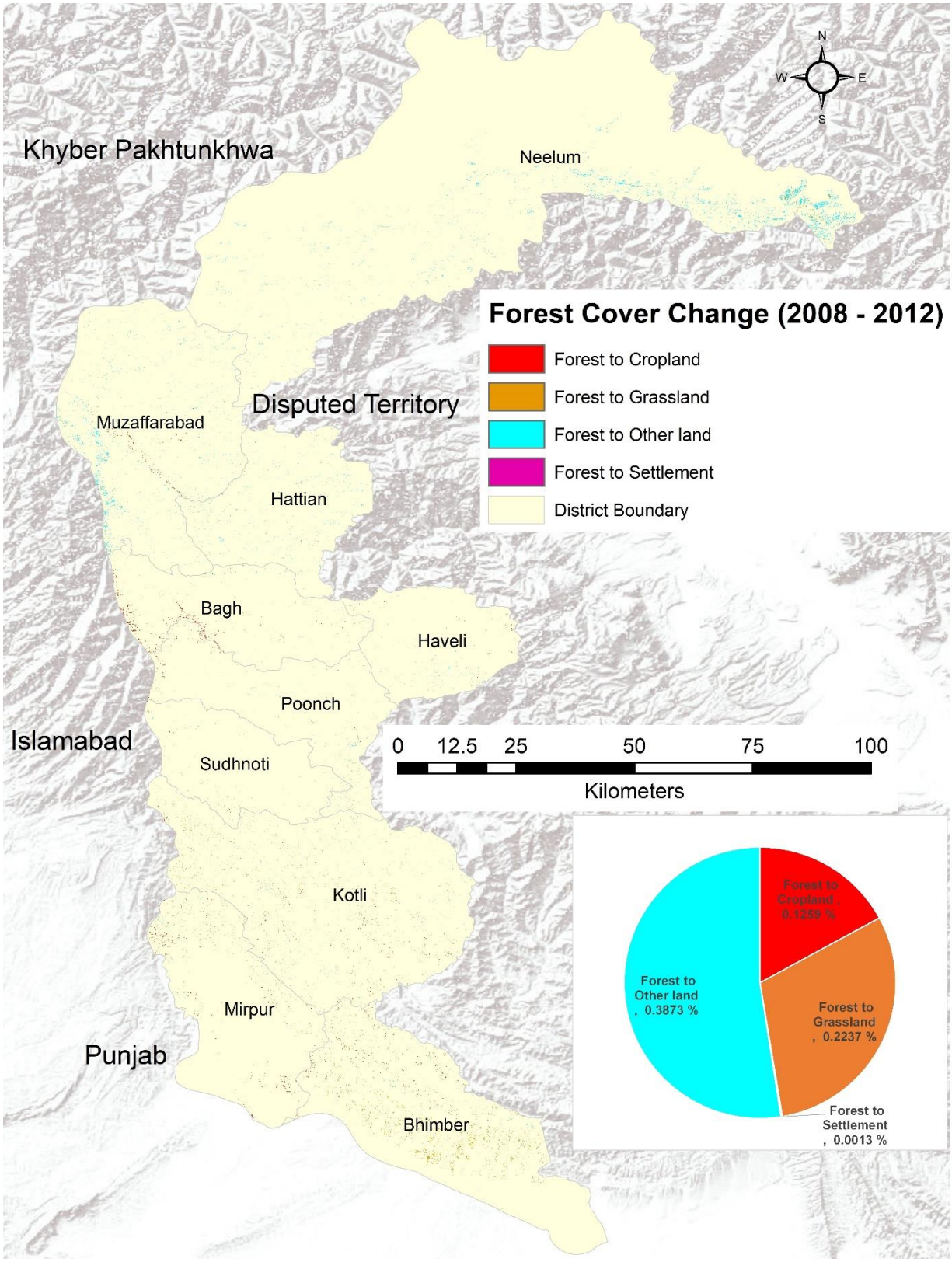


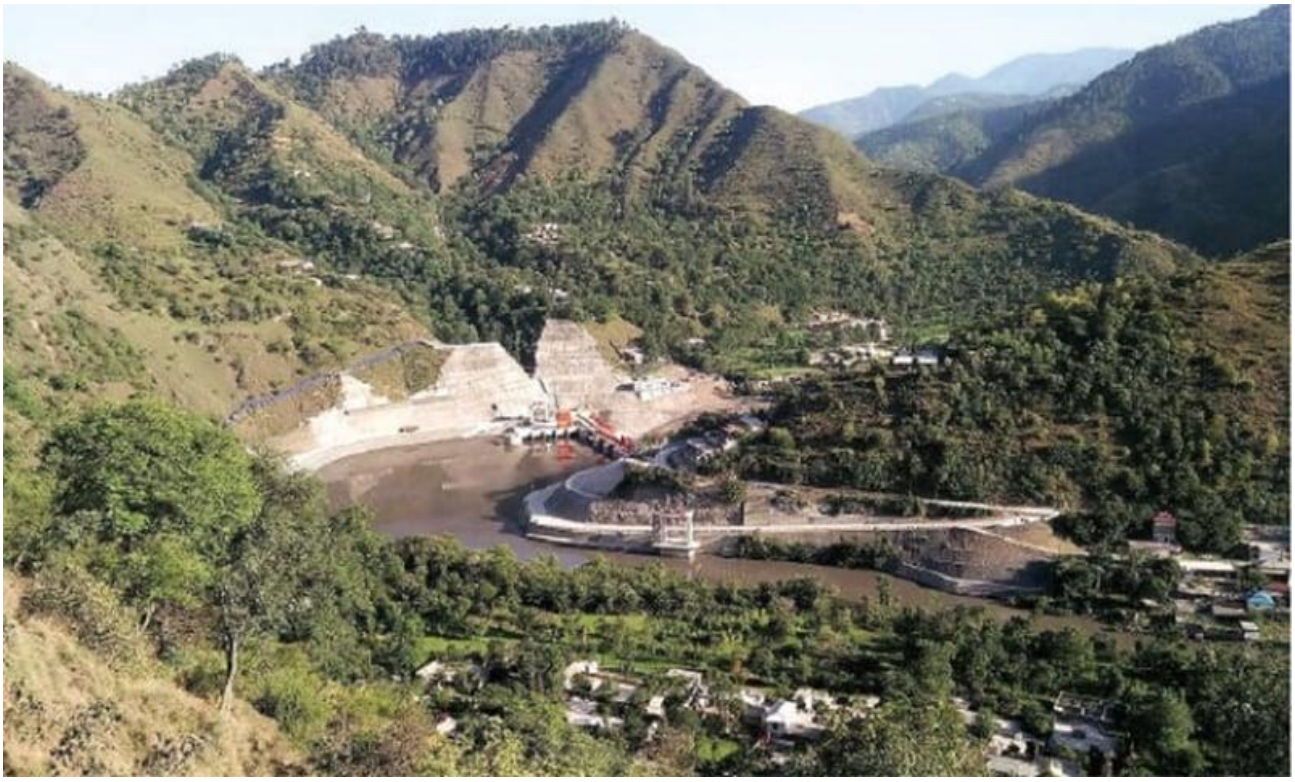
Figure 4: Forest cover of AJ&K 2008 - 2012

Picture 1: Muzaffarabad 2021 (top) and 2021 (below) including large infrastructure and housing

Picture 2: Expansion of settlements (Patika)

Picture 3: Expansion of settlements (Leepa Valley)

Picture 5: Expansion of Housing – Tao Bat)



Picture 4: Mining and hydropower in Patrind

4.2 Drivers of forest degradation

4.2.1 Prioritization of drivers of forest degradation

Three direct causes of forest degradation were prioritized by the stakeholders during the consultation process for further analysis **(Table 8).**

Table 8: Ranking of direct drivers of forest degradation

Direct Driver	Location (s)	Future Threat	Future Biomass/ Carbon Impact	Future Forest Area Impacted	Total Score
1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High					
Unsustainable fuelwood extraction	Neelum, Bhimber Mirpur, Haveli, Bagh, Jhelum	4	4	3	11
(Forest fires (intentional, natural or due to negligence)	Mirpur, Kotli, Bhimber, Planderi (Sudhanuti), Muzaffarabad, Neelum	4	3	3	10
Unsustainable Timber extraction	Neelum, Jhelum, Haveli, Bagh	3	3	3	9

Table 9 provides an overview of the grouped drivers of deforestation prioritized by the group and associated underlying causes. **Figure 5** gives a problem tree analysis prepared by the stakeholders.

Table 9: Direct and Indirect causes of forest degradation

Direct Drivers	Underlying/ Indirect Drivers
High demand for timber and firewood extraction	• Concessional rights are too engraved • Lack of policy incentives for forest conservation • Lack of alternative energy sources for local communities • Lack of affordability and income for alternative energy or other sustainable livelihood options • Lack of value chain promotion of NTFPs • Lack of private investment in forestry sector and market systems • Weak law enforcement to counter illegal activities • Lack of coordination among relevant line departments • Lack of wood substitutes for construction / market-based solutions
Forest fires (natural, intentional or due to negligence)	• Unsustainable /negligent tourism and grazing activities • Low management and monitoring capacity and non-regulated tourism / nomadic movements • Lack of community participation and control on forests • Lack of incentive-based forest management system (REDD+) • Lack of awareness on forest ecosystem services

AJ&K confronts rapidly increasing population, and crowded settlements which are expanding in all the valleys in natural and fragile landscape, even on critical slopes with implication for disaster risks and risk to nature. This population needs energy for survival as well as land for growing food-crops. These dynamics lead to both deforestation and forest degradation (change of land use to housing and expanded settlements lead to increase firewood extraction). Forest fires are frequent in Chir Pine and scrub forests due to negligence of tourists and graziers' choice for tender grasses.

Following locations were noted (Table 10) by the participants as hotspots of the prioritized drivers:

Table 10: locations of prioritised drivers of forest degradation for the AJ&K REDD+ Action Plan

Locations of prioritised drivers of forest degradation	
High demand for timber and fuelwood	Forest fires
Muzaffarabad, Neelum, Bhimber Mirpur, Haveli, Jhelum, Bagh	Mirpur, Kotli, Bhimber, Planderi (Sudhanuti), Muzaffarabad

Field verification of these drivers on some of the hotspots was conducted and evidence was collected through photos and conversation with local stakeholders. The hotspot locations are shown on a map in Figure 6.

4.2.2 Quantification of drivers of forest degradation

No recent studies are available for quantification of degradation. However, the prioritized drivers for degradation were further cross checked with secondary literature and random field verification of the hotspot locations identified by the participants and mapped (Figure 5).

The Government of Pakistan conducted a first baseline study in 2003-2004 on "Supply and Demand of Fuelwood and Timber for Household and Industrial Sectors and Consumption Pattern of Wood and Wood Products in Pakistan". The study revealed that the per capita availability of forests in AJK in 2002-2003 was 0.147 hectare (ha) per capita of the population. The study also revealed that the total supply of timber and fuel wood from state forests was 0.688 million m^3. On the other hand, the fuelwood consumption in AJK was 0.991 million m^3 in 2003 that was anticipated to increase to 1.322 million m^3 in 2018. The use of industrial timber was 0.264 million m^3 in 2003 which was anticipated to increase to 0.352 million m^3 in 2018[22]. The supply gap of wood was 0.67 million m^3 in 2003 that was anticipated to grow to 0.98 million m^3 in 2018. The AJK Forest Department chalked out their afforestation and rehabilitation programmes under TBTTP to tackle the additional area in order to achieve targeted wood production and increasing productivity level through intensive management of existing forest resources.

[22] Supply and Demand of Fuelwood and Timber for Household and Industrial Sectors and Consumption Pattern of Wood and Wood Products in Pakistan ((Maanics Int., 2004).

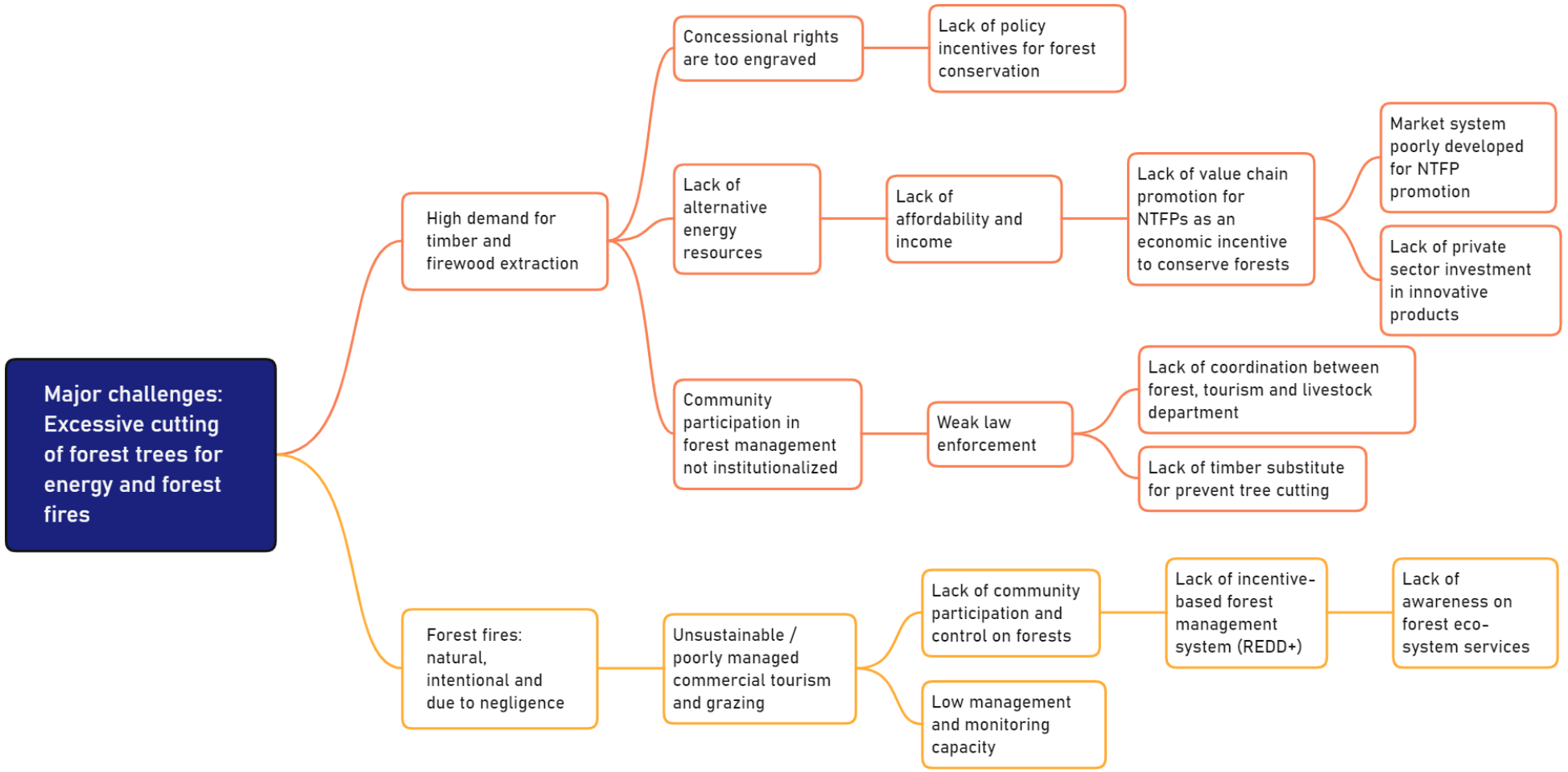


Figure 5: Problem tree of forest degradation

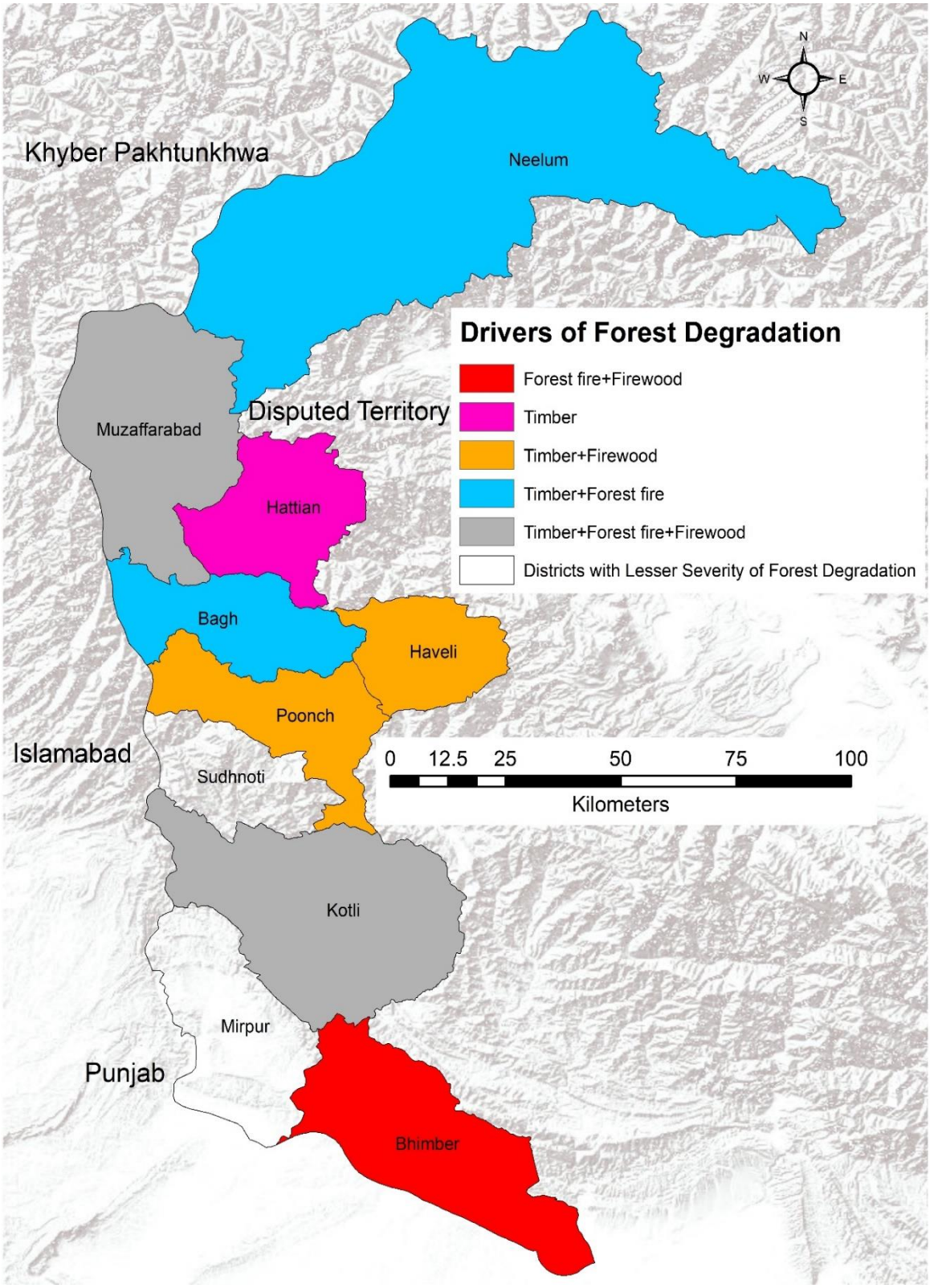


Figure 6: Hotspot areas of forest degradation

Picture 7: Firewood and timber depot in Muzaffarabad

Picture 6: Firewood collection in Neelam Valley

Picture 9: Forest fire in Bhimber (2008)

Picture 8: Forest fire in Muzaffarabad

4.3 Barriers to enhancement of forest biomass

4.3.1 Prioritization of barriers

The Government of AJ&K is committed to enhance the AJ&K forest biomass through conservation, development, and sustainable management of forest resources. This commitment is manifested through different measures already in place contributing to lands restoration, biodiversity conservation and inclusive conservation of existing natural forests. Three enhancement options were rated by the stakeholders. They agreed that afforestation and reforestation are the best options for AJ&K (**Table 11**).

Table 11: Ranking of options to address enhancement barriers/ challenges

Carbon Enhancement Activities	Location (s)	Future Potential Area	Future Biomass/ Carbon Impact	Total Score
1: Very Low, 2: Low, 3: Medium, 4: High, 5: Very High				
Reforestation & Forest restoration	Chakothi, Lamnian, Reshian, Mirpur, All Chir zone (blanks and demarcated particularly Langla, Hattian, Chinari, Gujar Bandi, Jhelum Valley, Neelum Valley, Muzaffarabad	5	5	10
Afforestation	Lipa, Reshian, Kathai, Chikar, Khilana, Lachrat, Kutla, Kotli, Poonch, Bagh,	4	4	8
SFM & conservation	Hattian, Bagh, Haveli, Poonch, Jhelum Valley, Neelum Valley, Leepa, Chikar, Sudhangali,	4	3	7

4.3.2 Analysis of barriers

The prioritized forest enhancement initiatives, however, face several barriers (policy, economic, institutional, social and technological). These barriers were elaborated by the stakeholders during consultation sessions (**Table 12).** The problem tree with prioritized barriers of enhancement activities is presented in **Figure 7.**

Table 12: Barriers to enhancement of forest biomass

Major Barriers	Underlying challenges
Policy/ governance barriers	• Lack of efficient land use policies and action plans • Lack of incentives in enhancement activities (who owns benefits from trees) • Encroachment of land for houses and businesses
Institutional barriers	• Weak law enforcement due to special conditions in AJ&K (e.g. LOC issues) • Lack of coordination mechanism with non-forestry actors • Lack of qualified and skilled human resource • Lack of research and outreach in forestry sector
Social barriers	• Community participation not institutionalized • Free grazing and unregulated nomadic movements • Damages to forests and regeneration due to trampling and fire
Economic barriers	• Lack of skills in forest businesses • Lack of PES options to incentivize community • Weak business plans to attract private sector (NTFPs)

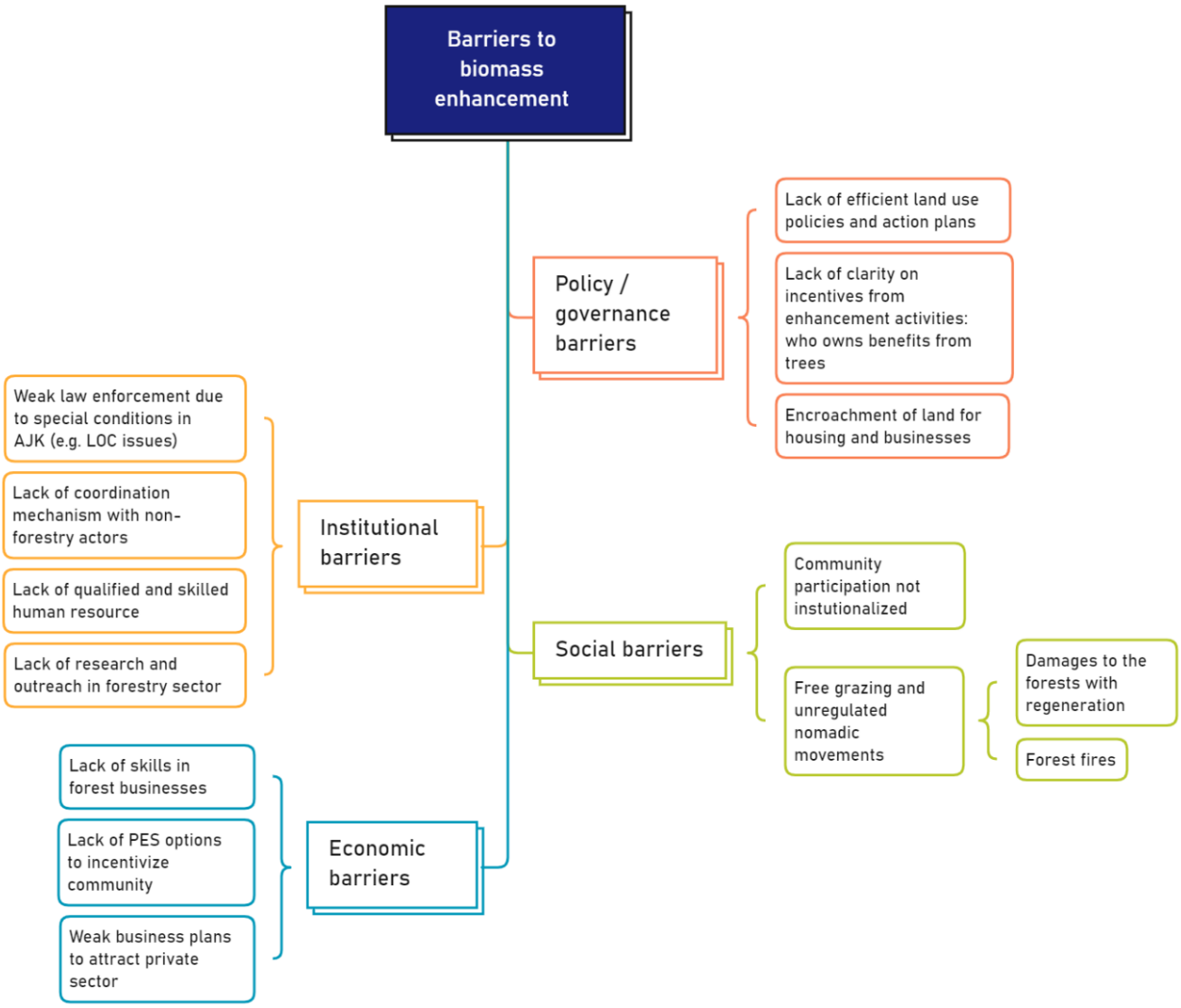


Figure 7: Problem tree of barriers to forest carbon enhancement

5 ACTIONS TO MANAGE DRIVERS, UNDERLYING CAUSES AND BARRIERS

This chapter elaborates on solutions for reducing the rate of deforestation and forest degradation in AJ&K and activities for enhancing forest carbon stocks. Different solution pathways have been elaborated and presented in this chapter.

5.1 Addressing drivers of deforestation

This section documents actions for addressing direct and indirect drivers of deforestation. The solution tree is given in **Figure 8** and **Table 13** provides an action plan to address underlying causes of deforestation.

5.1.1 Overall actions necessary to curb underlying causes of deforestation

The stakeholders suggested that REDD+ implementation will be effective when policies and REDD+ implementation framework conditions for forestry and allied non-forestry sectors are in sync with each other. REDD+ implementation should essentially include; (i) an inclusive governance framework and sound forest monitoring system to timely detect and report land use changes and (ii) well-defined interventions with associated potential benefits to enhance contributing interest from stakeholders. A strong support from community institutions is needed to bank on them as an extended arm to implement policy decisions. Participatory forest monitoring, therefore, is essential to track and flag drivers of deforestation so that measures may be taken to minimize them. In summary, the following immediate actions were identified to reduce deforestation trend:

- **Revision, strengthening and effective implementation of institutional framework and regulatory laws** to address contradiction in regulations, weak governance and subsequent poor law enforcement implicating forest sector. An important example is issuance of permits for mining and tourism activities. The following institutional framework and laws need to be reviewed, revised and implemented:
    - Strict compliance of Section 61 of Forest Regulation II of 1930 with correct interpretation on the exchange of land
    - Rules for the exchange of land (grant of Khalsa land 1860)
    - Environment Protection Act / EIA rules
    - Penalties and compensation rules
    - Reactivation of forest police wing,
    - Upgradation of range land management wing into pasture management wing of FD

- ***Ensure clarity on forestland boundaries and land use*** for expansion of infrastructure development and housing facilities. This will include formulation of land use policy and mapping to establish benchmarks and secure forestlands. Advocacy campaign for effective institutionalization and implementation of land use planning and policy will be required.

- ***Improved participatory monitoring mechanism at the State and Circle levels*** to flag encroachments and/ or clearing of forestland to other land uses on timely basis. This includes establishment and implementation of Forest Monitoring System at sub national level and link this with the national forest monitoring and MRV system to detect changes. The institutional structure of the sub-national monitoring system needs to be revised and strengthened through institutionalising community participation, launch of capacity building programme from organised communities and staff. An effective monitoring system is also a key to track impact of actions for reducing forest degradation.

- *Coordination between departments* (esp. forest, planning, land revenue, agriculture/ livestock, mining) for planning and monitoring. This may include reconstituting PRMC and other REDD+ forums in AJ&K for informed, timely and inclusive decision making.

- Improves research and outreach by reviewing, assessing and prioritizing existing research gaps in AJ&K forestry sector. There is need to improve coordination with research institutions and establish functional linkages to develop and implement research plans. Institutional strengthening is also required such as rehabilitation of (1) forest research division and (2) strengthening forest seed center and (3) Kashmir Forest school while ensuring specific financial resources allocation for research grants and establishment of (4) forest extension division and quality control committee on regular basis

5.1.2 Reduce land use change for infrastructure development and urban/ rural expansion

Land uses such as agriculture, settlements and mining are critical to determine the fate of forest resource and thus need to be regulated. Advocacy campaign for effective institutionalization and implementation of land use planning and policy will be required. Infrastructural development and expansion of settlements without proper land use planning is one of the reasons for natural resources degradation, deforestation and forest degradation. Forestland use has not long been a particular focus of land use planning in the State. However, increasing human populations with growing infrastructure needs locally has resulted in the transformation of forests to other land use types such as settlements, mining, physical infrastructure, etc. Strong institutions and clear strategic and incentivized land use policy guidelines help in effective, participatory, sustainable and coordinated management and monitoring of forestry land use and resources. A recognition of the multiple production, protection and service functions of the large proportion of forests in the State justifies and impels the adoption of innovative concepts such as adaptive strategy development and strategic spatial planning approaches to ensure an appropriate integration of forests and their management in land use planning and development at local, landscape and State level.

This AJ&K REDD+ Action Plan proposes following main interventions areas as a collective solution to the address forest land use change:

- Land use policy and planning developed and implemented:
    - Strict enforcement of section 61 of forest regulation II of 1930 (exchange of land)
    - Firm implementation of grant of Khalsa land (1860)
    - Policy for NOC of settlement schemes revised and made stricter
- Sub-national forest monitoring system established and strengthened with integrated land use monitoring indicators and tools
- Institutional capacities for monitoring compliance of rules enhanced
- Human and technical capacities in monitoring enhanced
- Improved coordination between line departments and border forces to assure do no harm measures in managing projects / migration

5.1.3 Reduce Forest land use change due to unsustainable mining activities

Though the scale of this driver is low, this might be expanded in future if not addressed in time. Although the EIA guidelines are available, these are not implemented in letter and spirit to ensure no harm to forest resources. A strong coordination is required among forest and mining departments to effectively implement EIA guidelines. In addition, penalties/ compensation system need introduction to control damage and expansion of mining activities in forest areas. Capacity building of forestry and mining officials is also required to implement these guidelines.

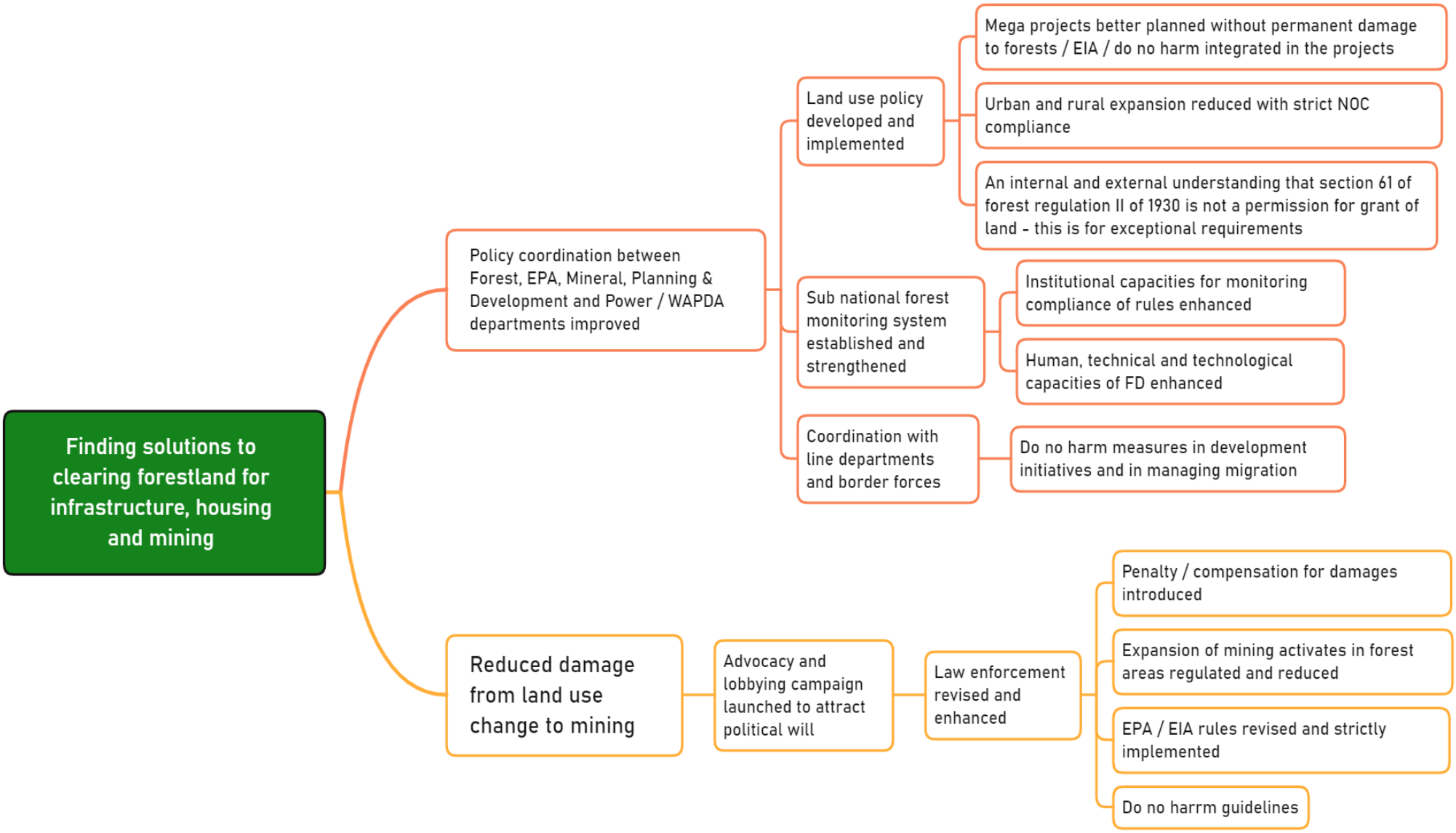


Figure 8: Solution tree of deforestation

Table 13: Addressing prioritized drivers of deforestation

Driver	Key underlying causes	Proposed Actions to address the underlying causes	Indicative Timeframe			Responsible Agencies/Actors		Indicative targets	Indicative Budget (PKR mill.)
			Short term (1-3 yrs)	Medium term (1-7 yrs)	Long term (1-10 yrs)	Lead	Support		
Clearing of forestland land for infrastructure development and urban/rural expansion	Poorly planned expansion of infrastructure/ settlements	• Land use policy development • Strict enforcement of section 61 of forest regulation II of 1930 (exchange of land) • Strict implementation of grant of Khalsa land (1860) • Policy/procedure for provision of NOCs for settlement schemes • Include NOC system in land use/ forest policy • Monitor land use changes • Land use change mapping and complete demarcation of forest boundaries linked with digital records	✓			Forest department	Planning department, housing department, land revenue department, communities	Land use policy developed Necessary amendment in existing rules	40
	Weak governance and ineffective coordination mechanism	• Improved coordination between relevant departments on land use and track conflicts • Sensitizes media on land use issues and acquire support for forestry sector • Organise special awareness seminars for political leadership and local	✓			Forest department	Local government, finance department	Strengthen REDD+ Cell Reconstitute PRMC Regular meetings	25
	Weak monitoring system	• AJ&K central and Circle level forest monitoring system established • Build necessary human & institutional capacities • Establish / agree do no harm measures in development initiatives and migration	✓	✓		Forest department	Development departments, security forces	Fully coordinated and equipped forest monitoring system	65
Unsustainable mining	Weak implementation of EIA guidelines	• Implement strict (EIA) guidelines and monitor compliance • Develop guidelines for the grant of NOC for mining activities • Staff is trained on sector specific EIA • Ensure do no harm guidelines	✓	✓		Forest department	Mining department, local administration, law department	Implementation of EIA guidelines and monitor compliance	50

5.2 Social and environmental risks of proposed actions

This section provides an analysis of any likely social or environmental harm on people or resources as a result of proposed actions in this plan. Major social and environmental risks associated with implementation of actions are given in **Table 14:**

Table 14: Social & environmental risks associated with implementation of proposed actions in AJ&K

Risk	Likelihood[23]	Impact	Mitigation measures to be facilitated by AJ&K REDD+ Cell
Internal resistance for land use policy / complexity of process causing delayed deliberation among actors	• Low	• Medium	• Organise diagnostic study on land issues • Conduct multi-stakeholder dialogues to onboard all important actors
Poor and marginalised households losing access to land for housing, agriculture, homestead grazing due to implementation of legal boundary demarcations of forestland and better law enforcement.	• Medium	• Low	• Organized community institutions dialogue with losers • Alternative livelihoods options (linked with degradation) • Prior information to these communities • Allow designated places
Resistance from powerful groups on the issues related to land use restrictions (e.g. mining,)	• Medium	• Low	• Communication designed to convey that mining is not opposed if it strictly complies with do no harm measures • Dialogue with relevant actors
Centralized technology-oriented monitoring system and controls misperceived as an attempt to centralize forest resources.	• Medium	• Low	• Awareness campaign at community level to address misperceptions • Delegate responsibilities to Circle levels to address decentralised monitoring and land use challenges
Security management and do no harm interests do not match	• High	• Medium	• Discuss scenarios for do no harm • Ensure record keeping recovering lands

5.3 Addressing drivers of forest degradation

This section documents actions for addressing direct and indirect drivers of forest degradation. An action plan is given in **Table 15**. A solution tree with options to address drivers of forest degradation is presented in **Figure 9.**

AJ&K has a vital role in regulating country's water sources through an effective watershed management and conservation. AJ&K's ecological system is highly fragile and burdened with increasing pressure of population and its demands. The solutions to the problems identified by stakeholders are more governance oriented. The most important measure is to facilitate provision of alternative energy to reduce pressure on the forests. This is further supplemented by increasing local incomes, including from economic use of forests to create a cause for forest conservation and sustainable management. In addition, it is essential to take measures to control forest fires on lower elevations. This may be done by introducing and enhancing role of organized communities and equip them with necessary tools and skills to manage resources (including organizing grazing and local tourism activities).

23 Likelihood Chances of this risk becoming real. The impact refers to extent to which this will sabotage REDD+ implementation and its effectiveness

5.3.1 Overall actions necessary to curb the drivers of forest degradation

Founded on prior experience of participatory forest management in other provinces, capacity development in participatory forest management within the department is essential for reducing the rate of forest degradation in AJ&K and would also help to conserve and enrich forest resources. Monitoring may also become efficient and effective when both government officials and forest users have become technically sound in participatory forest management and monitoring as a result of capacity building. In addition, the complexity of the underlying causes of forest degradation warrants a stronger focus on improved forest governance which is self-accountable and accountable to the communities and citizens. Some of these measures are already available within reformed frame conditions and a matter of effective implementation.

Establishment of an effective and transparent forest monitoring system and coordination mechanism are also necessary to determine if the forest governance and management measures are going in the right direction. Regular change analysis in forest resource will determine chronic underlying causes and help identifying revised solutions if the solutions already determined are not effective.

In summary, following overall actions are necessary to address forest degradation issues:

1. *Ensure implementation of participatory forest management practices* through development of PFMP plans. This is to assure that communities are part of the management structure at local level and forests cannot be conserved with department's command and control system only.
2. *Integration of forest degradation at local level into a centralised, functional, and empowered forest monitoring system / PFMP* that timely detects changes in forest density classes and confirms direction of measures. A common monitoring system with cross elements able to track total impact of actions against DoDD needs to be achieved in AJ&K.
3. In addition, an *effective institutional coordination* system with non-forestry stakeholders needs to be in place to remove bottlenecks and underlying causes of forest degradation as a team (e.g., agriculture, livestock, energy). This may be done by reconstituting AJ&K REDD+ Management Committee (AJ&K RMC).
4. *Awareness raising and media engagement to sensitize citizens and other actors* is necessary to enhance political and public will for supporting sustainable management of forest resources with institutionalised community participation.

5.3.2 Reduce pressure and demand for firewood and timber

One of the key drivers of severe forest degradation in AJ&K is the pressure on natural forests for firewood and timber for heating /cooking and construction purposes, respectively. This is due to lack of alternative energy sources and lack of wood alternatives for construction. Even fuelwood shortage is grave in many areas and people are forced to purchase fuelwood at a very high cost. Therefore, effective measures are required to deal with multiple options to address forest degradation – knowing the fact that the communities are also in search for cheaper and easy to access energy and construction options and improve quality of their lives. Alternative sources of fuelwood for heating and cooking can reduce the demand for fuelwood from the degraded natural forests. Promotion of wood alternatives for construction and fuel-efficient cook stoves, solar panels and energy plantations on barren/ private lands may also reduce the rate of degradation in natural forests. Based on the underlying causes, the AJ&K REDD+ Action Plan proposes the following five actions as a collective solution:

- *Alternative and more efficient energy sources*
  - *Establishment of energy plantations* with fast growing fuelwood/ timber species on barren lands/ private lands
- *Fuel efficient and alternative technology* promoted and provided on pilot basis. The alternative energy refers to doing away from use of firewood for heating and cooking. Efficient energy refers

to methods which lead to reduced consumption of firewood for multiple benefits (cooking beside water heating or space heating along water heating). Proven models of fuel-efficient stoves need to be shortlisted and promoted through market-based solutions since free distribution of stoves has failed several times in other parts of country. One way of market-based solution is to train local hardware stores on approved design and provide them a start-up incentive so that the stoves continue to be build and sold. The introduction of alternative energy sources, cook stoves and kilns must be designed jointly with the end-users because no single model may provide a feasible solution for energy needs in all areas. It is important to highlight that fuel efficient stoves are considered as a high priority mitigation alternative in Pakistan's Nationally Determined Contribution to UNFCCC. Similarly, smart startups may be supported to promote solar energy for cooking. Where funds and potential are available, small hydropower units may be introduced for a longer-term benefit.

- *Market based solutions for forest wood substitution* for construction by providing attractive incentive to the businesses. Until and unless market is incentivized for introduction of affordable alternative building material, the prices will not go down and citizens will find it hard to use alternative options.

- Enhance incentive from forest conservation and ecosystem restoration
  - Incentive based PES Schemes[24] (e.g., REDD+) designed and implemented. PES schemes may be effective if managed in a manner that economic returns directly reach the forest-dependent communities (including users, owners, nomads, and seasonal migrants). However, the overall socio-economic feasibility of PES will largely depend on alternative energy and income generation options available to local communities in an easy-to-access manner.
  - Eco-tourism and NTFP small businesses promoted
  - Promote market linkages
  - Awareness and capacity building, advocacy for communities

5.3.3 Reduce pressure from forest fires

Forest fires are among the main factors causing huge damage to forest ecosystem and in larger context climate change. In AJ&K, forest fire occurs when the forest burns either naturally or by anthropogenic activity (tourism, pastorals) which brings loss of organic matter, forest degradation and greenhouse gases emissions, mainly carbon dioxide and methane. Natural forest fire includes an unplanned burning of forest due to lighting mostly in dry season. Human-induced Forest fire results due to carelessness of people (tourists and pastorals) when they leave burning woods after cooking, cigarettes or an unauthorized burning practice e.g., shifting cultivation, fuelwood collection. The following action are proposed to reduce fire events in forest areas:

- Integration of forest fire monitoring (both spatial and ground based) into sub-national forest monitoring system
- Law enforcement mechanism improved
- Institutional capacities (technical, human, mobility, communication) on forest fire prevention and management enhanced
- Timely forest fire detection and reporting system through structured participation of local communities
- Grazing practices organised and regulated to control intentional/ negligent fire events
- Responsible eco-tourism promoted
- Awareness raising among tourists/ pastorals/ locals on forest conservation
- Coordination between line departments (tourism, forest, and livestock) improved

24 Pilot PES schemes already designed for Mangrove forests as test case for potential replication

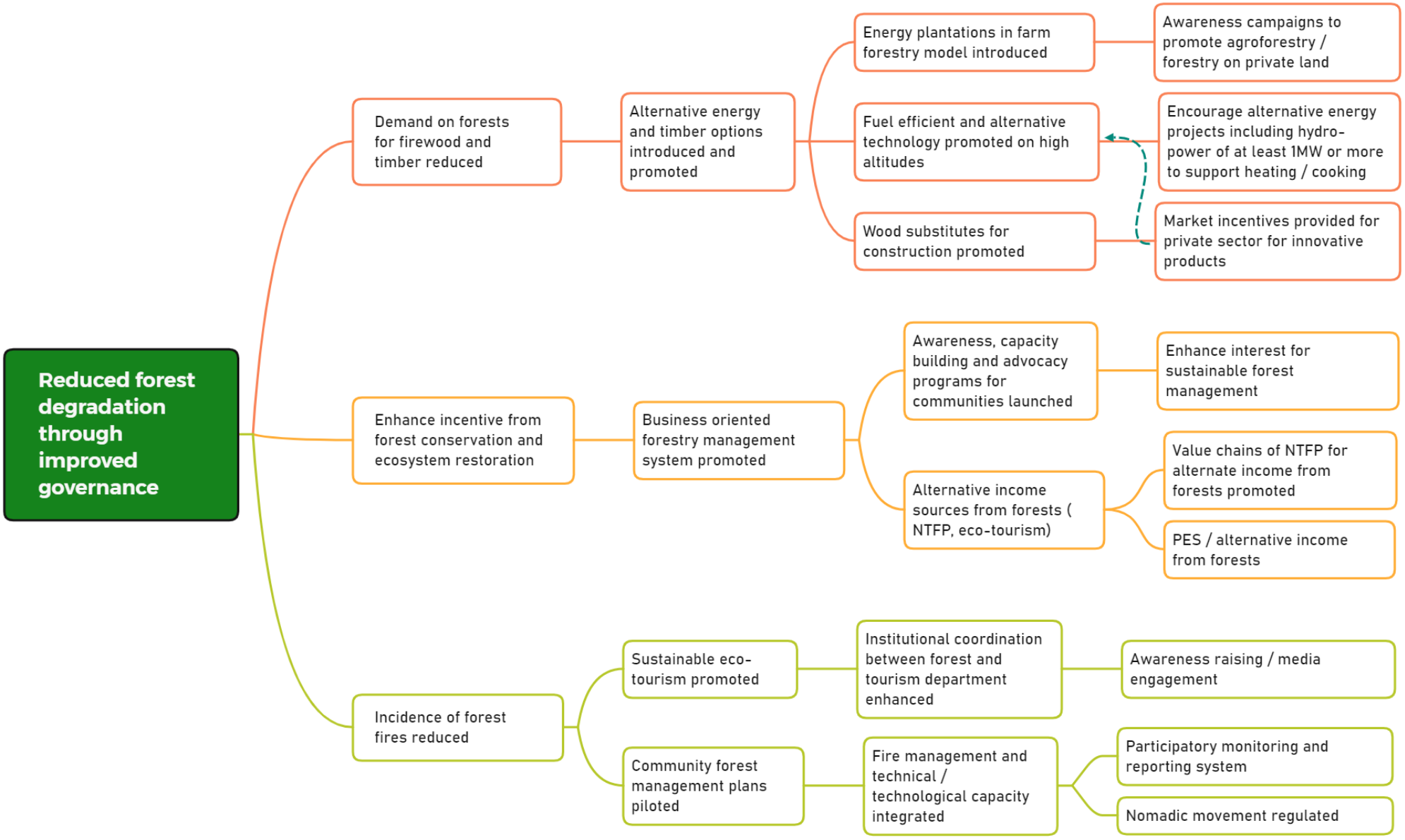


Figure 9: Solution tree of forest degradation - AJ&K

Table 15: Addressing drivers of forest degradation

Driver	Key underlying causes	Proposed Actions to address the underlying causes	Indicative Timeframe			Responsible Agencies/Actors		Indicative targets	Indicative Budget (PKR mill.)
			Short term (1-3 yrs)	Medium term (1-7 yrs)	Long term (1-10 yrs)	Lead	Support		
High demand for fuelwood and timber	High dependence on forest for fuelwood	• Enhance forest base by planting schemes • Rehabilitation of research and seed centre to improve germ plasm and supply in the region • Incentive policy to promote energy plantation	✓	✓	✓	Forest department	Private sector, NGOs, CBOs, institutions	Increase firewood supply by 30%	300
	Alternative / efficient energy	• Promote alternative and more efficient energy sources by providing incentives • Identify hardware vendors and market-based subsidies for alternative energy + train hardware vendors	✓	✓	✓	Forest department, energy sector	Private sector, NGOs, CBOs, institutions	Reduce firewood demand by 30%	180
	Lack of alternative income sources	• Promote alternative income to enhance affordability for sustainable solutions • Eco-tourism and cottage industry promoted • Identify Forest based PES schemes to incentivize conservation. • Develop benefit sharing mechanism	✓	✓	✓	Forest department	Private sector, NGOs, CBOs, Academia	At least 30% community in hotspots switch to energy mix	190
	Lack of community participation	• Implement participatory forest management and monitoring practices • Conduct and implement PFMPs • Integrate solutions (e.g. alternative energy solutions) in the PFMPs • Capacity building on participatory approach	✓	✓	✓	Forest department	Communities	10 PFMPs Training of community	900
	High dependency on timber for construction	• Promote forest wood substitution • Discover options, list SMEs, businesses • Incentive policy on how to promote substitutes • Allow substitute businesses to expand		✓	✓	Forest department	Private sector Media	Identify companies and subsidy including free publicity	60
	Lack of coordination among actors	• Improve coordination among relevant departments • Reconstitute PRMC, other bodies • Regular meetings and implement decisions • Coordination between departments (tourism, forest, fire brigade, and livestock) improved	✓	✓		Forest department,	Agriculture, Revenue, Tourism, Mining departments	AJ&K RMC notification, Meeting minutes	50

Driver	Key underlying causes	Proposed Actions to address the underlying causes	Indicative Timeframe			Responsible Agencies/Actors		Indicative targets	Indicative Budget (PKR mill.)
			Short term (1-3 yrs)	Medium term (1-7 yrs)	Long term (1-10 yrs)	Lead	Support		
Forest Fires affecting regeneration and pole crops	Poorly managed tourism / grazing	• Integration of forest fire monitoring (both spatial and ground based) into sub-national forest monitoring system • Timely forest fire detection and reporting system through structured participation of local communities • Equip communities with suitable tools • Responsible eco-tourism promoted through public communication	✓	✓		Forest Department	Departments of Tourism, Livestock, Fire Brigade, Local administration	Suitable fire-fighting tools; Communication material; Campaigns	80
	Capacity building of communities	• Law enforcement mechanism improved • Institutional capacities (technical, human, mobility, communication) on forest fire prevention and management enhanced at community level and local forest offices • Strengthen community institutions for control • Awareness raising among tourists/ pastorals/ locals on forest conservation	✓	✓	✓	Forest department	Communities Tourism Private sector	Training events	90
	Range management and grazing	• Grazing practices organised and regulated to control intentional/ negligent fire events by pastorals • Upgradation of rangeland management into pasture management wing	✓	✓	✓	Forest department	Communities Tourism Private sector	Integrate grazing systems in PFMP	15

5.4 Social and environmental risks of proposed actions and safeguards

This section provides an analysis of any likely social or environmental harm on people or resources from the proposed actions. Major social and environmental risks associated with implementation of actions are given in Table 16:

Table 16: Social & environmental risks associated with implementation of proposed actions in AJ&K

Risk	Likelihood[25]	Impact	Mitigation measures to be facilitated by the State REDD+ Cell
The risk to biodiversity from exotic fast-growing species for silvo-pastoral/ agroforestry systems	• Medium	• Low	Establish SOPs for incentivised agroforestry schemes and production systems including how species will be selected for different types of ecological conditions.
Alternative energy / building material are expensive to afford by common people and their hardship increases.	• High	• Medium	Provide policy incentives to market players and regulate market prices.
Rebound effect of unsustainable energy options with high emission risks	• Medium	• Low	Together with energy actors, carefully analyse possible alternatives and encourage cleaner options with providing market support and encouraging smart start-ups.
Rebound effect of alternative energy with risks of higher emissions	• Medium	• High	Careful analysis of options with energy actors; and provide incentives for low emission start-ups and up scaled solutions
The risk of elite capture in participatory forest management	• Medium	• Medium	Active participation of field staff of the forest department and local communities essential to ensure inclusiveness
Disputes within community when participatory community groups try to counter free grazing and forest fires	• High	• Medium	Strong skills are needed at the DFO level to mediate such disputes. Communities need to be equipped with legal justifications to counter stubborn elements; ensure graziers have suitable alternatives; ensure grievance redressal mechanism works.
Elite capture in the provision of alternative livelihoods / income generating activities, farm forestry etc.	• Medium	• Low	Ensure a clear and transparent mechanism for participatory policy making, monitoring & reporting in which poor, marginalised and women groups are prioritised.
Owing to the cultural constraints, women remain out of reach for alternative livelihood options and remain unaware of useful opportunities.	• High	• High	Follow gender action plan for REDD+ and ensure equal opportunities for women while introducing livelihood options

5.5 Removing barriers to enhancement activities

A number of measures were identified to remove potential barriers to enhancement activities. Some of these measures overlap with the solution pathways for addressing underlying drivers of deforestation and forest degradation and thus have already been explained in the earlier section and compiled in Table 17 and Figure 10.

25 Likelihood Chances of this risk becoming real. The impact refers to extent to which this will sabotage REDD+ implementation and its effectiveness

Table 17: Key results identified from solution tree of barriers of enhancement

Policy incentives in forestry sector promoted (at State and Circle levels)
• The State and Circle level forest monitoring system established to cater for monitoring results of action against drivers of deforestation, forest degradation, and impact of enhancement activities • Forest based payments from forest ecosystem services promoted • Develop AJ&K's FREL • Establish benefit sharing mechanism to incentivize people
Improved institutional framework
• Institutional coordination between line departments strengthened • Inclusive and transparent sub-national forest monitoring system established • AJ&K RMC / other coordination mechanisms reconstituted • Human, institutional, and technological capacity of forest department increased • Research and outreach promoted
Participatory approach adopted and community participation institutionalized
• Participatory forest management plans developed for encouraging participation • Community awareness and skills development programmes launched • Programme for restoration of heavily damaged forestry ecosystems launched • Appropriate participatory grazing system on scientific basis regulated and adopted to reduce grazing barrier to enhance regeneration
Enhance economic opportunities
• Enhance interest of communities to preserve forests for continued economic benefits • Build skills of forest dwellers in NTFP, Tourism • Develop marketable products and engage communities • Provide opportunities to women including forest nurseries established through women participation

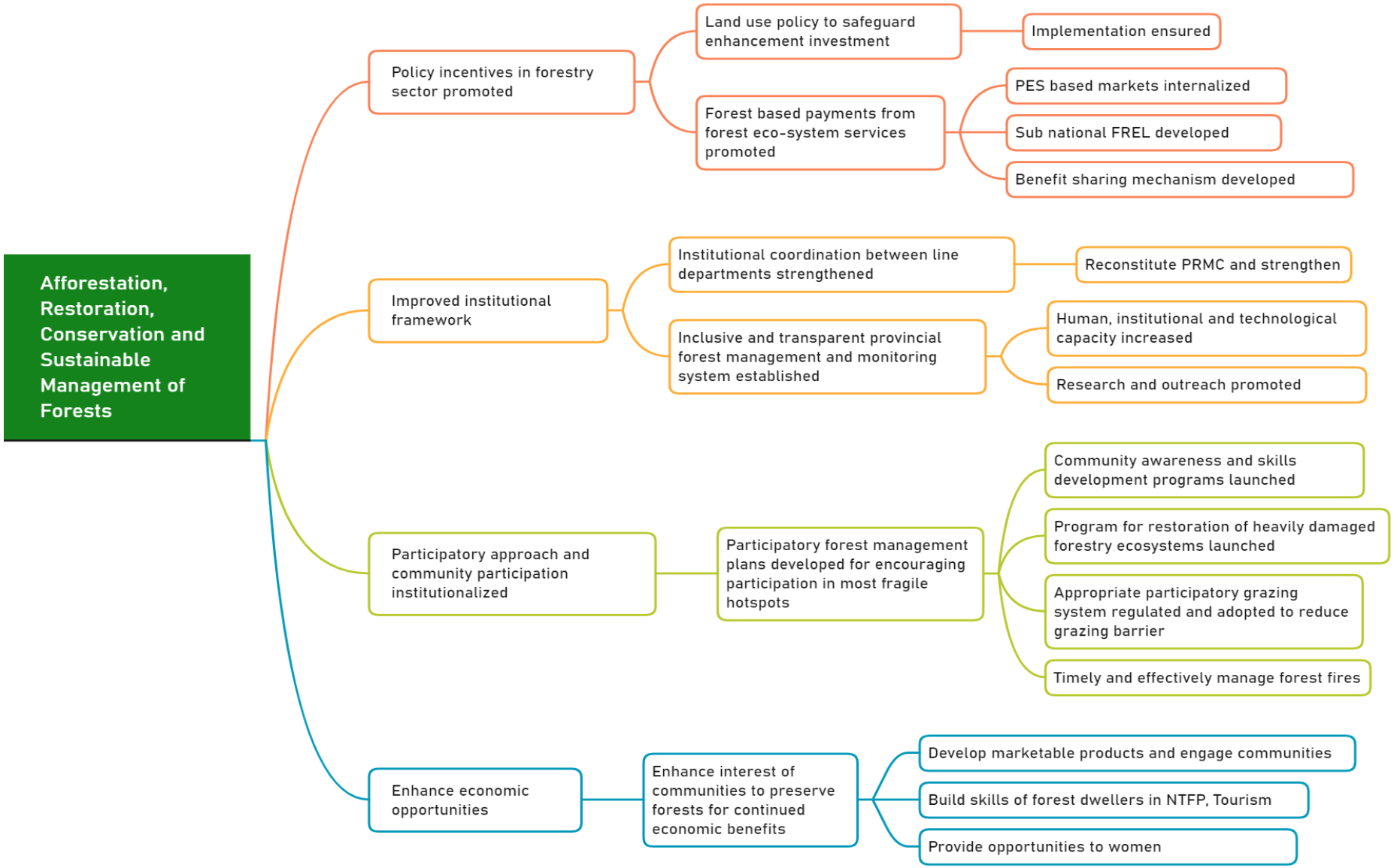


Figure 10: Solution tree of barriers to enhancement of forest carbon stocks

5.6 Indicative Budget

A total indicative budget for the actions identified in the AJ&K REDD+ Action Plan is PKR 2645 million. This may include public funding as well private investment (including projects financed by international donors and NGOs to support AJ&K RAP actions). **Table 18** summarizes the Action Plan budget for short term, medium term and long-term activities. Indicative budget proportions (short term, medium term, long-term) are given in **Figure 11**.

Table 18: Budget for Short Term Activities (2022-2023) of Intervention Packages of AJ&K RAP

Actions	Indicative Budget (PKR mill.)			
	Short term (1-3 years)	Medium term (1-7 years)	Long term (1-10 years)	Total
Forest enhancement / afforestation schemes	300	300	300	900
Alternative livelihoods (NTFP, skills)	50	70	0	120
Payment for Eco-system Services schemes	35	55	0	90
Effective State based Forest Monitoring and MRV System	35	30	0	65
Land use policy, mapping, and enforcement	30	10	0	40
Strengthen NOC / EIA system and do no harm guidelines	25	25	0	50
Improved coordination with relevant departments	25	25	0	50
Promote sustainable alternative energy / timber sources	50	80	30	160
Improve fuel efficiency of cooking appliances	20	5	0	25
Participatory forest management planning	200	500	200	900
Forest fire management and social control	45	35	0	80
Promote wood substitutes and incentivise private sector	40	20	0	60
Institutionalise, train and build capacity of communities	45	25	20	90
Grazing management and range management	5	5	5	15
Total	**905**	**1185**	**555**	**2645**

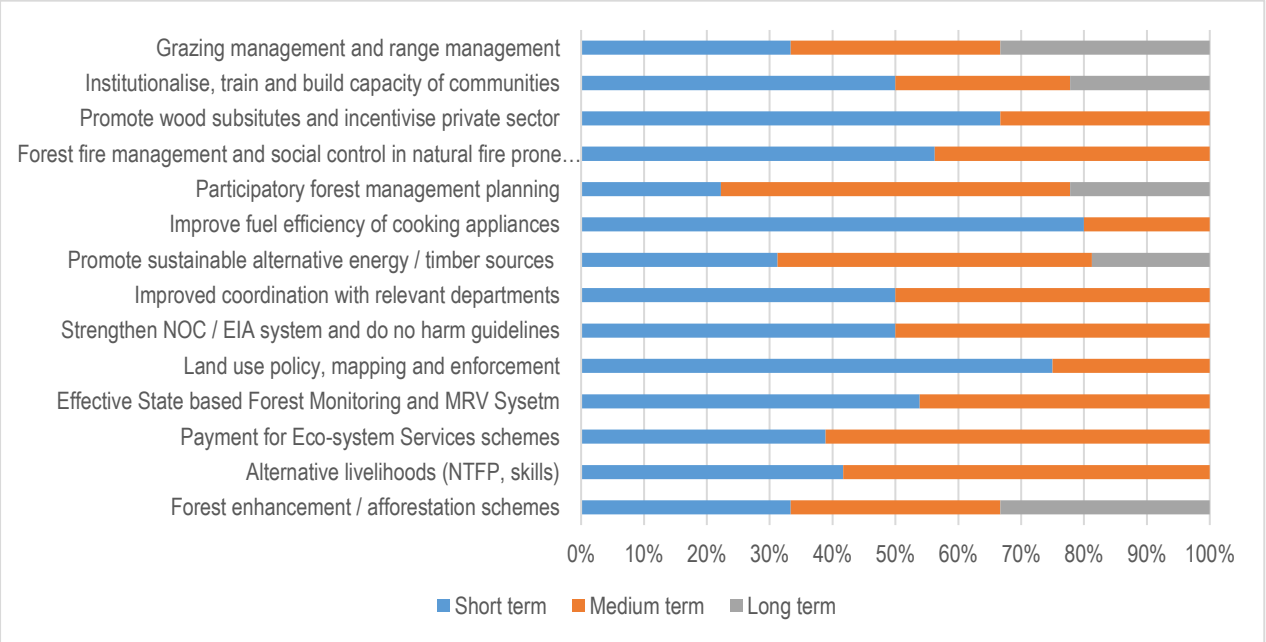


Figure 11: Indicative budget proportions for AJ&K REDD+ Action Plan

6 BENEFIT SHARING MECHANISM

The AJ&K government recognizes REDD+ as a financial incentive-based forest management scheme to incentivize ongoing forest management initiatives and associated behavioral change among the local communities for addressing drivers of deforestation and forest degradation. A broad sketch of benefit sharing mechanism for Carbon and non-Carbon benefits is proposed in this section. It has been drawn on AJ&K forestry stakeholders' deliberation and experience. The stakeholders suggested to keep it flexible and evolving with increased awareness and knowledge on REDD+ mechanism among foresters, non-forest stakeholders and communities.

AJ&K REDD+ action plan proposes a contract-based agreement between local stakeholders and the Forest Department to provide legal grounds for REDD+ implementation and sharing of Carbon and non-Carbon benefits. The monetary returns from REDD+ activities (carbon credits sale) would be divided differently for different forest tenures into various heads. There are a few fundamental principles in AJ&K which need to be followed:

1. The final decision for sharing the Carbon benefits with entities outside the AJ&K will rest with the government of AJ&K as the owner of land and natural resources in the AJ&K.
2. The decision to engage with voluntary market or buyers of Carbon credits either directly by the State with voluntary markets or via Federal Ministry of Climate Change will also rest with the AJ&K government in the best interest of forest resources and beneficiaries.
3. REDD+ benefits need to be seen independently of timber benefits. In case of scientific harvesting through sustainable forest management, the sale proceeds will be distributed exactly as stipulated for demarcated and un-demarcated forests. In case of REDD+ benefits, the same proportion of revenue sharing do not have to be applied since Carbon is a new product and the revenue will be generated due to reduced deforestation and forest degradation.
4. A greater share to the forest owners, right holders and users will result in better REDD+ benefits since most of the drivers to be removed originate at that level. The forest owners, right holders and forest users must be incentivised to contribute more to addressing drivers.
5. The owners' and non-owners' share will be divided into cash and kind. In kind benefit distribution will be ensured in the shape of schemes which have a direct contribution to reducing drivers of deforestation and forest degradation and forest enhancement.
6. The cost of transaction for individual REDD+ case under negotiation with a potential buyer will not be more than 10% of the total potential revenue so that maximum benefits may be retained for different stakeholders.

In case of different legal forest tenures, following benefit sharing mechanisms are proposed:

1. Demarcated and un-demarcated forests:

    a. Out of the total Carbon sale proceed, 50% of the share will go to the government of AJK after deducting all transactional costs of the site-specific negotiation and third-party monitoring and verification including the 10% service fee to the MoCC, decided on case-to-case basis for REDD+ credit registry and negotiation services. The government of AJK will retain 10% of the amount and allow the rest of the revenue to be deposited in the REDD+ Fund.
    b. Out of the remaining 50%, a total of 40% will be distributed to the concessionists, where applicable:
        i. 60% of this proceed will be spent on community welfare and development activities, particularly in activities that contribute to reducing drivers of deforestation and forest degradation (e.g., alternative energy initiatives and piloting). The latter benefits will be enjoyed both by the private owners and customary forest users.

ii. 40% of this proceed will be distributed in cash

c. The remaining 10% will be allocated for customary right holders / forest users. 100% of this amount will be spent on community welfare and development activities, particularly in activities that contribute to reducing drivers of deforestation and forest degradation (e.g., alternative energy initiatives). These benefits will be enjoyed both by private owners and customary forest users.

2. Private forests:

a. Out of the total Carbon sale proceed, 10% of the share will go to the government after deducting all transactional costs of the site-specific negotiation and third-party monitoring and verification including 10% to the MoCC. Out of this, the government of AJK will retain 10% of the amount and allow the rest of the revenue to be deposited in the REDD+ Fund.

b. Out of the total, 70% will be distributed to the private owners. Out of their total share:
   i. 60% will be distributed in cash
   ii. 40% will be spent in community welfare activities directly relevant to reducing drivers of deforestation and forest degradation (such as alternative energy development projects and installations). The latter benefits will be enjoyed both by private owners and customary forest users.

c. The remaining 20% will allocated for customary right holders / forest users. 100% of this amount will be spent on community welfare and development activities, particularly in activities that contribute to reducing drivers of deforestation and forest degradation (e.g., alternative energy initiatives). These benefits will be enjoyed both by private owners and customary forest users.

Figure 12 provides a schematic explanation of the benefit sharing mechanism in AJ&K.

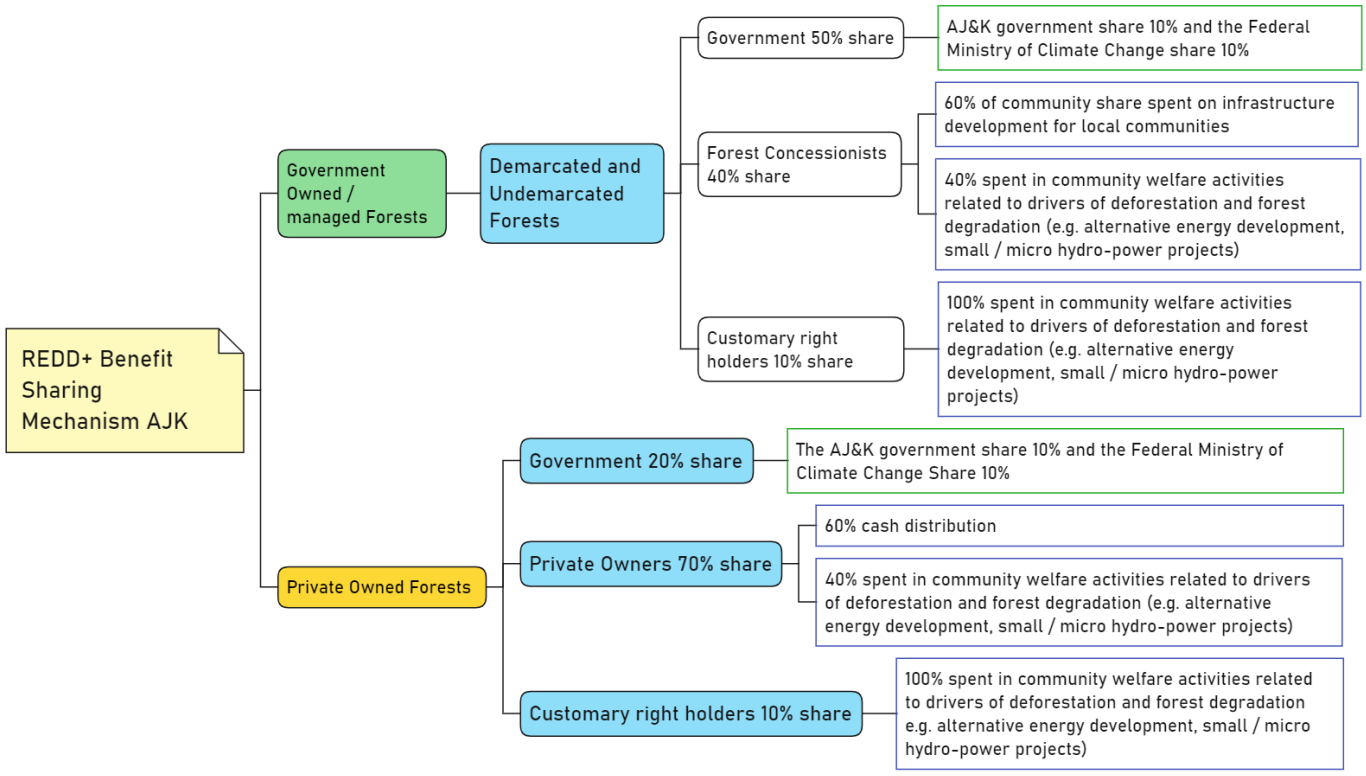


Figure 12: Flow Chart of Carbon and non-Carbon Benefit Sharing Accrued from REDD+ Programme

7 INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTATION OF AJ&K RAP

7.1 Institutional anchorage of REDD+ and responsibilities

The NRS established REDD+ institutions at national and sub-national level. However, during consultative workshop, the participants proposed the establishment of a number of other institutional set-ups at the State level, regional/forest circle and district/local levels. In addition, it also proposes the establishment of certain thematic working groups to guide implementation of the various technical aspects of the strategy. For synchronizing the AJ&K RAP with NRS the organogram for REDD+ Implementation in AJ&K, as envisioned in NRS is shown in Figure 13.

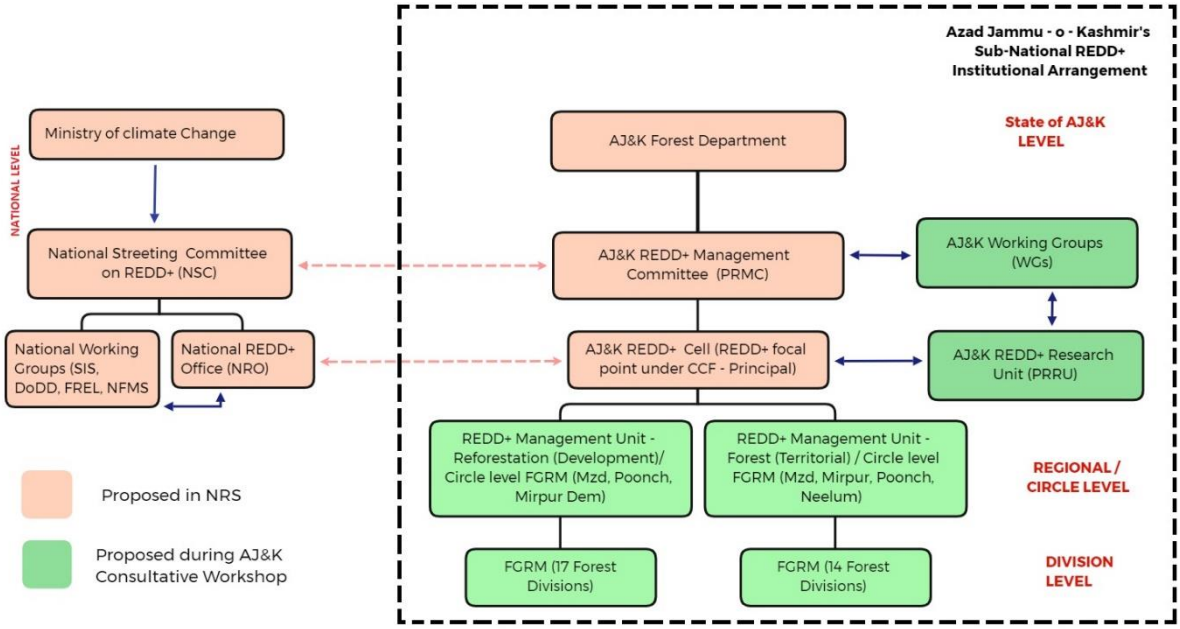


Figure 13: Sub national REDD+ Institutional arrangements for AJ&K

1. AJ&K REDD+ Management Committee: This committee will be headed by the Secretary Forests and will perform as an advisory and steering body in preparation of REDD+ policies, plans, laws, and institutional mechanisms in addition to carrying out previously determined mandate and supervisory functions.

2. AJ&K REDD+ Thematic Working Group: Four groups are proposed to provide technical guidance as follows:
   a. Technical working group on FREL/FRL.
   b. Technical working group on Forest Inventory and MRV.
   c. Technical working group on REDD+ Social and Environmental Safeguards and Grievance Redress Mechanism.
   d. Technical working group on REDD+ Finance

3. AJ&K REDD+ Cell: This unit will be responsible for designing and implementation of REDD+ strategies and action plans at the State, administrative, and regional/ circle level in consonance with the national and international framework. The State REDD+ Cell will be headed by the Project Director/ REDD+ Coordinator/ REDD+ focal person of AJ&K REDD+ Programme.

4. AJ&K REDD+ Research Unit/ Committee: The State REDD+ research unit will be based in Kashmir Forest School under forestry research and management division. A research committee will be formed representative of all administrative units to promote and coordinate research on REDD+ related thematic areas. This committee will also perform Quality Control checks on satellite-based forest inventories.

5. Three Regional REDD+ Management Units: On administrative grounds, two REDD+ Management Units (RRMUs) will be established in Muzaffarabad and Neelum. The management units will (i) support the AJ&K REDD+ Cell and oversee field and implementation activities of the pilot REDD+ project sites, (ii) undertake awareness raising/capacity building activities for forest staff and local communities, and (iii) collaborate with forest circles and divisions

6. Forest Circle Level REDD+ Social and Environmental Safeguards (SES) and Grievance Redress Mechanism (GRM): The circle level SES and GRM will be coordinated by the respective Conservator of Forests and will ensure adherence to the Social and Environmental Safeguards

7. Forest Division Level REDD+ Social and Environmental Safeguards and Grievance Redress Mechanism: The division level SES and GRM will be chaired by the Divisional Forest Officer of the Forest Division concerned. It will work as feedback providing link and resource pool for the Sate REDD+ Management Committee. It will also serve as platform for discussions on and resolution of REDD+ related issues at the district level. It will provide data and information on REDD+ implementation at the district level to the REDD+ management units/ REDD+ Management Committee.

7.2 Alignment with policy

National REDD+ Strategy

The NRS provides the overall guiding framework for implementing REDD+ at national and sub-national level. The AJ&K REDD+ Action Plan is aligned with the NRS REDD+ vision of optimizing forest ecosystem services and livelihood support on a sustainable basis and is consistent with the goals and objectives of NRS as given below:

i. Contribute significantly to reducing GHG emissions through avoided deforestation and forest degradation and to enhancing forest carbon stocks in order to mitigate climate change
ii. Provide sustainable flow of environmental services from forest ecosystems
iii. Make available alternatives for sustainable livelihoods to people dependent on forests
iv. Provide the required institutional, legal, and economic conditions to ensure the sustainable management of forest resources and ecosystems
v. Create the necessary governance for the implementation of cross-sectoral policies
vi. Ensure awareness of stakeholders concerning the role of forest in sustainable development, climate change and REDD+

Based on the wider goal of NRS, the objective of this AJ&K REDD+ Action Plan, as mentioned in section 2, is to contribute to achieve the targets set out in the NRS.

National Forest policy (2016)

The approved National Forest Policy 2016 has two main policy objectives i.e. (i) expansion of forest cover and (ii) curbing of deforestation and promotion of forest conservation. Under these objectives, the National Forest Policy envisages for both the implementation of REDD+ and the full transfer of benefits arising therefrom, such as payments for preserving carbon stock, to forest owners and right-

holders. The AJ&K REDD+ Action Plan is, therefore, designed to contribute to the objectives of National Forest Policy through implementation of REDD+ at sub-national level in AJ&K.

Alignment with AJ&K Sectoral Development Planning

This AJ&K REDD+ Action Plan encompasses multi-sectors and related issues e.g., agriculture, infrastructure, energy, tourism, livestock, economic growth and poverty reduction. The prioritized IPs are closely aligned with AJ&K's sectoral development plans and promote co-ordination and cooperation with all relevant stakeholders. Also, as already mentioned, the AJ&K REDD+ Action Plan is not a static document and would require periodic revisions taking inputs of the relevant AJ&K institutions and other stakeholders in light of the experience gained from implementing the actions.

7.3 Assessment of existing Capacities and Coordination

This capacity assessment was guided by the following:

1. Capacity-Based Needs Assessment (CBNA) report of 2014[26] (updated in 2017-2018[27]) to ensure consistency and comparability in reporting the capacity gaps;
2. Discussion on department's human and technical capacities during REDD+ Readiness consultations (R-Package)
3. Consultations on assessment of technical and extension systems at sub national level

AJ&K has established institutional capacities and resources to implement REDD+. The department has also established its Feedback Grievance Redressal Mechanism for REDD+ following guidance from the national FGRM. However, it is not yet operational. As a start, the two pilot PFMPs during implementation are expected to operationalize the FGRM and later this will be expanded to the whole AJ&K with more PFMPs prepared and implemented.

The Forest department AJ&K has its own financial management mechanism following the government financial management guidance for both public and international funded projects. The human resource is available at departmental level with requisite capacity (both academic and professional) to manage finances of government and donor funded projects. However, there is no designated staff for technical supervision and financial management of REDD+ activities. There is a need for a fulltime dedicated REDD+ staff with requisite capacities during the implementation phase.

The communication strategy is not yet available and Information sharing tools/ channels need to be identified and accessible to public in English and Urdu to keep the stakeholders informed about the REDD+ processes and progress. This is the reason that this discussion came up again during AJ&K REDD+ Action Plan consultations and it was emphasized that there was a need for exclusively focusing on establishing REDD+ implementation and communication framework.

AJ&K Forest Department has institutional capacity for regular spatial forest monitoring and ground-based inventory but the mapping and reporting capacities in compliance to the requirements of IPCC's Forest carbon emission reporting are limited. The department also has well established independent SLMS Section/Unit comprising of combined GIS/RS Lab with required human resources including SLMS expert, RS analyst, GIS analyst, GIS Operators, IT expert, system engineers and trained surveyors. However, Institutional capacity in terms of system infrastructure and standard operating protocol is lacking. All the existing facilities need to be capitalized for establishing a State based Forest Monitoring

26 https://www.unredd.net/documents/un-redd-partner-countries-181/asia-the-pacific-333/a-p-partner-countries/pakistan-1129/implementation-technical-including-tors-1845/mrv-and-monitoring-1852/15245-pakistan-nfms-capacity-building-needs-assessment-report.html?path=un-redd-partner-countries-181/asia-the-pacific-333/a-p-partner-countries/pakistan-1129/implementation-technical-including-tors-1845/mrv-and-monitoring-1852

27 https://www.redd-pakistan.org/wp-content/uploads/2019/02/Capacity-Needs-Assessment-Technical-Capacity-Enhancement.pdf

and MRV System at central level with monitoring capacity at Circle levels duly guided and supported by the dedicated REDD+ staff in AJ&K.

AJ&K Forest Department has mandate to undertake forest inventory and mapping works to prepare working plans of the forests. The department has been conducting inventories at the forest block levels to estimate the commercial timber volume. Such inventories are conducted in an interval of 10-15 years covering 1 plot per acre area at the sampling intensity of 1 percent. Inventory measurements are done establishing randomly sampled Temporary Sample Plots (TSPs) and quality control measurements. The standard procedure of the inventory is documented, with the latest in the Working Plan of June 2017. Sufficient quantity of field and measurement equipment, including modern equipment such as relascope, vertex transponders and high precision drone cameras are also available. For the full operationalization of sub-national NFI, a consistent methodology, capacity enhancements in planning and designing of sampling, inventory measurements, carbon and GHG inventory, QA/QC, analysis and reporting is deemed necessary.

7.4 Feedback grievance and redressal mechanism

A Feedback Grievance Redress Mechanism (FGRM) has been designed[28] at national level as part of national REDD+ readiness process to enable clear and effective handling of complaints or conflicts arising from the implementation of REDD+ activities. The FGRM is designed on the principles of legitimacy, accessibility, predictability equitability, transparency, rights compatibility and enabling continuous learning. The Standard Operating Procedures – SOPs for FGRM are defined and integrated into Safeguard Information System – SIS (www.pakistansis.com). A systematic stepwise procedure will be adopted for FGRM: i) Receipt and registration of feedback, grievance or complaint; ii) Investigation of the grievance or complaint; iii) Resolution to the utmost satisfaction of parties and in accordance with the rules, and; iv) Monitoring of implementation of the agreed resolution. These steps are in accordance with the FCPF guidelines. In total 30 working days are contemplated from the moment the complaint is received until its disposal. A summary of the SOPs of FGRM is given in **(Table 19)**. The aggrieved parties may decide to use the FGRM in preference to other available mechanisms.

The grievance redressal is also part of the existing AJ&K forest related policies and programmes in which complaint procedures are already defined and platforms to lodge complaints are available. AJ&K has also established its FGRM for REDD+ following guidance from the national FGRM. This action plan proposes the DFO office as the main FDRM since it is locally located and is best known to the forest communities. The DFO office needs to publicize a specific desk, phone number and email address through which written complaints may be registered. If not resolved, the matter will be reported to the higher levels. The system is not operational yet, however efforts will be made to operationalize this to first sensitize DFO level staff on how to operate FGRM. Mass awareness campaign on REDD+ will also include publicity of FGRM so that they can access platforms made available to them to provide their feedback and lodge complaints.

[28] https://www.redd-pakistan.org/wp-content/uploads/2015/08/Draft-Final-Report_final.pdf.

Table 19: Recommended FGRM mechanism

Steps	Process	Processing days	Responsibility to Receive and Deal with Complaint	Communication Tools/ Channel	Outcome
1st	Receipt and registration of complaint / grievance	5 business days	Divisional level FGRM	**Channels**: Email, complaint box, specific desk, phone number	The Complaint is received, registered, lodged and sent to complaint officer at DFO level
2nd	Investigation	15 business days	Designated Complaint Officer	**Tool**: Diagnostic questions to gather information about relevant actors/ parties, nature of complaint, the request made by claimant and position of other party, violated, or recognised legal rights, supporting witness, evidence, and prayers from parties **Channel**: Complaint officer to contact directly with the claimant and other relevant parties	The complaint is resolved or taken to a relevant level for resolution. Comprehensively document grounds for complaint and record support from rules.
3rd	Resolution	15 business days	Designated Complaint Officer	**Tool**: Written response about decision process **Channel**: Face to face meeting with parties and mutual discussion at appropriate level i.e., district, village, or State	A signed agreement.
4th	Monitoring	3 – 12 months	State REDD+ focal person	**Tool**: The FGRM monitoring database from which the information will be analysed **Channel**: Coordinated FGRM monitoring system between DFO and REDD+ Cell	The patterns of complaints recognized, the causes of the complaint are identified, and the effectiveness of handling of complaints by PRMUs evaluated.

7.5 Monitoring needs

Monitoring of actions is a critical aspect of this AJ&K REDD+ Action Plan that helps to ensure effective implementation of the actions and tracking any undesirable change in time for alerting possible remedies. Regular monitoring must be in place with trained human resources. The AJ&K REDD+ Action Plan proposes AJ&K REDD+ Monitoring Unit (AJ&KRMU) in Muzaffarabad and Circle level monitoring units supported by central unit. This monitoring system needs to be fairly independent from day to day forest monitoring activities that take place at territorial level in the department, with a capability to detect unusual changes and provide alerts in time.

Monitoring of AJ&K REDD+ Action Plan will take place at three levels:

1. Individual actions at intervention and output level to address drivers / underlying causes – recurring monitoring
2. Monitoring of safeguards remedies to assure there are no social or environmental implications – project / action-based monitoring while assuring that grievances are addressed and agreed solutions are implemented. For this FGRM has been set up at divisional and circle that will report to REDD+ management unit for further incorporation into State Forest Monitoring and MRV System.
3. Overall impact of actions on forest health and drivers of deforestation and forest degradation – medium and long-term monitoring

Currently, monitoring indicators for REDD+ related activities are being defined as part of sub-national forest monitoring system. However, forests have been monitored as per the standard methods/ protocols of working plans in addition of regular field staff visits and reporting. There is need of standardization and consistency in the procedures and methods for forest (including natural forests) monitoring at AJ&K and national levels. Several forest related monitoring tools already exist which need to be harmonized with new tools required for monitoring of AJ&K REDD+ Action Plan.

Several forest related monitoring tools already exist which need to be harmonized with new tools required for monitoring of PRAP without creating data redundancy. Table 20 documents some of the currently known indicators, which were also discussed during PRAP consultations, that may help AJ&K Forest department to embed in the forest monitoring system formally, permanently and firmly.

Since land and forest management within AJ&K are the responsibility of multiple government institutions (departments of agriculture, forestry, tourism, livestock, land revenue, planning and finance etc.) depending on the land cover specifications, a monitoring system that caters for all the aforementioned three levels is necessary to be designed by REDD+ management unit. There is a need to establish a thorough process for planning, collecting, processing, analyzing, reporting and verifying data, based on required capacities, guiding methodologies and tools which the AJ&K recognizes as a need for adequate and sustainable institutional arrangements for forest monitoring system at sub national level.

Table 20: Forest monitoring indicators and tools/ mechanisms at federal and State level

REDD+ activities	Summary of proposed actions	National monitoring indicators	AJ&K monitoring indicators	National monitoring tools	AJ&K monitoring tools
Deforestation	A clear forestland demarcation with digital record Coordination at policy level with land-based actors to safeguard convenient change of land use for other purposes AJK based Forest Monitoring and MRV System to enhance accountability Take measures to reduce damages from mining activities by strong advocacy for EIA and NOC compliance	Changes in national forest cover and land area (ha)	Conversion of land to built environment or urban / rural expansion; conversion of forests to agricultural lands	NFMS (SLMS) and other international studies e.g., FAO's FRA **Actors:** NRSC, OIGF, NRO, GCISC, Forest departments, Academia	State level Forest Monitoring and MRV System in which regular staff / community surveillance is integrated. **Actors:** PRMC, REDD+ management unit, Academia, communities
Forest Degradation	Reduce demand on forest for fuelwood through multiple means including alternative energy options (e.g. hydropower), promoting energy plantations and enhancing fuel efficiency Increase chances for alternative income to reduce pressure for single source fuel Awareness on responsible tourism management Community participation to contribute to sustainable forest management including forest fire management	Decrease in forest density (percentage of forest cover), soil land degradation/ Erosion, grazing, forest fires	Extent of firewood and timber extraction; forest fires; overgrazing	NFMS (SLMS and NFI) Social/economic surveys **Actors:** NRSC, OIGF, NRO, GCISC, Forest departments, academia	State based Forest Monitoring and MRV System in which regular staff / community surveillance are integrated; density-based forest cover assessment **Actors:** PRMC, REDD+ management unit, divisional forest offices, communities, academia
Enhancement of Forest Carbon Stocks	Policy incentive for enhancement schemes in state owned forests through PES, and other services Improved institutional coordination for safeguarding enhancement including institutionalizing community participation, partnering with institutions	Areas (in ha) afforested/ reforested/ regenerated. No of plants planted each year	Forest restoration and afforestation (ha), reforestation (no. of plants/ area ha), regeneration (counting no. of plants and area regenerated in ha)	SLMS, NFI, Afforestation/ reforestation plans, annual plantation targets/ reports from provinces, official statistics provided by other institution on plantations **Actors:** NRSC, OIGF, NRO, GCISC, Forest departments, academia,NGOs	State based Forest Monitoring and MRV System in which regular staff / community surveillance are integrated; post activity visits, counting of trees on regular basis to assess survival percentage **Actors:** PRMC, REDD+ management unit, DFOs, communities, NGOs, academia
Conservation	Increase incentive for conservation by promoting forest based non timber enterprises for income, PES Define / implement REDD+ benefit sharing mechanism	Conservation policies/ laws/ regulations, protected area notifications of government	Controlled encroachment of land; SFM, PES implementation, fire management	Protected area networks, enacted laws/regulations, guided by national Policy guidance **Actors:** NRSC, OIGF, NRO, GCISC, Provincial Forest departments, academia, NGOs/ INGOs	Enforcement of laws/ regulations (enforcement checks); SFM, PES targets; reduced fire incidents **Actors:** PRMC, REDD+ management unit, divisional forest offices, FCCs/ VCCs/ CBOs, local NGOs, academia
Sustainable Management of Forests	Conduct at least 10 Participatory Forest Management Plans and implement them	No of Management Plans at national level	Participatory Forest Management Plans (forest types/ area covered)	Review reports of Implementation progress from provinces **Actors:** NRSC, OIGF, NRO, GCISC, Provincial Forest departments, academia, NGOs/ INGOs	Review implementation progress of PFMPs in various forest types, area covered **Actors:** PRMC, REDD+ management unit, divisional forest offices, communities, local NGOs, academia

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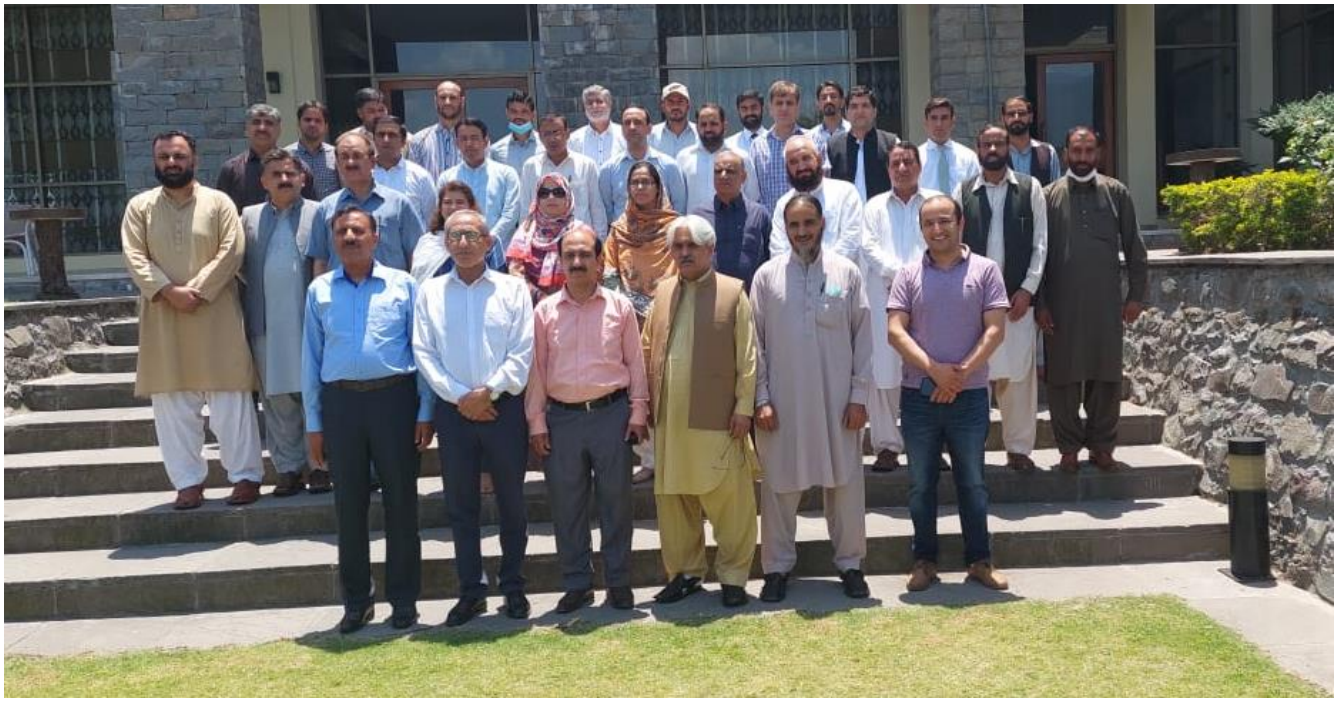
Annex – I: List of participants from consultative workshop

S.NO	NAME	DESIGNATION	DEPARTMENT
1	Dr. Hamayun Shaheen	Associate Professor	University of AJ&K
2	Mr. Irtaza Qureshi	DFO/REDD+AJ&K	Forest Department AJ&K
3	Mr. Abdul Qayyum Chaudhary	Forest Management Expert AJ&K	Helvetas
4	Mr. Imran Aziz Butt	Director Mineral	Mineral department
5	Mr. Muhammad Bashir	Coordinator	Helvetas
6	Mr. Sardar Muhammad Naseer	CCF(P) AJ&K	Forest Department AJ&K
7	Mr. Bilal Ahmed	DFO Research	Forest Department AJ&K
8	Mr. Syed Muhammad Atiq ur Rehman	DFO HQ	Forest Department AJ&K
9	Mr. Awais Javed	DFO Rangeland	Forest Department AJ&K
10	Mr. Tauseef Miran	Principal KFS	Forest Department AJ&K
11	Mr. Naveed Aftab	DFO	Forest Department AJ&K
12	Mr. Muhammad Rafique	GIS Lab Incharge	Forest Department AJ&K
13	Mr. Syed Maqbool Hussain	DFO Hattian	Forest Department AJ&K
14	Mr. Sardar Ali Saleem	Deputy director	EPA AJ&K
15	Mr. Waheed Kazmi	DFO	Forest Department AJ&K
16	Mr. Syed Asad Hamdani	DFO	Forest Department AJ&K
17	Mr. Akram Subhani	DFO Raid Party	Forest Department AJ&K
18	Mr. Muhammad Tauseef Mughal	ACF	Forest Department AJ&K
19	Mr. Mushtaq Pirzada	Director	Land Use
20	Mr. Zohrab	ACF	Forest Department AJ&K
21	Mr. Naveed Feroz	ACF	Forest Department AJ&K
22	Mr. Zia Rabbani	ACF	Forest Department AJ&K
23	Mr. Fozia Jehan	ACF/Manager seed center	Forest Department AJ&K
24	Mr. Amna Rafi	Deputy Director (Extension)	Agriculture Department
25	Mr. Malik Abdul Rehman	Chief conservator	Forest Department AJ&K
26	Dr. Tariq Kiani	Deputy Director Livestock	Animal Husbandry
27	Dr. shahid sheikh	DLPDONZD	Livestock
28	Dr. Zahid Rafique	Veterinary Officer	Livestock
29	Mr. Muhammad Tariq	Range officer wildlife	Forest Department AJ&K
30	Mr. Muhammad Shebaz Khan	DFO Neelum	Forest Department AJ&K
31	Mr. Mir Naseer Ahmed	DFO Reforestation	Forest Department AJ&K
32	Mr. Ghulam Mujtaba Mughal	CF MZD	Forest Department AJ&K
33	Mr. Sardar Muhammed Rafique	Deputy Director	CCC-AJ&K EPA
34	Mr. Arshad Khan	Regional PD	TBTTP MoCC
35	Mr. Ilyas	Nil	Community Representative
36	Mr. Yaqoob	Nil	Community Representative
37	Mr. Munawar Khattak	Team lead LWD	Helvetas
38	Mr. Syed Nadeem Bukhari	Team lead MEP	Helvetas
39	Dr. Jawad Ali	Deputy country Director	Helvetas
40	Dr. Arjumand Nizami	Country Director	Helvetas
41	Mr. Kamaran Hussain	REDD+ Strategy Expert	Helvetas
42	Mr. Sajid Hussain	Research Officer	Helvetas



OFFICE OF THE CONSERVATOR OF FORESTS
POONCH FOREST CIRCLE RAWALAKOT, AZAD JAMMU & KASHMIR

NO. CF/Poonch-AJK/7279-82 Dated 12-05-2022

Dr. Jawad Ahmed
HELVETAS
Islamabad

Subject: ENDORSEMENT OF AJK REDD+ ACTION PLAN

In continuation of Chief Conservator of Forest (principal) office's No.499-500/2022 dated 12-04-2022, wherein the AJK REDD+ Action Plan was conditionally endorsed with few observations highlighted during the meeting held in context of the subject matter at Muzaffarabad, AJK on 12-04-2022. The suggested changes have now been incorporated in the final draft. Accordingly, the AJK REDD+ Action Plan is endorsed herewith for further necessary action, please.

Regards

(Iftikhar A Khan)
Conservator of Forests

CC:

The National REDD+ Office, Ministry of Climate Change, Islamabad
The Chief Conservator of Forests (Principal), Government of AJK
All Members of AJK REDD+ Cell

AJK REDD+ ACTION PLAN

Azad Jammu & Kashmir

2022-2031

Prepared under the REDD+ Readiness Preparation Project for Pakistan financed by Forest Carbon Partnership Facility (FPCF), implemented by Federal Ministry of Climate Change (MoCC) through National REDD+ Office (NRO), Islamabad.