



KHYBER PAKHTUNKHWA INTEGRATED TOURISM DEVELOPMENT PROJECT



**ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK, Updated with COVID-19 Checklists**

APRIL 2020

LIST OF ABBREVIATIONS

Abbreviations	Description
ACS	Additional Chief Secretary
ADP	Annual Development Program
APs	Affected Persons
C&W	Communication and Works Department
DG	Director General
DMOs	Destination Management Organizations
DoT	Department of Tourism
EE – CC	Environmental Engineer of Construction Contractor
EE-SC	Environmental Engineer of Supervision Consultant
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPA	Environmental Protection Agency
ERKF	Economic Revitalization of Khyber Pakhtunkhwa and Federally Administrated Tribal Areas
ESIA	Environmental & Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FGDs	Focused Group Discussions
GDA	Aliyah Development Authority
GIS	Geographical Information System
GOKP	Government of Khyber Pakhtunkhwa
GPS	Global Positioning System
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
HSE	Health Safety & Environment
IDA	International Development Association
IEE	Initial Environmental Examination
IGC	International Growth Centre
ILO	International Labor Organization
IPPF	Indigenous People Planning Framework
ITZ	Integrated Tourism Zones
Km	Kilo meter
KP	Khyber Pakhtunkhwa
M&E	Monitoring and Evaluation
MD	Managing Director
ME	Medium Enterprise
MSMEs	Micro, Small and Medium Enterprises
MSMP	Management System & Maintenance Plan
MDTF	Multi Donor Trust Fund
NCS	National Conservation Strategy

NEP	National Environmental Policy
NEQS	National Environmental Quality Standards
NESPAK	National Engineering Services Pakistan (Pvt.) Limited
NGO	Non-Government Organization
NOC	No Objection Certificate
OP	Operational Policy
PAPs	Project Affected People
PCRMF	Physical Cultural Resource Management Framework
PCRMP	Physical Cultural Resource Management Plan
PCSW	Provincial Commission on the Status of Women
PD	Project Director
PEGO	Project Environmental Grievance Officer
PEPA	Pakistan Environmental Protection Act
PMU	Project Management Unit
POM	Project Operations Manual
PPP	Public Private Partnership
PSC	Project Steering Committee
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SC	Supervision Consultant
SDO	Sub Divisional Officer
SE	Small Enterprise
SEA	Strategic Environmental Assessment
SMEs	Small and Medium Enterprises
SMEDA	Small & Medium Enterprise Development Authority
SSU	Shared Service Unit
TA	Technical Assistance
TAIDU	Tourism Area Integrated Development Unit
TCKP	Tourism Corporation of Khyber Pakhtunkhwa
TIFC	Tourist Information and Facilitation Centers TIFCs
TNA	Training Needs Assessment
TORs	Terms of References
TPV	Third Party Validation
UNESCO	United Nations Educational Scientific & Cultural Organization
WB	World Bank

GLOSSARY

Baseline	A minimum or starting point used for comparisons.
Capacity Building	Capacity building is the process by which individuals and organizations obtain, improve, and retain the skills, knowledge, tools, equipment and other resources needed to do their jobs competently or to a greater capacity.
Climate	The weather conditions prevailing in an area in general or over a long period.
Consultation	The action or process of formally consulting or discussing.
Culture	The ideas, customs, and social behavior of a particular people or society.
Enterprise	Enterprise is another word for a for-profit business or company, but it is most often associated with entrepreneurial ventures.
Environment	The surroundings or conditions in which a person, animal, or plant lives or operates.
Environmental Impact Assessment	It is the assessment of the environmental consequences (positive and negative) of a plan, policy, program, or actual projects prior to the decision to move forward with the proposed action.
ESMF	The ESMF provides an overview of relevant World Bank policies and describes the planning process concerning environmental and social issues, including for screening, preparation, implementation, and monitoring of sub-projects.
Fauna	The animals of a particular region, habitat, or geological period.
Flora	The plants of a particular region, habitat, or geological period.
Framework	A basic structure underlying a system, concept or text.
Guidelines	A general rule, principle, or piece of advice.
Heritage	Heritage is the full range of inherited traditions, monuments, objects, and culture.
Infrastructure	The basic physical and organizational structures and facilities (e.g. buildings, roads, and power supplies) needed for the operation of a society or enterprise.
Initial Environmental Examination	IEE is an initial environmental examination, and it is a preliminary small study to see if a project harms the environment.
ITZs	Integrated Tourism Zones
Law	The system of rules which a particular country or community recognizes as regulating the actions of its members and which it may enforce by the imposition of penalties.
MTDF	Multi Donor Trust Fund (MTDF) for KP was established in August 2010 as one of the key instruments to support the interventions needed to build peace and create the conditions for sustainable development after 2009 crisis.
National Park	An area of countryside, or occasionally sea or fresh water, protected by the state for the enjoyment of the general public or the preservation of wildlife.
Policy	A course or principle of action adopted or proposed by an organization or individual.
Public Utilities	An organization supplying the community with electricity, gas, water, or sewerage.

Project	Khyber Pakhtunkhwa Integrated Tourism Development Project
Regulations	A rule or directive made and maintained by an authority.
Resettlement Action Plan	A Resettlement Action Plan (RAP) is a document drafted by the sponsor or other parties responsible for resettlement (such as government agencies), specifying the procedures it will follow and the actions it will take to properly resettle and compensate affected people and communities.
Seismicity	The occurrence or frequency of earthquakes in a region.
Stakeholder	A person with an interest or concern in something.
Strategy	A plan of action designed to achieve a long-term or overall aim.
Sustainability	The ability to be maintained at a certain rate or level.
Topography	The arrangement of the natural and artificial physical features of an area
Tourism	The commercial organization and operation of holidays and visits to places of interest.
Tourist	A person who is travelling or visiting a place for pleasure.
Walking Trails	A trail is usually a path, track or unpaved lane or road.
Wildlife	Wild animals collectively; the native fauna (and sometimes flora) of a region.
Winter Sports	Sports performed on snow or ice, such as skiing and ice skating.

EXECUTIVE SUMMARY

World Bank and Government of Khyber Pakhtunkhwa (GOKP) are developing **Khyber Pakhtunkhwa Integrated Tourism Development Project** using International Development Association (IDA) resources under Multi Donor Trust Fund (MDTF). MDTF was established to support the crisis hit areas of KP. The additional financing under WB will complement these activities by supporting the tourism sector.

The project activities may be implemented initially in four locations—potentially Naran, Chitral, Galliyat, and Kalam. These destinations are both developed and new, and at different stages of development. These were therefore selected to ensure a balanced approach toward site development. The four main criteria for destination selection are (a) tourism attributes (connectivity, seasonality, drawing power and facilities); (b) current visitation (number of tourists); (c) development potential and alignment with the objectives of KITE and the KP Tourism Policy; and (d) sustainability and replication value of the site development.

KP also aims to designate at least eight remote and unexplored scenic sites as Integrated Tourism Zones (ITZs) in order to ensure sustainable planning and development of tourism at these sites. The concept of the ITZs and their exact location are still being finalized by DoT and hence this is work under development. The project will help KP explore this idea further by providing support on good practice policy and regulation for the ITZ concept and support for feasibility studies for up to two ITZs to support decision making on the introduction of this concept in KP province. This document presents Environmental & Social Management Framework (ESMF) for the project. ESMF lays down principles and procedures for impact assessment & mitigations, institutional management, stakeholder consultation, grievance redress mechanism and monitoring & evaluation; and reporting requirements etc. As some important cultural heritage sites fall in the project area in Swat, therefore, a Physical Cultural Resource Management Framework (PCRMF) is also prepared separately to protect the cultural/heritage sites.

The project consists of four components which are as follows:

- **Component 1: Sector Enablement and Tourism Entrepreneurship**
 - Activity 1.1: Strengthening policy and regulatory environment for tourism
 - Activity 1.2: Establishing data collection and monitoring mechanism
 - Activity 1.3: Supporting Tourism Entrepreneurship
 - Activity 1.4: Transforming visitor experience tourism management through digital technology (DT)

Component 2: Infrastructure Planning and Development

- Activity 2.1: Visitor Facility Development
- Activity 2.2: Heritage Preservation
- Activity 2.3: Accessibility and Road Connectivity
- Activity 2.4: Resettlement Action Plan (RAP)
- Activity 2.5: Feasibility studies for two ITZs

Component 3: Project Management and Capacity Building

Activity 3.1: Support for project implementation and training

Activity 3.2: Environmental Preservation

Activity 3.3: Carrying out civil works for the appropriate functioning of PMU-DoT and PMU-C&W

Component 4: Contingent Emergency Response Component

There are many national and provincial laws and regulations that are applicable to the project in terms of environmental and social management. The most important of these is KP Environmental Protection Act, 2014, which remains the apex statute for environmental governance of any projects within the administrative boundaries of KP. This law requires proponents to acquire environmental approvals from the KP EPA before commencing construction activities. Other important laws include the KP Wildlife & Biodiversity Act and KP Forest Ordinance. The Land Acquisition Act will be the main legal instrument for settling land acquisition and resettlement issues (if any). The World Bank policies triggered for the project include Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement (OP/BP 4.12), Indigenous Peoples (OP/BP 4.10) and Forests (OP/BP 4.36).

As per census 2017, the total population of Swat District is 2,309,570. Swat is a mountainous region, located among the foothills of the Hindukush mountain range with the elevation of some mountains peaks ranging from 4500 to over 6000 m above sea level. River Swat is the main river in the district. The project area is located in the Seismic Zone-3. The mean maximum and mean minimum temperatures from 1991 – 2015 are 16.74 °C and -3.22 °C respectively while the mean annual rainfall is 26.13 mm. A number of cultural heritage sites are also present in Swat like Buddhist stupas etc. Main tourist destinations in Swat are Kalam, Mahodand Lake, Kundal Lake etc. and heritage sites.

Swat harbors diverse valuable plant species. The study revealed the presence of about 90 species of ethnobotanical importance. The moist and dry temperate forests of Khyber Pakhtunkhwa mostly concentrated in the districts of Swat provide habitats to valuable faunal species.

The total population of District Mansehra is 1,556,460. Mansehra district is considered as an important tourist location due to Kaghan Valley. The topography of Mansehra district is dominated by the high mountains varying in elevation from of 2000 meters in the south to over 4500 meters above sea level in the north. River Kunhar is the major river in the district. Mansehra district is located in the Seismic Zone-3 which represents moderate to severe damage. The mean maximum and mean minimum temperatures from 1991 – 2015 are 15.03 °C and -3.91 °C respectively while the mean annual rainfall is 60.89 mm. Main tourist destinations are Naran, Lalazar, Saiful Malook lake and Babusar Top etc.

Naran area is rich in biological diversity where wide variety of flora including herbs, shrubs, trees and medicinal plants are present in all over the area confined with dense population. Naran and its surrounding area is rich in biological diversity where wide variety of wild animals, birds, migratory birds and fish are found.

The total population of District Chitral it is 447,362. The Chitral-Mastuj valley is surrounded by three of the highest mountain ranges in the world. The district contains numerous peaks over 6000 m, Terichmir being highest with an altitude of 7700 m. River Chitral is the main river in the district. Chitral district is located in the Seismic Zone- 4. The mean maximum and mean minimum temperatures from

1991 – 2015 are 17.98 °C and -4.36 °C respectively while the mean annual rainfall is 54.85 mm. Main tourist destinations are Kalash valley, Chitral Gol National Park, Shandur and Garam Chashma etc.

Some of the most important plant species in Chitral are Willow, Birch, Juniper and Poplar and fruit trees like Mulberry, Walnut, Apricot, Apple, Grapes, etc., are most prevalent. Chitral is highly regarded for its treasure of Fauna as well. Some endangered species of the world i.e., Snow Leopard, Brown Bear, Tibetan Wolf, Golden Marmot, Snow Partridge and Himalayan Ibex live in remote valleys of Hindukush.

The total population of Abbotabad is 1,332,912. The district is dominated by mountains and hills and is located in the Seismic Zone-3. River Haro is the major river. The mean maximum and mean minimum temperatures from 1991 – 2015 are 26.12 °C and 7.36 °C respectively while the mean annual rainfall is 96.80 mm. Major tourist destinations are Nathia Gali, Khanaspur, Jheeka Gali, Kuza Gali etc.

The main tree species in Galiyat include deodar, biar, paludar and barangi. Chir pine covers the lower hills, along with kao, wild olive, phulai, drek and sinetta. Vegetation grows for the most part in scattered clumps. The main mammalian species found in Galiyat region are *Canis aureus*, *Canus lupus*, *Herpestes auropunctatus*, *Lepus capensis*, *Lutra prespcillata*, *Manus crassicaudata*, *Mus musculus*, *Pipi strellusspps*, *Rattus rattus*, *Rousettu sleschnauln*, *Suncus murinus*, *Sus scrofa*, *Viverri culaindica* and *Vulpes vulpes*.

The major stakeholders of the project are Department of Tourism (DoT), tourists, local community, enterprise owners, tourism organizations, relevant Government departments, and NGOs etc. As per prioritization criteria of stakeholders, DoT; local community and the enterprises will be engaged directly since they are the direct beneficiaries and have highest influence.

In compliance with the participation framework, consultations were made with the stakeholders and general public. Consultative meetings, scoping sessions and focus group discussions were held to learn about the views and concerns of the public on the proposed development works. The outcomes of public consultation process summarize the apprehensions, fears, suggestions, and concerns related to the project which include temporary issues in construction phase like dust emissions, traffic congestion, accessibility issues, surface water contamination etc. and long term cultural, privacy and management issues.

The project is anticipated to bring about some adverse environmental and social impacts. However, these impacts are manageable and can be mitigated by adopting Good Engineering Practices. The social disturbances and issues can be managed by community engagement and disclosure of project information. On the other hand, the project will have significant positive social impacts including improved livelihoods and enhanced economy by greater tourists' influx.

Possible environmental and social impacts of proposed project activities include changes in topography, land sliding, soil erosion and contamination, land acquisition and resettlement, air pollution, noise pollution, contamination of surface water resources, stress on groundwater resources, solid/construction waste generation, Environmental Health & Safety (EHS) issues, disruption in

routine activities, removal of vegetation/tree cutting, damage to wildlife and ecosystem, sanitation issues, security issues, fire hazards, natural hazards and damage to physical/cultural resources.

The mitigation measures shall include following:

- All proposed activities will be screened to ensure that the environmental, cultural heritage and social risks can be identified and adequately addressed through the application of standardized guidelines.
- Each subproject with sizeable physical work involved will have its site-specific Environmental & Social Management Plan (ESMP).
- A Resettlement action plan (RAP)/abbreviated RAP will also be prepared, if any of the sub-project requires land acquisition and the Resettlement Policy Framework (RPF) has been prepared which comprises guidelines for land and asset acquisition, compensation and documentation.
- An Environmental & Social Impact Assessment (ESIA) will be prepared for sub-projects falling under the relevant Schedule of KP-EPA 2014.
- A standalone PCRMF has been prepared to ensure that heritage sites in or around the project area are not negatively affected due to project activities.

Social strategy defines how the project can better relate and communicate with all the stakeholders. The social strategy intends to make the project socially acceptable and viable especially by addressing gender related issues and through implementation of Grievance Redress Mechanism (GRM). It also outlines a gender framework and a consultation framework for later stages of the project.

The ESMF identifies and categorizes all potential activities that may require physical works, identifies the instrument type that will be used to screen, assess, and mitigate the negative environmental impacts, details and extent of the stakeholder consultation that shall be needed for each assessment type, the disclosure requirements and the institutional, reporting and monitoring measures that shall be needed to ensure implementation of mitigation measures.

The ESMF includes sub-project screening requirements, monitoring & institutional strengthening framework and grievance redress mechanism. Indicative cost for ESMF implementation is estimated as PKR 34.8 M inclusive of 20% contingencies. Budget is based on tentatively five (05) years execution period for staff training and preparation of ESMPs and IEEs (for environmental legal compliance). Personnel cost will be included in the core project cost. Environmental Monitoring cost shall be included in specific ESMPs.

Public disclosure of ESMF was held in the last week of January 2019 in Galiyat, Chitral, Kalam and Kaghan (Naran). Stakeholders and project affected persons were informed about the project in public disclosure sessions. Executive summaries of environmental social safeguard documents and project brochures were distributed among the participants. Issues, suggestions and concerns of the people were noted down and people were given adequate answers. Overall the participants were in favor of the proposed project.

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1 INTRODUCTION

1.1 Project Background

In recent years, largely due to increased security and improved accessibility, the tourism sector in KP has experienced substantial growth, around 1.2 million domestic tourists and thousands of international tourists visiting the area annually and generated over \$120 million in direct revenue¹. It is expected that this trend will continue, bringing more tourists and investment to the province. Thus, recognizing the high potential for tourism to contribute to economic growth and opportunity, the Government of Khyber Pakhtunkhwa (GOKP) has prioritized the development of this sector and developed a Tourism Policy in 2015. This development presents both challenges and opportunities. Where increased tourism activity presents an opportunity for poverty reduction through economic growth, enterprise development, and job creation, with particular involvement of local communities among women and rural poor, it also increases environmental and social challenges in the area.

World Bank (WB) and GOKP are collaborating for the province's economic development (since year 2010) by initiating Economic Revitalization of KP and FATA (ERKF) project. The objective of ERKF is to support GOKP in the economic recovery and revitalization of the crises affected areas of KP & FATA by creating sustainable employment opportunities through rehabilitation of Small & Medium Enterprises (SMEs), investment mobilization and institutional capacity building. Later on, additional financing has been allocated to support elements of tourism sector. To build upon the initial support to Department of Tourism (DoT) and the sector, the WB and GOKP are developing the **Khyber Pakhtunkhwa Integrated Tourism Development Project** using International Development Association (IDA) resources. In addition, GOKP is investing funds from ADP in several activities for developing the tourism sector. The additional financing will complement those activities by supporting the tourism sector².

1.2 Khyber Pakhtunkhwa Integrated Tourism Development Project

The project consists of four components which are as follows:

1. Sector Enablement and Tourism Entrepreneurship;
2. Infrastructure Planning and Development;
3. Project Management and Capacity Building; and
4. Contingent Emergency Response Component

The project involves several activities that aims at development of tourism in project sites. Given its potential for environmental and social impacts during implementation, the project triggers the World Bank safeguard policies for the project include Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement (OP/BP 4.12), Indigenous Peoples (OP/BP 4.10) and Forests (OP/BP 4.36). The project environmental and social safeguard category is classified as B project, as per WB OP 4.01 (Environmental Assessment).

¹ Khyber Pakhtunkhwa Integrated Tourism Development Project, Technical Note, May 2018

² Project Appraisal Document ERKF

1.3 Purpose and Scope of ESMF

This document presents Environmental & Social Management Framework (ESMF) for activities to be carried out under Component 2: Infrastructure Planning and Development and Component 3: Infrastructure Planning and Development.

Since the specific projects to be initiated using IDA funds are yet unknown, therefore an Environmental & Social Management Framework (ESMF) has been prepared to fulfill the WB policy requirements. The ESMF sets out principles and guidelines to identify and assess the potential environmental & social impacts and prepare guideline mitigation and management as a part of preparation of the sub-projects. The objective of the ESMF is to ensure that the project has no negative environmental and social impacts and provide guidelines for health and safety of project staff, labor and beneficiaries.

The ESMF lays down principles and procedures for impact assessment and mitigation, institutional arrangements, grievance redress, consultation, participation, documentation and reporting, disclosure, monitoring and evaluation, training and budget. It also offers sample terms of references (TORs) for carrying out EIA, EMP and social assessment of the project.

The ESMF serves as an environmental & social safeguard instrument to provide the framework to relevant agencies for preparing and implementing infrastructure projects.

1.4 ESMF Objectives

The objectives of ESMF are to:

- Identify legislations, regulations and guidelines relevant to the project interventions;
- Assess the baseline conditions of physical, biological, socioeconomic and cultural aspects of selected project sites;
- Evaluate environmental and social impacts related to the project interventions and provides practical measures to mitigate the impacts;
- Outline Environmental and Social Management and Monitoring Framework that presents monitoring requirements for effective implementation of mitigation measures;
- Identify institutional arrangements required to implement RPF and ESMF;
- Provide a Physical Cultural Resources Management Framework (PCRMF);
- Describe training needs and specific reporting and documentation requirements; and
- Proposes a third-party validation mechanism for ESMF.

1.5 Team of Experts

A multidisciplinary team was formulated to develop the ESMF consisting of environmental engineers, environmental scientists, ecologists and sociologists (List attached as Annexure-XVII).

1.6 Approach & Methodology

The methodology adopted for the preparation of Environmental & Social Management Framework (ESMF) is described below:

Task 1: Data Collection

This task involved review of all activities in the selected destinations of Chitral, Galiyat, Naran and Swat. Available documents/ related literature, policies and guidelines which may include any field surveys conducted for the project site, layout maps and other relevant studies were collected for review.

Task 2: Desk Studies

The project related information, documents, maps and other data collected from the client and relevant departments were reviewed to get a better understanding of the project. National and provincial legislation and WB policies related to environmental and social aspects were reviewed and relevance for the proposed activities under the project was determined. The details were discussed with all the team members and responsibilities were assigned.

Task 3: Reconnaissance Survey & Identification of Stakeholders

Reconnaissance surveys of the four project areas was conducted to get familiar with the sites and to develop a work plan for detailed visits. The possible stakeholders of the project were also identified considering proposed project interventions.

Task 4: Devising of Survey Tools

Various survey tools were devised to gather the primary data from project sites, stakeholders and the possibly Project Affected Persons (PAPs). The survey tools included checklists, Public Consultation Proformas and social survey questionnaires.

Task 5: Detailed Site Visits & Consultation Meetings

Detailed site visits were conducted to gather the baseline information and to perform other field activities including social surveys, consultations, group discussions, departmental meetings, transect walks, public awareness and conceiving the environmental and social issues keeping in view the proposed project interventions.

Task 6: Data Analysis

The data collected from the field was analyzed and the possible environmental and social impacts were highlighted.

Task 7: Compilation of Deliverables

The reports were compiled based on data analysis, field visits, stakeholder consultation and expert's evaluation.

1.7 Structure of Report

The ESMF consists of following sections:

Section 1 – Introduction

Introduces the project and the need for ESMF.

Section 2 – Description of the Project

Provides brief description of the project.

Section 3 – Review of National and Provincial Legislations and Regulations

Presents a review of national regulatory frameworks, World Bank Safeguard Policies and standards and international conventions and agreements.

Section 4 – Environmental and Social Baseline

Provides details on environmental and social settings of the project area.

Section 5 – Stakeholder Consultations

Presents details of stakeholder analysis and consultations conducted for the project including Stakeholders Consultation Framework for sub-projects.

Section 6 – Anticipated Environmental & Social Impacts & Mitigation Measures

Describes the assessment of potential environmental and social impacts and proposed mitigation measures.

Section 7 – Environmental Social Management Framework

Presents environmental and social management and monitoring framework along with screening requirements for sub-projects. It outlines the institutional arrangements including roles and responsibilities for ESMF monitoring and implementation.

Section 8 – Stakeholders and Gender Management Framework

Provides gender framework & consultation framework and addresses other social issues including access and use of spaces and provides a grievance redress mechanism.

Section 9 – Physical Cultural Resources Management Framework

Provides guidelines to safeguard the physical cultural resources of the project area.

Section 10 – ESMF Implementation Budget

Presents the ESMF implementation budget.

2 DESCRIPTION OF THE PROJECT

2.1 General

The project aims to enhance under-utilized potential of KP’s tourism sector for generating income and revenues, by providing an enhanced tourism experience to domestic and international tourists, while focusing on preservation of environment, wild life, culture and heritage.

The proposed development objective of the operation is to strengthen institutional capacity, increase private sector participation and improve destination infrastructure in support of the tourism ecosystem in KP.

2.2 Project Locations

The activities under component 2 of the project will be undertaken in the following districts of KP at potential tourism sites. The location map of districts of project areas is shown in **Figure 2-1**.

- Mansehra – Naran
- Abbotabad – Galiyat
- Swat – Kalam, Ilam
- Chitral – Kalash

2.3 Components of the Project

The project comprises of following four components:

Comp.	Component Name	Cost	Activities	Activity Name
1	Sector Enablement and Tourism Entrepreneurship	US\$8 million	1.1	Strengthened policy and regulatory environment for tourism
			1.2	Establishing data collection and monitoring mechanism
			1.3	(c) Supporting tourism entrepreneurship
			1.4	Transforming visitor experience through digital technology
2	Infrastructure Planning and Development	US\$ 62	2.1	Visitor Facility Development
			2.2	Heritage preservation
			2.3	Accessibility and Road Connectivity
			2.4	Resettlement Action Plan (RAP)
			2.5	Feasibility studies for two ITZs
3	Project Management and Capacity Building	(US\$ 7 M)	3.1	Support for project implementation and training
			3.2	Environmental preservation
			3.3	Carrying out civil works for the appropriate functioning of PMU-DoT and PMU-C&W

4	Contingent Emergency Response Component	US\$ 0 (may be adjusted from other components as per requirement)
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This ESMF relates to the activities to be carried out under component 2 and 3 of the project. It will provide guidance on environmental and social management at the design, implementation and operations stages of the activities. Site and activity specific Environmental & Social Management Plans will be developed as and when required.

2.3.1 Component 2: Infrastructure Planning and Development (US\$62 million, of which IDA is US\$55 million): This component will finance the procurement of services and goods to carry out diagnostics and to upgrade and develop tourism infrastructure at project locations. Through this component, KITE will help the client plan and direct project investments in public infrastructure and identify opportunities for mobilizing private sector investments. The selection of activities and investments is expected to be a deliberative process on the basis of community needs, project feasibilities, master plans (including DIMPs) and other policy considerations. The project activities could aim at both

established and emerging destinations, possibly Naran, Kalam, Galliyat, and Chitral, and could include the following:

- 2.3.1.1 Visitor facility development.** The component will support the formulation of DIMPs for tourist destinations, identified by the clients, using the destination selection criteria and procedures set out in the POM. In the initial phase, DIMPs for at least six destinations will be financed. The scope of the DIMPs will vary according to the need of a particular site/destination. For example, sites that are already established tourist destinations and are experiencing over-tourism will benefit from DIMPs that have a focus on visitor management plans. The less-known sites will require the DIMPs and feasibilities to focus on the elements of both destination and investment planning, identifying investments, including visitor facilities, for implementation under KITE. Such facilities would include well-equipped TIFCs, rest areas, walking and hiking trails, signage (directional, management, and informative), parking areas, and dedicated convenience facilities for women, children, the disabled, and the elderly. Similarly, implementation of all the activities that are financed under the project will be managed through the procurement process. It is important to note that not all the activities and investments identified through DIMPs and feasibilities (that are formulated under KITE) will be financed through this project. Where feasible, the project financed facilities will operate as private enterprises on behalf of GoKP, managed by local entrepreneurs, possibly through PPP agreements, including concessions. The types of management and revenue modalities for visitor facilities will be determined through a revenue mobilization study.
- 2.3.1.2 Heritage preservation.** This activity focuses on the preservation and management of heritage sites across KP—including sites of religious significance for Buddhists and Sikhs—to be selected in accordance with the selection criteria and procedures set out in the POM. Private tour operators and travel agents will assist in developing these tourism sites to attract visitors from Korea, Thailand, Japan, China, and Nepal. This will help reduce seasonality by increasing tourist spending and duration of stay in the destinations.
- 2.3.1.3 Accessibility and road connectivity.** Additional infrastructure, including feasible secondary and/or tertiary road(s) will be supported by KITE in accordance with the selection criteria and procedures set out in the POM. The rehabilitation of additional roads will follow the framework approach for safeguards. The engineering design of roads will include considerations for road safety and the installation of a cable box for ICT connectivity. The project will also procure relevant equipment for road clearing and maintenance. To enhance tourist safety, telephone/Internet connectivity options will be explored to procure mobile repeater stations and/or signal boosters that could be installed at remote tourist sites such as camping pods
- 2.3.1.4 Resettlement Action Plan (RAP).** The cost of the RAP for the infrastructure supported by the project would be financed by the GoKP's own resources. An indicative amount of US\$7 million (PKR equivalent 1,011 million) is already added to the project's PC1.
- 2.3.1.5 ITZ Feasibility Studies.** Feasibility studies for two ITZs will be financed.

2.3.2 Component 3: Project Management and Capacity Building (US\$7 million). This component will finance technical assistance, equipment, and works for the project implementation entities (IEs) and relevant implementation partners, such as the local development authorities in project sites. More specifically, it will support the following activities:**2.3.2.1 Support for project implementation and training.** This component will support the establishment, staffing, and running costs of the IEs, implementation of the social and environmental safeguards plan, and project M&E. The project has two IEs and two project PMUs—one in the

DoT and one in C&W.³ This activity also includes training public sector officials on hospitality standards, destination and environmental management, and procurement. KITE will sponsor the preparation of a PPP Toolkit for Tourism and the development of a GIS-based “road selection tool” and “asset management system” to help the province prioritize and allocate road investments and manage these assets. The resources for implementing KITE’s GAAP⁴ and communications strategy will also be mobilized through this component. The details of the IEs and project oversight mechanism are covered in section III (Implementation Arrangements) of this document. In addition to DoT and C&W, the associated functions of DoT—DTS, archaeology, sports, youth affairs, and culture—will benefit from the activities of this project.

2.3.2.2 Environmental preservation. KITE emphasizes an “environmental value” approach introduced through DIMPs and project safeguards documents. Globally, tourism is an innovator and initiator of environmental management systems that benefit local residents. KITE’s technical assistance will contribute to an improved SWM planning system at the project locations. It will also launch efforts to reduce and recycle waste (especially glass and plastics) through planning and awareness campaigns for tourists and students. These activities will be complemented by the procurement of essential technology and equipment for sorting and using recycled plastics in the construction of walking trails and facilities such as signage, boardwalks, and shelters.

2.3.2.3 Carrying out civil works for the appropriate functioning of PMU-DoT and PMU-C&W.

2.3.4 Component 4: Contingent Emergency Response Component (US\$0). This component will support preparedness for and rapid response to a natural disaster, emergency, or catastrophic event as needed. The provisional zero cost for this component will allow for rapid reallocation of credit proceeds from other components under streamlined procurement and disbursement procedures. Following an adverse natural event that causes a major disaster, the GoKP may request the Bank to reallocate project funds to this component from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds if they become available as a result of an emergency.

2.4 Anticipated Activities

The activities under the sub-projects will tentatively include the following.

- Tourists information centers
- Destination Management Plans
- Solid waste management & Plastic recycling
- Camping Paradise
- Provision of Clean drinking water
- Parking Areas and Tourist Transport Hub
- Rest Areas with emergency medical supplies
- Development of Tourism Routes
- Access to Lakes
- Installation of Chairlift
- Winter Sports
- Facilities for Disabled & Women
- Hiking and walking trails

³ C&W is responsible for the construction and engineering of provincial roads and other infrastructure in KP province.

⁴ Refer to Annex V for GAAP.

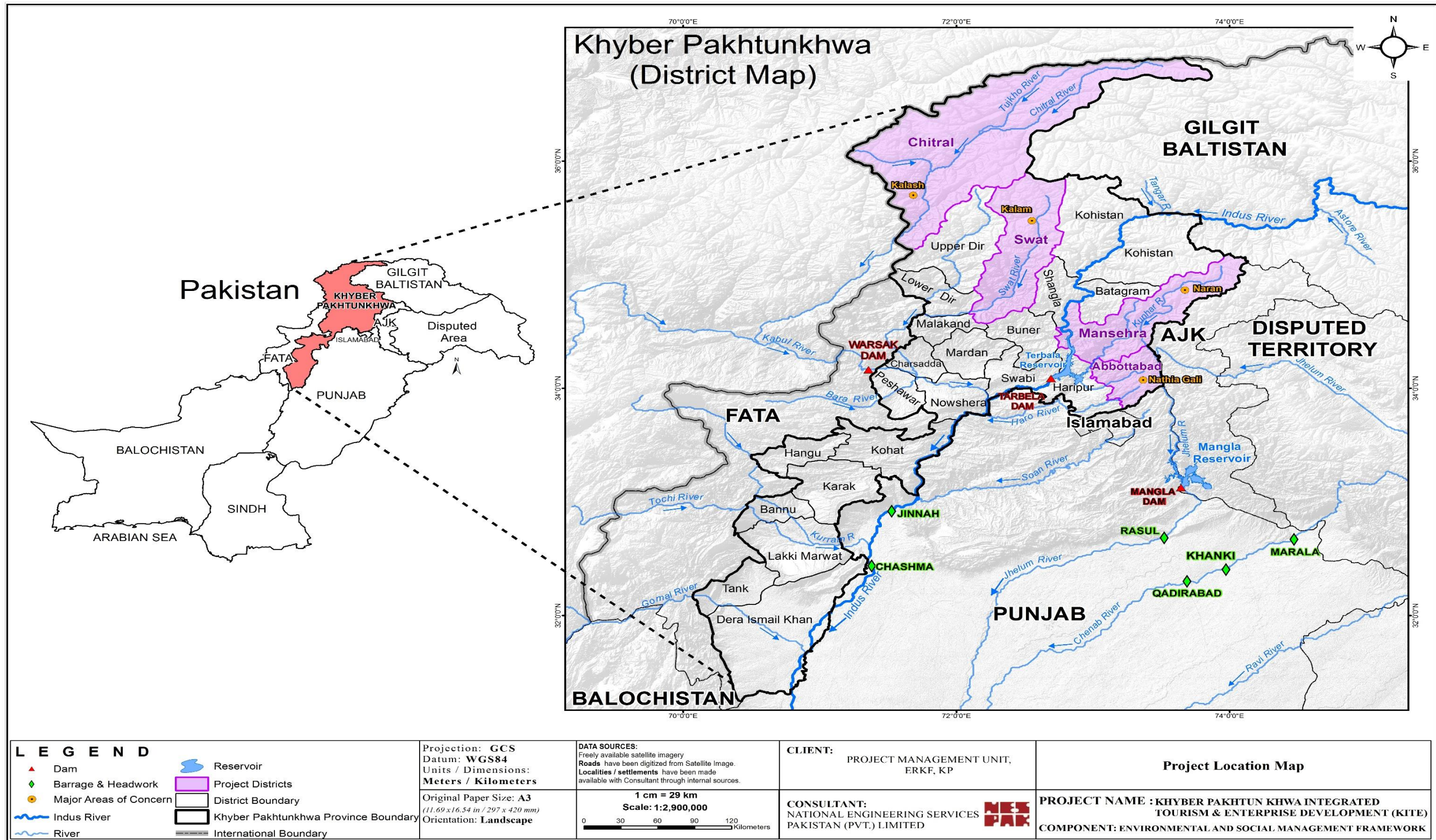


Figure 2-1: Location Map of Project Area

2.5 Project Status

Table 2-1 provides the district wise update of the current status of the activities under the project. Some of the activities indicated in **Table 2-1** are already being implemented by Tourism Area Integrated Development Unit (TAIDU) under ADP. Activities under this project will be finalized based on needs identified in DIMPs.

Table 2-1: Project Status

Sr. #	Activities	Status	Funding Source
Chitral			
1	Internal roads of Chitral	PC-1 prepared	ADP Schemes 2017-18
Kalam			
2.	Beautification and face uplifting of Kalam main bazar.	Construction work in progress	ADP Schemes 2017-18
3.	Children park, flower market and food street.	Construction work in progress	ADP Schemes 2017-18
4.	Kalam internal roads.	Construction work on eight (08) internal roads is in progress	ADP Schemes 2017-18
Galiyat			
5.	5 nos. rest areas	Completed	ADP Schemes 2017-18
6.	Camping Pods	Installation in progress	ADP Schemes 2017-18
7.	Beautification of main bazar	Construction work in progress	ADP Schemes 2017-18
Naran			
8.	Beautification and face uplifting of Naran main bazar.	Construction work in progress	ADP Schemes 2017-18
9.	Rest areas	Construction work in progress	ADP Schemes 2017-18

2.6 Alternatives

Alternatives for the sub-projects shall be considered in the designing phase of each sub-project based on socio-economic and environmental conditions.

2.6.1 The No Project Alternative

The No Project alternative can be considered for the sub-projects. An assessment shall be made for all the sub-projects whether they need implementation or not. The pros and cons of sub-project shall be noted and a decision shall be made later. If the sub-project has adverse environmental and social impacts then alternate options can be considered or the client may adopt the no project option.

2.7 Project Duration

The project implementation and management will spread over the duration of five (05) years and civil works are expected to be completed in period of two (02) years.

2.8 Restoration & Rehabilitation Plans

The site rehabilitation plans shall be prepared for each of the sub-projects.

2.9 Government Approvals

Government approvals and NOCs shall be obtained where and when required.

2.10 Construction Materials

Local construction materials shall be preferred for the sub-projects construction.

3 REVIEW OF NATIONAL AND PROVINCIAL LEGISLATIONS AND REGULATIONS

This section presents review of national, international and World Bank policies relevant to the proposed project.

3.1 Key National and Provincial Laws, Regulations and Policies

The enactment of comprehensive legislation on the environment, covering multiple areas of concern, is a relatively new and on-going phenomenon in Pakistan. Whereas, a basic policy and legislative framework for the protection of the environment and overall biodiversity in the country is now in place. Besides environmental statutes, a number of laws governing the social performance of the project also exist, e.g. Land Acquisition Act. The following description presents a brief overview of the relevance of various existing national policies, legislation and guidelines:

3.1.1 National Conservation Strategy

Pakistan National Conservation Strategy (NCS) that was approved by the federal cabinet in March 1992 is the principal policy document on environmental issues in the country (EUAD/IUCN, 1992). The NCS outlines the country's primary approach towards encouraging sustainable development, conserving natural resources, and improving efficiency in the use and management of resources. The NCS has 68 specific programs in 14 core areas in which policy intervention is considered crucial for the preservation of Pakistan's natural and physical environment. The core areas that are relevant in the context of the proposed project are pollution prevention and abatement, restoration of rangelands, increasing energy efficiency, conserving biodiversity, supporting forestry and plantations, and the preservation of cultural heritage.

3.1.2 Pakistan Environmental Protection Act (PEPA), 1997

Pakistan Environmental Protection Act, 1997 (PEPA) is the basic legislative tool empowering the Government of Pakistan to frame and enforce regulations for the protection of environment. The PEPA 1997 is broadly applicable to air, water, soil, marine and noise pollution, and handling of hazardous wastes. However, after the 18th amendment, environment has become a provincial subject, therefore, the KP law will govern the proposed project.

3.1.3 Guidelines for Environmental Assessment, Pakistan EPA

The Pak-EPA has published a set of environmental guidelines for conducting environmental assessments and the environmental management of different types of development projects. The guidelines that are relevant to the proposed project are listed below:

- Guidelines for the Preparation and Review of Environmental Reports, Pakistan, EPA 1997;
- Guidelines for critical areas;
- Guidelines for Public Consultations; Pakistan EPA May 1997

3.1.4 National Environmental Policy (NEP), 2005

NEP is the primary policy of Government of Pakistan addressing environmental issues. The broad Goal of NEP is, “to protect, conserve and restore Pakistan’s environment in order to improve the quality of life of the citizens through sustainable development”. The NEP identifies a set of sectoral and cross-sectoral guidelines to achieve its goal of sustainable development. Section 5 of the policy commits for integration of environment into development planning as instrument for achieving the objectives of National Environmental Policy.

Management of proposed project will ensure that the project will not add to the aggravation of the environmental issues identified in NEP and mitigation measures would be adopted to minimise or avoid any contribution of the project in these areas.

3.1.5 National Environmental Quality Standards (NEQS), 2010

In pursuance of the statutory requirement under clause (e) of sub-section (1) of section (6) of the Pakistan Environmental Protection Act, 1997(XXXIV of 1997), Pakistan Environmental Protection Agency with prior approval of the Pakistan Environmental Protection Council, has published the NEQS in 2010.

The NEQS 2000 specify the following standards:

- Maximum allowable concentration of pollutants (32 parameters) in municipal and liquid industrial effluents discharged to inland waters, sewage treatment facilities, and the sea (three separate sets of numbers);
- Maximum allowable concentration of pollutants (16 parameters) in gaseous emissions from industrial sources;
- Maximum allowable concentration of pollutants (two parameters) in gaseous emissions from vehicle exhaust and noise emission from vehicles; and
- Maximum allowable noise levels.

3.1.6 Land Acquisition Act, 1894 Including Later Amendments

The Land Acquisition Act, 1894, is a “law for the acquisition of land needed for public purposes and for companies and for determining the amount of compensation to be paid on account of such acquisition”. The exercise of the power of acquisition has been limited to public purposes. This law is applicable in resettlement of the community and will ensure provision of adequate compensation of land to the affectees.

3.1.7 Protection of Trees and Brushwood Act, 1949

This Act prohibits cutting or lopping of trees and brushwood without permission of the Forest Department. The Forest Department will be approached for permission to cut trees (if required) in or around the proposed project site.

3.1.8 Antiquities Act, 1975

The protection of cultural resources in Pakistan is ensured by the Antiquities Act of 1975. Antiquities have been defined in the Act as ancient products of human activity, historical sites, or sites of

anthropological or cultural interest, national monuments etc. The act is designed to protect antiquities from destruction, theft, negligence, unlawful excavation, trade and export. The law prohibits new construction in the proximity of a protected antiquity and empowers the Government of Pakistan to prohibit excavation in any area, which may contain articles of archaeological significance. NOC would be requested from DG Archeological Department for construction within 200 feet of cultural heritage sites.

3.1.9 Guideline for Solid Waste Management, 2005

Guidelines for Solid Waste Management have been issued as a draft by the Pakistan Environmental Protection Agency. These guidelines explain the waste generation, discharge and composition. These guidelines should strictly be followed for safe handling and disposal of waste generated during construction and operational stages of the project.

3.1.10 Building Code of Pakistan, 1986

The provision of Building Code of Pakistan shall apply for engineering design of building like structure and related components. The construction in violation of the Building code shall be deemed as violation of professional engineering work. Moreover, a certificate for the proposed action will be obtained from Provincial Building Control Authority. Seismic provisions were later added in 2007.

3.1.11 National Forest Policy 2015

Historically, Forestry remained a provincial subject even after independence of Pakistan. In the Constitution of Islamic Republic of Pakistan 1973, Forestry is purely a provincial subject and not impacted by the eighteenth amendments in the Constitution (2010). However the federal support to federating units for meeting international obligations and filling their financial gaps is widely acknowledged. Climate mitigation and adaptation measures are the focus of National Forest Policy in view of Pakistan's high vulnerability to adverse impacts of climate change, in particular to extreme events.

3.1.12 The Forest Act (1927)/Addendum

The Forest Act 1927 is designed to protect forest areas. The law prohibits grazing hunting, quarrying, clearing for the purpose of cultivation, removing forest produce, and felling or looping trees in forest or protected areas. Section 26 of the act prohibits the clearing of land, felling trees, cultivation, grazing livestock, trespassing, mining and collecting forest reserves along with setting traps or snares and poisoning of water. Any person who contravene shall be liable with punishment set by the law. However, after Forest Ordinance Amendment (2016) in sec 27 and 34-A of the Forest Act 1927 a subsection (3) is inserted according to which the government after approval from the provincial cabinet declares reserved forest as no more reserved and can acquire the forest land for purpose of projects of national importance. The forest act also allows the concerned authorities to regulate privately owned forests and land under certain conditions such as protection from floods or landslides, safeguarding roads, bridges and railways and preservation of public health (Sec 55).

3.1.13 Employment of Child Act, 1991

This act prohibits the employment of children in certain occupations and regulates the conditions of work of children. According to the definition in the act, a child is one who has not completed his 14th year of education. According to Section 3 of the Act, ‘No child shall be employed or permitted to work in any of the occupations set forth in Part I of the Schedule or in any workshop wherein any of the processes set forth in Part II of that Schedule is carried on: Provided that nothing in this section shall apply to any establishment wherein such process is carried on by the occupier with the help of his family or to any school establishment, assisted or recognized by Government’.

3.1.14 Occupational Health & Safety Laws

In Pakistan, the OHS in different sectors is covered in various laws. There is no single comprehensive law covering OHS. The following pieces of legislation could be relevant to the project in terms of OHS aspects:

- Factories Act 1934
- North-West Frontier Province Factories Rules 1975
- West Pakistan Hazardous Occupations Rules 1963
- Provincial Employees Social Security (Occupational Diseases) Regulation 1967
- Workmen Compensation Act 1923 and Rules 1961

However, the exact applicability of the above laws to the proposed project is subject to discussion and legal opinion.

3.2 Provincial Laws, Regulations and Policies

3.2.1 KP Environmental Protection Act, 2014

Post the adoption of the 18th Constitutional Amendment in 2011, the subject of environment was devolved, and the provinces have been empowered for environmental protection and conservation. Subsequently, the KP Government amended PEPA 1997 as KP Environmental Protection Act 2014, and KP EPA is responsible for ensuring the implementation of provisions of the Act in KP’s territorial jurisdiction. KP EPA is also required to ensure compliance with the NEQS and establish monitoring and evaluation systems. In case any project falls under Schedule I or II of this Act, the relevant IEE (or EIA where required) will be developed and submitted to EPA KP for issuing NOC before commencing any physical work.

3.2.2 KP Tourism Policy, 2015

This policy identifies key priorities of provincial government for the next few years to develop the tourism sector as the priority sector and transform it into an engine of economic growth by making KP a preferred tourist destination. KP tourism sector vision aims to develop an internationally competitive tourism sector to fully realize its diverse potential; making tourism a leading economic sector for the province through public-private partnership.

3.2.3 KP Wildlife & Biodiversity Act, 2015

This Act provides for the protection, preservation, conservation and management of wildlife in Khyber Pakhtunkhwa. This Act is relevant because the proposed project interventions are located in areas that are rich in biodiversity and wildlife habitats. This act provides for establishment of a Wildlife Fund wherein a potential source of financing is the resource extraction fee to include cess and licencing fee obtained from sale or auction of any resources extracted from the Protected Area. This Act also describes that “any wild animal which is found dead or dying or which has been killed, caught or acquired ---- and any meat of animal, or article, product or trophy thereof, shall be the property of Government. The person in possession of such property shall be bound to hand over the possession of such property to the officer authorized”. Furthermore, this Act prohibits logging and felling or removing any plant or tree; and clearing or breaking up any land for quarrying of stones or for any other purpose in a National Park.

3.2.4 KP Forest Ordinance 2002

This Ordinance is relevant because the proposed projects are located in or around forested areas. Especially, during construction, the contractors will need to strictly abide by its provisions. This Ordinance prohibits construction of any building or shed, road or enclosure, or any infrastructure, or altering or enlarging any existing road or infrastructure in a reserved forest. It also ban any cutting, felling or uprooting any tree or brushwood listed in Schedule –I. Furthermore, it also disallows to quarry stone from reserved forests. Due to the close proximity with a number of reserved forests, the mentioned provisions of this law will need to be taken into account.

3.2.5 KP Climate Change Policy 2016

The government of KP formulated a Provincial Climate Change Policy in June, 2016, to the specific needs of the Province. The sectors highlighted in the Policy that are also relevant to the project (Activity 2.2) include wastes, and urban planning etc. It also gives emphasis, to streamline Climate Change in different sectors of the economy and developmental projects in the Province to make a sustainable development and create resilience to natural disasters.

3.2.6 Culture Policy, 2018

The KP culture policy goals are to create an enabling environment in which Cultural Heritage Sector can flourish and play a significant and defining role in nation building, safeguarding of identity and socioeconomic development. The primary objective of KP cultural policy is to achieve the economic and social development and moderate the problems faced by existing cultural sector. KP culture policy aims to provide an environment conducive to the protection, growth and promotion of indigenous culture heritage.

3.2.7 KP Commission on Status of Women

The Khyber Pakhtunkhwa Commission on the Status of Women is a statutory advisory body established under the Khyber Pakhtunkhwa Act XIX of 2009 which was amended by the Khyber Pakhtunkhwa Assembly under the new Act XXVIII of 2016. The Commission in Khyber Pakhtunkhwa is the first ever Provincial Level Commission in the country, established with functions to oversee

implementation of laws, policies and programs related to women and propose new measures where gaps exist. The third term of the Provincial Commission on the Status of Women was notified in January 2017.

3.3 Applicable International Conventions

Pakistan is signatory to a number of international conventions and agreements on biodiversity conservation, environmental protection, and sustainable development. The major conventions and agreements that are relevant to the project are the following:

3.3.1 Convention on Biological Diversity

Also known informally as the **Biodiversity Convention**, it is a multilateral treaty. The Convention has three main goals including: the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources.

The Convention requires parties to develop national plans for the conservation and sustainable use of biodiversity, and to integrate these plans into national development programmes and policies. Parties are also required to identify components of biodiversity that are important for conservation, and to develop systems to monitor the use of such components with a view to promoting their sustainable use.

Relevance: This convention is relevant because the project interventions will be undertaken in areas of rich diversity of flora and fauna.

3.3.2 The Convention on Conservation of Migratory Species of Wild Animals, (1981)

The Convention requires countries to take action to avoid endangering migratory species. The term "migratory species" refers to the species of wild animals, a significant proportion of whose members cyclically and predictably cross one or more national jurisdictional boundaries. The parties are also required to promote or cooperate with other countries in matters of research on migratory species.

Relevance: The project interventions will be undertaken in areas of rich wildlife and is the habitat of a number of migratory species.

3.3.3 Convention on International Trade in Endangered Species of Wild Fauna and Flora, (1973)

The convention requires Pakistan to impose strict regulation (including penalization, confiscation of the specimen) regarding trade of all species threatened with extinction or that may become so, in order not to endanger their survival further.

Relevance: The project interventions will be undertaken in areas where number of endangered species are present e.g. Snow Leopard in Chitral.

3.3.4 Ramsar Convention

The **Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat** is an international treaty for the conservation and sustainable use of wetlands. It is also known as the Convention on Wetlands. Pakistan being a signatory to the Ramsar Convention, has committed

to work towards the wise use of all its wetlands through national land-use planning, appropriate policies and legislation, management action and public education. The wise use of wetlands is defined as “maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development”.

Relevance: The project interventions will be undertaken in areas of numerous wetland sites.

3.3.5 United Nations Framework Convention on Climate Change, (1994)

The UN Framework Convention on Climate Change (UNFCCC) is a multilateral agreement to address the issue of climate change. The Convention, was set out and opened for signature at the June 1992 UN Conference on Environment and Development (UNCED), also known as the Rio Earth Summit. The UNFCCC entered into force on 21 March 1994. Pakistan being signatory of this treaty is bound to control the GHG emissions and climate change. Recent conference of parties (COP) for UNFCCC was held from 6 to 17 November, 2017 in Bon Germany.

Relevance: Being a signatory to UNFCCC, the activities under the project must avoid GHG emissions.

3.3.6 Sustainable Development Goals (SDGs)

Sustainable Development Goals (SDGs) are a collection of 17 global goals set by the United Nations General Assembly in 2015, and adopted by Pakistan as its national goals. The goals are broad and interdependent, yet each has a separate list of targets to achieve. The SDGs cover social and economic development issues including poverty, hunger, gender equality, water, sanitation, energy, health, education, global warming, urbanization, environment and social justice.

Relevance: The project has direct relevance with SDG 6 (Clean Water & Sanitation), SDG 8 (Decent Work & Economic Growth), SDG 11 (Sustainable Cities & Communities), SDG 13 (Climate Action), SDG 14 (Life below Water) and SDG 15 (Life on Land).

3.4 Applicability of World Bank Safeguard Policies

Based on available information the applicability of World Bank policies is summarized below:

3.4.1 Applicable World Bank Policies

The development objectives of the World Bank safeguard policies are based on sustainability, transparency, fairness, accountability, governance, informed decision making, rights, participation and meaningful consultation for investment projects financed by the World Bank. Among total twelve safeguard policies, there are six environmental, two social, and two legal policies with their detailed Bank procedures can be found on the World Bank website. The disclosure and access to information policy is applicable to all investment projects and programs funded by the World Bank.

i. OP 4.01 Environmental Assessment

The World Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. The OP defines the EA process and various types of the EA instruments. Component 2 of the project

proposes infrastructure development in tourism areas that may potentially cause negative environmental and social impacts. Most of these impacts are likely to be small scale, localized, and reversible in nature. This project is classified as “Category B” with partial assessment per the WB safeguards category. Since the exact nature and locations of the proposed sub-projects are not identified, therefore an ESMF has been prepared in accordance with OP 4.01

The OP 4.01 also defines ESMF as “An instrument that examines the issues and impacts associated when a project consists of a program and/or series of sub-projects, and the impacts cannot be determined until the program or sub-project details have been identified. The ESMF sets out the principles, rules, guidelines and procedures to assess the environmental and social impacts. It contains measures and plans to reduce, mitigate and/or offset adverse impacts and enhance positive impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project impacts.

Since the activities under the project would be small-scale interventions such as development of rest areas, walking trails and access roads etc., the level of environmental and social impacts is likely to be low to moderate. This ESMF presents checklists designed to identify these potential impacts, and direct communities and project teams to practical ways of avoiding or mitigating them. If project screening used by implementing agencies finds that more detailed planning work is required, Environmental and Social Management Plans (ESMPs) may be prepared for each sector.

ii. OP 4.04 Natural Habitats

The conservation of natural habitats, like other measures that protect and enhance the environment, is essential for long-term sustainable development. The Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions. There is the presence of fragile ecosystems such as protected forests in the project districts. Moreover, the project may support enterprises related to eco-tourism and forestry. There is the chance that beneficiaries may want to conduct project supported livelihood activities within or near sensitive habitats.

This OP is **triggered** to support the protection, maintenance and rehabilitation of natural habitats and their functions. This ESMF identifies the ecologically sensitive zones and protected areas present in the project districts. These zones will be assessed in each district prior to execution through sectoral ESMPs.

iii. OP 4.09 Pest Management

The objective of this OP is to support a strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides. This OP is **not triggered** since no agricultural activities are involved in the project.

iv. OP 4.10 Indigenous Peoples

The OP defines the process to be followed if the project affects indigenous people. This OP is **triggered** as the project include activities in Indigenous Kalash community area. Therefore, an Indigenous Peoples Planning Framework (IPPF) will be prepared, cleared by the Bank and implemented.

v. OP 4.11 Physical and Cultural Resources

This policy safeguards archaeological, physical or cultural heritage sites and assists in their preservation, and avoids their elimination. This OP is **triggered** as some of the project interventions will be carried out in or near notified archaeological, physical or cultural heritage sites and monuments of Swat.

vi. OP 4.12 Involuntary Resettlement

OP 4.12 – Involuntary Resettlement covers direct economic and social impacts that results from land acquisition for project development, relocation or loss of shelter, loss of assets or access to assets, and loss of income sources or means of livelihood. The Policy applies to all affected persons, regardless of titles/ownership and the severity of impacts – direct or indirect. The policy requires particular attention to be given to the needs of vulnerable groups especially those below the poverty line, the landless, the elderly, women and children, indigenous groups, ethnic minorities, orphans, and other disadvantaged persons. The Resettlement Policy Framework (RPF) will address any possible land acquisition. This OP is **triggered** as project interventions may require land from public or private land holders.

vii. OP 4.36 Forestry

The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and global environmental services and values of forests. Where forest restoration and plantation development are necessary to meet these objectives, the Bank assists borrowers with forest restoration activities that maintain or enhance biodiversity and ecosystem functionality. The Bank also assists borrowers with the establishment and sustainable management of environmentally appropriate, socially beneficial, and economically viable forest plantations to help meet growing demands for forest goods and services.

This OP is **triggered** because while the project is not likely to support any activities that will lead to a significant degradation or conversion of forests, the project will comply with this policy and ensure that the forest resources of the selected project districts remain preserved.

viii. Safety of Dams (OP 4.37)

The Policy seeks to ensure that appropriate measures are taken and sufficient resources provided for the safety of dams the WB finances. This OP is **not triggered** since the proposed project does not involve construction of dams.

ix. Projects on International Waterways (OP 7.50)

This OP defines the procedure to be followed for projects the WB finances that are located on any water body that forms a boundary between, or flows through two or more states. This OP is **not triggered** since the proposed project interventions are not located on international waterways.

x. Projects in Disputed Areas (OP 7.60)

This OP defines the procedure to be followed for projects the WB finances that are located on any disputed and conflict areas. This OP is **not triggered** since the proposed project interventions are not located on any disputed and conflicting area.

3.5 Other Relevant World Bank Guidelines and Policies

3.5.1 WB Committee on Disability-Inclusive Development

The World Bank has accelerated its support for disability-inclusive development with significant strides in operations and analytical work. This has culminated in World Bank's first Disability Inclusion and Accountability Framework, which offers a roadmap for:

- Including disability in the World Bank's policies, operations, and analytical work; and
- Building internal capacity for supporting clients in implementing disability-inclusive development programs.

The Framework is also relevant to policymakers, government officials, other development organizations, and persons with disabilities.

3.5.2 Labor Influx

These guidelines provide guidance on identifying, assessing and managing the risks of adverse social and environmental impacts that are associated with the temporary influx of labor resulting from Bank supported projects. It contains guiding principles and recommendations to be considered as part of the design and implementation of projects with civil works that require labor from outside the project's area of influence. It does not introduce new requirements, but rather seeks to provide concrete guidance on how to approach temporary labor influx within the environmental and social assessment process.

3.5.3 WB EHS Guidelines

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). When one or more members of the World Bank Group are involved in a project, these EHS Guidelines are applied as required by their respective policies and standards. These General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines which provide guidance to users on EHS issues in specific industry sectors. For complex projects, use of multiple industry-sector guidelines may be necessary.

3.5.4 World Bank Group Gender Strategy (2016-2023)

The 2015 Gender Strategy recognizes that stronger and better-resourced efforts are needed to address gender inequalities in access to jobs as well as control over and ownership of productive assets are key levers of change for women, their communities and economies and fundamental drivers of economic growth and poverty reduction. Gender equality is central to the World Bank Group's own goals of ending extreme poverty and boosting shared prosperity in sustainable manner.

4 ENVIRONMENTAL AND SOCIAL BASELINE

An environmental baseline study is intended to establish a data base against which potential project impacts can be predicted and managed later. The existing environmental conditions around the proposed project have been considered with respect to physical, biological and socio-economic aspects.

Baseline study of the project area has been conducted through desktop study and literature review, field surveys and site visits, and interviews & meetings with primary and secondary stakeholders. Adopted approach and methodology is discussed in section 1.6. Baseline environment of the project area is described below.

4.1 Physical Environment

The project activities will be executed in four (04) major tourists' sites i.e. Kalam, Naran, Chitral and Galiyat in districts Swat, Mansehra, Chitral and Abbotabad respectively. A brief description of physical environment of these districts is presented hereunder.

4.1.1 Swat

Swat Valley is situated in the North of Peshawar in the Malakand Division of the Khyber Pakhtunkhwa. The valley is an integral part of the strategic and significant region where three parts of the Asian continent - South Asia, Central Asia and China meet. Swat is one of the main tourism sites of KP province.

- i. **Topography & Geology:** Swat is a mountainous region, located among the foothills of the Hindukush mountain range. The elevation of Swat river valley, at the southern boundaries of the district, is over 600 m and rises rapidly towards the north. There are several mountain peaks ranging from 4500 to over 6000 m above sea level. The Swat region, containing the meandering Swat River, is also home to lush green valleys, snow-covered glaciers, forests, meadows and plains.⁵ The district has varying geology. The geological map of the project districts is shown in **Figure 4-3**.
- ii. **Seismicity:** The project area is located in the Seismic Zone-3 where PGA ranges from 0.24 to 0.32g which represents moderate to severe damage. The seismicity map of project districts is attached as **Figure 4-4**.
- iii. **Land Use:** Area of district Swat is 5,337 sq.km comprising Tehsils, namely Matta, Mangora, Bahrain and Kabal. Main agricultural crops are maize, wheat, vegetables, fodder and orchards. Another major land use is grazing. Residential units also cover a small fraction of the area. Cultivated land is mainly found in the south-lying regions of Mingora, Barikot, Matta, Kabal, Kanju and Khwazakhela, as the northern part of the district is mostly mountainous terrain. The Swat River is the main source of irrigation, funneling water to most regions through community and government-built channels.

⁵. Topographical Survey of Pakistan.

Table 4-1: Land Use Pattern Swat 2015-2016

Land Utilization Area	Area (in hectares)
Total Reported Area	506,528
Total Cultivated Area	97,466
Net sown	88,010
Current fallow	9,456
Total Cropped Area	183,997
Area Sown more than Once	95,987
Total Un-Cultivated Area	409,062

Source: Development Statistics of Khyber Pakhtunkhwa-2017

iv. **Climate:** The mean maximum and mean minimum temperatures from 1991 – 2015 are 16.74 °C and -3.22 °C respectively while the mean annual rainfall is 26.13 mm.⁶

v. **Water Resources:**

Irrigation Water: Some 41% of the cultivated area is irrigated by canals (both Government and private), another 23% by wells (groundwater) for irrigation, while the rest is irrigated by other sources.

River Swat: It is the main source of surface water commencing at Kalam with the confluence of Ushu and Utror Rivers. It flows for about 160 km across the valley up to Chakdara, while its total length is 250 km up to to River Kabul near Charsadda. Many large and small tributaries like Gahil, Mankial, Daral, Chail, Barwai, Arnawai, Jambil and Marghazar streams join the river along its course. A number of streams in the lower Swat, Swat Ranrizai and Adinzai also contribute to the river. The river with its tributaries forms the drainage basin for the valley. A view of River Swat is shown in **Plate 4-1**.



Plate 4-1: Views of Swat River

Bashigram Lake: Bashigram Lake is situated to the east of Bashigram valley near Madyan. Strong, jagged and gigantic mountains from three sides surround the lake. Towards the west, the face of the lake is open and the lake water creeps under the huge rocks and appears in the form of an attractive

⁶ http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisCcode=PAK

foamy waterfall. Huge glaciers feed the lake and remains around it till the end of September. A View of Bishigram Lake is shown in **Plate 4-2**.



Plate 4-2: A View of Bishigram Lake

Mahodand Lake: Mahodand Lake is located in the upper Usho Valley at a distance of about 40 km from Kalam. The Mahodand Lake lies at the foothills of Hindukush mountains at an elevation of (9,603 ft), surrounded by the meadows, mountains and dense forests. A View of Mahodand Lake is shown in **Plate 4-3**. Thousands of tourists visit this lake in summer season and pollute the lake area by littering and disposing of waste in and around the lake. The environmental sensitivity of the lake is threatened. The trees are being cut by the locals and restaurant owners to meet the fire demands.



Plate 4-3: A View of Mahodand Lake

Kundal Lake: Kundal Lake also known as Kundol Dand, is a lake in Swat Valley which is located in the north of Utror valley at a distance of 20.8 kilometres away from Kalam. The maximum length and width of the lake is approximately 1km and 1.5 km respectively with surface elevation 3,033 m. Two other lakes, Khapiro (Faries), and Spin khwar (White Stream) are also located in the peripheries of Kundal Lake. A View of Kundal Lake is shown in **Plate 4-4**.

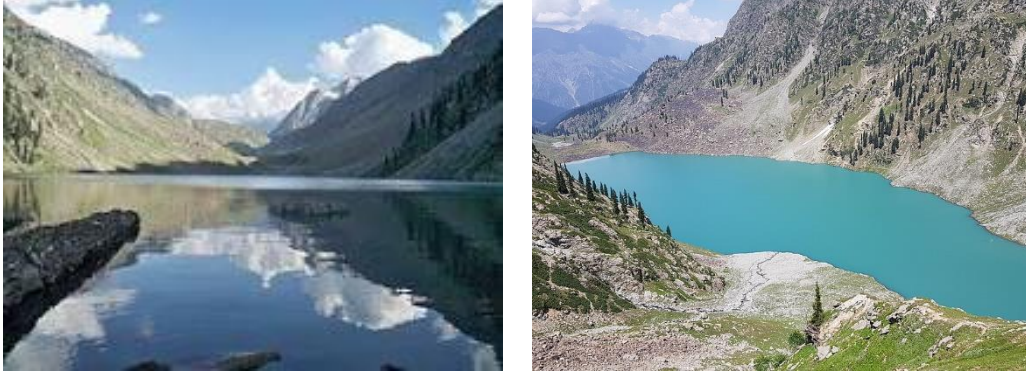


Plate 4-4: A View of Kundal Lake

Daral Dand: Daral Dand also known Daral lake is an alpine scenic lake in the hill top of Bahrain region of Swat valley. The lake appears as giant amoeba like in shape and stretched over a huge area with surface elevation of 3,505 m. A View of Daral Dand lake is shown in **Plate 4-5**.



Plate 4-5: A View of Daral Dand Lake

Saif Ullah Lake: Saifullah Lake lies in the North of Kalam and Mahudand Lake. It is famous not only among nature lovers and escapists but also the exotic trout fish hunters. The valley can be accessed through an un-metalled road from Kalam in a four by four (4x4) vehicle which ends in Mahudand Lake. A View of Saif Ullah lake is shown in **Plate 4-6**.

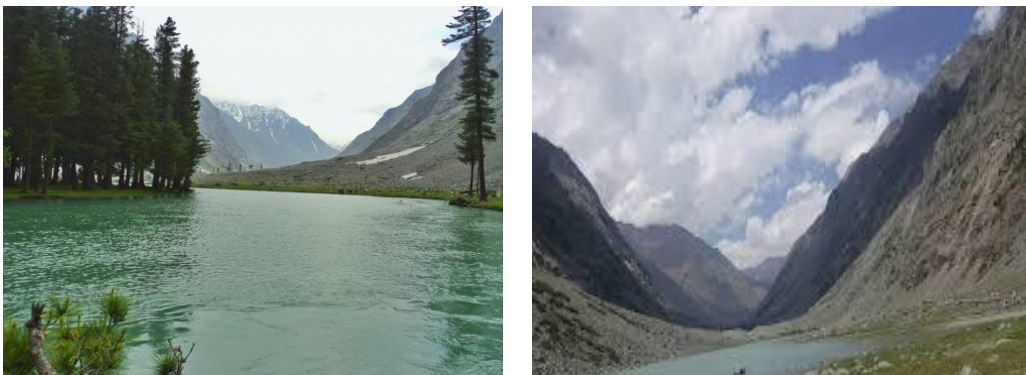


Plate 4-6: A View of Saif Ullah Lake

- vi. **Heritage Sites:** The famous heritage sites in Swat are Butkara, Siadu Shareef, Amluk Dara, Gumbat, Jehanabad, Gogdara, Galagai, Shingerdar Stupa, Udegram/Ora and Barikot. **Section 9** of this ESMF covers these sites and outlines a physical & cultural resource management plan for their protection.
- vii. **Main Tourists Destinations:** The main tourist destinations are Kalam, Mahodand lake and the heritage sites mentioned above.

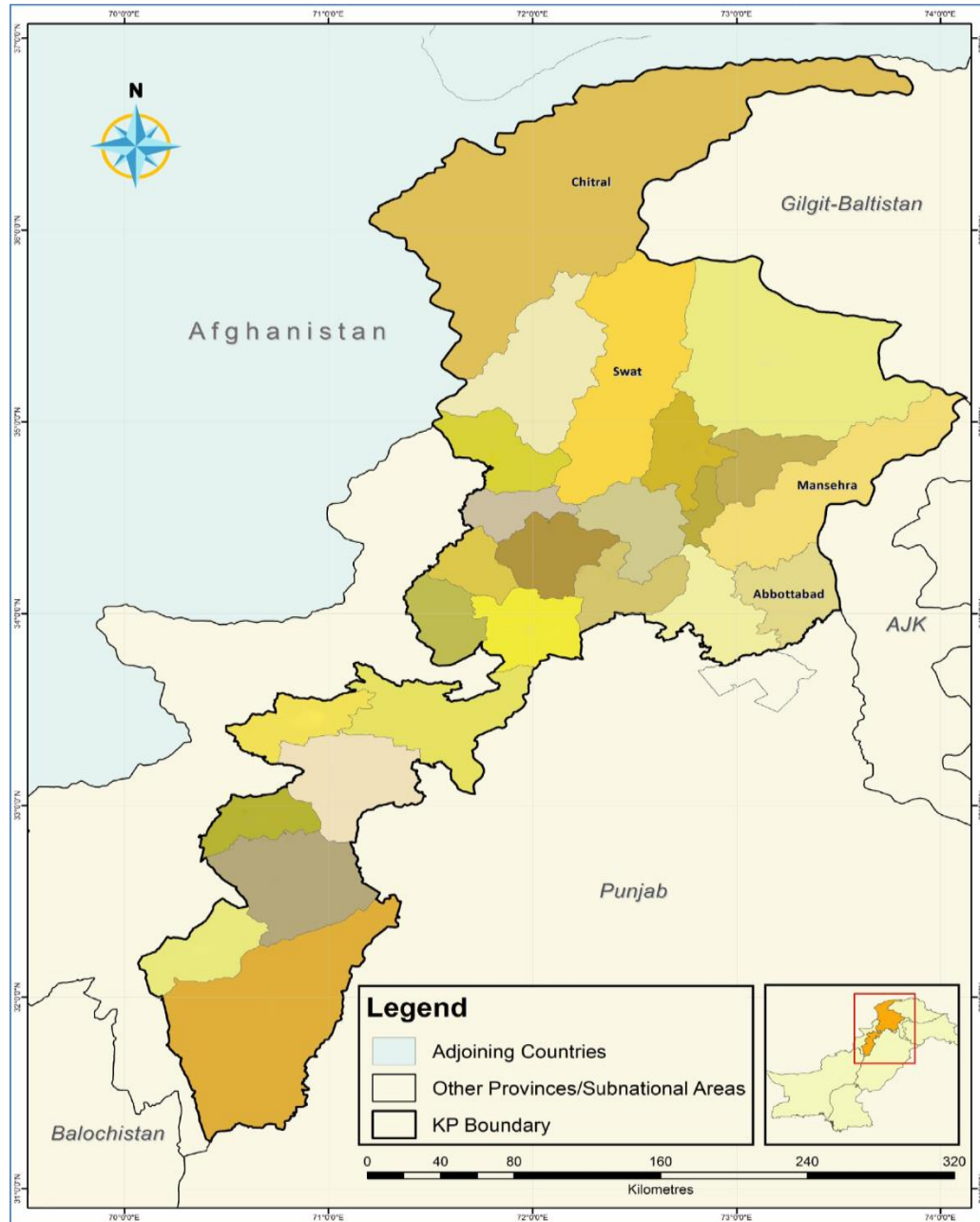


Figure 4-1: Focused districts of KP ⁷

⁷ Source: dev~consult GIS

4.1.2 Mansehra

Mansehra district is considered as an important tourist location due to Kaghan Valley and the Karakoram Highway passing through the district.

- i. **Topography:** The topography of Mansehra district is dominated by the high mountains varying in elevation from of 2000 m in the south to over 4500 m above sea level in the north. In the north along its boundary with Kohistan district, lies the Great Himalayan Range. The famous Babusar Pass is situated in this range on the north-eastern boundary of the district. The Nanga Parbat Mountain is situated about 40 kilometers from the north eastern boundary of the district. The district has varying geology. The geological map of the project districts is shown in **Figure 4-8**.
- ii. **Seismicity:** Mansehra district is located in the Seismic Zone-3 which represents moderate to severe damage. The seismicity map of the project districts is attached as **Figure 4-9**.
- iii. **Land Utilization:** Land use pattern of Mansehra district for the year 2015-16 is given in **Table 4-2**.

Table 4-2: Land Use Pattern Mansehra 2015-2016

Land Utilization Area	Area (in hectares)
Total Reported Area	439,423
Total Cultivated Area	80,747
Net sown	68,514
Current fallow	12,233
Total Cropped Area	101,598
Area Sown more than Once	33,084
Total Un-Cultivated Area	358,676

Source: Development Statistics of Khyber Pakhtunkhwa-2017

- iv. **Climate:** The mean maximum and mean minimum temperatures from 1991 – 2015 are 15.03 °C and -3.91 °C respectively while the mean annual rainfall is 60.89 mm.⁸
- v. **Water Resources:**

Irrigation Water: Only 21% of the cultivated area is irrigated by canals (both Government and private), while there is almost no use of groundwater for irrigation purposes.

Rivers and Streams: Besides many small springs and streams, there are two major rivers: Kunhar and Siran. River Siran passes through the Pakhal valley and irrigates major part of the land. River Kunhar starts from Lake Saif-ul-Malook and flows through a large number of villages reaches Balakot and Ghari Habibullah from where it turns to Muzaffarabad. It then meets River Neelam.

In Mansehra district there are numerous small streams, however Jinjal from Jaba area Ichhar Nullah from Ichhrian area; and Kadar Nullah are the major streams situated in the district. These streams come

Modified from KP Biodiversity Strategy and Action Plan 2016

⁸ http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisCcode=PAK

out from the adjoining mountains of Sacha, Jaba etc. and after running through various areas join the Siran river.

Dudipat Lake: Dudiptsar Lake or Dudipat Lake is located in Lulusar-Dudipatsar National Park. This lies in the extreme north of the Kaghan Valley, in the Mansehra District. The lake's water is a beautiful greenish blue hue and very cold. A view of Dudipat Lake is shown in **Plate 4-7**.



Plate 4-7: A View of Dudipat Lake

Lulusar: Lulusar is a wonderful natural tourist attraction. Lulusar is located in Kaghan Valley. Its water looks like water reflecting the surrounding stunning snowcapped Lulusar Mountains. It is One of the highest lakes in the world, giving tremendous views of the natural beauty. A view of Lulusar is shown in **Plate 4-8**.

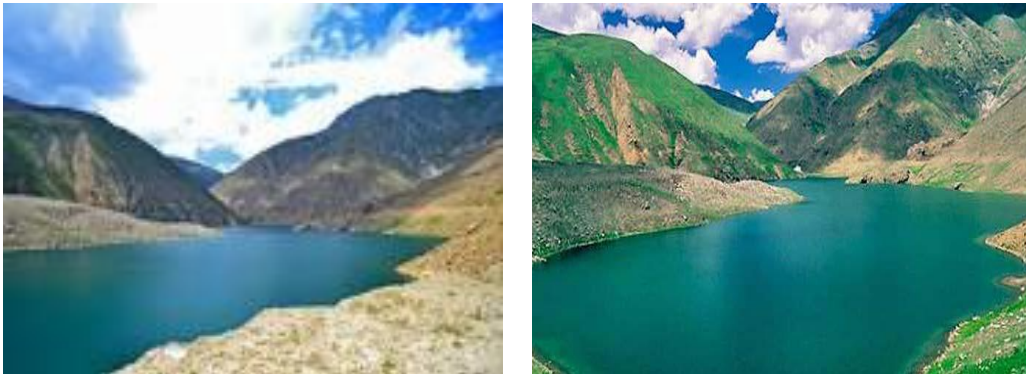


Plate 4-8: A View of Lulusar Lake

Lake Saiful Maluk: Lake Saiful Maluk is the most popular attraction in Kaghan Valley in Mansehra. The legendary lake is located in the mountain ranges of the Karakorum in the northern end of the Kaghan Valley. It is approximately 14 km from Naran. Water comes from the surrounding glaciers of the Malka Parbat which fills the lake. A view of Saif ul Maluk is shown in **Plate 4-9**.



Plate 4-9: A View of Lake Saiful Maluk

- vi. **Main Tourists Destinations:** Main tourist destinations are Naran, Saif ul malook Lake, Lalazar, Sharan, Siri Paye, Babusar Top etc.

4.1.3 Chitral

Chitral is situated at about 322 kilometers from Peshawar. The district is strategically located in such a way that its neighbors include Afghanistan, Central Asian States, Northern Areas of Gilgit and China.

- i. **Topography:** The Chitral-Mastuj valley which is approximately 320 km long is surrounded by three of the highest mountain ranges in the world. To the west bordering Afghanistan is the Hindu Kush range. To the east the Himalayas and in between the Shandur- Karakoram range. The district contains numerous peaks over 20,000 ft, Terichmir being highest with an altitude of 25,263 ft.

The mountains are bare except for the lower part of the district and cultivation is found in small patches at the bottom of the deep and narrow valleys. Altitude of the mountain ranges from 3500 feet in the extreme south in Arandu to 25263 feet at Terichmir. The district is made up of several valleys most important and the largest of which is the Chitral-Mastuj valley stretching from Broghil in the Pamirs to Arandu on the southern tip on Afghan border. The other valleys are Laspur, Mulkhov, Torkhow, Terich, Owir, Lotkoh, Shishi and Ashuret. The district has varying geology. The geological map of the project districts is shown in **Figure 4-8**.

- ii. **Seismicity:** Chitral district is located in the Seismic Zone- 4 corresponding to PGA >0.32g which represents severe damage. The seismicity map of the project districts is attached as **Figure 4-9**.
- iii. **Land Utilization:** Land use pattern of Chitral district for the year 2015-16 is given in the **Table 4-3**.

Table 4-3: Land Use Pattern Chitral, 2015-2016

Land Utilization Area	Area (in hectares)
Total Reported Area	97,619
Total Cultivated Area	21,500
Net sown	20,108
Current fallow	1,392
Total Cropped Area	26,949
Area Sown more than Once	6,841
Total Un-Cultivated Area	76,119

Source: Development Statistics, KP, 2017

iv. **Climate:** The mean maximum and mean minimum temperatures from 1991 – 2015 are 17.98 °C and -4.36 °C respectively while the mean annual rainfall is 54.85 mm.⁹

v. **Water Resources:**

Irrigation Water: Around 97% of the cultivated area is irrigated by canals (both Government and private).

Rivers and Streams: River Chitral emanates from Chiantar glacier in the Baroghal valley and passes through numerous hamlets during the course of its journey before entering Afghanistan. The river, from its source to the place where it enters Afghanistan, has various names, e.g. Yarkhun when it passes through the long valley of Yarkhun, and Mastuj around the village with the same name. At village Mastuj it is joined by the Laspur river which is its first main tributary and drains the huge section of the northern face of Shandur. From here it reaches 'Gankorini' four miles above Chitral town. During this course it collects numerous hill torrents and streams on both bank and also Torkhow river on the right bank. The Torkhow river drains the regions of Torkhow and Mulkhow. At Gankorini it is joined by the Lotkoh river. It enters Afghanistan at Arandu. On its way, the Chitral river is joined by many streams and side valleys such as Jughoor gole, Ayun gole, Kalashgum, Shishi Kuh and Ashuret.

vi. **Main Tourists Destinations:** Kalash valley, Chitral Gol National Park, Shandur and Garam Chashma are major tourist attractions.

4.1.4 Abbottabad

i. **Topography:** Abbottabad district is dominated by mountains and hills. The mountains of Abbottabad are part of lesser Himalayas. Along the northern boundary of the District, a series of low-lying hills form barrier to the Mangal tract in District Mansehra. To the south of these hills, Orash or Resh plains lie with an area of about six (6) square kilometers. Another such tract is Dhan which is an elevated basin enclosed by Nara hills. The district has varying geology. The geological map of the project districts is shown in **Figure 4-8**.

ii. **Seismicity:** Abbottabad district is located in the Seismic Zone-3 corresponding to PGA from 0.24 to 0.32g which represents moderate to severe damage. The seismicity map of the project districts is attached as **Figure 4-9**.

iii. **Land Utilization:** Land use pattern of Abbottabad district for year 2015-16 is given in the **Table 4-4**.

Table 4-4: Land Use Abbottabad 2015-2016

Land Utilization Area	Area (in hectares)
Total Reported Area	178,401
Total Cultivated Area	47,288
Net sown	43,620
Current fallow	3,668
Total Cropped Area	58,510
Area Sown more than Once	14,890

⁹ http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisCcode=PAK

Land Utilization Area	Area (in hectares)
Total Un-Cultivated Area	131,113
Forest	178,401
Culturable waste	47,288
Not available for cultivation	43,620

Source: Development Statistics, KP, 2015-2016

iv. **Climate:** The mean maximum and mean minimum temperatures from 1991 – 2015 are 26.12 °C and 7.36 °C respectively while the mean annual rainfall is 96.80 mm.¹⁰

v. **Water Resources:**

Irrigation Water: Only some 10.5% of the cultivated area is irrigated by canals (Government owned), while wells (groundwater) for irrigation are used for only around 1% of the cultivated area.

Rivers and Streams: The important streams of the District are Haro, Dor and Siran. The Haro originates at the southern end of Dunga Gali range and flows through the District as two separate streams towards southwest. The Dor River rises at the northern end of Dunga Gali range and flows in the center of the District in a south western direction. The Siran river enters the District from the north western corner and flows southwards along the western boundary for a short distance and finally leaves the District near Kachi village. These rivers have numerous tributaries, some with permanent flow and other with scanty flow. These tributaries (nullahs) are also used as access road to the hilly terrain where the earthen tracks are not available.

vi. **Main Tourists Destinations:** Nathiya Gali, Kuza Gali, Khanaspur, Mushkpuri Peak etc. are the major tourist's attractions.

¹⁰ http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisCcode=PAK

4.2 Biological Environment

Khyber Pakhtunkhwa has diverse geo-ecological formation, ranging from Dera Ismail Khan at 250 m above MSL in South to 7,708 m high Tirich Mir in the Chitral District. KP is comprised of 25 districts having distinct ecological and cultural identities. Around 20.25% of the province is forested with trees of varying density and age distributed in nine major vegetation types., Alpine pasture constitutes almost one third (28.98%) of the forest ecosystem, almost same quantum of land (30.08%) is under agriculture. Another 10.67% constitutes the rangelands. Even the remaining area is under one or the other manifestation of biodiversity.

Khyber Pakhtunkhwa experiences many types of climates, ranging from arid to humid and from continental to Alpine and polar. Major part of the province's area in the north and south is arid. Only a small patch comes under humid and sub-humid climatic influence for monsoon showers and the central part is generally semiarid. The higher Alpine and tundra climatic situation is found in the interior of the high mountain valleys near the glaciated areas. The province is divided into seven physiographic regions shown in **Figure 4-2**, while the land cover map shown in **Figure 4-4** shows a wide variety of physical and biological resources.

The biological environment includes floral and faunal species and other ecological features of the project area. The brief information about ecologically important species is attached as **Annex – I**.

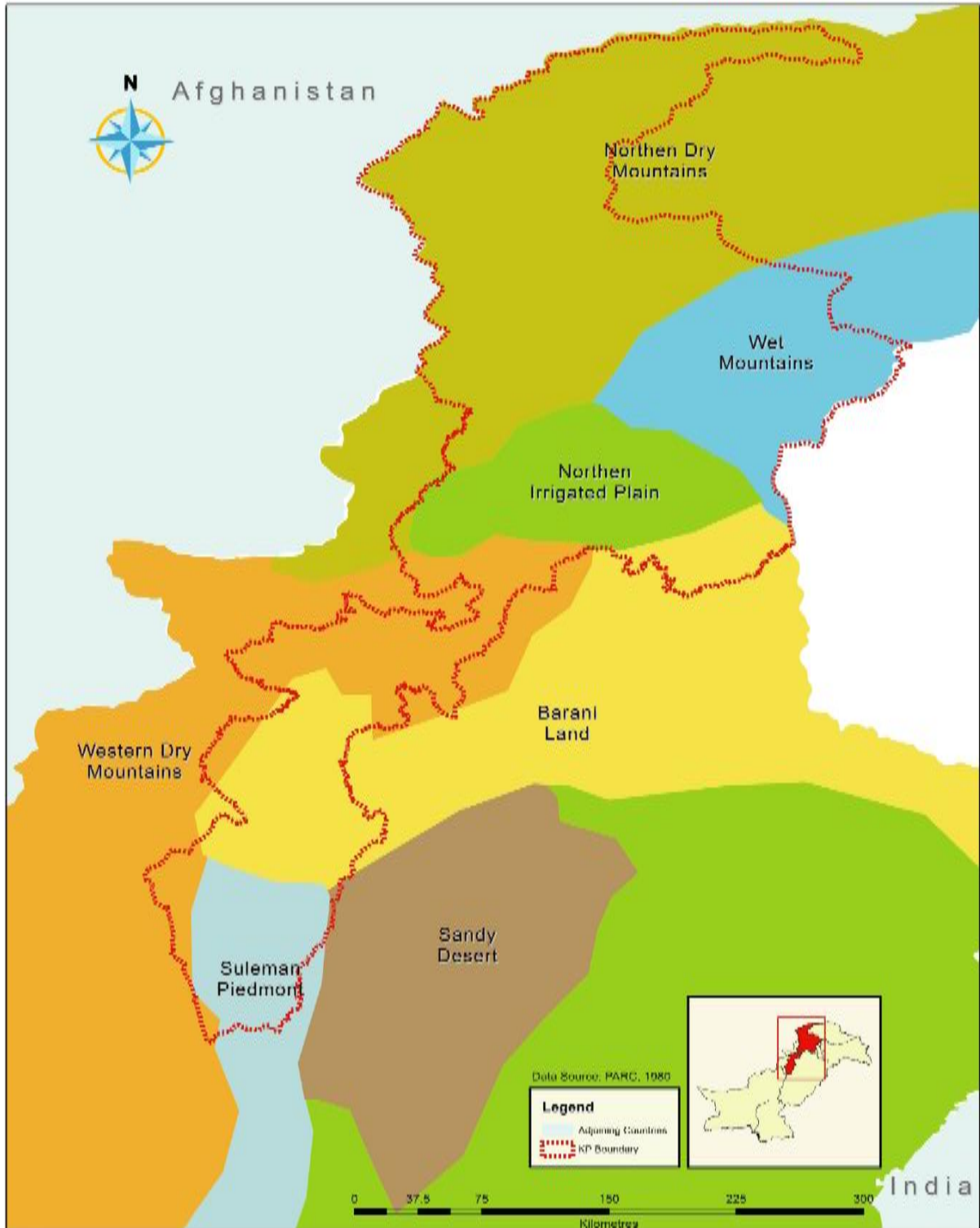


Figure 4-2: Physiographic divide of KP ¹¹

¹¹ Source: PARC 1980, Modified from KP Biodiversity Strategy and Action Plan 2016

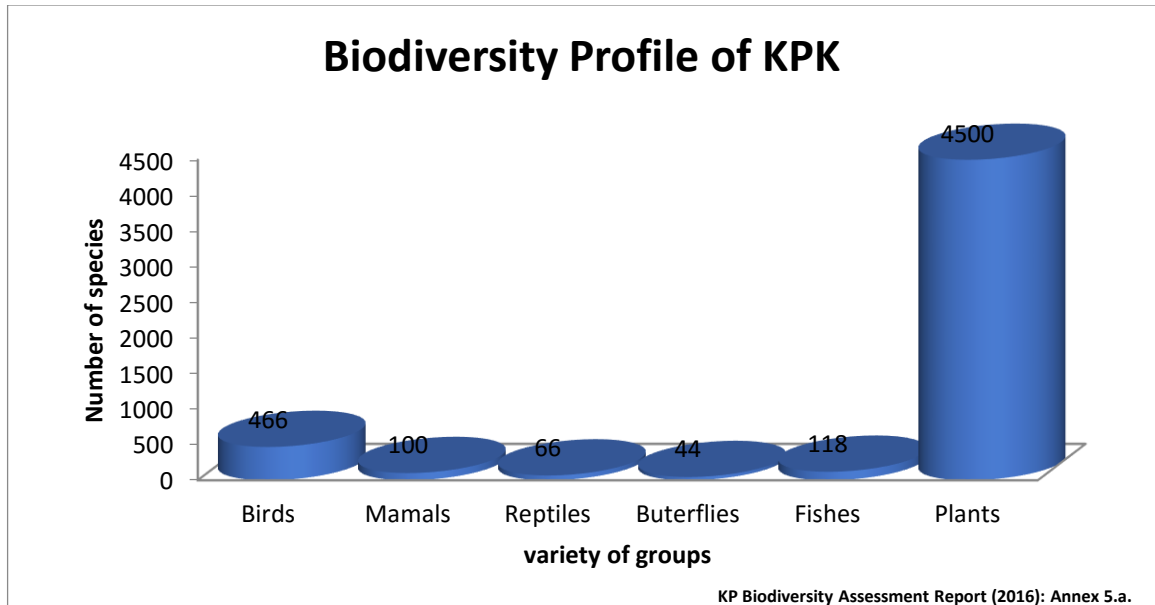


Figure 4-3: Biodiversity Mix of KP

4.2.1 Flora

The iconic tree species of KP include silver fir / partal (*Abies pindrow*), Himalayan spruce / kachal (*Picea smithiana*), cedar / deodar (*Cedrus deodara*), pine nut / chilghoza (*Pinus gerardiana*), chir pine / chir (*Pinus roxburghii*), bhoj patra / birch (*Betula utilis*), maple / trekhan (*Acer caesium*), horse chestnut / bankhor (*Aesculus indica*), Himalayan poplar / palach (*Populus ciliata*), ash / sum (*Fraxinus hookeri*), walnut / akhrot (*Juglans regia*), Himalayan pistachio / kangar (*Pistacia integerrima*), oak / rein (*Quercus spp. / Q. incana*), gum acacia / phulai (*Acacia modesta*), babul acacia / Kikar (*Acacia nilotica*), Indian olive / zaytoon / kahu (*Olea ferruginea*), Indian rosewood / shisham (*Dalbergia sissoo*), mulberry / tut (*Morus alba*), black locust / walaiti kikar (*Robinia pseudoacacia*), ber (*Zizyphus mauritiana*), black siris (*Albizia lebbek*), and bakain (*Melia azedarach*).

Non-timber forest products (NTFP)

KP has important associated flora to forest resource, which includes medicinal, aromatic and other economic plants, mushrooms, honey, wild vegetables, wild fruits, resin, mazri, chilghoza nuts, essences and a range of barks and fibres such as bamboo, rattans, and a host of other palms and grasses. Important of these include:

- Food products (morels or black mushroom, honey, wild fruits and nuts, vegetables, condiments)
- Medicinal plants
- Industrial products (resin, babul bark, bhabar grass)
- Fibres (Mazri leaves)
- Silk cocoons
- Miscellaneous products (soap-nut, walnut bark, phulai (*Acacia modesta*) gum, neen leaves)

These products find a high place in the rural economy, for they provide job opportunities to a large number of rural populations and supplement the meagre income of rural poor. More importantly, the morels and honey are export items of economic significance and fetch foreign exchange also. The local

people get firewood, fruits, nuts, and fodder for livestock, and medicinal plants for treatment of human beings and livestock, and more mushrooms from the forest.

i. Swat Floral Diversity

The area under forest reported for the district is around 165,755 ha. According to UNDP, Swat is the third most forested district of Pakistan¹². Forest area by enactment of Swat district for year 2015-16 is given in the **Table 4-5**.

Table 4-5: Forest in Swat 2015-2016

Forest Type	Area (in acres)
Total	409,591
Reserved Forest	0
Protected Forest	338,544
Resumed Land	0
Unclassed Forest	0
Section 38	0
Communal	0
Guzara Forest	0
Private Plantation	70,703
Miscellaneous	344

Source: Development Statistics, KP, 2015-2016

The survey revealed that the study area harbors diverse valuable plant species and associated ethnobotanical knowledge. The study revealed the presence of about 90 species of ethnobotanical importance. These include 84 species of angiosperms, 3 species of gymnosperms, 2 species of pteridophytes and 1 species of fungi. The plant resources were grouped into medicine (71 species), fodder (20 species), wild fruit (14 species), fuel wood (18 species), furniture and agricultural tools (9 species), vegetable (10 species), thatching, fencing and hedges (9 species), religious (2 species), poison (2 species), evil eye (2 species), honey bee (4 species).

ii. Mansehra Floral Diversity

According to UNDP, Mansehra is the 10th most forested district of Pakistan, having 25% area under forest cover¹³. Forest area by enactment of Mansehra district for year 2015-16 is given in **Table 4.6**.

Table 4-6: Forests in Mansehra 2015-2016

Forest Type	Area (in acres)
Total	536,423
Reserved Forest	84,809
Protected Forest	6,765
Resumed Land	29,142

¹² <http://www.pk.undp.org/content/dam/pakistan/docs/Environment%20&%20Climate%20Change/UNDP-PK-ECC-Forests%20and%20Biodiversity.pdf>

¹³ <http://www.pk.undp.org/content/dam/pakistan/docs/Environment%20&%20Climate%20Change/UNDP-PK-ECC-Forests%20and%20Biodiversity.pdf>

Forest Type	Area (in acres)
Unclassed Forest	175,712
Section 38	0
Communal	0
Guzara Forest	150,937
Private Plantation	88,378
Miscellaneous	680

Source: Development Statistics, KP, 2015-2016

Naran area is rich in biological diversity where wide variety of flora including herbs, shrubs and medicinal plants are present. The important medicinal plants present in the area are Aspagol (*Plantago ovate*), Thandi booti, (*Tussilago farfara*), Ban kakri (*Podophyllun hexandrum*), Chikee (*Primula macrophylla*), Beshmolo (*Allium victrialis*).

Some important shrubs include, Grecian Juniper (*Juniper exelsa*), French marisk (*Tamarix gallica*), Jongi (*Betula utilis*), and Sumbal (*Barberis achycantha*). Important herbs are Chutyal (*Polygonum paronchioides*) Jogi badshah (*Bistortra affinis*) Tindi jari (*Oxyria digyana*) Banjameri (*Thymus linearis*) Patmea (*Nepta discolor*), Ghorie (*Phlomis bracteosa*), Peli panja (*Mysotis alpestris*), Chalandri (*Potentilla dryandanthoides*).

iii. Chitral Floral Diversity

Forest area by enactment of Chitral district for year 2015-16 is given in the **Table 4-7**.

Table 4-7: Forest in Chitral 2015-2016

Forest Type	Area (in acres)
Total	125,677
Reserved Forest	0
Protected Forest	90,196
Resumed Land	0
Unclassed Forest	0
Section 38	0
Communal	0
Guzara Forest	0
Private Plantation	35,351
Miscellaneous	130

Source: Development Statistics, KP, 2015-2016

Some of the most popular plant species in Chitral are Willow, Birch, Juniper and Poplar and fruit trees like Mulberry, Walnut, Apricot, Apple, Grapes, etc., are most prevalent. Some cold resistant aromatic species like Buckthorn, Hawthorn, Low shrubs, Sage brush, Wormwood, Bulbous iris, low-lying cushion plants, meadows grasses, Artemisia, Cobereasia, Clovers and Alphaalph are also abundant in nature. Fresh bird Cherry and Olive are also among the common plants of Chitral. Currently, small oasis of plants, tree species and shrub species are confined at different landscape contexts of Chitral valley.

iv. Abbottabad Floral Diversity

Forest area by enactment of Abbottabad district for year 2015-16 is given in the **Table 4-8**.

Table 4-8: Forests in Abbottabad 2015-2016

Forest Type	Area (in acres)
Total	199,710
Reserved Forest	38,428
Protected Forest	0
Resumed Land	0
Unclassed Forest	69,530
Section 38	0
Communal	0
Guzara Forest	20,291
Private Plantation	70,703
Miscellaneous	758

Source: Development Statistics, KP, 2015-2016

In the upper reaches of the Galiyat region, the main tree species include deodar (*Cedrus deodara*), biar (*Pinus wallichiana*), paludar (*Abies smithiana*), and barangi (*Quercus lassiflora*). Chir pine (*Pinus roxburghii*) covers the lower hills, along with kao, or wild olive, phulai (*Acacia modesta*); (*Cedrela toona*); drek (*Melia sempervirans*); and sinetta (*Dodona burmanniawa*). Vegetation grows for the most part in scattered clumps.

At lower elevations and in the plains, the most common trees are shisham (*Dalbergia sissoo*), toot (*Morus alba*), drek (*Melia sempervirens*), phulai, (*Acacia modesta*), ber (*Zizyphus jujaba*), pipal (*Ficus religiosa*), kikar (*Acacia arabica*). Non-timber forest products include floral buds of the kachenar, pomegranate, blackberries, raspberries, cranberries, and wild pears. Major confined trees along the road at some patches, but densely flourished are mainly include sufaida (*Eucalyptus sp.*), neem (*Azadirachta indica*), shahtoot (*Morus spp.*), shisham (*Dalbergia sissoo*), jund, and poplar (*Populus euphratica*).

4.2.2 Fauna & Wildlife

KP is home to the richest wildlife biodiversity in Pakistan but many of the species are threatened to become extinct due to climatic and anthropogenic influences. However, there is adequate capacity and sense of urgency in the wildlife management at the provincial level to take necessary steps for conservation and protection of wildlife in the province.

KP is one the most diverse landscapes in the country that possesses every component of the natural environment, snow covered peaks, green mountains, painted landscape, a variety of agro-ecological zones, rivers and streams, and a variety of cultures closely knitted with the available natural elements. All ecological zones, from temperate to arid and sandy, are full of resources to host a number of wildlife species. Despite anthropogenic and habitat loss pressures on wildlife, and resultant decrease of population in some species, still a few species have recovered marvelously because of preservation efforts. Mammalian species like markhor (*Capra falconeri*) and Himalayan ibex (*Capra ibex sibirica*)

share their high elevation habitats with snow leopard (*Panthera uncia*). This high altitude habitat is also home to some of the endangered species such as Himalayan black bear (*Selenarctos thibetanus laniger*), and brown bear (*Ursus arctos*). Among birds, snow partridge (*Lerwa lerwa*), and Himalayan snowcock (*Tetraogallus himalayensis*) also share the same Alpine and Sub-Alpine habitats. The Alpine and sub-Alpine meadows and dry temperate forests in Chitral, Dir, Swat, Kohistan and Hazara provide habitats to ungulates such as markhor (*Capra falconeri*), and Himalayan ibex (*Capra ibex sibirica*), and birds including several species of pheasants, notably the monal pheasant (*Lophophorus impejanus*) and western horned tragopan (*Tragopan melanocephalus*). Both of these bird species are listed endangered in the red data book of IUCN and at appendix I of Convention on International Trade in Endangered Species, while the country's laws list them protected.

i. Swat Faunal Diversity

The moist and dry temperate forests of Khyber Pakhtunkhwa mostly concentrated in the districts of Swat provide habitats to species such as Himalayan black bear (*Selenarctos thibetanus laniger*), common leopard (*Panthera pardus*), grey goral (*Nemorhaedus goral*) and birds including koklass pheasant (*Pucrasia macrolopha*), and kalij pheasant (*Lophura leucomelanos*). The sub-Tropical scrub forests at the lower reaches of Himalaya and Hindu Kush are home to common leopard (*Panthera pardus*), rhesus macaque (*Macaca mulatta*), urial (*Ovis aries vignei*), and birds like chir pheasant (*Catreus wallichii*) and partridges including see-see partridge (*Ammoperdix griseogularis*), chukar partridge (*Alectoris chukar*), black partridge (*Francolinus francolinus*), and grey partridge (*Francolinus pondicerianus*).

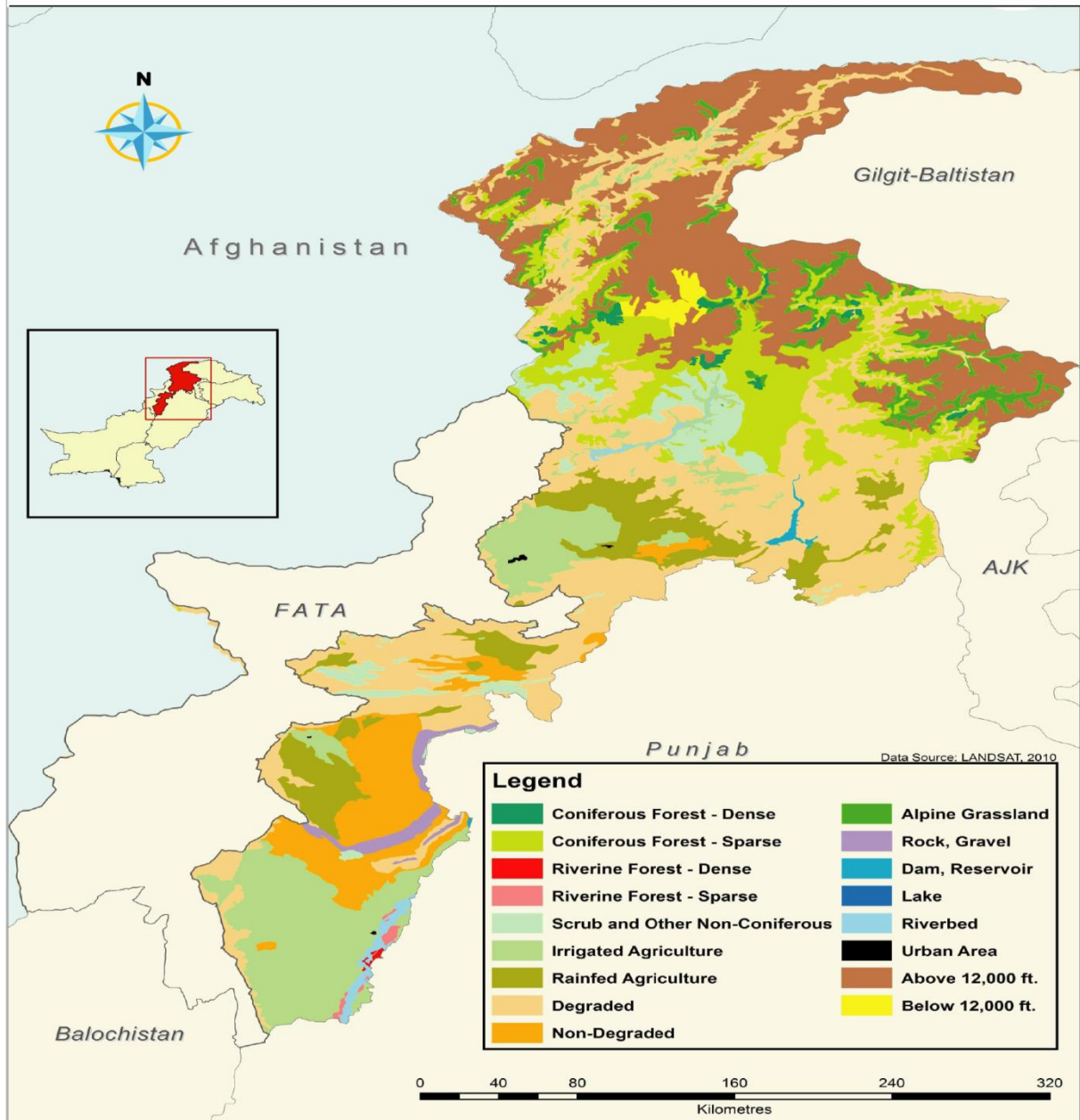


Figure 4-4: Land Cover Pattern in KP with Special Focus on Selected districts ¹⁴

ii. Mansehra Faunal Diversity

Naran and its surrounding area is rich in biological diversity where wide variety of wild animals, birds and migratory birds are found. The lakes and river Kunhar are considered as suitable habitats for long term survival of two types of fish (*Salmo trutta* - Brown trout, *Oncorhynchus mykiss* - Rainbow trout). Important fauna are Himalayan ibex (*Capra ibex sibirica*), Brown bear (*Ursus arctos*), Marmot (*Marmot flaviventris*) snow leopard, (*Uncia uncia*), Important bird species of are Snow cock (*Tetragallus himalayensis*), Snow partridge (*Lerwa lerwa*), Himalayan Griffen vulture (*Gyps*

¹⁴ Source: LANDSAT 2010 Modified from KP Biodiversity Strategy and Action Plan 2016

coprotheresand), Himalayan Monal (*Lophophorus impejanus*) and Falcon (*Falco jugger*). Some of the migratory birds come from Siberia to Lulusar Dutipatsar national during autumn and spring season. Important migratory bird species are Pintail (*Anas Acuta*), common teal (*Anas crecca*), mallard (*Ans platyrhynchos*).

iii. Chitral Faunal Diversity

Chitral is regarded highly for its treasure of Fauna as well. Some endangered species of the world i.e., Snow Leopard, Brown Bear, Tibetan Wolf, Golden Marmot, Snow Partridge and Himalayan Ibex still live in these remote valleys of the Hindu Kush. Other common mammals of this mountain habitat are Morolephered Fox, Jackal, Hare, Rat, Himalayan Lynx, Common Otter, Hyena and Markhor Male and Female.

iv. Abbottabad Faunal Diversity

The main mammalian species found in Galiyat region are *Canis aureus*, *Canus lupus*, *Herpestes auropunctatus*, *Lepus capensis*, *Lutra prespcillata*, *Manus crassicaudata*, *Mus musculus*, *Pipi strellusspps*, *Rattus rattus*, *Rousettus leschnauln*, *Suncus murinus*, *Sus scrofa*, *Viverri culaindica* and *Vulpes vulpes*. A variety of rare animal species can be found in Murree, including the leopard, which inhabits the neighboring Galiyat region. Common animals include the rhesus monkey, wild boar, foxes and various species of birds, including the cheer pheasant and kalij pheasant.

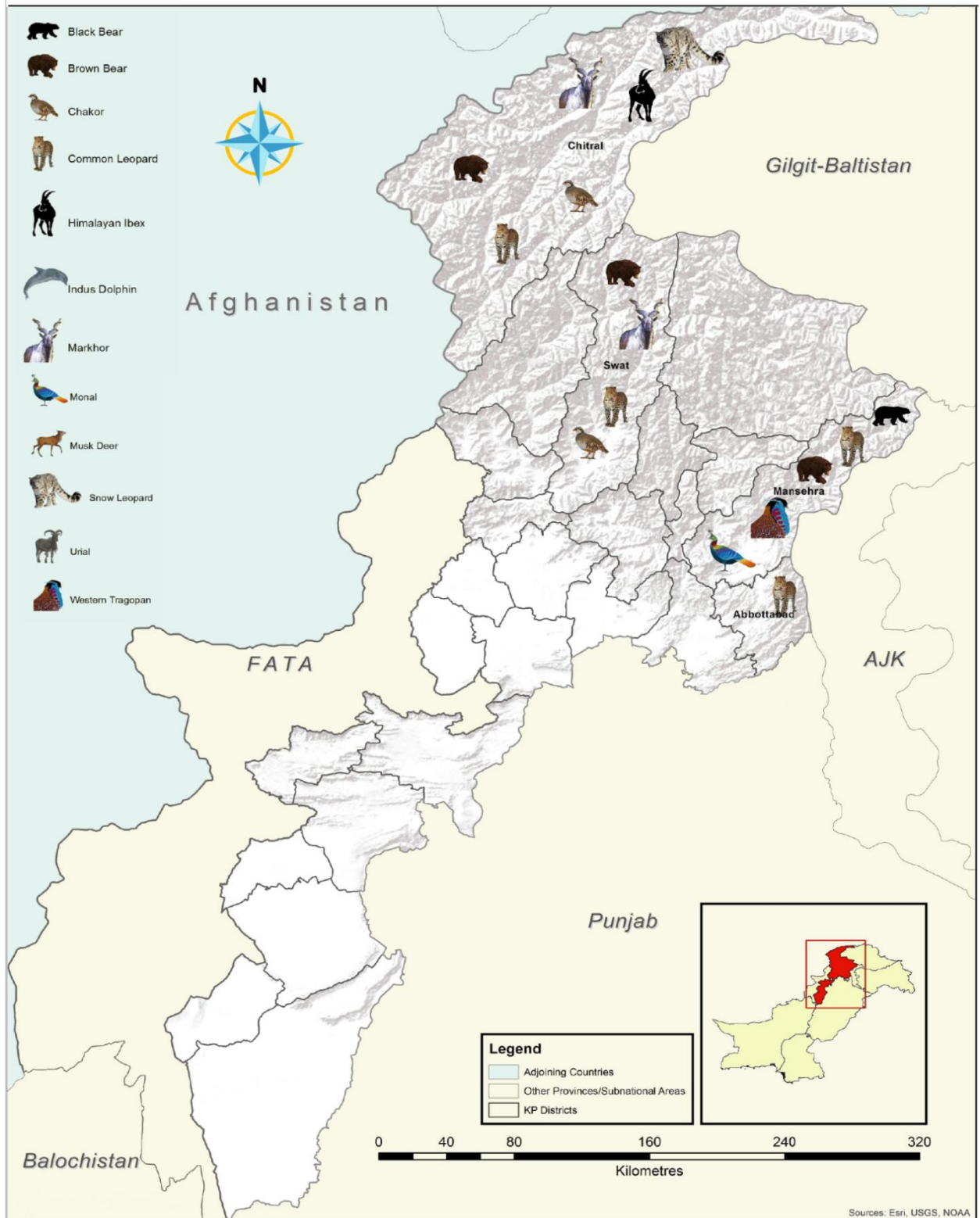


Figure 4-5: The Significant Wildlife Representation in Focused Districts of KP ¹⁵

¹⁵ Source: Dev~Consult GIS. Modified from KP Biodiversity Strategy and Action Plan 2016

4.2.3 Protected Area Network

KP has a significant proportion (14.23%) of its landmass under the protected areas regime, which includes 163 sites from all categories of protected areas. **Figure 4-6** summarizes the nature and extent of the protected areas system in KP. Only two (Ayubia and Chitral Gol) of the six national parks have their management plans, which are under implementation but require an update. Among other protected areas, only the community game reserves have their management plans (no matter how basic) developed and implemented. Rest of the protected areas, including wildlife sanctuaries, wildlife parks, wildlife refuges and private game reserves, do not have any management plans.

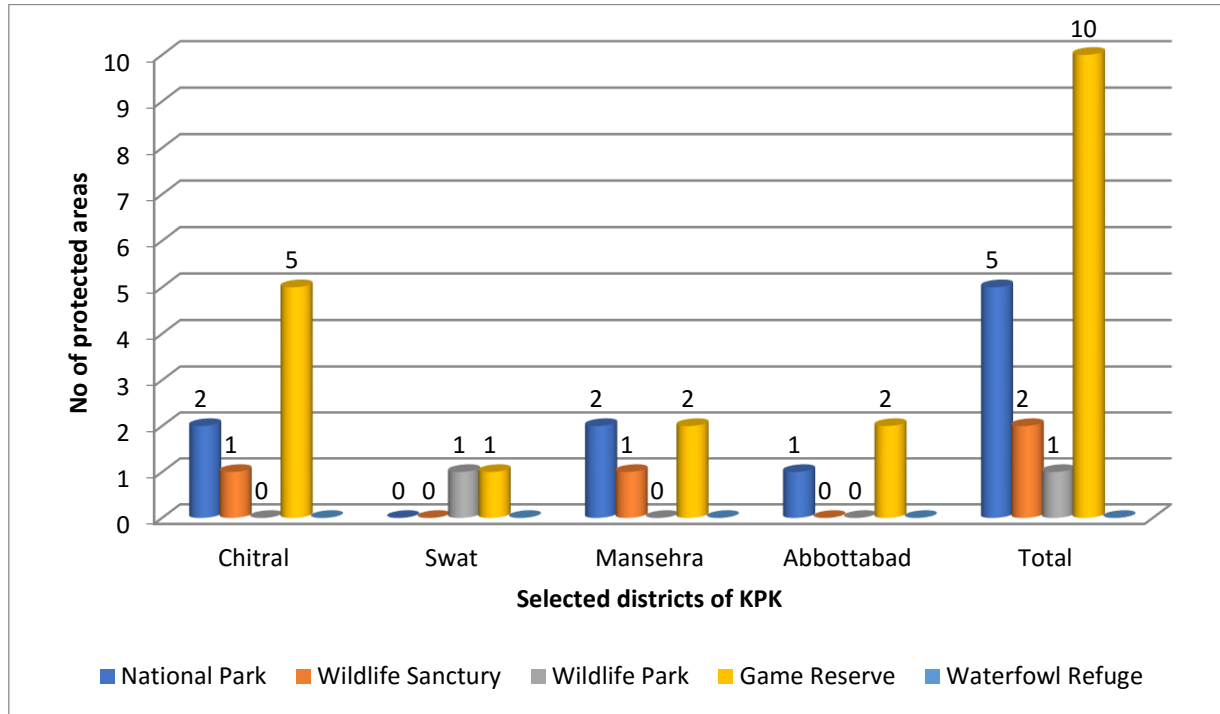


Figure 4-6: Distribution of Protected Areas in Focused Districts of KP¹⁶

i. Swat – National Parks

Kalam National Park

Kalam National Park is located in the North of District Swat at a distance of about 130km from Saidu Sharif. The average elevation of the area varies from 1,980 to 5,000 m from the mean sea level.

The area is confined with snow for more than five months and demarcate the tree line from 2500-3500 m. These are grazed by herds of sheep and goats in the summer months. Normally, agriculture is not a common practice in these areas and the products are usually the medicinal herbs growing here. *Betula utilis* and *Q. semecarpifolia* are the indicator tree species in the Park. Himalayan Monal (*Lophophorus impejanus*) and Koklass (*Pucrasia macrolopha*) are avian species that are connected to the forest ecosystem and considered important for conservation concerns.

¹⁶ Modified from KP Biodiversity Strategy and Action Plan 2016

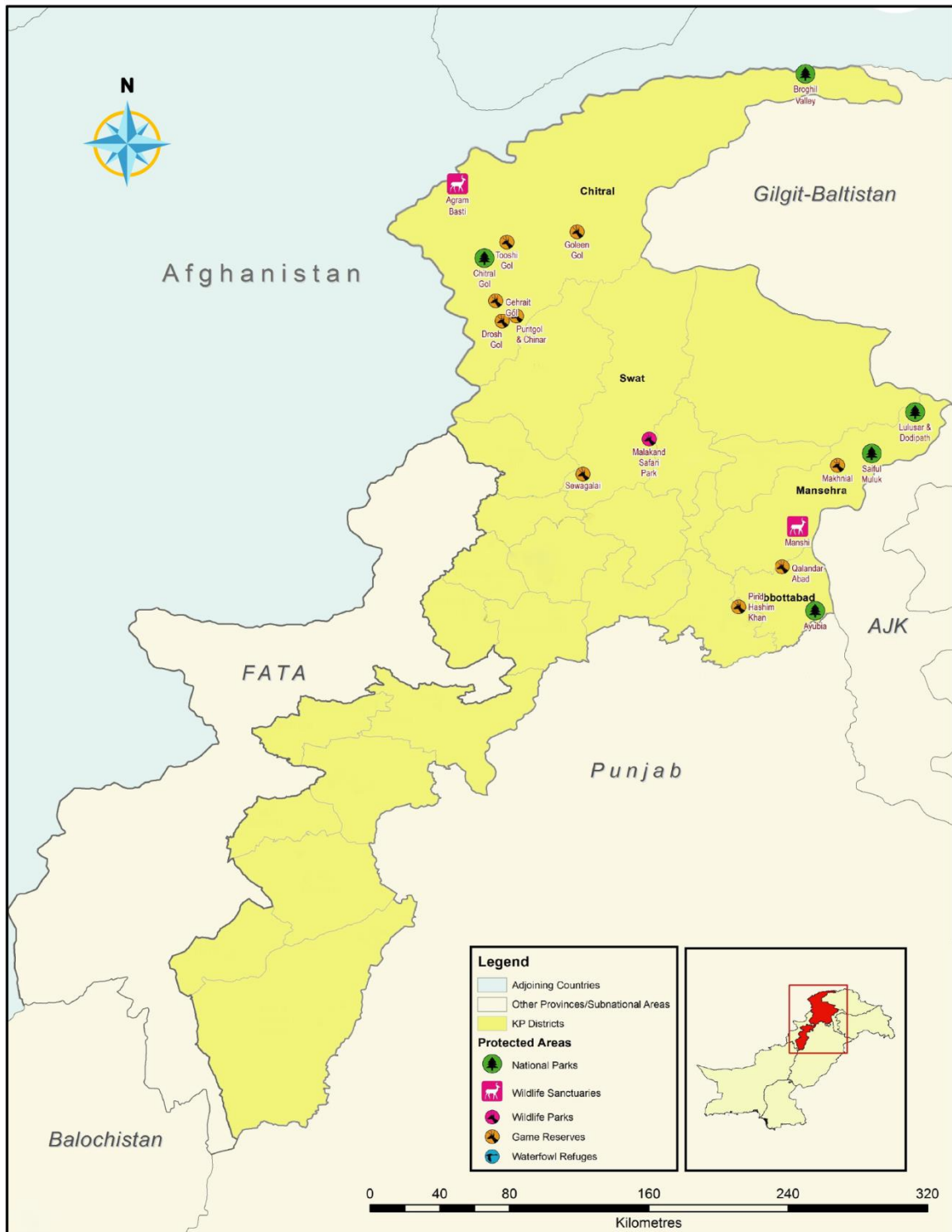


Figure 4-7: The Location Distribution of Protected Areas in Focused Districts of KP ¹⁷

¹⁷ Source: KP Wildlife Department, 2015. Modified from KP Biodiversity Strategy and Action Plan 2016

ii. Mansehra – National Parks

Lulusar National Park

This park is located in the Kaghan Valley in Mansehra District. The park was created in 2003. The scenic Dudipatsar Lake and Lulusar Lake and peaks are in the park.

The flora includes the trees, shrubs, perennials, and herbs of the Himalayan Western, Himalayan subalpine conifer forests and higher elevation Western Himalayan alpine shrub and meadows Eco-regions. Some of the park's fauna includes the snow leopard, black bear, marmot, weasel, lynx, leopard, Himalayan snowcock, and the snow partridge. The park's lakes and wetlands habitats are of significant ecological importance for resident fauna and migratory waterfowl.

Saiful Muluk National Park

Located in the Naran Valley in Mansehra District. The park was created in 2003 and is centered upon the alpine Saif ul Maluk Lake.

The flora includes the trees, shrubs, perennials, and herbs of the Himalayan Western Himalayan subalpine conifer forests and higher elevation Western Himalayan alpine shrub and meadows Eco-regions.

Some of the park's fauna includes the snow leopard, Asiatic black bear, marmot, weasel, Eurasian lynx, Indian leopard, Himalayan snowcock, and the snow partridge. The park's lakes and wetlands habitats are of significant ecological importance for resident fauna and migratory water fowl.

iii. Chitral – Parks and Protected Areas

Chitral Gol National Park

Chitral's protected areas consist of one national park and seven game reserves, covering 1,804 km². Of these, only the Chitral Gol National Park, spread over 77.5 km², is protected from consumptive use, including grazing, firewood collection and timber harvesting.

There is a good herd of about 400/500 Markhor's with snow leopard, wolf, marmot and weasel in it. The park is also rich in bird life such as Monal pheasant, Falcon, Hawk, Eagle, Lammergeyer, snow cock, chukar and many other species.

Wolves, foxes, jackals, hyenas and marmots are still common. A number of migratory birds, including the Black Throated Thrush, Golden Oriole, Oriental Turtle Dove Grey Heron, and different species of waterfowl pass through the valleys en route between Central Asia and India. The hunting of these birds, ducks in particular, is a major problem.

iv. Abbottabad – National Parks

Ayubia National Park is situated in the Galiyat Forest Division of Abbottabad District. It is one of the best moist temperate in Pakistan with a diversity of valuable plant species. The park is situated between 34°-1° to 34°-3.8° latitude and 73°-27.1° east longitude over an area of 1684 hectare.

The Ayubia National Park is entirely consisting of reserve forest, which spill out of the park area on West and South sides. The park is enriched with coniferous forest (*Abies pendrow*, *Cedrus deodara*,

Picea smithiana, Pinus wallichiana and Taxus baccata) mixed with broad leaf evergreen (*Quercus floribunda, Q-glauca, Q-incana*) and deciduous broad leaf trees (*Acer casium, Aesculus indica, Cornus macrophylla, Jaglans regia, Populus ciliata, Prunus cornuta, Salix tetrasperma*). 420 species of plants, 09 species of fungi, 05 species of lichens, 05 species of gymnosperms, 65 species of monocots belongings to 8 families while 309 species of dicots belonging to 71 species are present in the Ayubia National Park.

4.3 Social Environment

4.3.1 Population Census

According to the census conducted in 2017, the population and number of households of the districts of project area is given in **Table 4-12**:

Table 4-9: Population Census (2017)

District	Population	No. of households
Swat	2,309,570	274,620
Mansehra	1,556,460	239,275
Chitral	447,362	61,619
Abbottabad	1,332,912	216,534

Source: Pakistan Bureau of Statistics

4.3.2 Primary Level Education

District wise primary level education statistics for the year 2012-13 are summarized in **Table 4-13** below:

Table 4-10: Primary Level Education Statistics (2012-13)

District	Schools	Enrolment	Teaching Staff	Students Per School
Swat	1318	259023	4996	197
Mansehra	2059	16325	5071	79
Chitral	641	45090	1394	70
Abbottabad	1607	109188	4012	68

Source: Important District-Wise Socio-Economic Indicators of Khyber Pakhtunkhwa 2014

4.3.3 Literacy Rate

The district wise literacy rate for the year 2014-15 are summarized in **Table 4-14** below:

Table 4-11: Literacy Rate (2014-15)

District	Literacy Rate (%)		
	Urban	Rural	Total
Swat	67	44	48
Mansehra	76	63	64
Chitral	74	60	62
Abbottabad	83	66	69

Source: Development Indicators KP 2017

4.3.4 Health Institutions

The district wise health institutions up to the year 2016 are summarized in **Table 4-15** below:

Table 4-12: Health Institutions (2016)

	Abbottabad	Chitral	Mansehra	Swat
Hospitals	11	4	12	10
Dispensaries	44	29	59	18
RHS	2	6	9	3
TB Clinics	28	2	1	1
MCH Centers	2	2	3	3
Sub Health Units	1	0	0	0
BHUs	54	19	58	41
Leprosy Clinics	1	3	1	3
Population / bed	862	1713	2250	2763

Source: Development Indicators of Khyber Pakhtunkhwa 2017

4.3.5 Typical Sources of Livelihood

The typical sources of livelihood for men in the area are govt. employments, private employment, drivers, transporters, enterprise owners (hotels, restaurants, shops etc.), labors, farmers, security personnel (Army, Police, other forces), fishermen, shepherds, boaters etc. The typical sources of livelihood for women are cottage industries and agriculture.

Since the project is focused on economic revival of the tourist sites, therefore the enhanced tourism will lead to better economic conditions which in turn will lead to better educational and health facilities, improved lifestyles and will add to the sources of livelihood for jobless people.

4.4 Tourism Industry

4.4.1 Galiyat – Abbotabad¹⁸

Galiyat includes Nathiagali, Dongagali, Ayubia, Changlagali, Khairagali, Khanspur, Baragali, Barian, Kalabagh, Thandiani and Koozagali. The main attractions in Galiyat are mountain landscape, weather, trekking to Mukshpuri and Miranjani Top, Ayubia National Park and Ayubia Chair Lift.

There 98 Nos. hotels with 1,468 Nos. rooms, a total of 154 Nos. restaurants / entries, 81 transport-oriented enterprises and 399 Nos. shops and other businesses. Estimated annual tourist arrivals is up to 2.5 million.

The major issues are parking, public toilets for tourists, water supply, solid waste and sewerage, treatment and disposal, pressure on forests, unregulated growth, roads clearing during winter season and low-key role of GDA.

¹⁸ Launch of KP Tourism Sector Analysis, Way Forward for the Tourism Sector of Khyber Pakhtunkhwa, 2018

4.4.2 Kalam - Swat

The main attractions in Kalam are mountain landscape, Lake Mahodand, Ushu, Bayon, Utrot and Lakes in High Pastures. There 124 Nos. hotels with 2,537 Nos. rooms, a total of 87 Nos. restaurants / entries, 150 transport-oriented enterprises and 777 Nos. shops and other businesses. Estimated annual tourist arrivals is up to 0.4 million¹⁹.

The major issues in Kalam are accessibility (to Kalam & beyond), pressure on forest resources, landscape degradation due to mushroom development of hotels, water supply, solid waste & sewerage management, shortage of LPG supply during peak season, limited health services / emergency evacuation services, no banks / ATMs.

4.4.3 Naran - Mansehra²⁰

The main attractions in Naran are mountain landscape, Lake Saiful Muluk, Lalazar, Babusar Pass and Lulusar Lake. There 201 Nos. hotels with 2,915 Nos. rooms, a total of 75 Nos. restaurants / entries, 175 transport-oriented enterprises and 354 Nos. shops and other businesses. Estimated annual tourist arrivals is up to 1.5 million.

The key issues in Naran are electricity, solid waste management, public toilets, sewerage treatment & disposal, water supply, unregulated growth, pressure on forest resources, shortage of LPG supply during peak season, health services and role of KDA.

4.5 Communication & Road Network

Easy access to the tourist destinations is very important part of the tourism. The accessibility and road connectivity to the project areas is described below. **Figure 4.3** presents the accessibility map of the project destinations.

4.5.1 Swat - Kalam

Swat is accessible through 135 km long national highway (N-95). It starts from Chakdara in Lower Dir District to the town of Kalam in district of Swat via Mingora, Manglour, Khwazakhela, Madyan and Bahrain. The section from Bahrain to Kalam is in deplorable condition and is currently being constructed for the smooth flow of traffic. However, section up to Bahrain is in good condition.

4.5.2 Mansehra - Naran

Naran is accessible through main Naran – Kaghan road (N-15), which is a 240 km long national highway extending from Mansehra to Chilas. It is dangerous and curvy road prone to land sliding.

4.5.3 Chitral

Chitral is accessible through National Highway (N-45). It starts from Nowshera District to the town of Chitral via Dir. It is a two-lane road with total length of 309 km. Lowari tunnel is a 10.4 km vehicular tunnel under the Lowari Pass of the Hindu Kush mountains, between Dir and Chitral which has made

¹⁹ Launch of KP Tourism Sector Analysis, Way Forward for the Tourism Sector of Khyber Pakhtunkhwa, 2018

²⁰ Launch of KP Tourism Sector Analysis, Way Forward for the Tourism Sector of Khyber Pakhtunkhwa, 2018

the accessibility to Chitral very easy by not only reducing the travel time but also made it all weather road.

4.5.4 Abbotabad – Galiyat

Galiyat is accessible through main Murree – Abbotabad Road. It is a curvy and dangerous road often congested with the traffic. Law and Order Situation

The law and order situation in the project sites is much in control since the security forces have taken over the areas and executed combing operations to central the terrorists in various areas of KP. The most affected area was Swat, where the situation is in control now. Tourists and other people can now freely move there.

4.6 Land Use

The project sites are mountainous regions mostly covered by the forest areas. Small and scattered settlements are mostly present in these areas. GDA has planned six (06) Nos. new townships in Galiyat. While no such planning is available for rest of the project sites.

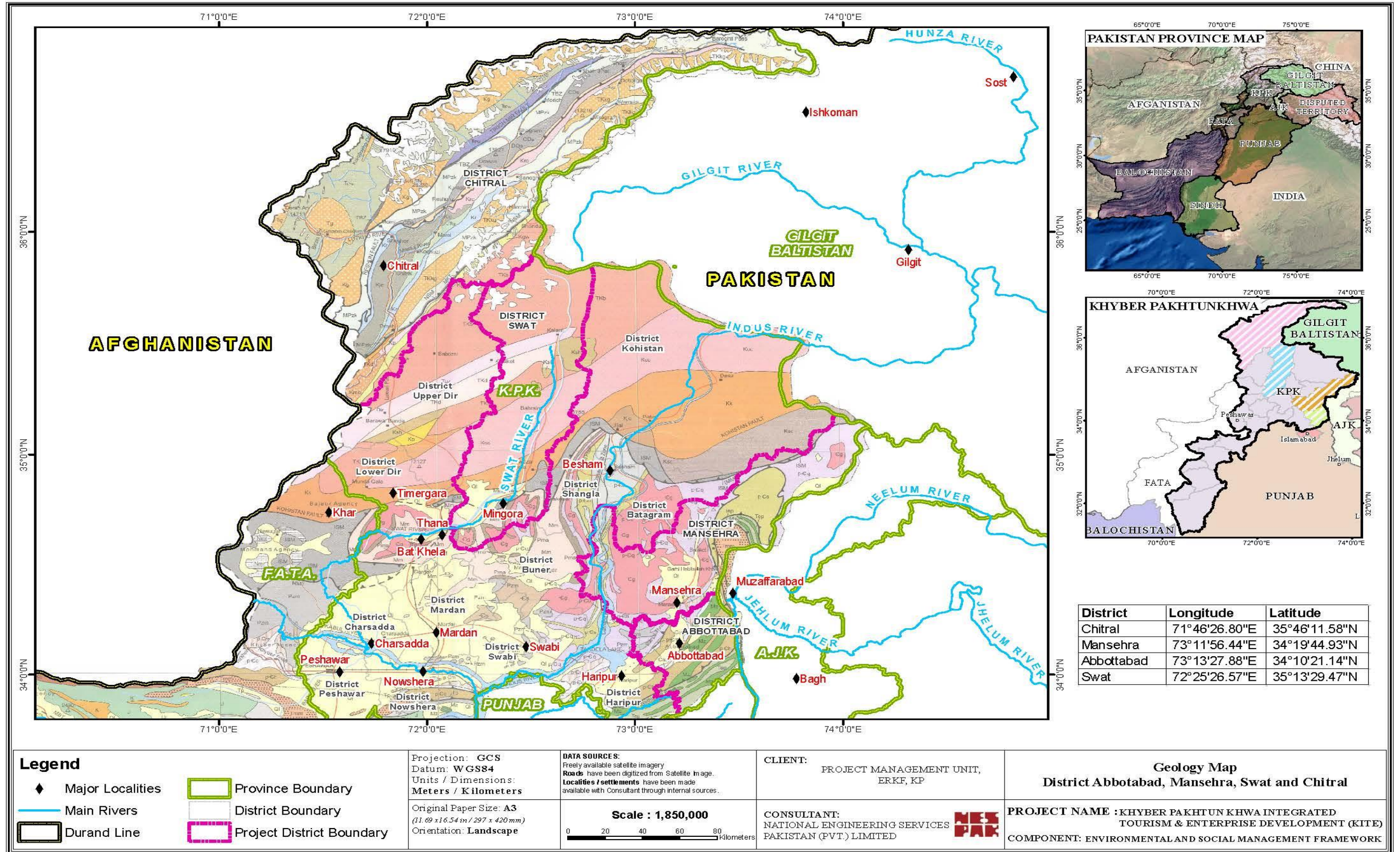


Figure 4-8: Geological Map of the Project Areas

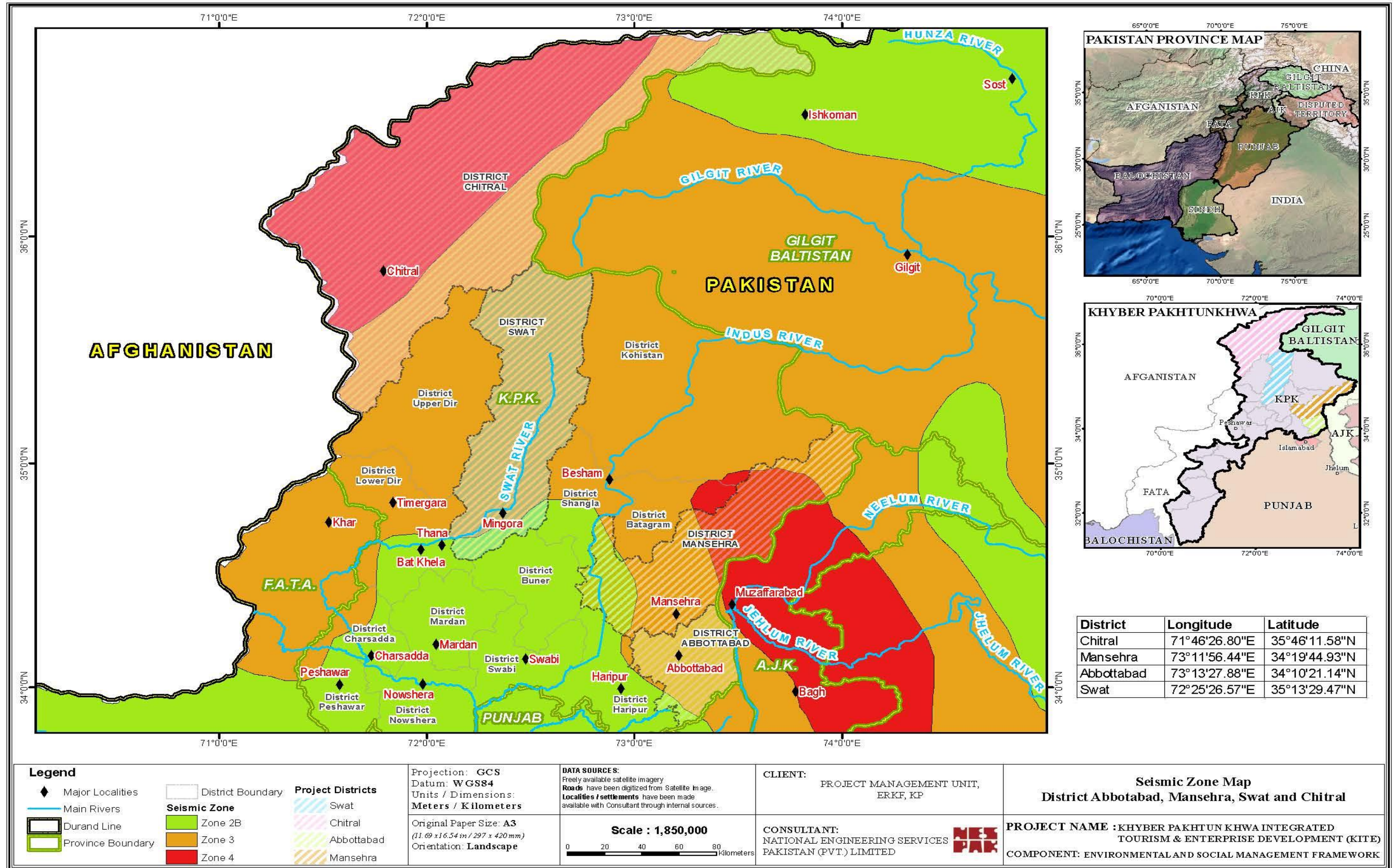


Figure 4-9: Seismic Zoning Map of the Project Areas

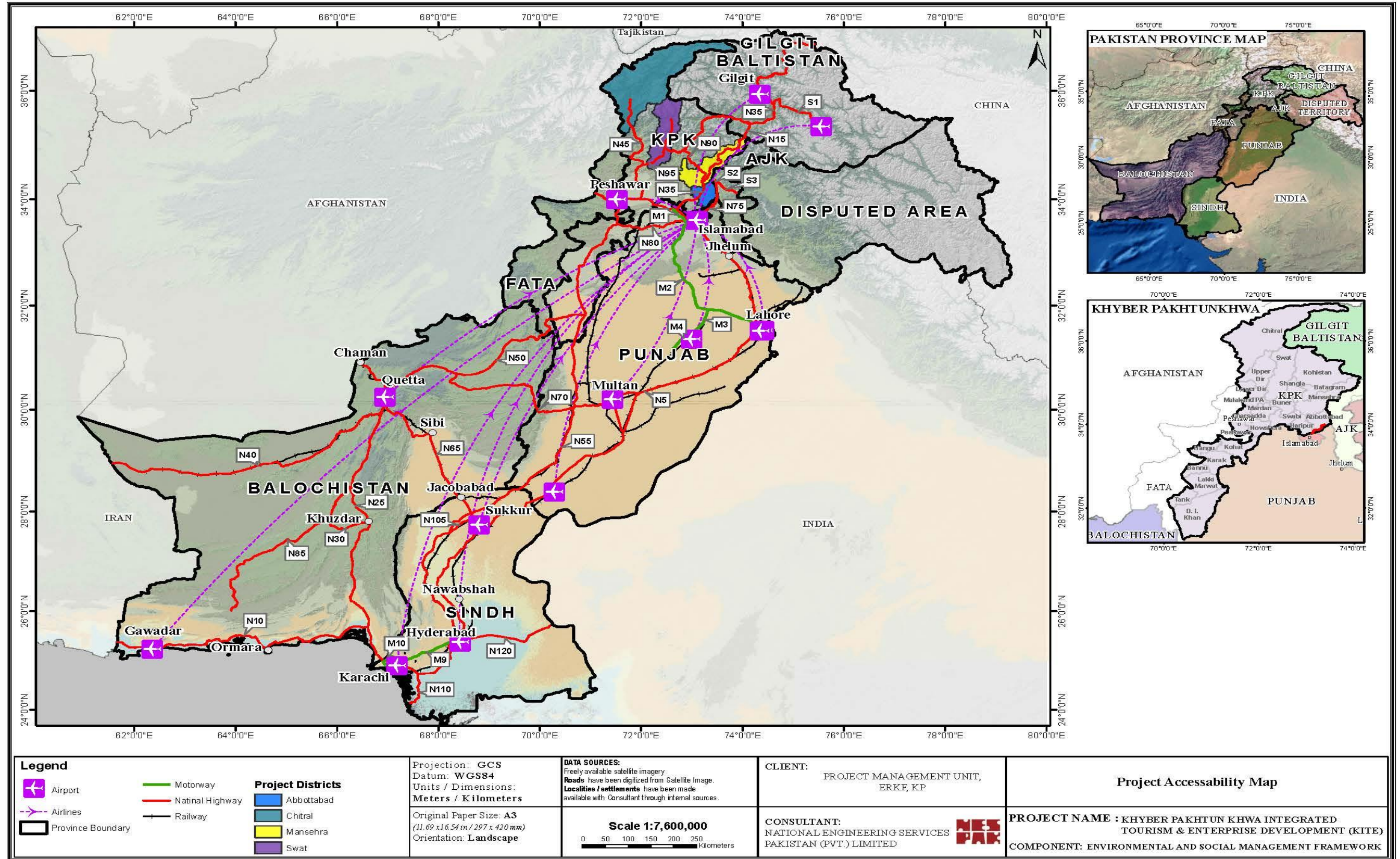


Figure 4-10: Accessibility Map of the Project Areas

5 STAKEHOLDER CONSULTATIONS

This section identifies the key stakeholders of the project and summarizes their stakes in the proposed project activities. A comprehensive stakeholder consultation/engagement process is also described hereunder.

5.1 Stakeholder Mapping

The stakeholder mapping process identifies the key stakeholders and assess their roles and responsibilities in the successful implementation of the project.

5.1.1 Identification

Following are the primary and secondary stakeholders of the project.

1. Primary stakeholders

- Department of Tourism (DoT)
- Tourists
- Local community
- Enterprise owners

2. Secondary stakeholders

- Tourism organizations
- Relevant government departments
- Industry
- Civil society organizations (NGOs)

5.1.2 Assessment of Role of Stakeholders

Different stakeholders may have different roles in the project's implementation. The role assessment of stakeholders is based on five (05) parameters i.e. their contribution in the project; legitimacy of involvement; willingness of stakeholders to get engaged; influence of stakeholders and their necessity of involvement. These parameters are rated as high, medium and low based on the category and type of stakeholders.

Table 5.1 indicates that the DoT/TCKP, tourists, local community, enterprise owners and government have the most significant roles in the successful implementation of the project. These stakeholders should be taken on board for making decisions related to the project and their consent and suggestions must be respected.

Table 5-1: Role Assessment of Stakeholders

Stakeholder	Contribution	Legitimacy	Willingness to Engage	Influence	Necessity of Involvement
DoT/TCKP	High: DoT is planning the project activities	High: Directly involved in project activities	High: DoT is proactive in implementation of the project	High: Well-known group	High: The project cannot be implemented without DoT
Tourists	High: The project is for the ease of tourists and success is based on tourists' influx	High: Direct beneficiary	Medium: Depends on the nature of tourists	Medium: Relatively unknown group	High: The project is focused to address tourists' concerns
Local Community	High: The project is focused to enhance livelihood and economy of the community.	High: Direct beneficiary	High: Local community is keen to get engaged in the project.	High: Controls the local business	High: The project will be a complete failure without involvement of local community.
Enterprise Owners	High: Base of the business and backbone of tourism.	High: Direct beneficiary	High: Eager to enhance the business.	High: Controls the major portion of economy.	High: Must be taken on board for better planning.
Other tourism organizations	Medium: Run adventure clubs.	Low: A separate business runner group.	Medium: Eager to enhance the business.	Low: Relatively unknown groups.	Medium: Controls a portion of tourism.
Government	High: Government finances the activities.	High: Unsustainable without government support.	High: Government wants to increase the GDP through tourism.	High: Government has the highest influence on the project.	High: Cannot proceed without government approvals.
Industry	Medium: Cottage industries make money in tourism.	Medium: Indirect beneficiary	Medium: Eager to enhance the business.	Low: Relatively unknown groups.	Medium: Controls a portion of tourism.
Civil Society Organizations	Medium: Work for development	Medium: Indirect beneficiary	Medium: Eager to enhance the business.	Low: Relatively unknown groups.	Medium: Controls a portion of tourism.

5.1.3 Stakeholders Mapping

The stakeholder mapping has been done based on their influence and willingness to get engaged in the project. **Figure 5-1** presents stakeholder mapping for the proposed project.

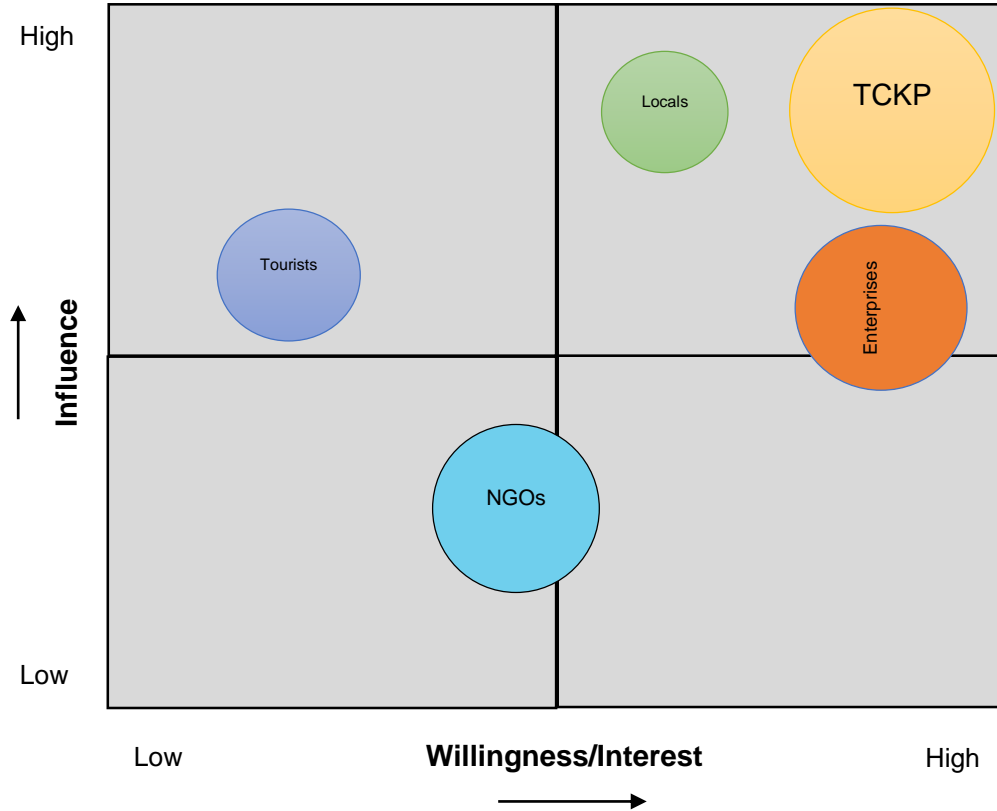


Figure 5-1: Stakeholder Mapping

5.1.4 Prioritization of Stakeholders

The prioritization of the stakeholders is based on the following criteria.

Communicate (High level)	Engage
Passive	Communicate (Low level)

As per the criteria, TCKP; Local community and the enterprises will be engaged directly since they are the direct beneficiaries and have highest influence. Tourists will be communicated at high level while NGOs will be communicated at low level.

5.2 Stakeholder Consultation

Presented below are the details of stakeholder consultation process held in order to obtain their views so that their concerns and recommendations can be taken into account regarding development of tourism related facilities in the project areas.

The stakeholders, who were invited to participate in the consultation process, included policy makers / Government departments and local people of the project area. The process undertaken is described in the following sub-sections:

5.2.1 Methods of Stakeholder Consultations

The methods used for the consultation with the stakeholders included:

- Scoping Sessions;
- Formal Meetings;
- Informal Meetings;
- Individual Interviews; and
- Focus Group Discussions (FGDs).

5.2.2 Purpose of Consultation

The consultation with stakeholders was conducted to:

- Inform and involve stakeholders;
- Collect and analyze data;
- Build trust to ensure sustained support for the project;
- Learn about public concerns that need to be addressed and taken into account in designing of the project concept and preparation mitigation measures and programs; and
- Learn about the strengths, skills and organizations that the stakeholders can bring to support project planning and implementation.

5.2.3 Consultations with Stakeholders

In compliance with the participation framework, consultations were made with the stakeholders and general public using a consultation proforma attached as **Annex – II**. Consultative meetings, scoping sessions and focus group discussions were held to learn about the views and concerns of the public on the proposed development works.

The guiding principle underlying consultations is that the social and environmental safeguards planning and implementation must follow a consultative and participatory process to ensure success of the project. This was further reinforced by the requirements of the World Bank OP 4.01, OP 4.12 and BP

17.50/ Public Disclosure of Information, which give high priority to public consultation and participation in designing and implementation of a socially and environmentally compliant project.

5.2.4 Summary of Consultation Meetings

Table 5-2 and Table 5-3 below presents the summary of meetings with primary and secondary stakeholders of the project.

Table 5-2 : Summary of Consultation Meeting with the Primary Stakeholders

Sr. No.	Location / District	Stakeholders Category	Venue	Date	No. of Participations
1	Kalam / Swat	Locals	Main Bazar	10-06-2018	08
2	Mahodand Lake / Kalam	Business owners	Lake	10-06-2018	11
3	Naran		Main Bazar	13-06-2018	9
4	Quza Gali – Galiyat / Abbotabad	Locals / enterprise owners	Rest Area	03-07-2018	15
5	Khanaspur – Galiyat / Abbotabad	Locals/ Enterprise owners	Main Bazar	03-07-2018	12
6	Kalam / Swat	Tourists/ enterprise owners	Main Bazar	09-07-2018	14
7	Chitral	Locals	Polo Ground	11-07-2018	06
8	Chitral	Locals/ Spectators	Polo Ground / Bazar	11-07-2018	06
9	Kalash / Chitral	Locals/ Enterprise owners	Krakal	13-07-2018	07
10	Kalash / Chitrals	Locals/ Enterprise owners	Balan Guru	14-07-2018	05
11	Naran / Mansehra	Tourists/ Enterprise owners	Main Bazar	20-07-2018	07

Table 5-3: Summary of Consultation Meeting with the Secondary Stakeholders

Sr. No.	City	Offices	Date
1	Peshawar	i. Director General, EPA	04-07-2018
		ii. Research Officer Peshawar Museum	04-07-2018
		iii. Tourist Information Centre, Peshawar	04-07-2018
		iv. Billion Tree Tsunami Office, Peshawar	05-07-2018
2	Mingora / Swat	i. SDO Forest, Mingora	06-07-2018
3	Kalam / Swat	i. Mataltan – Gorkin, HP Project	08-07-2018
		ii. Naib Tehsildar Office	09-07-2018
		iii. Civil Hospital Kalam	09-07-2018
4.	Chitral	i. Ad. Deputy Commissioner, Chitral	10-07-2018
		ii. Helping Hand, NGO	11-07-2018
		iii. Chitral NP Conservation Society	11-07-2018
		iv. Snow Leopard Foundation	11-07-2018
		v. C&W Department, Chitral	11-07-2018
		vi. Assistant Commissioner / Collector, Chitral	11-07-2018
		vii. Village Council, Kalash	13-07-2018
		viii. Museum Incharge, Kalash	14-07-2018
5	Naran	i. Hotel Union Naran	20-07-2018
		ii. Kaghan Development Authority	21-07-2018

5.2.5 Stakeholders Attitudes towards the Project

Stakeholders were enquired about the existing issues in relation to the tourism and were informed about the proposed project interventions. They were enquired about their concerns and interests in the project and about the protective actions to safeguard their interest.

Since the project is focused on economic development of the tourism sites, therefore, most of the stakeholders presented a positive attitude towards the project. Most of the stakeholders specially the

local business owners and enterprise owners were keen for the immediate implementation of the project.

The locals showed no concern over the increased tourists' influx, rather they were ready to welcome even more tourist every season. All the tourism related business operators were satisfied with the project implementation. The government agencies and relevant departments were ready to provide their services and support in overall projects' implementation.

Some of the stakeholders, especially the locals, demanded to safeguard their interests and to avoid any harm or damage to their properties and businesses while implementing the project.

5.2.6 Outcomes of Public Consultation

Following are the outcomes of public consultation process which summarizes the apprehensions, fears and concerns related to the project.

Table 5-4: Outcomes of Public Consultation

S #.	Location	Venue	Date	Participants	Category	Concerns/Suggestions	Response
1	Quza Gali – Galiyat / Abbotabad	Rest Area	03-07-2018	15	Locals and enterprise owners	Chairlifts should be installed Bagla area to Tara.	Concern noted for the feasibility stage.
						The beautiful destinations including Chump, Anderkot and Banta must be introduced for tourism.	Suggestion relates to DoT. Noted down.
						There is no community water supply scheme.	Noted for DIMP and GDA.
						There is no provision for sewerage collection in the area.	Noted for DIMP and GDA.
						There is no solid waste management system.	Noted for DIMP and GDA.
2	Khanaspur – Galiyat / Abbotabad	Main Bazar	03-07-2018	12	Locals and enterprise owners	Darwaza Wali road need to be constructed from Kooza Gali to Cham.	Points noted for DIMPs
						Khanspur - Ghora Gali road needs construction.	
						Darar to Khanaspur road needs construction.	
						There are no sanitation facilities.	Point noted for DIMPs
						Water supply pipelines are available but there is no water.	Noted for DIMPs
3	Kalam / Swat	Main Bazar	09-07-2018	14	Locals and enterprise owners	The access road to Kalam needs to be constructed at quick pace.	Noted
						Electricity is available but the voltage is low.	Noted.
						The forest is being damaged because trees are being cut to meet the fire demands.	Concern noted
						There are water supply issues.	Noted for DIMPs stage
4	Chitral	Polo Ground	11-07-2018	06	Locals and enterprise	No better hotels and transportation facilities for the tourists.	Noted to be conveyed to DoT.
						The famous polo ground in the town is not levelled.	Noted for DIMP.

S #.	Location	Venue	Date	Participants	Category	Concerns/Suggestions	Response
						There is no fencing and proper seating arrangements around the Polo ground.	Noted for DIMP.
						No street lights in the town.	Noted for DIMP
						There is no proper drainage system.	Noted for DIMP
5	Chitral	Polo Ground / Bazar	11-07-2018	06	Locals	The access roads are not in good condition.	PC-1 for internal roads of Chitral has been prepared under ADP 2017-18
						Free style unique polo of Chitral is not promoted.	Noted for DIMP
						Backwardness of Kalash community due to access issues.	Noted for DIMP
6	Kalash / Chitral	Krakal	13-07-2018	07	Locals	Kalash are left with less land and they have no place available for resettlement.	Government is taking measures to preserve Kalash land in assistance with donors and other NGOs.
						Lack of Kalash teachers in local schools.	Noted
						Kalash literature should be a part of curriculum.	Suggestion noted
						Conversion of Kalash to Muslim religion should be banned.	To be taken up by the relevant Government dept.
7	Kalash / Chitral	Balan Guru	14-07-2018	05	Locals	Disturbance to privacy of local women due to tourists.	Noted to be considered in management plans
						Traditional graveyard is being damaged.	Noted for site specific ESMP at appropriate stage
						Kalash culture and religion is transferred verbally and hence it is under threat.	Noted for DoT
8	Naran / Mansehra	Main Bazar	20-07-2018	07	Jeep Drivers	Road to Lake Saif ul Malook must not be constructed.	Noted for DIMP
						Jeep access to Dudipat and Ansu lake should be developed.	Noted for DIMP
						No specific point of jeep hiring.	Noted

5.2.7 Gender Consultations

Meetings/consultations were held with the women of project areas to understand their concerns, to identify their roles in the community and their attitudes towards the tourism. Women were enquired about safety and security issues, privacy issues due to tourists and their willingness in relation to influx of tourists.

Most of the local women reported that they have no security and safety issues at their places. However, in the peak seasons of tourism they have privacy issues. Privacy issues were mostly highlighted by Kalash women since the tourists enter their houses without permission and take photographs without their consent.

Overall, women were in favor of tourism and encouraged the idea of promoting tourism to enhance the economy.

6 ANTICIPATED ENVIRONMENTAL & SOCIAL IMPACTS & MITIGATION MEASURES

This section presents the anticipated environmental and social impacts of proposed project and also provides generic mitigation measures to minimize if not eliminate the potentially negative impacts, in order to ensure that the interventions under the proposed project do not cause environmental and/or social impacts beyond the acceptable level.

6.1 Impact Identification and Characterization

The identification of impacts is done on the basis of literature review, site surveys and expert opinion on prevailing site conditions and sensitive receptors. Characterization is done on the basis of significance, probability and prevalence of the potential impacts in the surrounding environment. To evaluate the impacts, *Impact Characterization Matrix* is prepared and given in **Tables 6-1**.

6.1.1 Significance Rating

The overall significance of the impacts is defined based on the result of a combination of the consequence rating and the probability rating. Each identified impact is analyzed in terms of magnitude, extent, duration, and probability of occurrence, the value of the affected environment and likely degree of recovery of the affected area. The results of the assessment of the significance of the residual impacts are linked to decision making in the following manner.

Significance Rating	Implication
Low	Should not have an influence on the decision to proceed with the proposed project, provided that recommended mitigation measures to mitigate impacts are implemented.
Medium	Should influence the decision to proceed with the proposed project, provided that recommended measures to mitigate impacts are implemented.
High	Should strongly influence the decision to proceed with the proposed project regardless of mitigation measures.

Table 6-1: Characterization Matrix

Environmental and Social Parameters	Impact Characterization							
	Nature	Duration	Type	Frequency	Extent	Probability	Reversibility	Significance
Topography & Landscape Changes	Negative	Permanent	Direct	Once	Local	Probable	Irreversible	Low Adverse
Cutting of Hill Slopes & Land Sliding	Negative	Permanent	Direct	Once	Local	Probable	Irreversible	Medium Adverse
Soil Quality/Erosion	Negative	Permanent	Direct	Intermittent	Local	Probable	Irreversible	Low Adverse
Land Acquisition & Resettlement	Negative	Permanent	Direct	Once	Local	Probable	Irreversible	Low Adverse
Air Pollution	Negative	Temporary	Direct	Continuous	Wide	Probable	Reversible	Low Adverse
Noise	Negative	Temporary	Direct	Continuous	Local	Probable	Reversible	Low Adverse
Contamination of Surface Water Resources	Negative	Temporary	Direct	Intermittent	Wide	Probable	Reversible	Medium Adverse
Municipal & Construction Waste	Negative	Temporary	Direct	Continuous	Local	Definite	Reversible	Medium Adverse
Health and Safety Issues	Negative	Temporary	Direct	Intermittent	Local	Probable	Irreversible	Medium Adverse
Removal of Vegetation & Tree Cutting	Negative	Permanent	Direct	Once	Local	Probable	Irreversible	Medium Adverse
Disturbance to Wildlife	Negative	Permanent	Direct	Continuous	Local	Probable	Irreversible	Medium Adverse
Security Issues	Negative	Permanent	Direct	Intermittent	Local	Probable	Reversible	Medium Adverse
Fire Hazards	Negative	Temporary	Direct	Intermittent	Local	Probable	Irreversible	Medium Adverse

Environmental and Social Parameters	Impact Characterization							
	Nature	Duration	Type	Frequency	Extent	Probability	Reversibility	Significance
Natural Hazards	Negative	Permanent	Direct	Intermittent	Local	Probable	Irreversible	Medium Adverse
Impacts on Physical / Cultural Resources	Negative	Temporary	Direct	Once	Local	Probable	Irreversible	Medium Adverse
Social Conflicts Due to Limited Absorptive Capacity of Tourism Sites	Negative	Permanent	Direct	Intermittent	Local	Probable	Irreversible	High Adverse
Resource Conservation	Negative	Permanent	Direct	Continuous	Local	Probable	Irreversible	Medium Adverse
Biodiversity Conservation	Negative	Permanent	Direct	Intermittent	Local	Probable	Irreversible	Medium Adverse
Traffic Management	Negative	Temporary	Direct	Continuous	Local	Definite	Reversible	Medium Adverse
Disturbance to Social Sensitive Areas	Negative	Temporary	Direct	Continuous	Local	Probable	Reversible	Medium Adverse
Accessibility	Negative	Temporary	Direct	Continuous	Local	Definite	Reversible	Medium Adverse

6.2 Positive Impacts of the Project

The proposed project is envisaged to have positive impacts on economy and social fabric of the project areas. Following are some of the positive impacts of the project:

- Easier access to tourist destinations;
- Increased tourists' influx;
- Enhanced tourist facilities;
- Empowerment of tourism sector;
- Revival of economy/Economic growth;
- Employment/Business opportunities;
- Improvement in lifestyles of local community;
- Platform for entrepreneurships;
- Development of business hub for investors;
- Environmental protection of tourist/ heritage sites;
- Institutional control over tourism related activities;
- Attraction for foreign tourists and investors; and
- Participation of women in tourism industry can lead to more opportunities for female tourists.

6.3 Anticipated Impacts of the Project

This ESMF has been prepared to frame the guidelines for implementing agency to further prepare EMPs/RAP to mitigate potential environmental and social impacts due to sub-projects, during execution stage. Following are the possible environmental and social impacts of proposed project activities:

6.3.1 Changes in Topography

The proposed project interventions may cause changes in the topography in and around the project areas due to possible cutting of rocks, cutting of hill slopes, land clearing and levelling. The changes may be minor, moderate or significant depending upon the sub-project category.

The changes in topography will be significant in development of new routes, since land may need to be acquired and hill slopes may need to be cut for establishing the corridor for smooth traffic flows. However, rehabilitation of existing routes may have minor impact on topography. The construction of rest areas, camping paradise and platforms for chairlifts may also change the baseline topography of project sites. The overall impact on the topography will be minor and localized.

Mitigations:

- The project design should avoid excessive cutting of rocks/hill slopes where cutting is unavoidable make maximum efforts to ensure minimum changes in the topography;
- Ground disturbances should be limited to only the areas necessary for project related construction activities; and
- Disturbed areas shall be restored after the completion of construction works.

6.3.2 Cutting of Hill Slopes and Land Sliding

The project area is a hilly terrain and highly prone to land sliding. The cutting of hill slopes and ground activities may further increase the risk of land sliding. Land sliding may cause blockage of roads and

serious accidents and can affect the nearby structures. The damages may vary from loss of life to injuries, loss of property to loss of business and economic damages. The impact will be in the range of minor to moderate for rehabilitation of existing routes or development of rest areas.

Mitigations:

- A retaining or protection wall should be constructed to stabilize the hill slopes in sensitive areas;
- Bioengineering principles should be used to stabilize the slopes; and
- Ensure minimum cutting of hill slopes and look for the alternatives.

6.3.3 Soil Erosion and Contamination

Following impacts on soil quality are envisaged due to proposed project interventions:

- Excavation of earth/cutting operations, clearing of vegetation and land levelling activities can destabilize the surrounding land surface;
- The unspent materials and debris produced from consumed up materials, if left as such and allowed to mix with soil underneath, can degrade the quality of receiving soils;
- Leakages of oils, lubricants, chemicals, and other similar substances from their storage sites and from engines of the generators, machines, equipment and vehicles can spoil the receiving soils and may undermine ability of the spoiled soils to support growth of vegetation and plants.

However, it is envisaged that due to sub-project activities, the impacts will be minor and limited to project area only.

Mitigations:

- The excavations should be kept limited as per approved engineering drawings and the top fertile layer of soil should be separated and reploughed after the completion of tasks;
- All spoils will be disposed of at designated site and the site will be restored back to its original conditions;
- Avoid use of heavy machinery on wet soil to prevent damage to soil structure;
- Oils, lubricants, chemicals, and other listed hazardous materials should be stored safely at their designated spots, enclosures or store rooms, which should be safe from rainfall and away from any potential source of fire and Hazardous Substance Rule 2003 should be followed;
- All the unspent and left-over materials be completely removed offsite upon completion of construction and the site be restored to original or near to original condition.

6.3.4 Land Acquisition and Resettlement

The project interventions may require land which can result in social disturbances, loss of livelihoods and may exaggerate the social and cultural conflicts among the people. However, development of routes mostly includes rehabilitation of existing routes. Therefore, land acquisition may not be involved. There could be minor land acquisition for establishment of rest areas. Therefore, the impact of land acquisition will be minor to moderate and localized.

Mitigations:

- Land Acquisition and Resettlement issues will be dealt with in accordance to the Land Acquisition Act, 1894, and WB policy on Involuntary Resettlement (OP/BP 4.12)
- Careful alignment and site selection by the designer to minimize the land acquisition;
- State land should be acquired for establishment of rest areas and other projects; and

- Prepare full RAP if there are more than 200 Affected Persons and an abbreviated RAP if the Affected Persons are less than 200.

6.3.5 Air Pollution

Air quality will be affected by fugitive emissions from construction site through machinery, asphalt plants, rough tracks, quarry areas and vehicular traffic etc. Emissions may be carried over longer distances depending upon the wind speed, direction, temperature of surrounding air and atmospheric stability.

Air pollution can cause breathing diseases. The overall impact on the quality of air during the construction phase will, however, be minor and limited to the project's implementation phase only.

Mitigations:

- Emissions and ambient air quality will be managed as NEQS standards for air.
- Dust suppression techniques i.e. regular water sprinkling should be carried out to suppress excessive dust emissions;
- Vehicles used for construction should be tuned properly and regularly to control emission of exhaust gases;
- Construction workers should be provided with masks for protection against the inhalation of dust, and
- Vehicle speed in the project area should be prescribed not more than 20 km/ hr and controlled accordingly.

6.3.6 Noise Pollution

Noise is envisaged to be generated from construction camps, heavy machinery such as bulldozers, excavators, stabilizers, concrete mixing plant, pneumatic drills and other equipment. Noise generated by construction machinery is likely to affect sensitive receptors located within 500 meters of the project area.

Health risks associated with exposure to continuous noise levels includes increase in blood pressure, hypertension, annoyance and sleep disturbances etc. Due to sub-project construction activities, the impacts of noise would be temporary and minor in nature.

Mitigations:

- Provide construction workers with suitable hearing protection like ear cap, or earmuffs and training them in their use;
- Preferably, restrict construction vehicles movement during night time near the residential areas and camp sites;
- Locate the concrete mixing, and materials shipment yards at least 2 km from residential areas, particularly schools and health centers;
- Selection of up-to-date and well-maintained plant or equipment with reduced noise levels ensured by suitable in-built damping techniques or appropriate muffling devices;
- Heavy machinery like percussion hammers and pneumatic drills should not be used during the night; and
- Noise management plan attached as **Annex – III** must be followed.
- NEQS standards for noise will be followed for compliance.

6.3.7 Contamination of Surface Water Resources

The activities involved in this project may damage and contaminate important water resources in the project areas specially Lake Saiful Malook and Lulusar Lake in Naran, Mahodand and Kandol Lake in Kalam, River Swat, River Chitral, River Kunhar and River Haro etc.

The sources of surface water pollution include run-off from construction sites with heavy sediments loads, spillage of fuels, chemicals & lubricants and construction wastewater. However, the impact will be moderate in nature.

Mitigations:

- Wastewater from construction sites should not be disposed into the water bodies;
- Soil erosion should be avoided in watershed areas to protect water resources;
- Water required for construction may be obtained in a sustainable way from alternate water sources;
- Surface run off from construction site should be avoided to reach water bodies by diverting or by restricting sediments through hessian/jute cloth etc.;
- Provision of septic tanks must be ensured to treat the construction waste and wastewater from campsites.
- Prevent dumping of hazardous materials especially near Rivers and seasonal nullahs;
- Emergency Response plan is prepared to address the accidental spillage of fuels and hazardous goods;
- Septic tanks and sumps will be built at a safe distance from any water hole, stream or dry streambed, to prevent entry of surface water, and the bottom of the sump will be kept above groundwater level.
- NEQS and WHO guidelines will be used for any effluent generated from the project related activities, before its discharge into any surface water resources.

6.3.8 Solid/Construction Waste Generation

Large quantities of waste will be produced at the different stages of the project. Without a proper solid waste management system and engineered land filling practices, solid waste may result in odor, breeding ground for disease vector, and aesthetic concerns. Solid waste may result in leachate production and percolation in groundwater. The impact of solid waste will be moderate in nature.

Mitigations:

- A comprehensive solid waste management plan should be devised and implemented as per the guidance document attached as **Annex - IV**;
- Three Rs: "Reduce, Reuse, Recycle" waste management hierarchy will be adopted.
- Recording system for the amount of waste generated, recycled and disposed;
- Explore the option of bio-gas generation of composting after collecting food & vegetables waste from rest points, hotels and shops at one place;
- Planning for disposal sites with reasonable distance from the human settlements following the siting criteria for landfill site;
- Disallow siting for work camps, including waste dump sites, in a distance closer than one km to any inhabited areas;
- Incorporate technical design features for refuse collection containers at sites that would minimize burning impacts;
- Devise plan(s) for safe handling, storage and disposal of harmful materials;
- Burning of waste shall not be allowed in any case; and

- Follow the hazardous waste management plan attached as **Annex - V**, for the management of hazardous waste.
- Hazardous substance rules 2000 will be followed for managing and handling any hazardous waste.

6.3.9 Accessibility Issue

The activities involved in the project may result in temporary closure of existing routes/ pathways during the execution stage of sub-projects and cause inconvenience to the nearby residents and affecting their daily life activities.

Mitigations:

- Public awareness/ notification about the timing of closure of route/ pathways during execution of sub-projects through local available sources (like local FM radio station).
- Placement of appropriate sign boards; and
- Timely completion of the sub-projects.

6.3.10 Stress on Groundwater Resources

In the project areas, ground water is mostly used for domestic purposes while in Swat 23% irrigation is also carried with groundwater. Sub-projects activities can put stress on groundwater availability if not properly managed.

Mitigations:

- Water required for sub-projects construction may be obtained in a sustainable way from alternate water sources;
- Best practices for construction will be used to ensure minimum use of resources.

6.3.11 HSE Issues

Worksite related accidents can result in injuries and casualties. Workers may be exposed to unsafe and/or unfavorable working environment due to storage, handling and transport of hazardous construction material. The construction activities and vehicular movement at construction sites and access service roads may also result in roadside accidents particularly inflicting local communities who are not familiar with presence of heavy equipment and machinery. The impact is medium adverse in nature.

Mitigations:

- The contractor will be required to strictly follow WB EHS Guidelines.
- Providing basic medical training to specified work staff and basic medical service and supplies to workers;
- Work safety measures and good workmanship practices should be followed by the contractor to ensure no health risks for laborers;
- Use of PPEs by workers must be ensured by the contractors; and
- Timely public notification on planned construction works.

6.3.12 Disturbance to Natural Habitat

The project interventions will be undertaken in areas with presence of biodiversity and natural habitats. As mentioned in the section on baseline, a number of protected areas lie close to the anticipated project areas. Two of the national parks (Ayubia and Chitral Gol) have their own management plans. Project activities might create disturbance to these natural habitats during construction and operations. Care must be taken to protect the key natural features including trees and plants. However, the extent of project activities is low in terms of physical intervention, therefore, this is a moderate negative impact of the project.

Mitigations:

- While working in or close to the National Parks and other protected areas, their management plans will be strictly followed.
- In case a management plan of any protected area does not exist, the project will develop a site specific plan for natural habitat conservation in consultation with the forest and wildlife department.
- Site specific plans for wetland management will be developed and implemented if any activities are designed near and at the buffer areas of the wetlands like lakes (Saiful Muluk, Mahodhand etc).
- KP Forest Ordinance 2002, Protection of Trees and Brushwood Act, 1949, WB OP on Natural Habitats (OP/BP 4.04) and Forests (OP/BP 4.36) will be strictly followed.

6.3.13 Removal of Vegetation/Tree Cutting

Since the project interventions will be undertaken in the environmentally rich areas of KP, therefore, care must be taken to protect the key natural features including trees and plants. Some of the sub-projects may require trees to be cut, affecting the aesthetics of the areas and reducing the carbon sinks. Cutting of trees may lead to loss of habitats for some of the wildlife species. Some of the trees in the area are of ecological importance and the identification of that particular ecosystem. Therefore, tree cutting is the moderate negative impact of the project. At sub project level the screening will estimate the exact number of trees to be cut.

Mitigations:

- Alignments and sites should be properly selected to minimize the cutting of trees;
- The critical areas of animal breeding should be avoided;
- Compensatory 10 nos. trees should be planted of same species, in lieu of 1 affected tree.
- A tree plantation plan will be developed at sub project level if trees are require to be cut.
- Prior formal approval from the Forest department will be obtained if removal of vegetation/ tree cutting is required.
- KP Forest Ordinance 2002, Protection of Trees and Brushwood Act, 1949, WB OP on Natural Habitats (OP/BP 4.04) and Forests (OP/BP 4.36) will be strictly followed for compliance.

6.3.14 Disturbance to Wildlife

The project area is rich in wildlife. The proposed interventions related to the project, and the resultant increased number of tourist activity, can impact animal movements by direct mortality or avoidance behavior. Enhanced tourist mobility will increase the traffic load that may consequently increase the

mortality of wild animals. However, the impact is likely to be mitigated through design measures and wildlife will be able to adjust its niche using its intrinsic phenotypic plasticity.

Mitigations:

- After consultation with the Wildlife Department, site specific Wildlife Safety Plans will be developed. These plans will include the following aspects, as appropriate:
 - Safety fencing and signage will be provided at wildlife hotspots.
 - Safe speed limit will be strictly implemented, to ensure fatal accidents involving wildlife or humans could be avoided.
 - In case of access road, structure for wildlife movement (underpasses, culverts) will be provided.
 - Caution boards would be erected at crossing areas of wild animals. The exact location for boards would be determined through a survey of crossing animals.
 - Awareness material regarding wildlife will be developed and displayed prominently at the sites frequented by tourists.
 - Roadside reflectors may be used to scare animals away from the road when vehicles approach at night.
 - Pedestrian Overhead bridges should be constructed near the populated areas for pedestrians and livestock crossings.
 - Fencing or plant barriers can reduce the risk of collisions between animals and vehicles.
 - The engineering design to integrate the principles of green infrastructure including habitat conservation, animal trespasses etc.
- KP Wildlife & Biodiversity Act 2015, WB OP 4.04 Natural Habitats will be followed for compliance.

6.3.15 Security Issues

The project interventions also include construction of a camping paradise. Camps are mostly prone to security issues. Any act of vandalism, violence, kidnapping or terrorism can cause problems to the visitors. The attack of wild animals can never be neglected. Further the social conflicts with the local community may also become a major concern in construction of camping site. The security issues are linked to almost all the sub-projects. Due to pertaining law and order situation in the country this would have moderate negative impact.

Mitigations:

- The campsites should be properly fenced and adequate security arrangement must be made;
- Deployment of forest guards for security; and
- A security plan must be prepared for overall project activities.

6.3.16 Fire Hazards

Fires may be resulted from bonfires and other such activities that can lead to serious health and safety hazards. The initiation of fire can cause a major damage to the reserved forests in the project areas. However, the sub-project activities are not within the reserved forests but trees are everywhere in the area. Therefore, the impact may be moderate adverse in nature.

Mitigations:

- A proper place must be allocated in camping paradise for bonfires;
- In autumn/ dry season campfires and bonfires should be restricted to avoid forest fire hazard;
- No one is allowed to set a bonfire or campfire at dense forest areas; and
- Prepare and implement an emergency response plan (see **Annex - VI**).

6.3.17 Natural Hazards

Natural hazards such as floods, forest fires or earthquakes may prove to be fatal and can cause serious injuries to the workforce or the tourists. The impact may be minor to moderate in nature.

Mitigations:

- Fire extinguishers should be installed at different locations;
- Flood protection arrangements must be made in flood prone areas;
- An Emergency Response Plan should be planned and implemented.

6.3.18 Impacts on Physical/Cultural Resources

The sub-projects under the project also involve provision of basic tourist facilities around famous Buddhist sites of Swat. The project activities may cause accidental structural damage to these physical and cultural resources. The impacts could be moderate in nature.

Mitigations:

- The heritage sites must be properly cordoned off before initiating the project activities;
- No construction activity should be undertaken within 200 feet of heritage sites;
- Physical and cultural resource management plans should be prepared for the heritage sites; and
- Chance Find Procedures must be followed in case of finding of artifacts.
- The PCR framework has been developed under this study and it outlines the roadmap of PCR plan if any cultural and heritage sites are under adverse impact by the project interventions. The screening and chance find mechanism is also described in the PCHRF.
- WB policy on Physical Cultural Resources (OP/BP 4.11) will be followed for compliance.

6.3.19 Social Conflicts Due to Limited Absorptive Capacity of Tourism Sites

The project sites are tourism hub of the country and do not have much absorptive capacity to adjust and facilitate all the tourists during peak season. The sub-projects are envisaged to increase the tourists' influx. Greater the number of tourists, more resources will be required to facilitate them. This may create serious issues in summer seasons when the tourism is at its peak. It may cause social conflicts and grievances among the people. These impacts could be low to moderate in nature if not properly managed.

Mitigations:

- Ensure route clearance in winters, which will attract the tourists in winter as well, and the number of tourists will be divided for winters and summers, thus reducing tourists' load in summers; and
- Ensure provision of basic accommodation facilities under the sub-projects, to facilitate the tourists.

6.3.20 Traffic Issues during Peak Seasons

At present, parking is the major issue and point of conflict in the project areas. During the peak seasons, people do not find adequate parking spaces and they either end up parking at the main roads blocking the traffic. Since the project is envisaged to increase the tourist influx, therefore, the parking issues shall be aggravated after the implementation of the project. This impact is medium adverse in nature.

Mitigations:

- Ensure provision of adequate parking facilities at cheap rates; and
- Indulge traffic police in traffic management plan and allocation of parking facilities.

6.3.21 Gender Related Issues

The local and tourist women may feel uncomfortable with the increased tourist influx and they may have privacy issues. On the other hand, women may find job opportunities and they may get the chances to work as entrepreneurs.

Mitigations:

- Reserve quota for women in jobs related to the project; and
- Avoid project activities near residential and private lands.

6.3.22 Spread of Diseases

Different diseases may spread due to increased influx of tourists in the project destinations. Different viruses may break out and locals as well as the tourists.

Mitigations:

- Adopt good hygienic practices in food courts and restaurants; and
- Vaccination of locals against transmittable diseases.

6.4 Generic Mitigation Measures for Project Activities

Presented below is the list of generic mitigation measures to contain the possible adverse environmental and social impacts of the project:

- All proposed activities will be screened to ensure that the environmental, cultural heritage and social risks can be identified and adequately addressed through the application of WB policies & EPA guidelines.
- Based on environmental screening, each subproject will have its site-specific ESMP for the construction package prepared during the detail engineering design stage.
- A Resettlement Action Plan (RAP) will also be prepared, if any of the sub-project require land acquisition affecting more than 200 PAPs. Resettlement Policy Framework (RPF) is also developed which comprises guidelines for land and asset acquisition, compensation and documentation. The indicative TORs for preparation of RAP are attached as **Annex - VII**.
- An EIA will be prepared for the sub-projects that may cause adverse damage to the environment. The indicative TORs for EIA are attached as **Annex - VIII**.

6.5 Induced/Indirect Impacts

The project may have some indirect impacts on the sensitive environmental and social features of the project areas. Following are some of the anticipated induced impacts of the project:

- Although no sub-projects are proposed specifically for Lake Saif ul Malook in Naran, but the road development up to the lake is envisaged to affect the lake indirectly in terms of pollution and resource management;
- The lakes in Kalam including Mahodand lake and Kandol lake may also get affected indirectly due to project activities;
- The project activities may have indirect impacts on reserved forests and national parks in the project areas and can damage the resources of ecological importance;

Mitigations:

- If any project activity is located close to any waterbody, especially lake, a management plan should be developed to protect lakes in the project areas;
- A habitat management plan (indicative TORs attached as **Annex X**) must be developed and implemented for the sub-projects in sensitive areas.

6.6 Cumulative Impacts

Following hydro power projects are under construction in the project area;

- **Matiltan Hydropower Project** is located in the Gorkin Matiltan region of Kalam valley, District Swat, Khyber Pakhtunkhwa province of Pakistan, on the left tributary of Suvastu River (River Swat). The power station has a planned generating capacity of 84 MW.
- **Lawi Hydropower project** having planned capacity of 69MW is located at the Drosh Valley of Chitral, Malakand Division.
- **SK Hydro also known as Suki Kinari HPP**, is an under construction, hydropower project located on the Kunhar river in the Kaghan valley of Mansehra District Khyber Pakhtunkhwa, having proposed generation capacity of 840 MW. The project is one of Pakistan's largest private-sector power development projects.
- Furthermore, Diamer Bahsa Dam upside Naran near Chilas and Munda/ Mohmand Dam on River Swat are in implementation stage and can impact the project.

Following Road projects are under construction in the project area;

- **Jhalkhad Chillas (N-15)** is under construction in the project area and may impact the project. N-15 is 71.5 km long consisting of two packages one for 30km and second one for 41.5km.
- **Upgradation of Behrain-Kalam Road (N-95)** Construction work for up-gradation of N-95 is in progress. N-95 is 135 km long road running from town of Chakdara in Lower Dir to the town of Kalam in via Mingora, Manglawar, Charbagh Khwazakhela, Madyan and Bahrain.
- **Construction and Rehabilitation of MCG Road in Galiyat** MCG is under feasibility stage and its construction will also impact the project.
- **Kalam Kumrat Road** (63km long) proposal is also in tender stage and may impact our project.

The project activities shall be undertaken at various locations in the project areas. The implementation of the activities parallel to other development activities in these areas may have cumulative impacts on the environment. Construction of proposed roads and other planned schemes are expected to exacerbate the existing environmental threats and introducing new challenges. The construction of the roads and planned business activities could create influx of people including construction workers, operational staff, etc., leading to social chaos. The potential impacts on the biodiversity will be mainly from the population pressure on collection and commercial trade in fire wood and herbs, illegal deforestation, logging, reclamation of land for agriculture and other activities. Some of the expected cumulative impacts are the following:

- Water related issues including surface water quality, ground water quality, and loss of natural streams
- Deterioration of air quality
- Noise related issues, especially during construction
- Ecological impacts including loss of biodiversity due to fragmentation, smaller habitats etc.
- Social issues including land acquisition and resettlement

The project activities are rather limited in their scope of physical intervention, and their magnitude could not be compared with the above mentioned other developmental works. The above impacts and their mitigation is beyond the mandate of this project. This comes under the domain of the relevant EPA. For each individual planned activity, the EPA asks its proponent to conduct an environmental assessment and commit for mitigation measures. Therefore, it is expected that most impacts of all activities will be mitigated through appropriate measures at the individual activity level. For the remainder of impacts, it is the job of the relevant government authorities to implement necessary policies and laws to conserve the environment of the area.

On its part, the project will implement measures to ensure that the project does not contribute in negative impacts of other development activities taking place in the surrounding area. Therefore, the project activities shall be planned timely, considering the schedule of other activities and more development projects.

7 ENVIRONMENTAL SOCIAL MANAGEMENT FRAMEWORK

This section presents the Environmental and Social Management Framework for the proposed project. It covers sub-projects environmental and social screening, monitoring and institutional strengthening for implementation of the sub projects.

7.1 Environmental & Social Screening

Implementation of environmental and social safeguard requirements in this ESMF will follow the following steps closely linking with activity planning, design and implementation.

Step 1: Screening of Business Enterprise according to general and relevant sectoral screening checklists

Step 2: Preparation and Submission of Environmental and Social Assessment/or sectoral Environmental and Social Management Plans

Step 3: Approval of Environmental and Social Assessment/or sectoral Environmental and Social Management Plans

Step 4: Compliance and Monitoring

7.2 Environmental & Social Screening Process

According to the World Bank OP 4.01 all potential adverse impacts on human populations or environmentally important areas including wetlands, forests, grasslands, and other natural habitats are site-specific; reversible; and mitigation measures can be readily designed. To ensure that all activities comply with this criterion, two levels of screening will be carried out for each activity:

- General Screening against negative list of activities
- Sectoral screening to for sector specific environmental and social impacts

In addition, if required activities will be screened for involuntary resettlement, and physical cultural resources.

7.2.1 General Screening

General screening will be carried out ensure that the activities supported by this project do not have any irreversible environmental and social impacts during and after implementation. The activities must not have any adverse impacts environmentally important areas or the social fabric of the communities. The subprojects will be screened using the General Screening Checklist given in **Annex XI** which will screen to ensure the following:

1. The activity does not fall in the negative list of activities provided in this ESMF;
2. Location is at a reasonable distance from Protected Areas;
3. Location is at a safe distance from identified sensitive habitats and natural habitats of animals;
4. Location is at a safe distance from designated Forests;

5. Activity will not result in any resettlement or displacement (economic and physical) of the local communities. All land requirements will be fulfilled through Voluntary Land Donation;
6. Activity will not adversely impact vulnerable groups such as women, children and disabled etc.;
7. Activity will not result in child labour, forced labour or gender based violence (GBV);
8. Location is away from Protected Sites of Archaeological and cultural significance.

7.2.2 Sectoral Screening

While executing subprojects, sectoral screening will be followed to activities to determine their environmental and social impacts and identify appropriate mitigation measures required in line with the World Bank Operational Policies. Tourism is the main sector that will be supported under this project. Sectoral indicative checklist outlining major anticipated impacts for tourism sector have been prepared and are provided in **Annex XI**. The checklists will be updated and used to guide the development of sector specific detailed Environmental and Social Management Plans (ESMPs) once the nature of activities to be supported has been identified.

7.2.3 Land Acquisition and Resettlement Screening

If social impacts related to land, resettlement, livelihood, infrastructure damage are identified during screening process, the sub-projects will also be screened for need of land acquisition and resettlement using Involuntary Resettlement Screening Checklist Attached as **Annex XI**. All efforts will be taken to ensure that land required for the project is donated by the beneficiary individual/community through Voluntary Land Donation. However, if land acquisition is necessary, planning efforts will be carried out to develop mitigation measures in accordance with RPF.

7.2.4 Physical Cultural Resources Screening

All projects/subprojects will be screened for impacts on physical cultural resources and necessary mitigation measures. An outline of Physical Cultural Resource Management Framework providing a roadmap for preparing a Management Plan for the protection of physical cultural resources is presented in Section 9 of this ESMF.

7.3 Planning Review and Approval

Project Management Unit (PMU) under C&W and DoT will be responsible for the screening and preparation of any safeguards instrument required in line with this Framework. The PMU will submit all the sub projects' ESMPs and related safeguard documents to the World Bank prior to implementation of sub projects for approval and clearance to maintain the quality control and consistency. The implementation agencies will not approve the proposed operations until the required environmental and social safeguard action plans are cleared for compliance with the Framework by the World Bank.

The implementing agency will implement the projects in close coordination with the relevant line departments, local governments, and political agents. The implementing agency will be responsible for applying the safeguard screening and mitigation requirements to its own sub-projects. It should also be ensured that other necessary NOCs should also be obtained from all other departments before commencing works of any sub-project. This section defines the organizational roles and

responsibilities of the key players in the project and provides a mechanism for implementation of ESMF.

7.4 Organizational Setup for Implementation of Project

The project will adopt a multi-tiered and private-sector orientated approach towards implementation. The organizational setup for implementation of the project is presented in **Figure 7-1**.

7.4.1 Executing Agency

The project will be implemented through two (02) Project Management Units (PMUs), one each at the Department of Tourism (DoT) and Communication & Works Department (C&W) of GoKP. PMU-DoT would be established at Peshawar and would manage the analytical and tourism promotion activities of the project. All construction, engineering and civil works under the Components 1 and 2 will be implemented by the PMU-C&W.

i. PMU-DoT Housed at Peshawar

PMU at DoT will work under Department of Sports, Culture, Tourism and Youth, GoKP. It shall comprise of following:

1. Project Director
2. Heritage and Eco Tourism Expert
3. Digital Marketing Expert
4. PPPs/ Legal Advisor
5. Financial Management Expert
6. Procurement Expert
7. Administration and Accounts Officer
8. Additional staff as and when desired.

ii. PMU-C&W Housed at Peshawar

PMU-C&W shall comprise following:

1. Project Director
2. Senior Infrastructure Engineer
3. Road Engineer
4. Senior Environmental Expert
5. Senior Social Safeguard Expert
6. Divisional Accounts Officer
7. Procurement Expert
8. Project Accounts Officer
9. Support staff (Drivers etc.)

7.4.2 Project Steering Committee (PSC)

Project Steering Committee will comprise Additional Chief Secretary (ACS) of KP (Chair), representation from P&D, Finance Department, DoT, FATA Secretariat, Secretary Local Government

and Rural Development Department, Secretary C&W (C&W), Galiyat and Kaghan Development Authorities and private sector stakeholders, including representation from the travel and tourism industry, Hazara University, Women Chambers of Commerce, Agha Khan Cultural Services, Bank of Khyber, and Small Medium Enterprise Development Authority (SMEDA) KP.

7.4.3 Role of Environmental and Social Cell

It is envisaged that social and environmental issues are more likely to be encountered during infrastructure development activities under C&W, therefore, Senior Environmental Expert and Senior Social Safeguard Expert are housed at C&W. as and when required, the same experts will be available for DoT. Environment Safeguards Specialist will ensure the implementation of mitigation related to environmental impacts in ESMF and preparation of sectoral/ sub project ESMPs. The Social Safeguards Specialist will ensure implementation of the Resettlement Policy Framework and other social safeguards related measures defined in ESMP along with implementation of Grievance Redress Mechanism (GRM). The Gender Specialist will ensure gender mainstreaming and implementation of the Gender Action Plan at the PMU-C&W, consultants, contractor and community level. The specialists will be assisted by Local Facilitators and Technical Resource Persons for continuous monitoring of activities on field. PMU-C&W will be responsible for hiring of Construction Contractor and supervision of contractors work on the sites in accordance with ESMPs. Roles and responsibilities of the designated Specialists and project team have been detailed in **Table 7-1** below.

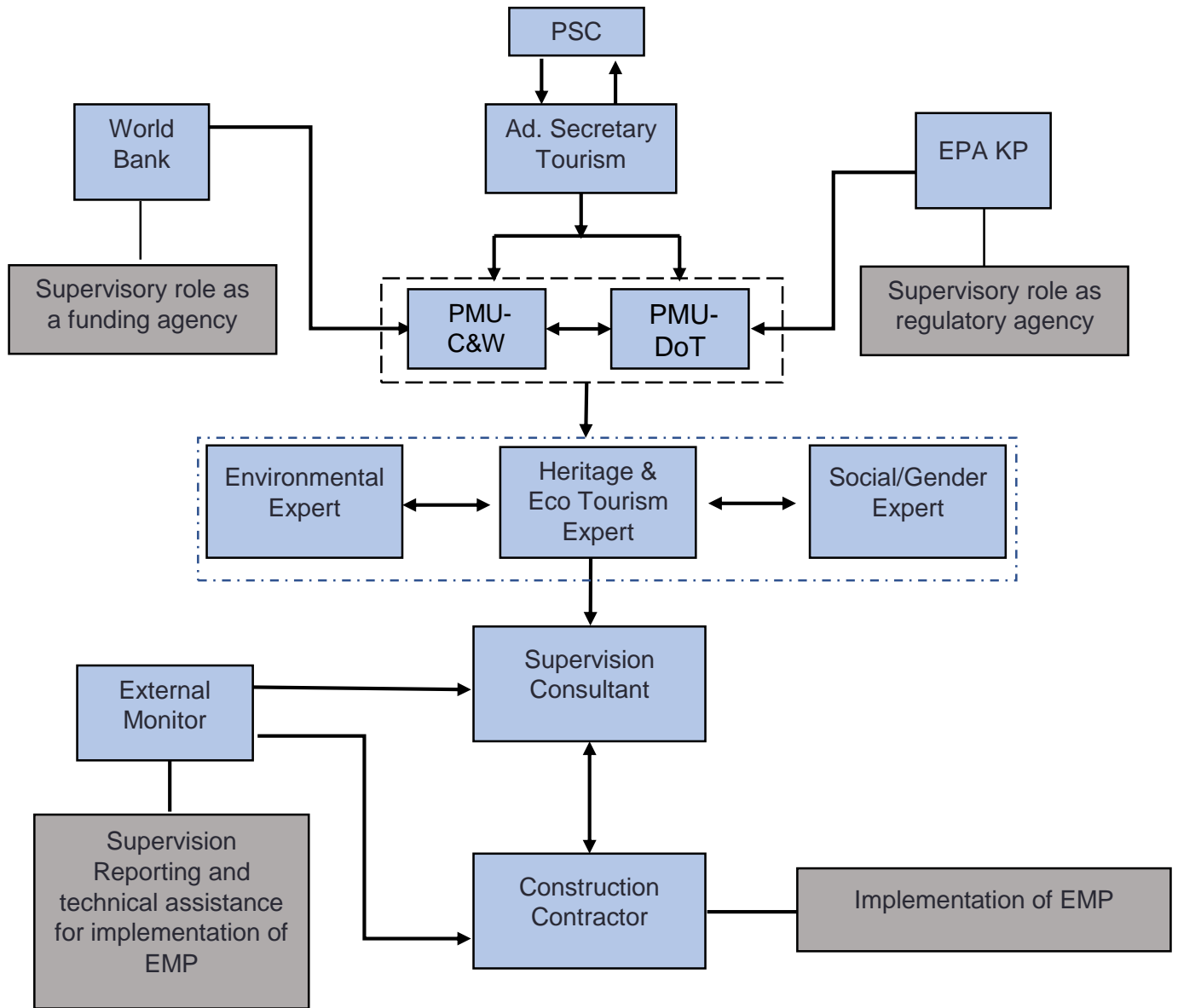


Figure 7-1: Organizational Setup for Implementation of EMP

Table 7-1: Roles and Responsibilities of Environmental & Social Safeguard Unit

Organization	Position	Responsibility
PMU	Project Director	<ul style="list-style-type: none"> ▪ Ensure ESMF Implementation; ▪ Supervise procurement and hiring of staff; ▪ Supervise financial matters; and ▪ Overall supervision.
PMU	Senior Environment Safeguards Specialist	<p><u>Indicative ToRs</u></p> <ul style="list-style-type: none"> ▪ Carry out environmental screening of enterprises defined in ESMF; ▪ Coordinate preparation of ESMPs for sectors; ▪ Ensure that the construction contracts include clauses for ESMP implementation; ▪ Ensure implementation of the ESMPs during various stages of design and construction; ▪ Certify timely and robust environmental monitoring in the field by local facilitators and technical resource persons; ▪ Ensure that environmental trainings are planned and implemented; ▪ Overall monitoring and reporting of environmental impacts; ▪ Coordinate and ensure development of awareness material; ▪ Commission annual third party validations of the project; and ▪ Prepare and submit Environmental Bi-Annual Progress Reports for the project compliances to the World Bank. ▪ Act as a focal point to the World Bank on Environmental safeguard compliances.
PMU	Senior Social Safeguards Specialist	<p><u>Indicative ToRs</u></p> <ul style="list-style-type: none"> ▪ To carry out the screening of the enterprises with respect to the social and gender aspects as defined in the ESMF; ▪ Monitor and check proper implementation of all social and gender related mitigation measures as suggested in ESMF/ESMPs; ▪ Monitor and evaluate of social and gender related matters of the project and maintain a complaint register; ▪ Ensure timely and robust social monitoring in the field by local facilitators and technical resource persons ▪ Ensure inclusion of ESMP requirements in project designs.

Organization	Position	Responsibility
		<ul style="list-style-type: none"> ▪ Screen sub-projects for Involuntary Resettlement, gender focus and citizen engagement ▪ Ensure Resettlement Policy Framework (RPF) is implemented and RAP is prepared, if required ▪ Remain the focal point for managing the project GRM, and maintain analysis and reports on types of complaints received, resolved, time taken to action, etc. ▪ Prepare Required Reports biannually. ▪ Provide technical lead to the field teams regarding gender mainstreaming activities of the project ▪ Train the Local Facilitators in gender mainstreaming for project interventions. ▪ Coordinate and monitor the beneficiary selection process for various project activities under a developed gender criterion. ▪ Collect analyses and interpret field data regarding gender aspect of the project initiatives. ▪ Prepare and submit social safeguards documents Bi-Annual Progress Reports for the project compliances to the World Bank. ▪ Act as a focal point to the World Bank on Social safeguard compliances.
PMU	Third Party Monitoring consultants	<p><u>Indicative ToRs</u></p> <ul style="list-style-type: none"> ▪ Develop monitoring and evaluation methodologies for Environment and Social safeguard documents compliance monitoring. ▪ Implementation and Evaluation of ESMF and Social Safeguard documents; ▪ Supervision of construction contractor; ▪ Prepare environment and Social Safeguard compliance monitoring progress reports to the higher authorities and World Bank.

7.4.4 Role of Local Facilitators and Technical Resource Persons

The project will rely heavily on local facilitators and technical resource persons who will be representing the project at the community level. Local Facilitators (LFs) and Technical Resources Persons (TRPs) will be remunerated based on deliverables and will support the Project Management Units (PMUs) in project implementation. While LFs will provide communities with overall support, the TRPs will provide specialized business development support to entrepreneurs supported through the project. LFs and TRPs are individuals (male and female to ensure adequate coverage of and support to female beneficiaries) from the community who are both active and committed to the development

of their area. They will be hired on a short-term contract by the Project to organize beneficiary groups in the project area. The roles and responsibilities will include formation of new groups and revitalization/ reactivation of existing groups; attending meetings in order to help beneficiaries and the project in monitoring performance; monthly reporting to PMU; and, training group members in basic group management skills. The cadre of local facilitators and technical resources persons created through the project are expected to ensure continuity of the enterprise development process after project completion.

The Local Facilitators and Technical Resource Persons will collect data from the field on a monthly basis, including compliance with environmental and social safeguards. These facilitators will be trained by the PMU staff to perform these duties.

7.4.5 Role of Enterprise Owner

Enterprise owner will be required to ensure integration of ESMF/ESMP requirements in all interventions. They will also be involved in the preparation of EOIs for contractors and ensure that ESMF/ESMP requirements are integrated in EOI and BOQ documents.

7.4.6 Role of Construction Contractors

In case of construction work, the contractor will be required to submit all relevant plans for mitigating environmental and social impacts to attain approval in case the intervention is in the categories defines by KP Environmental Protection Act and falls in high risk through ESMF screening checklist. The construction contractor will also ensure that ESMF/ESMPs/RAPs requirements are part of the design and implemented at the field level. A list of plans to be implemented by contractors in case of construction is given below:

- Emergency Response Plan
- Public Safety Plan
- Workers Health & Safety Plan
- Energy and Water Conservation Plans
- Environmental Management Plan
- Biodiversity Management Plan

7.5 Environmental and Social Mitigation and Monitoring Framework

The anticipated interventions under the project and their potential negative impacts are presented in **Table 7-2** below. It should be noted that the list of potential impacts is not exhaustive, and it will need to be updated based on screening process for each sub-project at the implementation stage.

Table 7-2: Anticipated Activities & Impacts

Anticipated Project Activities	Potential Impacts
Development of Tourism Routes/ Access to lakes / Hiking & Walking Trails	<ul style="list-style-type: none"> ▪ Changes in the topography due to possible cutting of rocks and land clearing. ▪ Damages due to possible land sliding. ▪ Soil erosion and contamination

Anticipated Project Activities	Potential Impacts
	<ul style="list-style-type: none"> ▪ Social conflicts due to land acquisition ▪ Risk to social and cultural resources of the project area. ▪ Loss of trees, damage to ecosystem and habitat loss ▪ Disturbance to public due to shifting of public utilities. ▪ Noise issues ▪ Solid waste generation and disposal issues ▪ Dust from rough tracks, vehicular exhausts, emissions from construction machinery etc. may pollute the air. ▪ Contamination of water resources. ▪ Traffic jams and access issues. ▪ Worksite related accidents can result in injuries and casualties. ▪ Loss of income for the jeep operators.
Installation of Chairlift	<ul style="list-style-type: none"> ▪ Privacy and security issues for local residents. ▪ Loss of trees, damage to ecosystem and habitat loss ▪ Soil degradation and erosion during oiling operations. ▪ Generation of noise. ▪ Waste generation ▪ Visual obstruction and blockage of scenic view in the project area. ▪ Unsafe chairlifts and inappropriate operational procedures can result in fatal accidents.
Camping Paradise	<ul style="list-style-type: none"> ▪ Damage to flora and fauna during site clearing. ▪ Land acquisition issues ▪ Pressure on existing public utilities ▪ Natural hazards ▪ Damage to soil due to ground levelling and compaction. ▪ Noise ▪ Improper handling and disposal of solid waste may create nuisance. ▪ Inadequate disposal of wastewater may affect the existing water bodies. ▪ Any act of vandalism, violence, kidnapping or terrorism can cause problems to the visitors. ▪ Fires may be resulted from bonfires and other such activities that can lead to serious health and safety hazards.
Heritage Sites	<ul style="list-style-type: none"> ▪ Accidental structural damage to the protected sites. ▪ Chance find of artefacts during excavation / construction ▪ Damage to heritage sites
Winter Sports	<ul style="list-style-type: none"> ▪ Cutting of trees and smoothing out the landscape to make suitable ski runs. ▪ Wildlife habitat will be disturbed throughout the winter season by the skiers.

Anticipated Project Activities	Potential Impacts
Parking Areas and Tourist Transport Hubs / Rest Areas with Emergency Medical Supplies / Tourist Information Centers / Rest Areas & Facilities for Women & Disabled	<ul style="list-style-type: none"> ▪ Land acquisition and resettlement issues ▪ Soil erosion and contamination ▪ Air pollution (Fugitive dust emissions from different sources). ▪ Chances of contamination of groundwater and surface water. ▪ Noise ▪ Limited parking spaces in peak seasons. ▪ Traffic congestion issues in peak seasons. ▪ Accessibility issues and limited facilities for disabled and women ▪ Solid waste generation & disposal Issues
Solid Waste Management & Plastic Recycling	<ul style="list-style-type: none"> ▪ Improper handling and disposal of solid waste may create nuisance.
Provision of Clean Drinking Water	<ul style="list-style-type: none"> ▪ Inadequate disposal of wastewater may affect the existing water bodies. ▪ Any accidental quality issues with drinking water may lead to health hazards

Table 7-3 below presents Environmental and Social Mitigation, Management and Monitoring Framework for the potential impacts. It is to be noted that at the time of implementation, sub-project and site specific plans will be developed based on the below presented framework. The list of potential impacts for each sub-project will be finalized and updated at that stage.

Table 7-3: Environmental and Social Mitigation, Management and Monitoring Framework

Implementation Framework			Monitoring Framework		
Aspect /Impact	Proposed Mitigation Measures	Responsibility	Monitoring Parameter(s) & Methods	Frequency	Responsibility
Topography	<ul style="list-style-type: none"> ▪ Project design to avoid excessive cutting of rocks/hill slopes; ▪ Limit ground disturbances to only the absolute necessity; and ▪ Immediate restoration of disturbed areas after the completion of construction works. 	PMU-C&W	Change detection from GIS imagery, Physical inspection	Biannual	Environmental specialist
Land Sliding	<ul style="list-style-type: none"> ▪ Retaining or protection wall to stabilize the hill slopes in sensitive areas; ▪ Bioengineering principles to stabilize the slopes; and ▪ Ensure minimum cutting of hill slopes and look for the alternatives. 	PMU-C&W	Geo technical investigations, Physical inspection, Photographic change detection	Biannual	Environmental specialist
Soil	<ul style="list-style-type: none"> ▪ Limit the excavations as per approved engineering drawings; ▪ Top fertile soil layer to be separated and ploughed after the completion; ▪ Disposal of spoils at designated site; ▪ Avoid use of heavy machinery on wet soil; ▪ Oils, lubricants, chemicals, and other listed hazardous materials to be stored safely at their designated spots; ▪ Follow Hazardous Substance Rule 2003; ▪ All the unspent and left-over materials be completely removed offsite and the site be restored to original condition. ▪ Sites Specific Soil Management Plans to be prepared for activities that may cause extensive soil erosion and contamination. 	PMU-C&W	Site specific soil management plans, Soil testing, Visual observations	Biannual Daily	Environmental specialist
Resettlement	<ul style="list-style-type: none"> ▪ Careful alignment and site selection by the designer to minimize land acquisition; ▪ State land to be preferred for establishment of rest areas; and ▪ Prepare full RAP if there are more than 200 Affected Persons and an abbreviated RAP if the Affected Persons are less than 200. 	PMU-C&W	Number of APs, Number of affected structures, Reported issues	Once	Social safeguard specialist
Stress on Groundwater Resources	<ul style="list-style-type: none"> ▪ Water required for sub-projects construction may be obtained in a sustainable way from alternate water sources; ▪ Best practices for construction will be used to ensure minimum use of resources. 	PMU-C&W	Check and monitor the quantity of water used with respect to water needed for project.	Quarterly	Environmental specialist
Air Pollution	<ul style="list-style-type: none"> ▪ Dust suppression techniques (e.g. regular water sprinkling) to be applied; ▪ Proper and regular tuning of vehicles used for construction; ▪ Relevant PPEs to construction workers, and 	PMU-C&W	Air quality monitoring,	Quarterly Daily	Environmental specialist

Implementation Framework			Monitoring Framework		
Aspect /Impact	Proposed Mitigation Measures	Responsibility	Monitoring Parameter(s) & Methods	Frequency	Responsibility
	<ul style="list-style-type: none"> Vehicle speed in the project area to be prescribed not more than 20 km/ hr and controlled accordingly. 		Physical observation of dust and smoke		
Noise	<ul style="list-style-type: none"> Suitable PPEs to construction workers; Restrict construction vehicles movement during night time near the residential areas and camp sites; Locate the concrete mixing, and materials shipment yards at least 1 km from residential areas; Selection of up-to-date and well-maintained plant or equipment with reduced noise levels; and Heavy machinery like percussion hammers and pneumatic drills to not be used during the night. 	PMU-C&W	Noise levels monitoring, Reported issues of nearby community, Physical observations	Quarterly Daily	Environmental specialist
Contamination of Water Resources	<ul style="list-style-type: none"> No disposal of wastewater from construction sites into the water bodies; Avoid soil erosion in watershed areas; Water required for construction may be obtained in a sustainable way from alternate water sources; Prevent dumping of hazardous materials especially near rivers and seasonal nullahs; Prepare and implement Emergency Response to address the accidental spillage of fuels and hazardous goods; Septic tanks and sumps be built at a safe distance from any water source, and the bottom of the sump will be kept above groundwater level; Divert or restrict surface run off from construction site through hessian/jute cloth etc.; and Provision of septic tanks 	PMU-C&W	Water quality monitoring, Runoff water	Biannually	Environmental specialist
Solid Waste Generation	<ul style="list-style-type: none"> A comprehensive solid waste management plan including hazardous material; Three R's: "Reduce, Reuse, Recycle" waste management hierarchy will be adopted. Planning for disposal sites with reasonable distance from the human settlements following the siting criteria for landfill site; Disallow siting for work camps, including waste dump sites, within a radius of one km from any inhabited areas; Incorporate technical design features for refuse collection containers; Disallow burning of waste; Ban on usage of polythene/ plastic bags. Recording system for the amount of waste generated, recycled and disposed; 	PMU-C&W	Solid waste collection, reuse, and disposal practices at sites Site Specific Solid Waste Management Plans Physical observations	Quarterly Daily	Environmental specialist

Implementation Framework			Monitoring Framework		
Aspect /Impact	Proposed Mitigation Measures	Responsibility	Monitoring Parameter(s) & Methods	Frequency	Responsibility
	<ul style="list-style-type: none"> ▪ Explore the option of collecting food & vegetables waste from rest points, hotels and shops at one place and using it for bio-gas generation or composting (e.g. Vermicompost). ▪ Plan for solid waste management and plastics recycling from the destination areas; and ▪ Initiate a system of recycled plastics for the construction of walking trails and production of destination facilities such as signage, board-walks, shelters, plastics recycling plant, etc. 				
Health & Safety	<ul style="list-style-type: none"> ▪ Basic medical training to specified work staff and basic medical service and supplies to workers; ▪ Work safety measures and good workmanship practices to be followed; ▪ Use of PPEs by workers; and ▪ Timely public notification on planned construction works. 	PMU-C&W	Reported incidents, Use of PPEs, Safety protocols	Quarterly Daily	Environmental specialist
Disturbance to Natural Habitat	<ul style="list-style-type: none"> ▪ Strict adherence to existing Management Plans of national parks and protected areas (where available) ▪ Development of site specific plans for conservation of natural habitat when working close to protected areas, in consultation with wildlife and forest departments 	PMU-C&W	Existing management plans and site specific plans	Biannually	Environmental Specialist
Tree Cutting	<ul style="list-style-type: none"> ▪ Alignments and sites to be properly selected to minimize the cutting of trees; ▪ Avoid critical areas of animal breeding; ▪ Compensatory plantation of 10 nos. (of same species), in lieu of each affected tree; ▪ Avoid illegal cutting and theft of trees. 	PMU-C&W	Tree count, Site specific tree plantation plan	Biannually	Environmental specialist
Disturbance to Wildlife	<ul style="list-style-type: none"> ▪ Safety fencing and signage at wildlife hotspots. ▪ Safe speed limit will be strictly implemented. ▪ Structures for movement of wild animals where necessary. ▪ Caution boards at crossing areas of wild animals. ▪ Roadside reflectors. ▪ Pedestrian Overhead bridges for pedestrians and livestock crossings. ▪ Fencing or plant barriers. ▪ Awareness material regarding wildlife to be developed and displayed prominently at important points ▪ Engineering design to integrate the concept of green infrastructure ▪ Protect the wildlife and ecosystem of the area. Hunting, poaching and harassing of wildlife should also be banned. 	PMU-C&W	Site specific Wildlife & Habitat Management Plan	Biannually	Environmental Specialist

Implementation Framework			Monitoring Framework		
Aspect /Impact	Proposed Mitigation Measures	Responsibility	Monitoring Parameter(s) & Methods	Frequency	Responsibility
	<ul style="list-style-type: none"> ▪ The wildlife department will be taken onboard and consulted whenever any interaction with wildlife is envisaged. ▪ Dumping areas selection will be done in consultation with the wildlife department. 				
Security	<ul style="list-style-type: none"> ▪ Provide proper fencing and adequate security arrangement to secure the campsites; ▪ Deployment of guards for security; and ▪ A security plan for overall project activities. 	PMU-C&W	Reported issues, Security guards, Security cameras, Checking & screening of vehicles	Biannually	Social safeguard specialist
Fire	<ul style="list-style-type: none"> ▪ Allocate a proper place in camping paradise for bonfires; ▪ Emergency arrangement at the site; ▪ Restrict bonfires in autumn/ dry season; ▪ No bonfire or campfire at dense forest areas; and ▪ Prepare and implement an emergency response plan. 	PMU-C&W	Reported events, Emergency response plan	Biannually	Environmental specialist
Natural Hazards	<ul style="list-style-type: none"> ▪ Fire extinguishers to be installed at different locations; ▪ Flood protection arrangements to be made in flood prone areas; ▪ An Emergency Response Plan to be developed and implemented. 	PMU-C&W	Reported events, Emergency response plan	Biannually	Environmental specialist
Physical/Cultural Resources	<ul style="list-style-type: none"> ▪ The heritage sites must be properly cordoned off before initiating the project activities; ▪ No construction activity to be undertaken within 200 feet of heritage sites; ▪ Physical and cultural resource management plans to be prepared for the heritage sites; and ▪ Chance Find Procedures to be followed in case of finding of artifacts. 	PMU-C&W	List of physical/ cultural resources, Archaeological remains	Biannually	Environmental specialist
Social Conflicts	<ul style="list-style-type: none"> ▪ Ensure timely route clearance in winters; ▪ During construction, labor camps should not affect the private land and privacy; ▪ Consult and compensate the PAPs of land acquisition prior to commencement of construction works; and ▪ Provision of basic accommodation facilities under the sub-projects, to facilitate the tourists. 	PMU-C&W	Reported issues, GRM implementation	Biannually	Social safeguard specialist
Accessibility Issues	<ul style="list-style-type: none"> ▪ Public awareness/ notification about the timing of closure of route/ pathways during execution of sub-projects through local available sources (like local FM radio station). ▪ Placement of appropriate sign boards; and 	PMU-C&W	Physical observation, Reported Issues	Quarterly	Social safeguard specialist

Implementation Framework			Monitoring Framework		
Aspect /Impact	Proposed Mitigation Measures	Responsibility	Monitoring Parameter(s) & Methods	Frequency	Responsibility
	<ul style="list-style-type: none"> ▪ Timely completion of the sub-projects. 				
Traffic Issues	<ul style="list-style-type: none"> ▪ Provision of adequate parking facilities at cheap rates; and ▪ Indulge traffic police in traffic management plan and allocation of parking facilities. 	PMU-C&W	Traffic management plan, Traffic wardens around project area	Biannually	Traffic police
Gender Related Issues	<ul style="list-style-type: none"> ▪ Reserve quota for women in jobs related to this project; and ▪ Avoid project activities near residential and private lands. 	PMU-C&W	Reported issues	Annually	Social safeguard specialist

7.6 Environmental Management Plans

This ESMF provides guidance on how to manage environmental and social issues for various sub-projects under this project. However, for any major interventions, site specific Environmental & Social Management Plans (ESMPs) in accordance with World Bank OP 4.01 will need to be prepared and clearance obtained from the Bank prior to implementation of each sub projects. The ESMPs will examine the potential negative and positive environmental and social impacts and recommend any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental and social performance. The ESMPs will include a description of adverse effects, description of mitigation measures, description of monitoring program, responsibilities, capacity development and training, implementation schedule, cost estimates and sources of funds, and monitoring methods. ESMP guidelines are attached as **Annex – XII**.

To comply with applicable provincial environmental statutes, environmental assessment of each sub-project (in the form of environmental checklist, initial environmental examination or environmental impact assessment – as the case may be) will need to be submitted to the relevant EPA for obtaining No Objection Certificate (NOC) before commencing the subprojects implementation. While following sub-plans shall be prepared for the implementation of project at implementation stage by the contractor.

7.7 Environmental Code of Practices

The scale and scope of the activity, determined based on screening checklists, will establish whether an ESMP is needed. For activities where ESMP is developed then ECOPs are not relevant. However, for small civil works the ECOPs will be used.

Following Environmental Code of Practices (EPCs) for minor impacts shall be prepared and followed in the implementation phase of the project.

- ECP 1: Waste Management
- ECP 2: Fuels and Hazardous Goods Management
- ECP 3: Water Resources Management
- ECP 4: Drainage Management
- ECP 5: Soil Quality Management
- ECP 6: Top Soil Management
- ECP 7: Topography and Landscaping
- ECP 8: Quarry Areas Development & Operation
- ECP 9: Air Quality Management
- ECP 10: Noise and Vibration Management
- ECP 11: Road Transport and Road Traffic Management
- ECP 12: Construction Camp Management
- ECP 13: Cultural and Religious Issues
- ECP 14: Workers Health and Safety
- ECP 15: Construction and Operation Phase Security

The objective of ECPs is to address all potential and general construction related impacts during implementation of the Project. The ECPs will provide guidelines for best operating practices and environmental management guidelines to be followed by the contractors for sustainable management of all environmental issues. These ECPs shall be included in the tender documents of

contractor(s)/subcontractor(s) under the Project. The layout of ECP should include the environmental impacts with respect to the project activity/impact source and suggest appropriate mitigation measures/management guidelines for contractor. The sample ECPs are attached as **Annex XIII**.

Contractor(s) will prepare site specific management plans, namely Construction Environmental Action Plan (CEAP), in compliance with World Bank and Government of Pakistan guidelines and based on the guidance given in the ECPs. The CEAP will form the part of the contract documents and will be used as monitoring tool for compliance. It is mandatory for the main contractor(s) procured directly by the Project to include these ECPs in their subcontracts. Violation of the compliance requirements will be treated as non-compliance leading to the corrections or otherwise imposing penalty on the contractors.

7.8 Monitoring and Reporting

Unforeseen potential impacts may arise during implementation of project; therefore, it is necessary to monitor the activities for their deviation from the Environmental & Social Management Plan (ESMP). It is better to prevent the environmental impacts/risks than rectifying the consequences. Further, the environmental compliance and implementation of EMP is not a priority of Contractor, therefore a third-party check needs to be there to ensure the implementation of EMP.

7.8.1 OP 4.01 and Environmental Management Plan

As per OP 4.01 the implementation of ESMP is an integral part of project implementation and it is borrower's obligation to implement ESMP as included in the loan agreement. The ESMP is important part of the project's Operation Manual therefore the borrower must report on compliance with EMP.

7.8.2 Institutional Involvement

Following implementation partners will be involved in the implementation of EMP:

- PMU-Department of Tourism (DoT)
- PMU-Communication & Works Department
- PMU-ERKF
- Supervision Consultant (SC)
- Construction Contractor (CC)

7.8.3 Monitoring of Project

The purpose of the environmental and social monitoring is to ensure the effective implementation of the ESMF. Monitoring will be carried out at two tiers. At the first tier, the PMU of DoT and C&W department will carry out monitoring during their routine visits to the field, with the help of visual observations and discussions with the communities/tourists/beneficiaries. At the second tier, the PSC will provide top supervision of the monitoring carried out by the PMUs. Monitoring checklists will be prepared on the basis of the site specific ESMPs.

It is recommended that use of hi-tech equipment such as GPS, mobile phones with GPS facility, and digital camera is maximized in obtaining, recording, processing, and disseminating the baseline and

monitoring data collected in the field. Furthermore, satellite imagery and geographical information system (GIS) should also be used to document and process the field data.

The monitoring framework is given in **Table 7-4**. While template for the monitoring plan to be prepared for each of the sub-projects is attached as **Annex - IX**.

Table 7-4: Monitoring Framework

Sr. #	Type of Monitoring	Responsibility	Frequency	Parameters
1.	Compliance Monitoring	Construction Contractor	Weekly, monthly, seasonally, annually	Project TORs, ECPs and HSE standards
2.	Third Party Monitoring	Supervision/ Monitoring Consultant	Monthly, seasonally, annually	Project TORs, ECPs and HSE standards
3.	Effect Monitoring	Environmental and social Experts	Occasionally	Sudden changes in the environmental parameters
4.	Environmental Monitoring	Construction Contractor	Annually/ Biannually	All NEQS parameters

7.8.4 Compliance Monitoring

The compliance monitoring shall include the following:

- Systematically observe the activities undertaken by the contractors or any other persons associated with the project
- Verify that the activities are undertaken in compliance with the EMP
- Document and communicate the observations to the concerned persons so that any corrective measures, if required, can be taken in a timely fashion
- Maintain a record of all incidents of environmental and social significance and related actions and corrective measures
- Maintain contact with the communities, solicit their views and concerns, and discuss them during the monthly meetings
- Prepare periodic reports of the environmental and social performance of project.

7.8.5 Third Party Monitoring

In addition to the monitoring described above, an outside agency (such as an independent consultant/firm) will carry out the third-party monitoring (or third-party validation – TPV), twice; once before the mid-term review of the project and secondly after three months prior to the closing of the project implementation. The objective of this monitoring would be to review the entire ESMF implementation process and its effectiveness, to identify any environmental and/or social issues caused by the project that may exist on ground, and to frame recommendations to improve ESMF and its various components.

7.8.6 Monitoring Mechanism

The monitoring mechanism shall include the following:

- Location of the monitoring (near the project activity, sensitive receptors or within the project influence area)
- Means of monitoring, i.e. parameters of monitoring and methods of monitoring (visual inspection, consultation, interviews, surveys, field measurements, or sampling and analysis)
- Frequency of monitoring (daily, weekly, monthly, seasonally, annually or during implementation of a particular activity)

7.8.7 Monitoring Predicted Effects (Effect Monitoring)

The effect monitoring shall be conducted to:

- Verify that the impacts of the proposed project are within acceptable limits, thus establishing credibility (public assurance)
- Immediately warn the DoT or C&W Department of unanticipated adverse impact or sudden changes in impact trends so that corrective actions can be undertaken, which may include modifications in the proposed activities, or the inclusion of modified or additional mitigation measures
- To provide information to plan and control the timing, location, and level of certain project activities so that the effects are minimized.
- Biannual reports by External Auditors.

7.8.8 Physical Environmental Monitoring

The physical environmental monitoring should be carried out at different stages of project to ensure compliance with physical environmental standards and to avoid any damage to the physical environment due to project activities. The monitoring will identify any discrepancies with the physical environmental standards and will urge the responsible institutions/authorities to take necessary actions to control/avoid environmental damage.

Certain physical environmental parameters should be selected to carry out quantitative analysis. The results of analysis should be compared with the guidelines; standards and pre-project conditions to investigate whether the implementation of mitigation measures is effective. Physical environmental parameters to be analyzed during construction and operation of the project and responsibilities for monitoring and reporting are discussed below in **Table 7-5**.

Table 7-5: Physical Environmental Monitoring Framework

Components	Parameters	Min No. of Samples	Frequency	Responsibility	Duration
Construction Phase					
Air Quality	All NEQS parameters	2	Quarterly	Construction Contractor	24 hours
Ground Water Quality	All NEQS parameters	2	Quarterly	Construction Contractor	-
Surface Water Quality	All NEQS parameters	2	Quarterly	Construction Contractor	-
Noise Level	-	2	Quarterly	Construction Contractor	24 hours
Operation Phase					
Air Quality	All NEQS parameters	2	Biannually	DoT	24 hours
Ground Water Quality	All NEQS parameters	2	Biannually	DoT	-
Surface Water Quality	All NEQS parameters	2	Biannually	DoT	-
Noise Level	-	2	Biannually	DoT	24 hours

**Note: The physical environmental monitoring framework is based on two (02) years execution period.*

7.8.9 Reporting and Feedback Mechanism

Presented below is the reporting and feedback mechanism of monitoring.

Table 7-6: Reporting Framework

Sr. #	Type of Reports	Responsibility	Frequency	Submitted To
1.	Progress Reports	Construction Contractor	Weekly	Supervision Consultant, PMU-DoT/C&W
		Supervision Consultant	Monthly, Quarterly	PMU-C&W, Internal Circulation
		PMU – DoT/C&W	Quarterly	PSC, World Bank
2.	Environmental Compliance Reports	Construction Contractor	Weekly	Supervision Consultant,

Sr. #	Type of Reports	Responsibility	Frequency	Submitted To
				PMU – DoT/C&W
		Supervision Consultant	Monthly, Quarterly	PMU–C&W, Internal Circulation, World Bank, KP EPA
3.	OHS Compliance Reports	Construction Contractor	Weekly	Supervision Consultant, PMU – DoT/C&W
		Supervision Consultant	Monthly, Quarterly	PMU – DoT/C&W, Internal Circulation, World Bank
4.	Environmental Monitoring Reports	Construction Contractor	Quarterly, Biannually	Supervision Consultant, PMU – DoT/C&W
		Supervision Consultant	Quarterly, Biannually	PMU – DoT/C&W, Internal Circulation, World Bank, KP EPA
* Environmental and Social Specialist of PMU DoT/C&W will review all the reports.				

7.9 Institutional Strengthening, Training & Capacity Building Framework

To ensure the successful implementation of the environmental and social precautions and mitigation measures, a strengthening of relevant and fundamental competencies is essential. Therefore, a training and capacity building training framework is proposed. These trainings will lay the foundation of a sustainable outreach for the sub-projects and its facilitators. The objectives of the environmental and social trainings include providing basic knowledge and information on the key environmental and social issues associated with the proposed interventions to the key project personnel including the Contractors, Local Facilitators, Technical Resource Persons and general project staff. Specific trainings on environmental and social impacts and mitigation will be arranged for the project staff, local facilitators and technical resource persons. The main objective of the trainings is to enhance the technical capacity of staff associated with ESMF implementation and to keep the PMU Team aware of the emerging environmental and social issues.

Table 7-7 gives a tentative program for capacity building and trainings. The workshops will focus on environmental and social issues arising during ESMF implementation, mitigation measures, and health & safety. They will also focus on sensitizing the participants about environmental and social responsibility, managing the on-ground problems, and ensuring implementation of the ESMF.

Table 7-7: Capacity Building and Training Framework

Description of Training	Training Module	Responsibility	Frequency	Participation
Introduction to Environment and Social Management Framework	Objectives, need and use of ESMF; Legal requirements of the ESMP (Legislations and World Bank Operational Policies) ; Management of environmental and social issues and mitigation strategies as per ESMF; Monitoring Mechanism Documentation and reporting procedures.	Environment Specialist and Social Specialist	Annual workshops	PMUs staff , Implementation partners
Sector and District Specific Environmental and Social Safeguards Trainings	Subproject screening; Subproject monitoring and reporting; Sector specific ESMPs and their components; ESMP implementation; GRM; RAP; PCRMF; Community consultations; Child and forced labour; Gender Based Violence	PMU Environment Specialist and Social Specialist	Biannual in each district	Government departments of each sector present in each district Local Facilitators Technical Resource Persons
Environmental and Social Impacts of Construction	ESMF with special focus on mitigation measures during construction stage; Community and occupational Health and Safety	PMU Environment Specialist and Social Specialist	Annual in each district	Contractors, sub-contractors, and supervision consultants

8 STAKEHOLDERS AND GENDER MANAGEMENT FRAMEWORK

Social strategy defines how the project can better relate and communicate with all the stakeholders. The social strategy intends to make the project socially acceptable and viable through social reforms, especially by addressing gender related issues and through implementation of Grievance Redress Mechanism (GRM). It also outlines a gender framework and a consultation framework for later stages of the project.

8.1 Gender Framework

8.1.1 Gender-related Constraints

No society can develop sustainably without transforming the distribution of opportunities, resources and choices for males and females so that they have equal power to shape their own lives and contribute to their families, communities and countries. Women lag behind men in most measures of economic opportunity²¹.

In most regions of the world, women make up much of the tourism workforce but tend to be concentrated in low-paid, low-status jobs²². KP's tourism workforce does not include a good number of women. The participation of women in income generation activities may increase their involvement in household decision-making and can lead to their social and economic empowerment. Thus, participation of women in tourism sector is equally important as in different other sectors.

Though women are not directly linked to the tourism sector, but the trend of women employment is increasing day by day due to substantial increase in literacy rate. In the selected tourism sites for proposed project interventions the trends of women employment vary from area to area. Since the literacy rate in Chitral is highest among the other major cities of province (see Table 4.6), the rate of women employment is highest in different sectors. Most of the women work here in NGOs, Banks and other government organizations.

Similarly, women in Kalash – the sole pagan community, work in agriculture, livestock and handicrafts to earn their livelihoods and support the household. Some Kalash women also work in Banks and some have private jobs. The local women in Kalam mostly perform household chores and do not work in markets or outside their village. But in Kalam main bazar two restaurants are being run by ladies who came up from other cities i.e. Nowshehra and Faisalabad. Women were also not found working outside of their household related tasks in Galiyat and Naran.

The GoKP has dignified the status of women in the province by following regulatory tools:

- GoKP Commission on the Status of Women Act, 2016; and
- The Khyber Pakhtunkhwa Protection Against Harassment of Women at the Workplace Amendment Bill, 2018

²¹ World Bank Group Gender Strategy (FY16-23): Gender Equality, Poverty Reduction and Inclusive Growth

²² United Nations World Tourism Organization (2011). Global Report on Women in Tourism 2010.

8.1.2 Participation of Women in Tourism Industry

Tourism is considered a key source of poverty reduction and inclusive economic growth in developing countries. Presently, very little data is available on women's participation in KP's tourism sector. The Tourism Policy, which identifies key priorities of KP's provincial government for the next few years to develop the tourism sector, must seek to incorporate a gender perspective. Women in KP have the opportunity to be involved in tourism as employees, managers and owners in hotels, rest houses, and travel agencies, and as tour operators and other related service sectors including restaurants. Proper monitoring of women's role in this vital sector of the KP economy will suggest many opportunities for increasing women's productivity and thus contribute to higher sector growth (Aroona, 2016).

Since the tourism sector in KP is in a period of development and revitalization the government of KP has an opportunity to avoid common pitfalls of policies that fail to incorporate gender.

8.1.3 Initiatives to Promote Gender Equality in Tourism

According to International Growth Centre (IGC) studies for Emerging Opportunities for Women in Khyber Pakhtunkhwa, following initiatives are paramount in trying to promote gender equality in the tourism sector:

- Undertake participatory needs assessments and sector studies, including gathering gender disaggregated data, to assess the role of women in the sector in KP and to build knowledge on the multi-faceted impacts of tourism on affected communities;
- Establishment of women's recruitment and job placement centers under the KP Tourism Department to facilitate women's placement through formal channels;
- The government of KP should ensure functioning complaint redress mechanisms are in place so that women can report discrimination or harassment. The anonymity of reports must be protected so women can come forward without fear of reprisals. The existence of these mechanisms must be publicized and employers required to display relevant contact information in work areas;
- Government should ensure easy financing and loans for women entrepreneurship;
- A female friendly work environment, which provides amenities such as pick and drop services and daycare, should be provided to working women.

8.1.4 Gender Framework

Provincial Commission on the Status of Women (PCSW), KP has published KP Women Empowerment Policy Framework to ensure empowerment of women of Khyber Pakhtunkhwa, in all spheres especially social, cultural, political economic, legal, and personal life. Keeping this in view following framework has been proposed for the project.

- Facilitate an environment for women's participation in tourism related activities;
- Target should be developed to reserve minimum of 20% to women in all jobs, services & products;
- Support women in micro enterprises or entrepreneurs through measures including relaxing Regulatory Provisions;

- Ensure Small Enterprise (SE) & Medium Enterprise (ME) policies specially to facilitate women entrepreneurs at all levels;
- Support measures for facilitating economic empowerment of women home based workers, rural women, women with disabilities, widows, single and divorced women, minority women and marginalized women through micro financing;
- Increase and strengthen women's presence, positions and roles as employers and workers by providing safe and easy working environment;
- Ensuring formulation, review and implementation of gender sensitive legislation and policies for employment and labor in formal and informal sector in line with ILO convention and in consultation with Provincial Commission on the Status of Women (PCSW); and
- Value chain development through sectors of women enterprise development and entry points of women specific tasks.

8.1.5 Benefits of Women Participation in Tourism Sector

Following are the benefits of women participation in tourism sector.

- Women participation will promote women entrepreneurships and encourage other women for participation;
- Women participation can increase household income;
- It will increase the level of trust and comfort for women tourists; and
- More women in tourism industry can lead to more opportunities for female tourists.

8.2 Consultation Framework

8.2.1 The Purpose of Consultation

Consultation is the process by which information is gathered to make decisions that impact the community. Community members are informed, connected and participated in services and activities relevant to them, and feel they have a role to play.

For effective consultation to occur, communities need to be informed and engaged. This occurs when there is equal access to information, good ongoing information flow, consultation and participation among the stakeholders.

Consultation is a process of informed, two-way communication between project implementing agency and the community on an issue prior to a decision being made:

- It recognizes that implementing agency has the mandate to be the decision-maker.
- In most cases, consultation impacts on a decision through influence, rather than power.
- Depending on the issue, implementing agency may in some instances choose an empowering model of decision-making.

8.2.2 Levels of Public Consultation

i. Inform: Low level of public impact provides information to the community with balanced and objective information to assist them in their understanding of a problem, alternatives, opportunities and

possible solutions. Most appropriate when the activity is routine in nature and affects a limited number of people in a limited way.

ii. Consult: Low to medium level of public impact obtains feedback from the community on analysis, alternatives and decisions. Usually involves developing a preliminary or preferred position before releasing it for community input. Most appropriate for sub-projects which affect larger numbers of people but in a limited way. Methods may include community information sessions, surveys and email or written submissions.

iii. Involve: Medium level of public impact works directly with the community to ensure that public concerns and aspirations are consistently understood and considered throughout a process. This may involve the community in various stages of the project in seeking specific answers to issues as opposed to broad general feedback sessions. Methods may include focus groups, workshops, advisory committees and online consultations.

iv. Collaborate: Medium to high level of public impact partners with the community in each aspect of the decision including the development of alternatives and the identification of the preferred solution. Community collaboration may be fostered through steering committees, negotiation tables, online consultations, policy roundtables, citizen panels, search conferences and formal and informal partnerships.

v. Empower: High level of public impact may use similar methods for lower levels of participation, but decision-making is placed in the hands of the community.

8.2.3 Principles Underpinning Consultations

Every consultation process must be carried out under some principles to fulfil the requirements and goals of stakeholders' engagement. Following principles must be followed in consultation process:

1. Planned

Every consultation should be appropriately planned, including purpose, scope, stakeholders, risk, level of participation, activities, resources and timeframes. Consultations should be planned and developed on the principle of obtaining community input before implementing agency makes a decision on a matter. In every communication, there should be a clear statement about what the consultation is about, the role of implementing agency and the community in the consultation, and how participants' input will be used.

2. Inclusive

The consultation must give equal opportunity to, and encourage the involvement of, all people and groups who are affected by or interested in a decision. The consultation must be designed to ensure that views are captured from a representative cross-section of the community, using appropriate methods that will reach a range of demographic (e.g. age, gender, locality and income) and stakeholder groups.

There should be a balance of consultation methods and channels, including both one-way and two-way communication, and print, electronic and face-to-face. Two way and face-to-face methods are the best

ways to engage the community in a conversation with implementing agency. All participants should be treated with respect, courtesy and honesty throughout the consultation process.

3. Timely

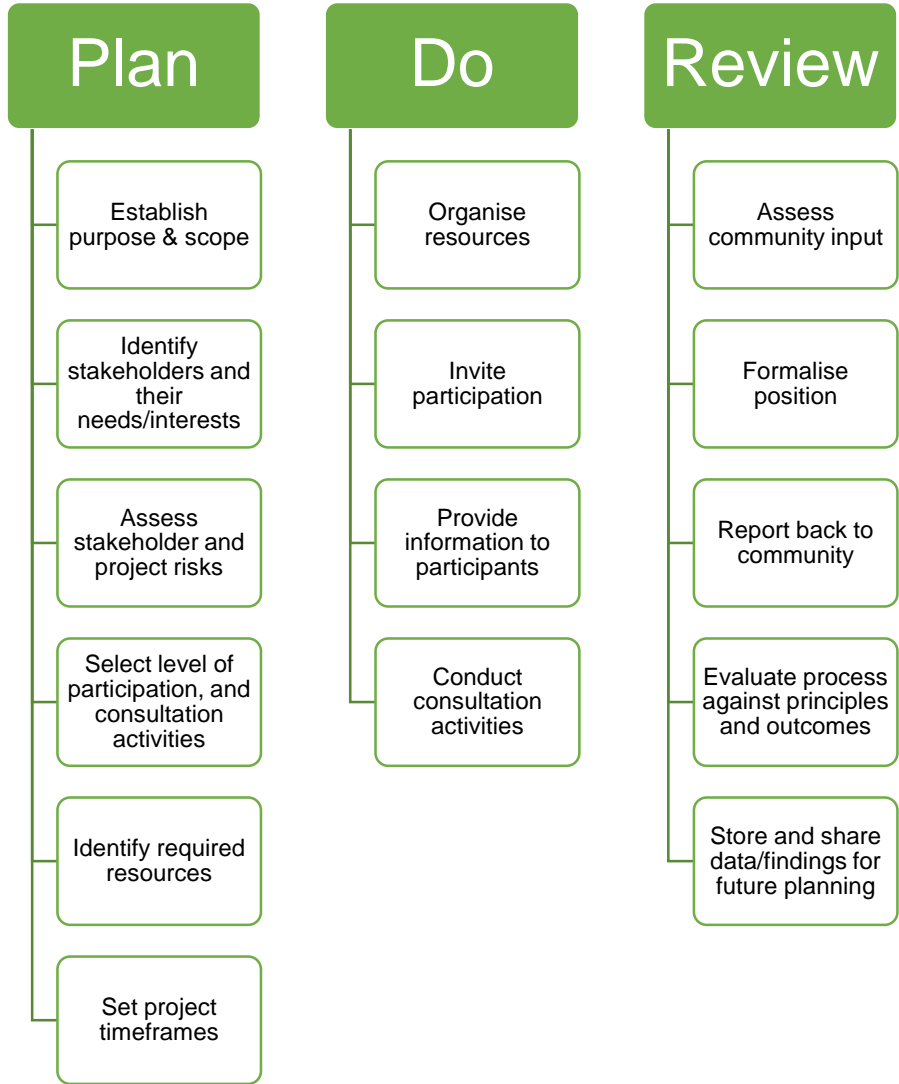
The consultation will take place early enough in the decision-making process to ensure that its outcomes are able to be considered prior to the decisions being made or determining a direction on an issue. The timeframe for the consultation process should be clearly communicated, including when decision-making is to take place.

4. Informed

Information relating to the consultation should be presented in an easily understandable format and should be easily accessible by everyone involved before key decisions are made. For issues of high community interest and public impact, implementing agency may choose to publicly release a detailed summary of feedback received throughout the consultation.

8.2.4 Consultation Process

The following process steps are based on best practice stakeholder engagement.



8.3 Conflict, Risks, Vulnerability and Use of Public Spaces

8.3.1 Utilization of Tourists Sites

Naran, Kalam, Galiyat and Chitral are the tourism hub of KP Province, but they are not accessible throughout the year because of several feet of snow on access roads. Land sliding in the summer monsoon season also hampers tourists’ access. Hence the tourism period in these areas is limited for 3 to 5 months only. The local people switch back to other areas in winter season due to extreme cold weather. These problems could be overcome by providing snow removal machinery and timely clearing the routes due to land sliding.

These tourism sites do not have major commercial facilities and major industries for business purposes as in other cities of the province. Therefore, the economy in these areas is based on tourism. The livelihood of local community is linked to tourism in several ways. Although most of the major enterprise owners are outsiders but the locals are involved as labors, waiters, security guards, small

business owners, shopkeepers, drivers, transporters and numerous other tourism-based activities. Thus, the potential of the tourist sites is fully utilized for economic activities and livelihood generation.

8.3.2 Access, Safety and Security of Women

The locals and tourists reported that the project areas are safe for everyone and there are no security and safety issues for women. However, single woman tourists hesitate to visit alone. The access, safety and security of women can further be enhanced by:

- Deputation of female police officers in tourist sites and establishment of separate police/security agency for tourist sites with effective enforcement;
- Establishment of separate markets/bazars for women;
- Employment of women in hotels and restaurants for ease of female tourists;
- Anti-harassment awareness and warnings through boards and signage.

8.3.3 Social Risks of Increased Tourism

Although the increased tourists' influx will revive the local economy but it may lead to some social conflicts and other issues. Some expected issues are summarized below:

- Cultural intermixing may damage the cultural identities of project areas;
- Disturbance to privacy of local community;
- Increased tourism may put stress on existing amenities and infrastructural facilities;
- Locals may have to compromise their resources for tourists i.e. social amenities and natural resources;
- Greater tourist influx can lead to traffic congestion and access issues. Roadside encroachment by local vendors should be discouraged;
- Parking facilities for the increased tourists during rush periods especially during summer season, should be ensured to avoid conflict with the locals; and
- Provision of separate facilities for women such as restrooms, prayer areas, hotel rooms etc. to ensure comfort of female tourists;
- Registering all the drivers, vendors, hotels, restaurants and all service providers with Police and TCKP so that complaint against any service provider may easily be made by the tourists.

8.3.4 Mitigation for Social Risks of Increased Tourism

Following mitigation measures should be adopted to avoid the possible risks of increased tourism in selected tourist sites:

- Awareness should be created among the tourists for not entering the premises of residential areas and no-go areas should be designated;
- Tourists must be educated to respect the culture and religious norms of local community;
- Resources must not be compromised for locals and alternate arrangements should be made to cater the tourists' demands;
- The increased tourists' influx must not affect the access of locals to their homes and alternate access should be provided for local community; and
- Security should be enhanced in peak seasons to avoid the conflicts.

8.4 Access and Disability

Every tourist has certain expectations about travelling and the destinations they choose to visit. Notably, studies have shown that disabled people are excluded from travelling and enjoying a holiday - at home or abroad - by a lack of suitable facilities and services. There is generally a lack of choice and lack of availability in terms of accessible accommodation, transport modes, attractions and activities.

Accessible services should be regarded as an essential adjunct to an accessible environment. Good design and accessible buildings cannot deliver truly accessible tourist experiences on their own. It is therefore vital that tourism providers develop and improve their services. Good practices in the provision of accessible facilities and services can act as examples to inspire and encourage the tourism industry to make their offers more accessible.

Taking into account people with disabilities, older people, pregnant women, families with young children and those who have other functional, health or mobility limitations, it is clear that a great portion of population would benefit greatly from improved accessibility in tourist facilities and services. Likewise disabled service providers can also be benefited from these services by getting jobs and running their businesses.



Figure 8-1: Accessible Tourism Promotion Literature

Today, the majority of hotels, transportation facilities and tourist sites are not physically accessible for many people with disabilities and older persons. In addition, accurate (and accessible) information about the access characteristics of destinations and venues is lacking. In general, it is also rare for personnel at tourist venues to be trained in how to “meet and greet” people with a disability.

8.4.1 People with Disability

The group of people with disability is very diverse and includes people with motor impairments as well as people with visual or hearing impairments, and people with mental disabilities. Disability also has a high correlation with age: elderly people can achieve a mixture of impairments due to age.

8.4.2 Universal Design

“Universal design” means the design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. “Universal design” shall not exclude assistive devices for particular groups of persons with disabilities where this is needed.

8.4.3 Chain of Accessibility

Accessibility must be present throughout the tourism chain, the links between all sites, services and activities must be well planned and tested. Elements of the tourism chain include:

- Tourism destination management
- Tourism information and advertising (Preparation, information and booking)
- Urban and architectural environments
 - Parking areas
 - Communication
 - Signage
 - Horizontal movement
 - Vertical movement
 - Public hygiene facilities
- Modes of transport and stations
 - Stations, passenger terminals and related facilities
 - Major thoroughfares
- Accommodation, food service and conventions
- Cultural activities
 - Museums
 - Theatres
 - Cinemas
- Other tourism activities and events
 - Excursions to surrounding areas
 - Sports
 - Green spaces and natural environments

8.4.4 Staff Training

Staff in tourist venues play an important role in reducing potential deficiencies in access or in mitigating unforeseen difficulties, and training in disability awareness and customer care can minimize the barriers encountered by persons with disabilities.

Staff should be trained to treat people with disabilities with courtesy and efficiency, provide complete information on services and facilities available, and facilitate access to non-accessible services.

8.5 Livelihood Strategies and Patterns

Presented below are the livelihood patterns of the people residing in selected tourist destination sites and analyzes their link to the tourism. The major sources of livelihood in the project areas are hotels, restaurants and transport provision (mostly jeeps). The typical sources of livelihood for men and women in the selected areas are summarized in **Table 8-1**.

Table 8-1: Typical Sources of Livelihood

Men	Govt. Employment
	Private Employment
	Drivers
	Transporters
	Enterprise Owners (Hotels, Restaurants, Shops etc.)
	Labors
	Farmers/ Agriculturalists
	Security Personnel (Army, Police, Other forces)
	Fishermen
	Shepherds
	Boaters
	Agriculturalists
	Trekkers
	Guides
Women	Cottage Industries
	Agriculturalists

8.5.1 Livelihood and Tourism

Most of the project sites are snowbound areas which are covered with several feet of snow throughout the winter and are thus mostly inaccessible for 4 - 5 months. Most of the sites are accessible for 3 to 4 months only in summer season. Therefore, the local business and economy just revives for almost a quarter of year.

The enterprise owners and small business owners shift to the tourism sites in summer and earn their livings for rest of the year. Almost all the businesses in Kalam, Naran and Galiyat are based on tourism either they are hotels, restaurants, shops or jeeps etc. In short, tourism is the major source of livelihood in these areas and enhanced tourism facilities and winter accessibility will cause greater tourist influx will improve the economic conditions of these areas.

8.5.2 Impacts of Project Interventions on Livelihood

Any interventions in Kalam, Naran and Galiyat during the summer season will disturb/reduce the tourist influx thus directly disturbing the tourism related businesses. Following are some of the major impacts on livelihood during construction stage:

- Temporary reduction in tourist influx during construction stages;
- Social conflicts and tensions due to loss of business;
- Reduction in economy due to disturbance in routine businesses;
- Permanent loss of business for encroachers present in the ROW of tourism routes;
- Temporary dislocation of vendors/hawkers; and
- Problems to tourists due to restricted access.

8.5.3 Addressing the Impacts on Livelihood

The proposed project is focused on the enhancement of tourism in selected destinations to revive the economy and increase the tourism related business. However, the project interventions will lead temporary loss of livelihoods and economy as discusses earlier. The anticipated impacts on the livelihood and economy cannot be fully mitigated but can be contained and reduced by adopting proper measures and strategies. Following options must be considered prior to commencement of any kind construction activities:

- Take all the stakeholders on board and address their concerns before initiating the project activities;
- Timely notification to the public at local and countrywide level through media (print media, e-media or social media);
- Inform the tourists about access issues (if any);
- Engage the business owners in project activities;
- Ensure the provision of adequate compensation to the affected community.

8.5.4 Positive Impacts in Operational Phase

The project is envisaged to uplift the economy by utilizing the tourism potential of the project sites and thus contributing to national GDP. The project will have countless positive impacts on the economy and livelihood of people after its implementation. Following are some of the positive impacts of the project:

- Revival of economy/Economic growth;
- Employment/Business opportunities;
- Improvement in lifestyles of local community;
- Platform for entrepreneurships; and
- Development of business hub for investors etc.

8.6 Grievance Redress Mechanism (GRM)

Grievance Redress Mechanism (GRM) provides a mechanism to address concerns and grievances, mediate conflicts and cut down lengthy litigations which delays such infrastructural projects. This mechanism serves as a way to meet requirements, prevent and address community concerns, reduce risks, and assist larger processes that create positive social change. The major objective of GRM is to implement and maintain a procedure for handling environmental and social concerns of the project stakeholders. This procedure will include a redress mechanism scaled to the project's identified risks and adverse impacts, focusing on stakeholders.

The GRM will comprise Grievance Redress Committees established at the PMUs at DoT and C&W respectively. The GRCs will be headed by the respective Project Directors of the two PMUs. The GRC shall address affected peoples' concerns and complaints promptly, using an understandable and transparent process.

8.6.1 Composition of DoT GRM

The DoT will develop a Grievance Redress Mechanism (GRM) at each Tourist Information Center planned at the main destination sites. This GRM will be accessible to project affected persons and tourists, and will be developed and managed by the PMU of DoT through a Grievance Redress Committee, with user-friendly complaint submission options. It will outline clear roles, timelines, procedures and responsibilities. It will have an in-built monitoring mechanism to check on responsiveness to complaints or grievances lodged. The different forms of receiving complaints will be clearly described together with the different stages of going through the process. In addition, all sub-projects requiring land acquisition will have site-specific GRCs managed by the C&W PMU.

8.6.2 Composition of C&W GRC

The GRC at C&W will be composed at following two (02) levels and will work directly under the supervision of Project Director of the C&W PMU.

- i. GRC at sub-project level
- ii. GRC at PD office / HQ level

i. Composition of GRC at Sub-Project Level/Local Level

When a grievance arises, the PAP (male or female) may contact directly with the sub-project level committee. The GRC will log the complaint along with relevant details in the community Complaint Register. The committee may resolve the concern at their door step. If the issue is successfully resolved, no further follow-up is required. The committee will make all efforts to resolve the issue within one week of launch of complaint. GRC at sub-project level shall include following members:

- A representative from local community
- Environmental Specialist of PMU–C&W
- Social Expert of PMU–C&W
- Environmental Engineer of Supervision Consultant (EE-SC)
- Environmental Engineer of Construction Contractor (EE - CC)
- A representative from local government

ii. Composition of GRC at PD Office / HQ Level

If no solution can be found at Tier 1, the PAPs may enter concern/ grievance to the GRC (PD office). For each complaint, the GRC will investigate and prepare Fact-Finding Report and assess its eligibility and identify an appropriate solution. Accordingly, the concerns will be redressed/appropriately responded within 15 days. Thus, the GRC will, as appropriate, instruct the responsible entity to take corrective actions. The GRC will review the responsible entity's response and undertake additional monitoring as needed. GRC at PD office level shall include following members:

- Project director
- Affected persons / Representative of Local Community / Private entrepreneurs representing associations of stakeholders
- Environmental Specialist of PMU–C&W
- Social Expert of PMU–C&W
- District Officer Environment

▪ LAC Revenue Department

If the affected person is not satisfied with the decision of GRC at PMU–C&W, then it can be referred to higher authorities / relevant govt. departments for its resolution. As a last resort, AP may submit the compliant to Environmental Tribunal. The flow chart of the proposed redress mechanism is shown below in **Figure 8-2**.

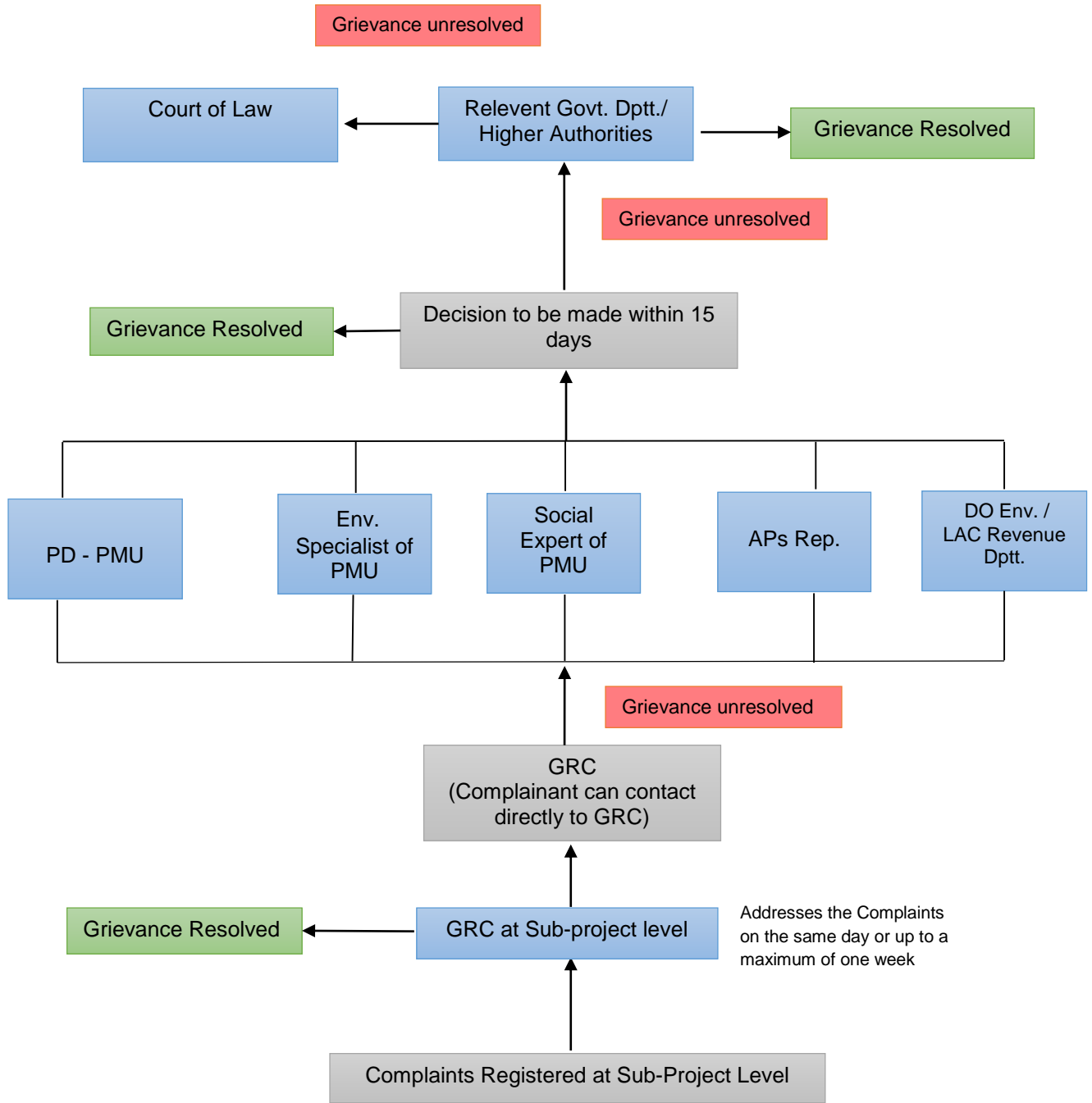


Figure 8-2: Flow Chart of the Proposed Grievance Redress Mechanism

8.6.3 Responsibilities of GRC

The responsibilities of GRC shall include the following;

- The GRC shall review, consider and resolve grievances related to environmental and social issues during implementation received by the PD – PMU.
- Environmental Specialist of SC is responsible for conducting investigations on these grievances.
- Any grievances presented to the GRC should ideally be resolved on the first day of hearing or within a period of one week, in case of complicated issues requiring additional investigations.
- GRC is empowered to take decision which is binding on PMU and considered final.

GRC meeting will be held in the PMU, PD office or other locations agreed by the committee. If needed GRC members may undertake field visits to verify and review the issues of dispute.

8.6.4 Procedures for Filing the Complaints

Any affected person can register his complaint through application at PD office or a Grievance Redress Form attached as **Annex - XIV**. The PD will direct the EE-SC to address the complainant at the same day. The EE-SC will have maximum one week to resolve the complaint. If complaint is not addressed within a week time, then the complainant can raise a grievance with the GRC.

There are several ways one can report a grievance:

- Contact the Environmental Expert or Social Expert of GRC over the phone. The contact details will be provided in the PD office.
- Send an email to the address provided in the PD- office.

The grievance will be reviewed and will be decided by the GRC. In case the grievance is not connected to the project related activity or in case the project authority finds that they are working within the applicable EPA standards, the grievance will not be further processed. In these cases, this will be explained in writing to the grievant.

In all the other cases the GRC will investigate whether they have failed to work to the intended standard and if they have identified measures which might be taken to protect against the incident occurring again.

The grievance mechanism will be made public through the public consultations and information leaflets during implementation.

8.6.5 Type of Grievance

The following are some of the environmental issues could be subject for grievance from the affected people, concerned public and NGOs.

- Dust, noise and air pollution from construction activities
- Nuisance
- Intensive schedule of construction activities
- Inappropriate timing of construction vehicle flow
- Traffic Movement

- Water Pollution
- Improper Waste disposal
- Disturbances to flora and fauna
- Health and safety issues
- Criminal activities and
- Failure to comply with standards or legal obligations

9 PHYSICAL CULTURAL RESOURCES MANAGEMENT FRAMEWORK

A significant number of Buddhist sites including stupas, monasteries, viharas, settlements, caves, rock-carvings and inscriptions are scattered all over the Swat Valley. Most of these sites are near Barikot, 30 Km of Mangora on GT Road. Under the proposed project, improved management facilities will be provided around these heritage sites including fencing, pathways, convenience facilities, signage and shelter. The heritage sites relevant to the project include Saidu Sharif, Butkara, Amluk Dara, Gumbat, Jehanabad, Gogdara, Galagai, Shingerdar Stup, Udegram/Ora and Barikot.

Due to presence of physical and cultural resources in and around the proposed project area, a standalone Physical & Cultural Resource Management Framework (PCRMF) has been prepared as per WB OP 4.11 (Physical Cultural Resources). Brief introduction to these heritage sites including snapshots and location map are covered in PCRMF document.

Physical Cultural Resources will be managed under Antiquities Act 1975, Cultural Policy of KP, WB OP 4.11 and Pak- EPA Guidelines for Sensitive and Critical Areas 1997, which have already been discussed in Section 3 of the report.

The anticipated direct impacts on physical cultural resources include impact upon sub-surface archaeology; effect of the works on any historic buildings or landscapes and visual impact on the property and its surrounding landscape. Indirect impacts include local cultural deterioration; resource use conflicts and loss of local identity and values.

It is the responsibility of proponent and the executing agency to protect and safeguard the physical cultural resources by adopting proper heritage site management practices. A Physical and Cultural Resource Management Plan shall be prepared before the commencement of construction works in/around the heritage sites. The significance of cultural heritage in a project area shall be evaluated and then potential impacts of the project, including the extent and economic costs of any damage will be assessed.

The following mitigation measures should be adopted to avoid the impacts on physical cultural resources:

- The most important single strategy for heritage protection is site avoidance: redirecting activities so that they do not endanger a site;
- If the site cannot be avoided, the assessment should consider design and construction alternatives for the project facilities as well as alternative methods and approaches for protection and mitigation;
- The alternatives should be ranked according to effectiveness, cost, difficulty, length of time required, and monitoring needs. Decisions should be made by weighing these rankings against the cultural significance and economic value of the site; furthermore
- Alternative and mitigation measures should be considered in Project Site-Specific ESMP

Project may involve deep excavations. Therefore, the possibility of chance find is not ignorable. In case of any chance find, the contractor will immediately report through Supervision Consultant to Directorate General (DG) of Archaeological Department, Government of Pakistan to take further suitable action to preserve those antique or sensitive remains. Representative of the DG will visit the

site and observe the significance of the antique, artefact and Cultural (religious) properties and significance of the project. The report will be prepared by representative and will be given to the DG. The documentation will be completed and if required suitable action will be taken to preserve those antiques and sensitive remains.

In case any artefact, antiques and sensitive remains are discovered, chance find procedures should be adopted by contractor workers as mentioned in PCRMF. The organizational setup for implementation of PCRMF is given in **Figure 9-1**.

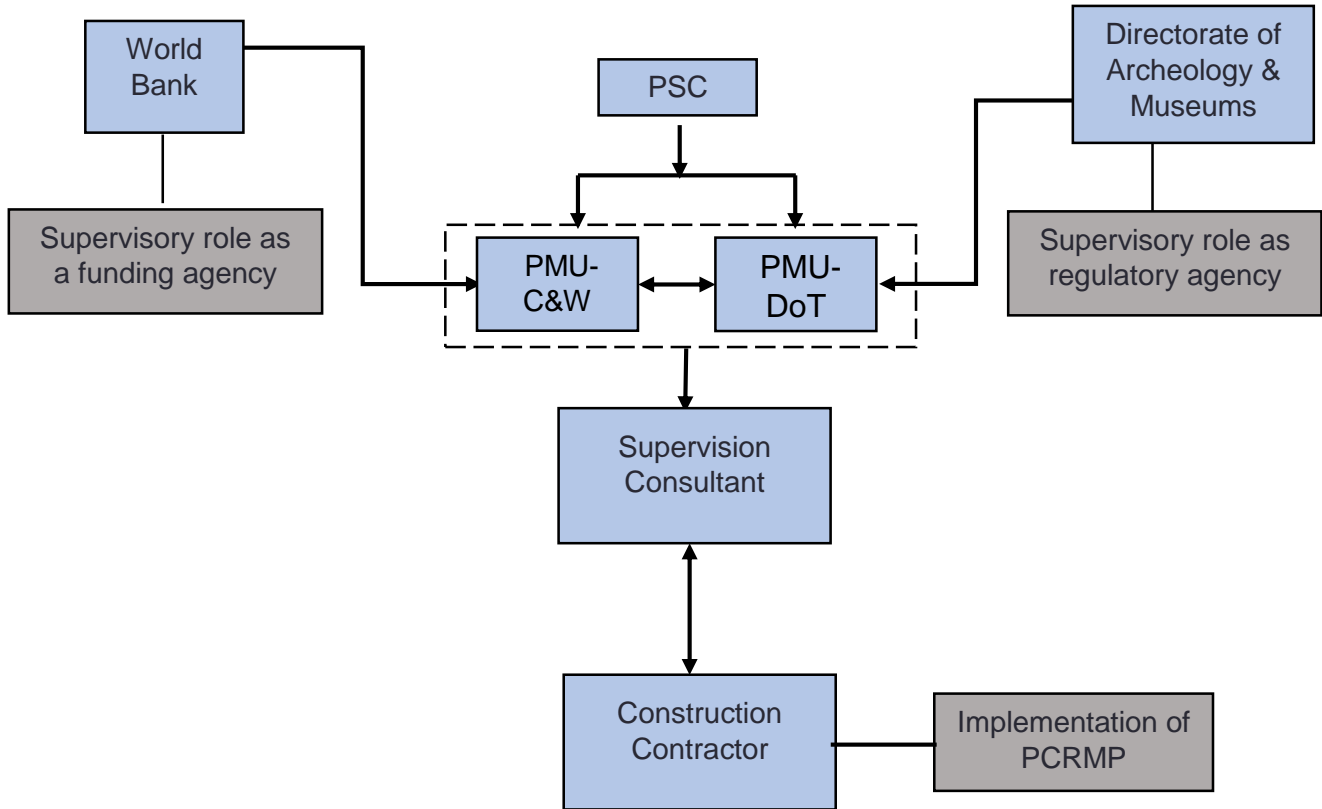


Figure 9-1: Organizational Setup for Implementation of PCRMF

10 ESMF IMPLEMENTATION BUDGET

Approximate implementation cost of ESMF implementation is given below:

Table 10-1: ESMF Implementation Budget

#	Description	Unit	Quantity	Unit Rate PKR	Total PKR
1.	Training & Capacity Building Costs (tentatively one session per district every half year)	Training Sessions	50	200,000	10,000,000
2.	External Monitors (TPV) (5 annual reports, 1 inception and end project evaluation report)	Reports	7	1,000,000	7,000,000
3.	Consultants (preparation of ESMP, IEE reports as and when required)	Lump sum	10	1,000,000	10,000,000
4.	Communication and awareness material for communities (to be developed by PMU – printing cost included here)	Lump sum	1		2,000,000
5.	Total				29,000,000
6.	Contingency @ 20 %				5,800,000
7.	Grand Total				34,800,000

*Note: Budget is based on tentatively five (05) years execution period for staff training and preparation of ESMPs and IEEs (for environmental legal compliance). Personnel cost will be included in the core project cost. Environmental Monitoring cost shall be included in specific ESMPs.

11 DISCLOSURE

Public disclosure enables affected groups and interested parties to understand likely implications of the project and have input into project design. It promotes dialogue among stakeholders i.e. government, community, NGOs and implementing agencies. As per OP 4.01, for all Category A and B projects the environmental and social aspects must be discussed with the stakeholders. The ESMF study team has made an endeavor to hold consultative and scoping sessions with these stakeholders to bring forth their views on the proposed Project, inter-alia, their opinions, suggestions and understanding on various issues and concerns.

The objectives of public disclosure are to aid meaningful public consultation and to ensure transparency of World Bank operations to its stakeholders and constituents.

The draft ESMF has been disclosed on official website of Department of Communication and Works (C&W), Govt. of KP on January 04, 2019 accessible through the link www.cwd.gkp.pk/downloads.php (Draft Safeguard Documents). The World Bank has also disclosed draft ESMF on its website under Projects & Operations in first week of January 2019.

Public disclosure meetings were held in Galiyat (Nagri Totial), Kalash, Chitral, Kalam and Kaghan (Naran) as per schedule mentioned below in **Table 11.1**. All the stakeholders were informed about the time and venue for the disclosure meeting through letters, emails, public announcements in the local mosques and banners (refer **Annex XV**). Members of NGOs and local government were also invited. The banners for the public disclosure were posted inside and outside the venue in all project areas. Naran and Galiyat were not accessible due to heavy snowfall, therefore public disclosure was conducted at nearby locations. The photographs are attached as **Annex XVI**.

Presentations containing project information and features of public interest were delivered to the public. Furthermore, project brochures, executive summaries of safeguard documents in local languages (Urdu, Pahsto and Chitrali) and handouts of presentations were distributed to the public.

Table 11.1: Schedule of Public Disclosure

#	Location	Date	Time (Hrs)	No. of Participants*
1	Galiyat (Nagri Totial)	26-01-2019	1100	77
2	Kalash (Chitral)	28-01-2019	1500	60
3	Chitral Town	29-01-2019	1100	45
4	Kalam	30-01-2019	1600	71
5	Kaghan (Naram)	01-02-2019	1430	67

The disclosure meetings were started with the recitation of Holy Quran. The Project Manager briefed the public about salient features of the project. The resettlement expert presented the findings of RPF and the environmental expert presented the findings of ESMF.

For Kalash Valley, a separate Indigenous Peoples Planning Framework (IPPF) was developed and presented at Bamburet Valley, Kalash. The services of local translator were also hired to translate the presentation into Kalasha language.

Table 12.2 presents suggestions, issues and recommendations raised by the participants during disclosure meetings and their responses by the consultants.

Table 11.2: Issues/Suggestions by the Participants

Location	Name	Suggestions/ Issues/ Recommendations	Response
Galiyat (Nagri Totial)	Participant 1	<ul style="list-style-type: none"> ▪ What will be the procedure for compensation? ▪ Who will provide compensation? ▪ Will the side walls be constructed? ▪ What is the width of land to be acquired with reference to existing road? 	<ul style="list-style-type: none"> ▪ The land will be acquired as per Land Acquisition Act 1894. ▪ The compensation shall be provided at market rates, acceptable to the public. ▪ The protection and retaining walls shall be constructed. ▪ The width of road shall be 35' to 40'.
	Participant 2	<ul style="list-style-type: none"> ▪ Measures should be taken to increase the livelihood of locals. 	<ul style="list-style-type: none"> ▪ The project is aimed at increasing the economy of province through tourism related activities.
	Participant 3	<ul style="list-style-type: none"> ▪ Will the compensation of land be given if only boundary wall is acquired? ▪ Land should be acquired at market rates. 	<ul style="list-style-type: none"> ▪ The compensation of both land and structures will be paid to the affected people. ▪ The land rates will be based on market rates.
Chitral	Participant 1	<ul style="list-style-type: none"> ▪ Please elaborate the detailed anticipated environmental impacts 	<ul style="list-style-type: none"> ▪ The detailed environmental and social impacts are documented in the ESMF. ▪ Few anticipated impacts are water pollution, waste generation, damage to ecosystem, effect to the biodiversity and other such impacts. The mitigations to contain these impacts have been documented by the experts in the ESMF.
	Participant 2	<ul style="list-style-type: none"> ▪ The main problem of Chitral is that there is no flood control system ▪ There are cultural issues e.g. in Kalash ▪ The infrastructure needs to be developed. 	<ul style="list-style-type: none"> ▪ A flood control system can be developed under the sub projects in Chitral and the suggestion will be conveyed to the competent authorities. ▪ The possible cultural issues are considered and mitigations are also proposed in the document. ▪ IPPF is developed to cater the cultural issues of Kalash people. ▪ The project contains a sub-component of infrastructural development of the project areas.
	Participant 3	<ul style="list-style-type: none"> ▪ What could be the possible activities under this project? ▪ What will be the project completion period? 	<ul style="list-style-type: none"> ▪ As written in the brochures and executive summaries the project activities will include access roads, infrastructure development, waste management, destination management, clean drinking water and many more. ▪ The project activities are anticipated to be completed within five (05) years.
	Participant 4	<ul style="list-style-type: none"> ▪ Recycling of Solid Waste should be done in Chitral city 	<ul style="list-style-type: none"> ▪ Solid waste management and plastics recycling is a possible activity under the project.

Location	Name	Suggestions/ Issues/ Recommendations	Response
		<ul style="list-style-type: none"> ▪ What activities are included Infrastructure Development? ▪ Training sessions must be held for Capacity Building and Local Awareness ▪ Development in Kalash can harm their unique culture as development and Kalash culture are inversely proportional to each other? 	<ul style="list-style-type: none"> ▪ The infrastructure development activities may include: <ul style="list-style-type: none"> ○ Internal roads in Chitral Town, ○ Rest areas on Dir-Chitral-Shandur Road, ○ Solid waste management, ○ Street lights in Chitral, ○ Rehabilitation of parks and polo ground etc. ▪ Training and awareness of the locals and local govt. officials is already a part of the project and training framework has been documented in the ESMF. ▪ The IPPF has been prepared to protect the cultural identity of Kalash. No such activity will be undertaken that damages their uniqueness and culture.
	Participant 5	<ul style="list-style-type: none"> ▪ What are steps taken for livelihood improvement? ▪ Any alternate energy source recommended? 	<ul style="list-style-type: none"> ▪ The project aims to facilitate the tourists and improve destination places to increase the tourist influx that will contribute to the livelihood improvement of the locals, as they are mostly dependent on tourism, and consequently economic growth of the province. ▪ Efforts shall be made to use the renewable energy and avoid conventional fuels and wood for meeting the energy demands.
Kalam	Participant 1	<ul style="list-style-type: none"> ▪ He appreciated the project initiative and suggested some destination places that need development and some pressing needs of the area as mentioned below; <ul style="list-style-type: none"> ○ Burun Hilltop Chairlift ○ Access Andrab Lake (5 Km from Kalam) ○ Desan valley (7-8 Km from Kalam) is 14 Km² plain area having lakes and flowers ○ Blue water lake needs proper access road ○ Asan (Destination Place) ○ No availability of clean drinking water ○ No access road (Behrain-Kalam) 	<ul style="list-style-type: none"> ▪ It was assured that all his concerns and suggestions will made part of this document for consideration of the competent authorities.

Location	Name	Suggestions/ Issues/ Recommendations	Response
		<ul style="list-style-type: none"> ○ Less educational facilities especially for women ○ Less facilities for health ○ 80,000 cars entering in Kalam in peak seasons and facilities are not available to fulfill this capacity ○ No banking system in Kalam ○ No Sui gas, it is essential to avoid cutting of trees as it is destroying the natural biodiversity and beauty of Kalam. 	
	Participant 2	<ul style="list-style-type: none"> ▪ Tunnels/ retaining walls to control avalanches/ land sliding 	<ul style="list-style-type: none"> ▪ This suggestion will be documented and will be considered in the road construction.
	Participant 3	<ul style="list-style-type: none"> ▪ Road to Sober (4 Km from Kalam) and Qarin 	<ul style="list-style-type: none"> ▪ Internal roads/ tourism routes to destination places is part of the project and this road will be considered as per scope and importance.
	Participant 4	<ul style="list-style-type: none"> ▪ Improper washrooms facility in Historical Mosque in Kalam main bazar 	<ul style="list-style-type: none"> ▪ Protection of cultural heritage and historical places is also included in the sub-projects. ▪ Further the mosque is situated in main bazar Kalam and tourist visit this place and offer prayers so washrooms facility may also be provided.
Kaghan	Participant 1	<ul style="list-style-type: none"> ▪ Install chairlift from Kaghan to Shingli Top to promote tourism in Kaghan. 	<ul style="list-style-type: none"> ▪ The suggestion has been noted.
	Participant 2	<ul style="list-style-type: none"> ▪ Install chairlift from Dhanna to Medan. ▪ Construct road from Shingri top to Dhanna. ▪ Construct track up to Ansu and Suroor lakes from Kaghan. 	<ul style="list-style-type: none"> ▪ Suggestion of chairlift has been noted. ▪ Provision of access roads and tracks to the scenic lakes is part of the project.
	Participant 3	<ul style="list-style-type: none"> ▪ Install chairlift up to Dhanna. ▪ Construct road from Kinari to Dhanna ▪ Construct road from Rajwal to Seh Kundi 	<ul style="list-style-type: none"> ▪ Suggestion of chairlift has been noted. ▪ Provision of access roads and tracks to the scenic lakes is part of the project.
	Participant 4	<ul style="list-style-type: none"> ▪ Provide clean drinking water supplies. ▪ Provide public wash rooms and rest rooms. 	<ul style="list-style-type: none"> ▪ Provision of clean drinking water to the locals and tourists is part of this project.

Location	Name	Suggestions/ Issues/ Recommendations	Response
	Participant 5	<ul style="list-style-type: none"> ▪ Provide water supply in Kinnari, Sehri and Diarian. 	<ul style="list-style-type: none"> ▪ The suggestion has been noted.
	Participant 6	<ul style="list-style-type: none"> ▪ There is water supply issue. 	<ul style="list-style-type: none"> ▪ The issue has been noted down.
	Participant 7	<ul style="list-style-type: none"> ▪ A committee must be constituted at local level to help in promoting tourism activities. ▪ Plan water supply in Sehri and Rajwal. ▪ Snow removing facilities/ machinery must be procured and the road shall be made an all season road to attract the tourists throughout the year. ▪ Centralized heating system must be installed in winters to keep the building warm in winters. 	<ul style="list-style-type: none"> ▪ The suggestion for local level committee is encouraged and the department shall take steps to indulge locals. ▪ Snow removing machinery shall be procured and deputed. ▪ Centralized heating system will be installed where feasible.

12 Environmental and Occupational Health and Safety Plan (Emergency) - KITE

(Attachment to the ESMF for KITE)

General Procedures to be adapted

Managing the Environmental and HCW Risks from COVID-19 Emergency Response

Under the environmental and safety guidelines (E&S) of the World Bank, National Action Plan for Corona virus disease (COVID-19) Pakistan and Labor law, employers have a duty of care for the health and safety of their workers and others at the workplace. This includes:

- Provision of appropriate number of tools, equipment and PPEs for facilities.
- providing and maintaining a work environment that is safe to any risk to health and safety, and
- providing adequate safety facilities for workers in carrying out their work.

Rationale

Overall, the project activity will support the COVID19 emergency response capacity building activities focusing primarily on providing medical supplies and equipment including ventilators, masks, nebulizers, supplies, cardiac monitors, infusion pumps and syringe pumps. Environmentally and socially sound health facilities management will require adequate provisions for minimization of occupational health and safety risks, proper management of hazardous waste and sharps, use of appropriate disinfectants, appropriate chemical and infectious substance handling and transportation procedures, etc.

Environmental Impacts and Mitigation Measures

Since the project activity is primarily limited to the procurement of hospital equipment, environmentally and socially sound operations will require adequate provisions for minimization of occupational health and safety risks, proper management and disposal of hazardous and bio-medical waste and sharps, use of appropriate disinfectants, proper quarantine procedure for COVID-19, appropriate chemical and infectious substance handling and transportation procedure as well as institutional/implementation arrangement for environmental and social risks.

Health and Safety issues

Goods and Services²³

Older people and people with pre-existing medical conditions (including asthma, diabetes, heart disease) appear to be more vulnerable to becoming severely ill from COVID-19²⁴.

The following table lists the health and safety risks and impacts associated with Goods and Services financed by the Bank in response to the COVID-19 outbreak. Potential mitigation measures and references to sources of additional advice and information are provided.

S. No.	Activity	Risks and Impacts	Mitigation Measures
1	Purchase and stocking of emergency rooms, clinics and other medical facilities, including with Laboratory equipment, supplies or goods.	Surfaces of imported materials may be contaminated and handling during transportation may result in spreading.	<ul style="list-style-type: none"> Although coronavirus can stay on surfaces for a few hours to several days depending upon the type of surface (and the differing conditions and temperatures through which the equipment is moved), it is very unlikely that the virus will persist on a surface, even if originating in China or other country reporting COVID-19 cases. No special measures are required for handling imported goods and equipment, except regular hand washing. Projects should ensure that adequate handwashing facilities with soap (liquid), water and paper towels for hand drying (warm air driers may be an alternative), plus closed waste bin for paper towels are

²³ References and sources of further information

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance>

<https://www.cdc.gov/coronavirus/2019-ncov/lab/lab-biosafety-guidelines.html>

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html>

<https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance#guidance-for-health-professionals>

²⁴ The SARS-CoV-2 virus has been identified as the cause of COVID-19.

			<p>available. Alcohol-based hand rub should be provided where handwashing facilities can not be accessed easily and regularly.</p> <ul style="list-style-type: none"> • Also ensure awareness campaigns and reminder signs are regularly posted around site to encourage workers regularly wash hands when handling goods, and that they do not touch their face. • If concerned (for example when dealing with goods that have come from countries with high numbers of infected people) a surface or equipment may be decontaminated using disinfectant. After disinfecting, workers should wash hands with soap and water or use alcohol - based hand rub
2	Purchase of PPE for healthcare workers and health facility cleaners	Incorrect standard or quality of PPE leads to spread of infection to healthcare workers and cleaners.	<p>Medical personal protective equipment (PPE) includes:</p> <ol style="list-style-type: none"> 1. Medical mask 2. Gown 3. Apron 4. Eye protection (goggles or face shield) 5. Respirator (N95 or FFP2 standard) 6. Boots/closed work shoes <p>WHO interim guidance on rational use of PPE for coronavirus disease 2019 provided further details on the types of PPE that are required for different functions.</p>
3	Distribution of goods or services on basis of need	<ul style="list-style-type: none"> • A non-transparent and poorly managed distribution system and practice could worsen the current shortage 	<ul style="list-style-type: none"> • Attention should be given to the distribution system, to ensure effective and efficient use of the goods and services and avoid capturing of the rich, powerful and privileged, particularly at this time of short supply.

		<p>situation, affecting the maximum and efficient use of resources.</p> <ul style="list-style-type: none"> The disadvantaged and vulnerable population groups, and IP communities could face disproportionate difficulties in accessing the available resources, exposing them to greater risks. 	<ul style="list-style-type: none"> Particular attention and efforts should be given to the disadvantaged and vulnerable groups and IP communities to make sure that they have equal if not better access to these resources.
4	Hand wash stations	Inadequate handwashing facilities are provided for handling.	<ul style="list-style-type: none"> Projects should ensure that adequate handwashing facilities with soap (liquid), water and paper towels for hand drying (warm air driers may be an alternative), plus closed waste bin for paper towels are available. If water and soap handwashing facilities are not possible, alcohol-based hand rubs may be provided.
5	Alcohol-based hand sanitizers	Alcohol-based hand rubs may not be as effective at controlling infection as hand washing with soap and water.	<ul style="list-style-type: none"> Alcohol-based hand sanitizers are not considered as effective as hand washing with soap and water and should therefore only be used in locations where full hand washing facilities cannot be provided. Advice should be provided to remind users where full handwashing facilities can be found.
6	Medical waste contaminated with COVID-19 virus	The collection, processing, treatment and disposal of medical wastes becomes a	<ul style="list-style-type: none"> There is no evidence that direct, unprotected human contact during the handling of healthcare waste has resulted in the transmission of COVID-19.

		<p>vector for the spread of the virus.</p>	<ul style="list-style-type: none"> • The treatment of healthcare waste produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated and then safely disposed. • Open burning and incineration of medical wastes can result in emission of dioxins, furans and particulate matter, and result in unacceptable cancer risks under medium (two hours per week) or higher usage. • If small-scale incinerators are the only option available, the best practices possible should be used, to minimize operational impacts on the environment. Best practices in this context are: <ul style="list-style-type: none"> • <i>effective waste reduction and segregation, ensuring only the smallest quantities of combustible waste types are incinerated;</i> • <i>an engineered design with sufficient residence time and temperatures to minimize products of incomplete combustion;</i> • <i>siting incinerators away from health-care buildings and residential areas or where food is grown;</i> • <i>construction using detailed engineering plans and materials to minimize flaws that may lead to incomplete destruction of waste and premature failures of the incinerator;</i> • <i>a clearly described method of operation to achieve the desired combustion conditions and emissions; for example, appropriate start-up and cool-down procedures, achievement and maintenance of a minimum temperature before waste is burned, use of appropriate</i>
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			<p><i>loading/charging rates (both fuel and waste) to maintain appropriate temperatures, proper disposal of ash and equipment to safeguard workers;</i></p> <ul style="list-style-type: none"> <i>periodic maintenance to replace or repair defective components (including inspection, spare parts inventory and daily record keeping); and</i> <i>improved training and management, possibly promoted by certification and inspection programs for operators, the availability of an operating and maintenance manual, visible management oversight, and regular maintenance schedules.</i> <ul style="list-style-type: none"> Single-chamber, drum and brick incinerators do not meet the Best Available Techniques (BAT) requirements under Stockholm Convention. Small-scale incineration should be viewed as a transitional means of disposal for health-care waste. Alternative treatments should be designed into longer term projects, such as steam treatment methods. Steam treatment should preferably be on site, although once treated, sterile/non-infectious waste may be shredded and disposed of in suitable waste facilities²⁵.
7	Water, sanitation, hygiene and waste management for COVID-19	COVID-19 virus is transmitted through inappropriate sanitation arrangements or through drinking	<ul style="list-style-type: none"> There is no evidence that COVID-19 virus persists in drinking water, sewage, or medical wastes, and following of good hygiene practices will provide effective control.

²⁵ See WHO Safe management of wastes from health-care activities.

		water and contaminated waste.	
8	Identification and diagnosis	Collection of samples and testing for COVID19 could result in spread of disease to medical workers or laboratory workers, or during the transport of potentially affected samples.	<ul style="list-style-type: none"> • Collection of samples, transport of samples and testing of the clinical specimens from patients meeting the suspect case definition should be performed in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases. Tests should be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures. • National guidelines on laboratory biosafety should be followed. There is still limited information on the risk posed by COVID-19, but all procedures should be undertaken based on a risk assessment. For more information related to COVID-19 risk assessment, see specific interim guidance document: WHO interim guidance for laboratory biosafety related to 2019-nCoV. • Samples that are potentially infectious materials (PIM) need to be handled and stored as described in WHO document Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses (PIM Guidance). • For general laboratory biosafety guidelines, see the WHO Laboratory Biosafety Manual, 3rd edition.

Hospital Preparedness Checklist for Pandemic- COVID-19

Healthcare Planning Checklist

General Introduction:

Hospitals play a critical role within the health system in providing essential medical care to the community, particularly during a crisis, such as an epidemic or a pandemic. Prolonged and combined outbreaks can lead to the progressive spread of disease with rapidly increasing service demands that can potentially overwhelm the capacity of hospitals and the health system. To enhance the readiness of the health facilities to cope with the challenges of a pandemic or any other emergency or disaster, hospital managers need to ensure the initiation of relevant generic priority action. This document aims to provide a checklist of the key action to carry out in the context of a continuous hospital emergency preparedness process.

Hospitals are complex and vulnerable institutions, dependent on crucial external support and supply lines. Under normal working conditions, many hospitals frequently operate at near-surge capacity. Consequently, even a modest rise in admission volume can overwhelm a hospital beyond its functional reserve. Well-established partnerships with local authorities, service providers (e.g. of water, power and means of communication), supply vendors, transportation companies and other organizations are required to ensure the continuity of essential services.

During pandemic, an interruption of these critical support services and supplies would potentially disrupt the services provided by an unprepared health facility. In addition, a high rate of staff absenteeism is expected. Shortage of critical equipment and supplies could limit access to needed care and **reduce occupational safety**. Panic could potentially jeopardize established working routines. Even for a well-prepared hospital, coping with the health consequences of a pandemic would be a complex challenge. Despite the difficult demands and obstacles foreseen, the proactive and systematic implementation of key generic and specific pandemic-related action can facilitate effective hospital-based management during a pandemic.

The benefits of an effective, hospital-based epidemic/pandemic response include: (1) the continuity of essential services; (2) the well-coordinated implementation of priority action at every level; (3) clear and accurate internal and external communication; (4) swift adaptation to increased demands; (5) the effective use of scarce resources; and (6) a safe environment for health workers. This checklist has been prepared with the aim of supporting hospital managers and emergency planners in achieving the above by defining and initiating the action needed to ensure a rapid response to epidemic or pandemic with respect to safe environment and occupational health and safety.

Under **Safety / Infection Control Activities Checklist- 1** there is a list of questions regarding the status of implementation of the recommended action. Hospitals experiencing an excessive demand for health services due to pandemic-prone disease are strongly encouraged to ensure the effective implementation of each action. Hospitals at risk of increased health service demand should be prepared to initiate the implementation of each action promptly. Hospital emergency preparedness is a continuous process that needs to link to the overall national preparedness programme.

Planning for a potential emerging infectious disease pandemic, like COVID-19, is critical to protecting the health and welfare of our nation.

Checklist- 1: Occupational Health and Safety / Infection Control Activities

Name of the facility: _____

Name of inspector: _____ Date of inspection: _____

S. No.	Activities	Not Started	In Progress	Completed	Additional Remarks
1	Develop a pandemic safety plan and appoint a safety officer.				
2	Develop a facility pandemic safety plan and appoint a safety officer.				
3	Provide staff education about COVID-19 infection control and update policies as required.				
4	Develop guidance for staff monitoring for signs of illness (including self-reporting, self-quarantine, and start/end of shift evaluation) and create a mechanism for reporting both illness and absenteeism.				
5	Develop a return to work post illness policy for health care workers. This should be as				

S. No.	Activities	Not Started	In Progress	Completed	Additional Remarks
	consistent as possible across the coalition.				
6	Determine contingency plan for at-risk staff (e.g., pregnant, other defined risk groups) including job expectations and potential alternate roles and locations.				
7	Evaluate the need for family support to enable staff to work (e.g., childcare, pet care				
8	Ensure that health care workers, patients and visitors are aware of cough etiquette and respiratory and hand hygiene. Provide verbal instruction, informational posters, cards, etc.				
9	Ensure that those caring for suspected and confirmed cases apply standard and droplet precautions.				
10	Ensure that personal protective equipment (PPE) (i.e. medical/surgical masks,				

S. No.	Activities	Not Started	In Progress	Completed	Additional Remarks
	gloves, gowns, eye protection) is easily accessible to staff.				
11	If the supply of PPE is limited, prioritize staff caring for cases.				
12	Provide medical/surgical masks to all suspected and confirmed cases during transport; reinforce cough etiquette when mask use is not tolerated.				
13	Optimize ventilation in the health care facility.				
14	Provide clear identification of and restriction to the rooms, routes and buildings used in connection with patient care. Limit patient, staff, and visitor transit through in- and out-patient units (restrict access).				
15	Ensure the cleaning and disinfection of reusable equipment between patient use.				
16	Health-care workers with symptoms of epidemic- or				

S. No.	Activities	Not Started	In Progress	Completed	Additional Remarks
	pandemic-prone disease should remain at home.				

Checklist-2: Hospital Hazardous Waste Holding and Storage Inspection: *Infection prevention and control*

Name of the facility: _____

Name of inspector: _____ Date of inspection: _____

S. No.	Activities	Response Check Yes or No		Remarks
A	Waste segregation and collection			
1	Does waste segregation occur at the point where the waste is generated?	Yes	No	
2	Is the collected waste properly segregated?	Yes	No	
3	Are color-coded waste containers used in all facility areas?	Yes	No	
4	Are waste containers properly marked and labeled as per the waste they contain?	Yes	No	
5	Do all yellow buckets for collecting infectious waste have lids?	Yes	No	
6	Are all waste containers free of leaking?	Yes	No	
7	Are sharps containers puncture-resistant, and leak-proof?	Yes	No	
8	Is appropriate passageway space maintained near the waste containers?	Yes	No	
9	Are the waste containers emptied at the end of each day?	Yes	No	
10	Are the waste containers filled no more than about three-quarters full?	Yes	No	
11	Are containers cleaned daily after waste is emptied?	Yes	No	
12	Is segregated sharps waste sealed and labeled before transportation?	Yes	No	
13	Is medical waste other than sharps placed in clearly labeled heavy-duty biohazard plastic bag or yellow plastic bag?	Yes	No	

S. No.	Activities	Response Check		Remarks
		Yes	No	
14	Does everyone who will be handling waste have the appropriate PPE? (Gloves, tongs)	Yes	No	
15	Is chemical waste temporarily stored in the generator's laboratory?	Yes	No	
16	Is the chemical waste stored in a central waste-holding facility of the building?	Yes	No	
17	Are incompatible chemical wastes stored in separate containers?	Yes	No	
18	Are liquid waste containers only filled to 70-80% capacity?	Yes	No	
B	Waste storage			
19	Are lids of waste bins and containers closed properly during transportation from ward to central storage?	Yes	No	
20	Is waste storage area located away from the patients?	Yes	No	
21	Are the waste collection tanks completely enclosed?	Yes	No	
22	Are the waste collection tanks not overfilled?	Yes	No	
23	Is waste storage area kept clean, free from loose litter and malodorous spillages and debris?	Yes	No	
24	Is waste storage area free from pests and vermin?	Yes	No	
25	Is waste storage area secure and with access restricted to authorized personnel only?	Yes	No	
26	Is waste storage area well lit?	Yes	No	
27	Is waste storage area well ventilated?	Yes	No	
28	Is waste storage separated from food preparation area(s) and supply rooms?	Yes	No	
29	Is stored waste clear within the following periods? <ul style="list-style-type: none"> ▪ Maximum 48 hours during the cool season ▪ Maximum 24 hours during the hot season 	Yes	No	
30	Is waste storage area clearly marked with warning signs (biohazard symbol)?	Yes	No	

S. No.	Activities	Response Check		Remarks
		Yes	No	
31	Is there access to first aid and washing facilities?	Yes	No	
32	Is waste storage area away from routes used by the general public?	Yes	No	
33	Is bag for storage of infectious waste identified with the source where the waste is generated — either by a written label or with bar-coded tape or labels?	Yes	No	
34	Is water supply available for cleaning purpose in the storage area?	Yes	No	
C	Documentation			
35	Are policy and procedures for medical waste management available in the storage area?	Yes	No	
36	Are SOPs for waste holding and storage available in the storage area?	Yes	No	
37	Is the record of quantity of collected waste in the storage area well maintained and up to date?	Yes	No	
38	Are HCWM training aids posted in the storage area?	Yes	No	
D	Training			
39	Are storage area personnel training files up to date and available?	Yes	No	
40	Is refresher training available to all related staff at least yearly?	Yes	No	
41	Do personnel understand hazards and how to minimize risks?	Yes	No	
42	Is injury and emergency response procedure known and understood by all relevant personnel?	Yes	No	

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