



**Pakhtunkhwa Energy Development
Organization (PEDO)**

KHYBER PAKHTUNKHWA HYDROPOWER AND RENEWABLE ENERGY DEVELOPMENT



MADYAN HYDROPOWER PROJECT

Resettlement Action Plan

October 2023

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ABBREVIATIONS AND ACRONYMS

AC	Assistant Commissioner
AF	Affected Family
AHH	Affected House Hold
amsl	Above mean sea level
AOI	Area of Influence
BHU	Basic Health Unit
BOQ	Bill of Quantities
CBM	Confidence Building Measure
CBOs	Community Based Organizations
CCA	Cultivated Command Area
CHC	Community Health Center
C&W	Communication & Works
DC	Deputy Commissioner
DCO	District Coordination Officer
DG	Director General
DMS	Detailed Measurement Survey
E&M	Electrical and Mechanical
EA	Environmental Assessment
EA	Executing Agency
EDO (R)	Executive District Officer (Revenue)
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ESF	Environmental and Social Framework (WB)
ESS	Environmental and Social Standard
FGD	Focused Group Discussion
GIS	Geographic Information System
GoP	Government of Pakistan
GRC	Grievance Redress Committee
ID	Irrigation Department
KPEPA	Khyber Pakhtunkhwa Environmental Protection Act
LAA	Land Acquisition Act
LAR	Land Acquisition and Resettlement
MCHC	Mother and Child Health Center
MOL	Minimum Operation Level
NGO	Non-Governmental Organization
NPSEP	National Power System Expansion Plan
O&M	Operation and Maintenance
OP	Operational Policy
OPL	Official Poverty Line

P&I	Planning and Investigation
EPA	Environmental Protection Agency
PEPA	Pakistan Environmental Protection Act
PAP	Project Affected Person
PD	Project Director
PIU	Project Implementation Unit
PMF	Probable Maximum Flood
PMO	Project Management Organization
PMU	Project Management Unit
RAP	Resettlement Action Plan
RHC	Rural Health Centre
ROW	Right of Way
RPF	Resettlement Policy Framework
SIA	Social Impact Assessment
SOP	Standard Operating Procedures
SRS	Social and Resettlement Specialist
TOR	Terms of Reference
WB	World Bank

GLOSSARY OF TERMS

Project Affected Person or Affected Person (PAP/AP): Means any person or persons, household, firm, private or public institution that, on account of changes resulting from the Project, will have its (i) standard of living adversely affected; (ii) right, title or interest in any house, land (including residential, commercial, agricultural, forest, mining, grazing land, water resources or any other moveable or fixed assets acquired, possessed, restricted or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence or habitat adversely affected, with or without displacement.

Affected Households: All members of the affected household residing under one roof, operating as a single economic unit and consisting of a single nuclear family or an extended family group, who are adversely affected by the project or any of its components or activity.

Compensation: Means payment in cash or in kind to replace losses of lands, housing, income, and other assets caused by the Project. All compensation is based on the principle of replacement cost, which is the method of valuing assets to replace the loss at current market rates, plus any transaction costs such as administrative charges, taxes, registration, and titling costs.

Cut-off-date: The date after which people will not be considered eligible for compensation, i.e., they are not included in the list of PAPs as defined by the Census. The cut-off date is the completion date of the census survey.

Encroachers/squatters: People who have encroached onto an unauthorized private, public or community land. If such people arrived before the entitlements cut-off date, they are eligible for compensation for any structures, crops or land improvements that they will lose but not the land under their use.

Entitlement: Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation, to restore the economic and social base of the displaced persons.

Host Population: Community living in or near to the area, where the project affected people are to be relocated.

Income Restoration: Re-establishment of income sources and livelihoods of PAPs.

Involuntary Resettlement: Economic and physical dislocation resulting from a development project. Improvements: Structures constructed (dwelling unit, fence, waiting sheds animal pens, utilities, community facilities, stores, warehouses, etc.) and crops/plants planted by the person, household, institution, or organization.

Inventory of Losses (IOL): This is the process where all fixed assets (i.e., lands used for residence, commerce, agriculture, including ponds; dwelling units; stalls and shops; secondary structures, such as fences, tombs, wells; trees with commercial value; etc.) and sources of income and livelihood inside the Project right-of-way (project area) are identified, measured, their owners identified, their exact location pinpointed, and their replacement costs calculated. Additionally, the severity of impact to the affected assets and the severity of impact to the livelihood and productive capacity of PAPs will be determined.

Land Acquisition: The process whereby a government agency uses eminent domain to acquire all or part of land owned by private entity for public purpose.

Meaningful Consultation: A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to project affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of project affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

Resettlement Action Plan (RAP): This is a time-bound action plan with budget setting out compensation and resettlement strategies, objectives, entitlement, actions, responsibilities, monitoring and evaluation.

Rehabilitation: Measures provided under the statutory Framework and on Involuntary Resettlement Policy of any financing agency (if applicable) other than payment of the replacement cost of acquired assets.

Relocation: The physical resettlement of displaced persons at his/her planned place of residence.

Replacement Cost: The financial value determined on current market rates as the fair compensation for the loss of agricultural and residential land, crops, trees, and other commodities such as; cost of rebuilding houses and structures at current market prices of building materials and labor, without depreciation or deductions for salvaged building material and including all other transactions costs and taxes.

Severely affected households: This refers to affected households who will (i) lose 10% or more of their total productive land and/or assets, (ii) have to relocate; and/or (iii) lose 10% or more of their total income sources due to the project.

Vulnerable Groups: Group of people who may suffer disproportionately from resettlement effects. The WB OP 4.12 on Involuntary Resettlement defines vulnerable groups (if any) as households below the poverty line, the elderly, those without legal title to assets, landless, female headed household, children and people with disabilities.

EXECUTIVE SUMMARY

ES-1: The Madyan Hydropower Project (MHPP) is a hydroelectric power plant being built along the Swat River by Pakhtunkhwa Energy Development Organization (PEDO). The Project is funded by the World Bank (WB) through the Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program (hereinafter referred to as 'the Program' or KHRE). Therefore, all environmental and social instruments prepared under this project are in compliance with both locally applicable regulations and WB's Operational Policies (OPs) and Guidelines. While the construction of the MHPP is expected to provide much needed electricity in the country, it will also entail involuntary land acquisition and resettlement, which may result in physical and economic displacement of the affected communities. To address this issue, this Resettlement Action Plan (RAP) has been developed in line with the World Bank OP-4.12 on Involuntary Resettlement, as well as the statutory requirements of the country. RAP aims to identify the potential land acquisition and resettlement (LAR) impacts of the project and provide mitigation measures to minimize these impacts. RAP will be updated based on the final design of the project (if needed) and will ensure that the affected communities are fairly compensated for their losses and receive appropriate assistance to help them to restore their livelihoods.

ES-2: MHPP is a run-of-the-river project. The site is located on Swat River about 12 kilometers (km) upstream of the town of Madyan in Swat district of Khyber Pakhtunkhwa (KP) province. The project is accessible from Peshawar and Islamabad via Motorway (M1) and National Highway (N-95). Madyan, a known tourists spot, is at about 200 km from Peshawar.

ES-3: The Project consists of the following main structural components:

- 16.2 m high weir from the riverbed, 107m long crest. It will be concrete gravity structure ogee shaped with overflow spillway, fish ladder and under sluices;
- One 72.9m long power intake, proposed at the left abutment of weir;
- Two underground de-sander chambers, proposed at the left abutment of weir;
- Approximately 910 m long approach tunnel to connect power intake to the de-sander chambers;
- Underground powerhouse (with two big units of 86.6 megawatts - MW and one small unit of 33.8 MW) and a 220-kilo volt (kV) Gas Insulated switchgear system;
- Approximately 11.18 km long Headrace (pressure) tunnel from the de-sander to the Power house;
- Approximately 01 km long 220 kV transmission line;
- One permanent new bridge crossing the Swat River connecting between N95 highway at right bank and the new construction road at left bank;
- Several sites to dispose excavated materials;
- Project colony with a necessary water supply and sanitation facilities for approximately 50 operation and maintenance (O&M) staffs.

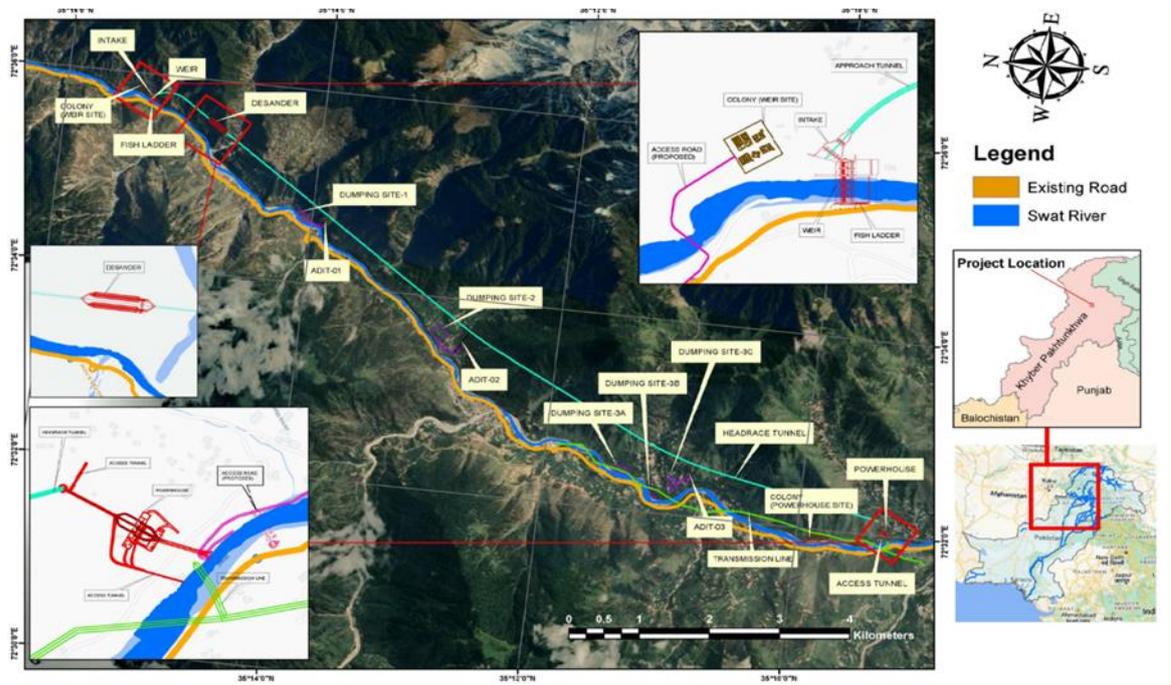


Figure ES-1: Location & Layout of Project Components

ES-4: Methodology adopted for the assessment of LAR impacts involved several components, including Census of project affected persons (PAPs), a Detailed Measurement Survey (DMS) of their affected assets and socioeconomic survey. The census was completed on 31 January 2023 and the same has been established as cut-off date. The cut-off date was publicly announced to the people of the project during the Jirga meetings, consultation meetings and scoping sessions with communities.

ES-5: The socioeconomic surveys were carried out to establish a baseline of the population of the project area. A sample size of 20% of the affected villages was chosen, based on the population size of the villages for the socioeconomic survey. However, in case of census, the affected households (AHHs) as identified during the impact assessment survey have been taken on 100% basis for the survey.

ES-6: The land impacted by the MHPP measures to be 1049.40 kanals¹ (about 53 hectares) as per revised design of the project. This land is owned by 141 landowners. About 105 kanals of government owned land will also be affected. The summary of the land required by the project is provided in Table ES-1.

Table ES-1: Land and Resettlement Impacts of the Project

Sr. No.	Category of Impacts	Affected Land		AHHs (Nos.)	PAPs (Nos.)	Remarks
		(Kanals)	(Hectares)			
A. Permanent Land Acquisition						
i)	Cultivated/Arable land	639.64	32.36	103	811	<ul style="list-style-type: none"> Permanent acquisition of

¹ Kanal is one-eighth of an acre.

Sr.	Category of	Affected Land		AHHs	PAPs	Remarks
ii)	Barren (Uncultivated land)	285.28	14.43	01	8	private Land • Cultivated and Residential land with multiple ownership with barren land.
iii)	Residential Land	19.56	1.38	37	291	
iv)	River Bed	104.92	5.30			Land under permanent impacts
	Total	1049.40	53.08	141	1110	
B. Affected Cropped Area						
i)	Permanent impact	639.64	32.36	103	811	Permanent Loss of cropped area
	Total	639.64	32.36	103	811	
C. Affected Structures						
i)	Residential structures (Nos.)	37	-	37	291	Permanent Loss of residential structures
	Total	37		37	291	
D. Affected Trees (Private)						
i)	Affected wood/timber trees	348	-	14	110	Permanent Loss
ii)	Affected fruit trees (Nos.)	363	-	31	244	
	Affected Timber Plus Fruit Trees	3680		58	456	
	Total	4391		103	811	
E. Project Affected Household						
i)	Total permanent AHHs			141	1110	These AHHs have multiple impacts as summarized
ii)	AHHs facing loss of livelihood and severe impact			138	1086	
iii)	AHHs losing permanent Cultivable/Arable	-	-	103	811	
iv)	AHHs losing structures	-	-	37	291	
v)	AHHs losing trees (Nos.)	-	-	103	811	

Sr.	Category of	Affected Land		AHHs	PAPs	Remarks
vi)	AHHs having livelihood related impacts			103	811	
vii)	Vulnerable AHHs	-	-	49	386	

ES-7: The project will impact about 285 kanals of waste land, 640 kanals of cultivated land, 20 kanals of residential land, 37 residential structures, and 4391 privately owned trees besides impacting a number of government owned infrastructure including five (05) 11 kV poles and two (02) 132 kV poles. The number of AHHs has been estimated to be 141. The population of the AHHs works out to be 1110 persons, including 576 males and 534 females. Moreover, there are 49 AHHs whose income is below the official poverty line (OPL) and are categorized as vulnerable. Among the total 141 AHHs, about 98% are severely affected² households. In view of the nature of project permanent impacts, the MHPP has been classified as a Category-A project in terms of WB risk classification criteria.

ES-8: The project will impact 640 kanals of cropped area. Wheat is grown in Rabi season while Maize is the major crop of the Kharif season. All the land is self-cultivated. The annual cropping intensity works out to be 200%.

ES-9: Project planning and design require the involvement of affected community and other stakeholder's consultation as per the World Bank OP-4.12 and the Pakistan Environmental Protection Act (PEPA Act 1997) as well as the Khyber Pakhtunkhwa Environmental Protection Act of 2014. The specific aim of this involvement was to build knowledge and support for the project, utilize the local wisdom in planning and design, identify community concerns and introduce mitigation measures through design. Jirga³ meetings were also conducted to involve the local leader/ elders of the area in the consultation process. The information dissemination and consultation activities were conducted from 14, June 2022 up till 31 January 2023. The consultation activities included 15 focus group discussions (FGDs) (including 03 Jirga meetings) with 197 male and 51 females in 6 villages, 12 meetings with officials from different line departments.

ES-10: To ensure transparency and stakeholder engagement, the key features of the RAP were disclosed to PAPs through the community level meetings, Jirga sessions, and informal interaction between PAPs, consultants and PEDO. RAP will be approved by PEDO and WB. After its approval, the RAP and its translation in Urdu Language will be disclosed at the websites of PEDO and the WB. RAP will be made available in the PEDO office and Field Office at project site, as an official public document. Copies of RAP will also be displayed at the offices of Assistant Commissioner (AC) of Behrain Tehsil.

ES-11: The legal and policy framework of the project on land acquisition and resettlement has been adopted to assist the AHHs for their lost land and assets, income and livelihood resources. The Land Acquisition Act (LAA) focuses on compensation payment of loss of land and land-based assets to title holders and provides no compensation to PAPs without land title. Gaps between national laws and WB Involuntary Resettlement (IR) Policy have been identified and bridging measures have been outlined as project resettlement principles for this RAP. The resettlement principles for this RAP have been developed to ensure that all categories of PAPs affected directly or indirectly with or without titles are fairly compensated for lost assets and their livelihoods are restored or improved. Under these principles, the affected people will also be entitled to cash compensation for land and other assets at replacement value. Additional assistance will also be paid as resettlement benefits that include shifting allowance, transitional allowance livelihood restoration and special assistance to vulnerable groups.

² A severely affected person is a land owner whose affected land is 10% or more of his/her total land holding.

³ Committee of elders.

ES-12: The entitlement and compensation eligibility were established by following LAA and WB OP-4.12. Based on the compensation eligibility, Entitlement Matrix has been prepared as provided in Table ES-2.

Table ES-2: Entitlement Matrix

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
Permanent loss of land for siting of Project facilities	All land losses (arable, commercial, residential, and barren)	Titleholders and landholders under customary rights	<ul style="list-style-type: none"> ▪ Cash compensation of land at full replacement cost⁴ on prevailing market rate through private negotiations free of taxes, registration, and transfer costs.
	Additional provisions for severe impacts (More than 10% of land loss)	Farmer/Titleholder Leaseholder	One-time paid severe impact allowance equal to market value of gross harvest of the affected land for 05 year (inclusive of winter and summer crop in addition to standard crop compensation)
Residential/ Commercial Land	AHH losing their commercial/ residential land	Titleholder	Cash compensation for affected land at full replacement cost free of taxes, registration, and transfer costs.
Loss of temporary access to agriculture land/ productive asset	Restriction to access	Titleholders/ land holders under customary rights	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Cash payment for loss of standing crops and trees (if affected) at market rates. ▪ Cash payment for loss of future crop production (if affected) at market rates for the period of loss of crops due to restriction of access. ▪ Cash payment for loss of income for the period of loss, up to a maximum of 3 years.
		Sharecroppers/ tenants/ encroachers /squatters	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Cash payment for loss of standing crops and trees at market rates, if trees are affected and cultivated by the affected sharecropper/ tenant/encroacher/squatter. ▪ Cash payment for loss of future

⁴ The replacement cost is equivalent to the market value of the land/assets, sufficient to replace the lost assets and cover transaction costs.

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
			<p>crop production (if affected) at market rates for the period of loss of crops due to restriction of access.</p> <ul style="list-style-type: none"> ▪ Partial payment to the sharecropper/tenant/encroacher for loss of crops based on their specific sharecropping/tenancy agreement with the owner/possessor (verbal or written). ▪ Cash payment for loss of income for 12 months equal to inflation adjusted official poverty line (OPL).
Severance impacts (permanent or temporary)	Access restricted to: agriculture lands cultivated by landholders/ male or female seasonal agriculture labor/ sharecroppers/ squatters' encroachers, infrastructure, social services, social networks; drinking water supply, irrigation water channels, walkways, formal or informal roads, bridges	All AHHs (Non-titled user or squatter on private or state land).	<ul style="list-style-type: none"> ▪ Connect severed pieces of lands through access ways, roads or bridges. ▪ Restoration of pipes to irrigate severed land plots. ▪ Restoration of formal and informal walkways, roads or bridges. ▪ The lessees or tenants of injurious affection and severance will receive cash payment at the rate of the rental fee proportionate to the size of the severed piece of land for the duration of the remaining lease/rental period as per written agreement. However, no lessees or tenants found among the project affected persons. ▪ Non-titled land users (squatters or encroachers) of affected land will not receive any payments for injurious affection and severance. No squatters or encroachers identified in the project area
Temporary impacts on arable land or non-arable land	Land required temporarily during civil works	Titleholders/ landholders under customary rights/ leaseholders	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Land will be temporarily acquired by a short-term lease agreement between the landholders/ leaseholder and Contractor with the approval of Project Director.

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
			<ul style="list-style-type: none"> Rental terms to be negotiated to the satisfaction of the PAPs. Full restoration/ reclamation of land to original use by the Contractor, as agreed with PAPs. Or The Contractor will make the payment of temporary land acquisition and full restoration cost, as agreed with the PAP with the approval of the Project Director. Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused.
Loss of crops	Arable land	Titleholders/ landholders under customary rights	Compensation at full gross market rate for the standing crops based on average production as calculated by Agriculture Department, GoKP.
Loss of wood trees	Trees affected	All PAPs owning trees (including squatters)	<ul style="list-style-type: none"> Cash compensation of timber trees to the cultivator based on the market value of their dry wood volume as calculated by Forest Department, GoKP. The wood of the fallen tree will remain with the owner and its value will not be deducted from the compensation
Loss of fruit trees	Affected trees	Title holders/ cultivators	<ul style="list-style-type: none"> Cash compensation to reflect replacement-based income on market value of annual net product multiplied by 5 years and investment cost needed to re-grow the tree to the fruit bearing age, based on the information provided by Agriculture Department, Madyan.
Loss of structures	All type of structures	Owners of built-up structures both titled or non-titleholders (squatters/	<ul style="list-style-type: none"> Cash compensation at replacement cost⁵ for affected structures by type of construction and other fixed

⁵ Replacement cost for structures includes reference to the market price of materials and labor, and the cost of transporting materials to the building site. The replacement cost further includes the cost of any registration and transfer taxes for land and buildings. The compensation against loss of structures will be compensated at the replacement cost calculated by following latest MRS rates of the GoKP

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
		encroachers), in case of community structures, the members of the committee or appointed administrator by concerned gov't department /community	<p>assets calculated at the latest Market Rate System (MRS) as fixed by the Communication and Works Department-GoKP, free of depreciation, exclusive of taxes.</p> <ul style="list-style-type: none"> ▪ Cost of salvaged material will not be deducted and salvaged material will be the property of AHH(s). ▪ In case of partial loss, cash assistance (compensation) will be provided to restore the remaining structure. If more than 25% of the building's area is affected, cash compensation will be computed for the entire building/structure without deducting depreciation and salvaged material costs. ▪ Cash compensation at the replacement cost for immovable assets attached to the land and/or buildings based on the latest MRS of GoKP to be calculated by Communication and Works Department of GoKP. ▪ One-time paid shifting allowance @ Pak Rupees (PKR) 100,000 to owners of affected structures to transport salvage material of affected structure to cover transportation expenses of salvage material including loading/ unloading labor charges and other items.
Self-Relocation Allowance	Loss of residence	Physically displaced households of owners/tenants	<ul style="list-style-type: none"> ▪ One-time paid cash assistance as self-relocation allowance equivalent to 12 months- of prevailing average rent in the area for moving to alternate premises or equal to 12 months of inflation adjusted OPL. (PKR 36697x12= PKR 440,364)
Transitional Allowance		Physically displaced households of owners/tenants	<ul style="list-style-type: none"> ▪ Provision of one-time paid transitional allowance to cover extraordinary living expenses at alternate premises, equal to 18 months of inflation adjusted

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
			OPL to the dislocating AHs
Support to Vulnerable PAPs	Livelihood support to vulnerable households	All vulnerable affected households (below poverty line (small landholders /tenants/ squatters, full time agriculture workers, female headed households, disabled PAPs)	<ul style="list-style-type: none"> Onetime paid allowance equal to 12 month's inflation adjusted OPL in cash, in addition to other admissible allowances. Preference for full time employment opportunity to at least one member of the AHs during construction and operation, subject to meeting the requirements.
Livelihood Restoration	Livelihood restoration and rehabilitation of affected households		<ul style="list-style-type: none"> One adult member of the affected household will be entitled for skill development and improvement training under the Livelihood Restoration and Improvement Plan (LRIP) provisions. Eligibility of affected households to livelihood restoration interventions as per provisions under the LRIP.
Loss of public services and facilities/ community assets	Schools, health centers, administrative services, infrastructure services, graveyards etc.	Service Provider	<ul style="list-style-type: none"> Full restoration/ rehabilitation at original site or re-establishment at relocation site of lost public services and facilities or community assets, including replacement of related land and relocation of structures according to provisions (i.e., mosques, footbridges, roads, schools, health centers, etc.).
Project benefits		All AHs	<ul style="list-style-type: none"> All AHs are entitled to get some sort of benefit from the interventions under Social Development Plan.
Unanticipated impacts			<ul style="list-style-type: none"> During the entire course of project implementation, the Executing Agency (EA) will deal with any unanticipated adverse impacts in the light of spirit of the Entitlement Matrix, if required; the Entitlement Matrix will be updated to mitigate adverse impacts by following Resettlement Policy Framework for KHRE Program in

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
			compliance with WB OP 4.12 on Involuntary Resettlement.

ES-13: AHs, including those who are poor and those who have lost their productive assets, will receive additional support to restore their livelihoods and income. The support includes both short and long-term measures. The short-term measures consist of compensation for affected land and assets at replacement costs, three-year additional crop compensation to severely affected land owners, compensation for affected livelihood, transitional allowance, transportation allowance, and more. Long-term measures involve providing employment opportunities for AHs and vulnerable individuals. To ensure the sustainable restoration and improvement of livelihoods, a Livelihood Restoration and Improvement Plan (LRIP) has been prepared; it will be updated and submitted to the World Bank (WB) for approval. The plan will recommend specific measures for the short and long terms restoration and improvement of livelihood of the AHs.

ES-14: MHPP will affect the communities of six (06) villages. These communities will have long term social and economic impacts on their social interactions and livelihood activities. To compensate these communities in parallel to the construction of MHPP, a Social Development Plan (SDP) has been prepared as a separate document and will be submitted to World Bank for approval.

ES-15: RAP will be implemented by the Project Management Organization (PMO) of PEDO with assistance from the Project Implementation Consultants (PIC). PMO will engage Consultants or NGOs to provide advice to the affected families in effectively utilizing the cash compensation. PMO will manage approval of RAP and ensure the availability of required budget for the implementation of RAP. In addition, Grievance Redress Mechanism (GRM) will be implemented and Grievance Redress Committees (GRCs) will be notified by the PEDO to redress the community complaints. The total amount of LAR budget works out to be about PKR 9.445 billion or about United State Dollars (USD) 32.63 million⁶ as per details provided in Table ES-3. PEDO will ensure timely provision of the funds needed to implement this RAP.

Table ES- 3: Land Acquisition and Resettlement Budget

Description		Quantity	Unit	No. of AHs	Total Costs (PKR)
A. Compensation for Privately Owned					
1	Land Losses	944.48	Kanal	141	5,169,866,780
2	Crops Losses	639.64	Kanal	103	15,799,846
3	Tree Losses	4391	No.	103	68,327,846
4	Structure Losses	37	No.	37	136,766,185
Total for (A)					5,390,760,657
B. Government Owned Infrastructure					
1	Electric Poles 11 kV	5	No.		5,000,000
2	Electric Poles 132 kV	2	No.		3,000,000
Total for (B)					8,000,000
Total Compensation					5,398,760,657

⁶ 1 USD = PKR 289.47 on 28 September 2023.

Description		Quantity	Unit	No. of AHHs	Total Costs (PKR)
C. Allowances					
				No. of AHHs	Amount (PKR)
1	Severe Impact Allow.			138	17,043,690
2	Transitional Allow.			37	23,953,356
3	Self-Relocation Allowance			37	15,968,904
4	Vulnerability Allowance			49	21,569,064
5	Shifting Allow.			37	3,700,000
6	Utility Connections			37	3,700,000
Total for (C)					85,935,014
Sub-Total-A (A+ B+C)					5,484,695,671
D) Training Costs					2,000,000
E) External Monitoring Agency					10,000,000
Sub Total-B (D+E)					12,000,000
Sub Total-C (Sub-Totals A+B)					5,496,695,671
F) Contingencies @ 20% of Sub-Total (C)					1,099,339,134
G) Management Costs @ 15% of Sub-Total (C)					824,504,351
H) LRIP Costs					300,000,000
I) SDP Costs					1,724,354,134
Total Land Acquisition and Resettlement Budget (Sub-Total C+F+G+H+I)					9,444,893,290

ES-17: The available allocation for SDP is PKR 1,500 million. However, the tentative cost for SDP schemes for MHPP has been estimated to be about PKR 1,724 million. Hence, an additional amount of PKR 224.35 million will be needed for the implementation of SDP.

ES-18: In addition, a time bound Implementation Schedule for RAP is prepared and it is synchronized with project construction schedule. The overall schedule of implementation is based on the principle that resettlement benefits are paid to AHHs before they are displaced and civil works are started.

ES-19: LAR tasks will be subject to both internal and external monitoring. Internal monitoring will be conducted by EA, assisted by PIC. External monitoring will be assigned to an External Monitoring Agency (EMA) or Individual Independent Expert that will be engaged by EA. The External Monitor will monitor and evaluate project activities intermittently over the project period and submit bi-annual reports and a final evaluation report to EA after completion of RAP implementation.

1. INTRODUCTION

The Government of Khyber Pakhtunkhwa (GoKP) through the Energy Development Organization (PEDO) is planning to undertake the Madyan Hydropower Project (MHPP) which will be built on the Swat River. The Project is funded by the World Bank (WB) through the Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program (hereinafter referred to as 'the Program' or KHRE). Therefore, all environmental and social instruments prepared under this project are in compliance with both locally applicable regulations and WB's Operational Policies (OPs) and Guidelines. While the construction of the MHPP is expected to provide much needed electricity in the country, it will also entail involuntary land acquisition and resettlement impacts, which may result in physical and economic displacement of the affected communities. To address this issue, this Resettlement Action Plan (RAP) has been developed in line with the World Bank OP-4.12 on Involuntary Resettlement, as well as the statutory requirements of the country. RAP aims to identify the potential land acquisition and resettlement (LAR) impacts of the project and provide mitigation measures to minimize these impacts. RAP will be updated based on the final design of the project (if needed) and will ensure that the affected communities are fairly compensated for their losses and receive appropriate assistance to help them to restore their livelihoods.

1.1 Background

Pakistan has a total installed power generation capacity of 43,775 megawatts (MW) as on 30 June 2022, which includes 26,683 MW thermal, 10,635 MW hydroelectric, 1,838 MW wind, 530 MW solar, 369 MW bagasse and 3,620 MW nuclear². Additionally, Pakistan has a potential of generating 60,000 MW hydroelectric power, presenting a significant opportunity to diversify its energy mix and transition towards a more sustainable future. Pakistan is among the countries where per capita availability of electricity is very low. The lack of access to electricity and power shortages in Pakistan have resulted in prolonged periods of load shedding, significantly, affecting households, industrial operations and commercial activities. The financial impact of load shedding has been estimated at about 4 percent of GDP, costing about USD 10 billion a year⁷. Currently, the electricity shortage in the country is over 9000 MW. According to the National Electric Power Regulatory Authority (NEPRA), Pakistan's per capita annual electricity consumption of 644 kilowatt-hour (kWh) is among the lowest in the world, which is only 18% of the world average, 7% of the developed countries' average, and 12% of that of China⁸. Pakistan has a vast hydroelectric potential of over 60,000 MW, yet only 15% of the potential has been harnessed so far. If appropriately utilize, the remaining untapped potential could effectively meet Pakistan's ever-growing demand for electricity in a cost-effective manner.

1.2 Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program

The Pakhtunkhwa Energy Development Organization (PEDO) is implementing the Khyber Pakhtunkhwa Hydropower and Renewable Energy Development Program (KHRE) (the Program), which aims to contribute in addressing the electricity shortfalls through the development of renewable energy sources in Khyber Pakhtunkhwa (KP) province of Pakistan. The Program has the following components:

Component A

A1. I) Development of Gabral-Kalam Hydropower Project (GKHPP), ii) Development of Madyan Hydropower Project (MHPP). GKHPP is already under implementation.

A2. Cascade development of Swat River Basin. Currently, two projects have been identified namely Kalkot-Barikot-Patruk (KBP) HPP and Patruk-Shringal (PS) HPP, both on Panjkora river in the Upper Dir District. Additional projects may be added in the Program at a later stage.

A3. Solar photo voltaic (PV) systems on hydropower asset.

Component B: Institutional Strengthening and Energy Sector Development

This component aims to help prepare and implement a strategic roadmap and business plan for development of KP energy systems and associated infrastructure to promote renewable energy, maximize investments and government revenue. It also entails strengthening of institutional systems and processes so that the Energy Department GoKP and PEDO can efficiently and effectively manage their duties as developer of renewable energy program as well as operations and maintenance of existing and future energy projects. The objectives of this

⁷ Pakistan's Energy Crisis - National Bureau of Asian Research, 13-Mar-2013

⁸ <https://propakistani.pk> > 2022/10/03 > Pakistan's-per-capita annual electricity consumption

component will be achieved through two sub-components including: (i) project planning and institutional strengthening, and (ii) accelerating renewable energy development in KP.

Component C: Environment and Social Management

The objective of this component is to improve environment, local living and economic development in the project area for GKHPP, MHPP and other hydropower projects under component A2. These hydropower sites are in areas with limited access but vast potential for development of local economy. This component will help align hydropower development with broader objectives to support local area development through tourism, social services and improving access and electricity supply in the project area.

Component D: Project Implementation Support and Technical Assistance

This component covers the Project Implementation Support including the cost of consulting and other services to implement the four hydropower projects starting with GKHPP and solar PV projects, as defined under Component A and fulfil training and capacity building needs of PEDO and Project Management Organization (PMO) to effectively implement project related activities.

1.3 Description of Madyan Hydropower Project

A feasibility study of the Project was prepared in 2008. The GoKP has requested funding for this Project from World Bank through the KHRE. As part of the evaluation of the Project, WB, on the advice of technical consultants, deemed the feasibility and preliminary design proposed in 2008 should be updated as per WB standards. Accordingly, these Safeguard studies of Madyan Hydropower have been conducted to prepare the Resettlement Action Plan (RAP) required for ensuring that the project meets the social safeguards of the WB. A detailed description of the proposed facilities in the Madyan Hydropower Project is provided as follows.

1.3.1 Project Layout

The proposed Project will divert part of the flow from Swat River using a weir and through a system of power tunnels to the powerhouse, where the water is returned to the Swat River some 13 km downstream. The Project will construct a 207 MW run-of-the-river hydropower plant on the Swat River to generate about 865.3 gigawatt hours (GWh) of electricity annually. The main facilities of the Project include arrangements for power generation (gated weir structure, power intake on the left bank adjacent to the weir, de-sander basins, headrace tunnel, surge tank, vertical pressure shaft, horizontal pressure tunnel, manifold, powerhouse, tailrace, and powerhouse outlet) and facilities for power evacuation (switchyard and transmission line). A schematic of the proposed Project facilities is presented in Figure 1-1.

1.3.2 Key Project Facilities

The Project consists of the following main structural components:

- Upstream & downstream cofferdam with 12 m high at 30 m away from the weir;
- Concrete weir construction, height of 1.5 m above riverbed and 117 m long ogee shaped discharging into stilling basin, located at 825m upstream of Kedam Nullah;
- One power intake, 5 bays 4m high & 72.9m long, proposed at left abutment of weir;
- Approach tunnel (free flow), length 910m, net diameter 8.8m and starts at 73m downstream of power intake;
- Two underground de-sander chambers (L235 mx W 28 m x H 43 m), located at 910 m downstream of weir;
- Headrace (pressure) tunnel, length 11.18 km, net diameter 8 m and starts at 1271 m downstream of the intake;
- Underground powerhouse (L 96 m x W 18 m x H 46 m) with surge tank (D 20.5 m x H 66 m);
- 94m long tailrace tunnel with 8m diameter is proposed downstream of draft tube and daylights at El. 1343m in Swat River.
- 220 kV Gas Insulated switchgear (GIS) system;
- 220 kV GIS switchyard is arranged in a double-bus system with a bus coupler circuit breaker;
- One permanent new bridge crossing the Swat River connecting between N95 highway at right bank and the new construction road at left bank;
- Several sites to dispose excavated materials; and
- Project colony with a necessary water supply and sanitation facilities for 50 O&M staff.

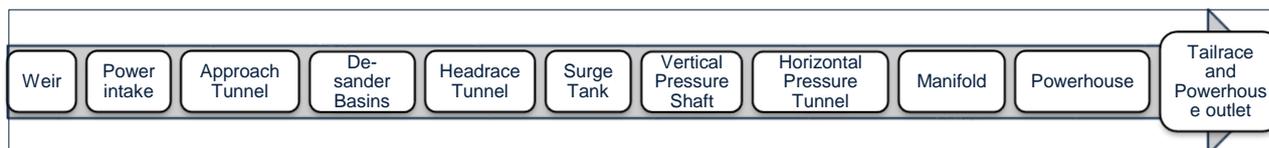


Figure 1-1: A schematic drawing of proposed project facilities

1.3.2.1 Weir

Swat River's mean annual flow is $118.5 \text{ m}^3/\text{s}$ at the selected weir sites. The river experiences, high flow periods from May to September while low flow periods occur from December to March. In an average hydrological year such as the year 1995, the Swat River's daily flow ranged between 18.5 and $447.6 \text{ m}^3/\text{s}$ with a mean value of $118.5 \text{ m}^3/\text{s}$. These variations in flow demonstrate the river's dynamic nature, which can be influenced by various factors such as precipitation, temperature, and land use. Understanding the range of the river's flow can be useful for managing water resources, forecasting floods or droughts, and assessing the river's ecological health. The Weir structure at the Swat River is an ogee-shaped structure that spans 117 meters and discharges into a concrete stilling basin. The structure is designed to measure and regulate the river's flow, and its location is specified by the coordinates E: 028 11 87.0 and N: 390 40 69.0. The weir is located at 910 m upstream of Kedam Nullah, a tributary of Swat River.

The dimensions of the proposed weir are tentatively set as follows: at 16.2 m high, 117m long and 78.5 m wide along the flow. The structure is designed to accommodate a maximum discharge of $5,234 \text{ m}^3/\text{s}$ and has a crest level of El. 1499.4 m. The high Flood Level (HFL) is set at 1514.1 meter above mean sea level (amsl). The weir will be a concrete gravity structure with an ogee shape, featuring an overflow spillway and under sluices. A concrete stilling basin has been integrated into the weir body.

The proposed weir site is accessible from the N95 highway (Bahrain Road) located along the right bank of the Swat River. To ensure the safety of the weir structure, it is designed to withstand floods to a return period of up to 10,000 years and the design earthquake without sustaining major damages. At the left bank adjacent to the power intake, two under sluices are planned, to evacuate sediments that may deposit in front of the power intake. The precise location and layout of project and its components are shown in Figure 1-2 Power Intake.

1.3.2.2 Power Intake

The power intake serves as a crucial transition point between the Swat River and the feeder canal. Its primary design objectives are to exclude bedload sediments and floating debris while minimizing head losses. The required dimensions of the intake are set at in length and 5.7 m in height (L*H). However, to reduce the height of the intake gates, the height of the intake has been limited to 4 m, which will result in a total area of 160 sqm (40 m in length and 4 m in height).

1.3.2.3 Approach Tunnel

The approach tunnel is designed based on gravity flow with a bed slope of 1 in 1000 with different design discharges. The concrete-lined tunnel will have a Manning roughness of 0.015. Free flow is assured with the provision of a 2m freeboard. Non-silting velocity is maintained in the tunnel.

1.3.2.4 Headrace Tunnel

The headrace tunnel, with a length of 11.18 km and internal diameter of 8.0 meters, will serve as the conduit for water from the intake to the powerhouse. It will start just 1271 m downstream of the intake and has a mean flow velocity of 3.013 m/s . Its alignment of the tunnel was selected for conventional drill and blast excavation method, and it will be constructed nearly parallel to the Swat River. Three adits with a total length of 1,060 m are planned to ensure timely completion. During construction, a round $1,050,000 \text{ m}^3$ of spoil material, consisting of mostly rocky material, and large areas (approximately $186,000 \text{ m}^2$) will be required for its disposal. The headrace tunnel will ultimately end up at the pressure tunnel, which will further convey the water to the powerhouse.

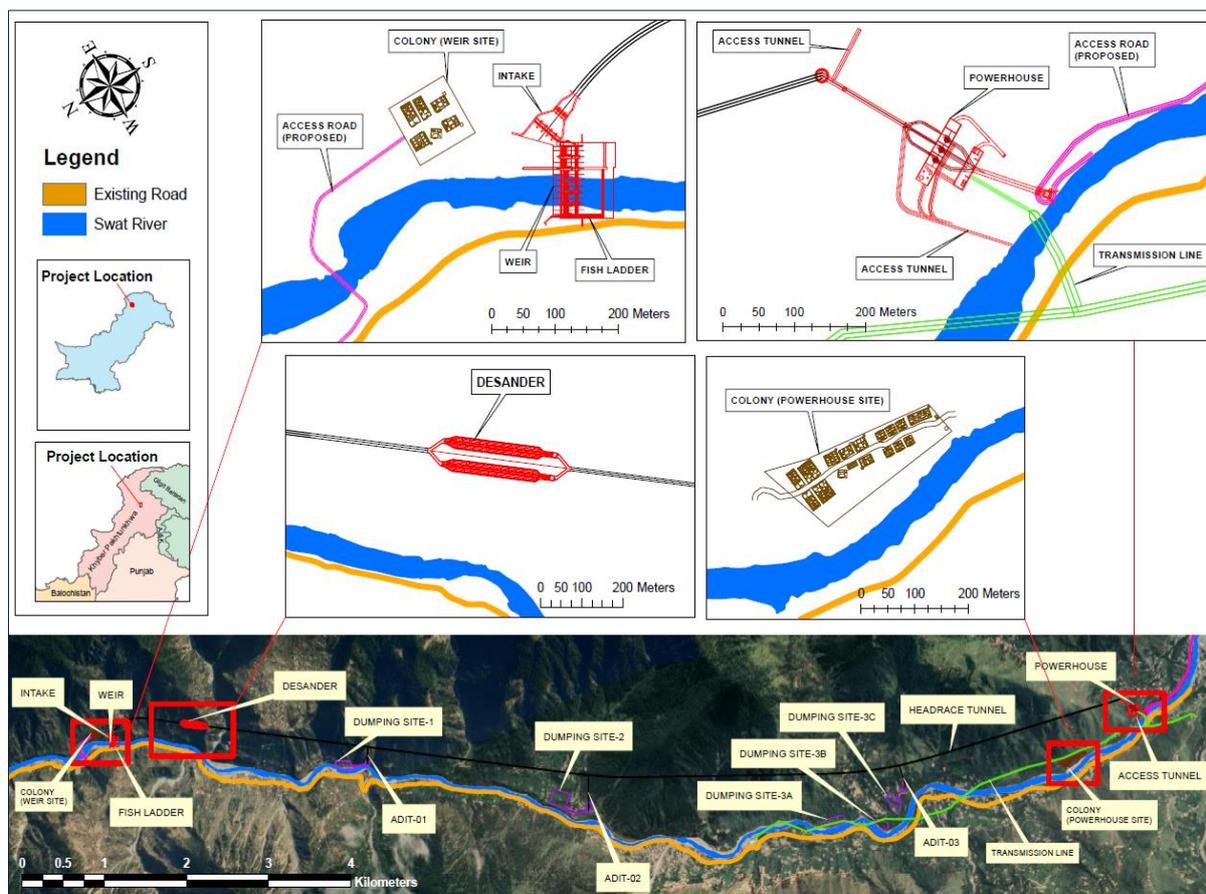


Figure 1-2: Location & Layout of Project Components

1.3.2.5 De-sander

The proposed Intake for the conveyance of water has been demarcated on the left side of the weir and terminates at the approach tunnel. Two caverns, each measuring L 235 m x W 28 m x H 43 m, are proposed to be constructed in metamorphic rock downstream of the power intake to house de-sanders. The arrangement of the proposed facilities is presented in Figure 1-2. The de-sander facilities, which include two caverns with ducts and gates for sediment evacuation, are located 983 m downstream of the weir and constructed on solid rock.

During the high flow season, the Swat River has the potential to transport large quantities of sediments in both suspension and bed load. Sediment concentrations as high as 10,000 parts per million (ppm) have been recorded in the Swat River. Based on petrographic analysis of rock and sand samples, it can be inferred that quartz minerals may constitute up to 10 % of the suspended Sediments. The proposed design of the weir structure and the flushing outlets has been carefully planned to prevent coarse sediments such as sand, gravel, and cobble from entering the power intake. Instead, this sediment will be directed towards the sediments sluice for removal. However, finer sediments fraction such as sand and silt are likely to remain suspended in the small reservoir of the Madyan HPP and may unavoidably enter the power intake. To address this, de-sander facilities are necessary to remove most sediment particles larger than the design particle diameter of 0.2 mm. For larger particle sizes, the removal rate approaches 100%, and for particles with a diameter of 0.1 mm, the removal rate remains above 50%.

The two de-sander caverns will be equipped with:

- two slide gates (3.5 m x 6.6 m) upstream of the de-sander cavern
- two slide gates (3.5 m x 6.6 m) downstream of the de-sander cavern
- de-sander device with auxiliaries
- four sluice valves DN500 for sediment flushing

The manifold system consists of concrete-lined branches with a diameter 4.2 m that divert flow from the headrace tunnel upstream and return to downstream to the headrace tunnel again. Maintenance gates have been installed

upstream and downstream of each de-sander chambers, allowing for easy inspection and maintenance of one chamber while the others remain in operation.

1.3.2.6 Surge Shaft

The headrace tunnel will serve as the main channel through which water flows into the system. At the end of the headrace tunnel, the surge shaft is located to neutralize excess pressure rise and pressure drop conditions, thus preventing damage to the system. To mitigate the detrimental effects of the water hammer resulting from sudden load rejection or closure of generating units, relief valves are provided.

The surge tank will be located some 50 m upstream of the transition to the pressure shaft and has an excavated diameter of approximately 22.5 m with a depth 78 m. The height of the surge shaft is 66 m with a diameter of 20.5 m.

Water from the surge shaft enters the penstock, which comprises of three branch pipes. The diameter of each pipe will be selected 3.75 m for larger units and 2.5 m for smaller units. The design charge velocity will be set at 5.17 m/s to ensure optimal performance.

1.3.2.7 Pressure Shaft and High-Pressure Tunnel

Continuing from the surge tank, the water flows through a vertical pressure shaft that carries it to the elevation of the underground powerhouse where the three Francis turbine units will be located. The total length of the shaft and tunnel is 340 m, with the vertical shaft itself being 110 m in length. The shaft is lined with both concrete and steel, with a diameter of 5.75 m for the concrete lined section and 5.40 m for the steel lined section.

The concrete lined section has a flow velocity of 6 m/s, while the steel lined section has a slightly lower velocity of 5.99 m/s. The steel lining of the shaft and tunnel is 20-28 mm thick, providing the necessary structural support and protection against corrosion and wear.

1.3.2.8 Powerhouse

The proposed underground powerhouse for the hydropower system consists of a conventional cavern structure designed to house two big and one small Francis units. The big units have a rated capacity of 86.6 MW each, while the small unit has a rated capacity of 33.8 MW, giving a protection total installed capacity of three Francis turbines is 207 MW ($2 \times 86.6 + 1 \times 33.8 = 207$ MW). The maximum turbine design discharge for the large units is 64.0 m³/s, while the small unit has a maximum 25 m³/s. for small unit. After passing through the turbines, the water is discharged via the draft tube, which extends into the common tailrace tunnel and from there, the water flows back to the river, completing the hydropower generation cycle.

To provide access to the powerhouse cavern and transformers caverns, a common access tunnel is provided will be constructed. The tunnel has a width and height of ~ 5 m approximately to ensure safe access and easy transport of equipment between the two caverns. The access tunnel runs horizontally between the tunnel portal and the powerhouse cavern.

1.3.2.9 Tailrace

The powerhouse cavern is connected to the Swat River via a short tailrace tunnel, which is designed to releases the flow back into the river approximately some 13 km downstream from the weir. The tailrace tunnel is arranged to convey the turbine discharge to the power outlet structure on the left bank of the river. The dimensions of the draft tube and its rectangular exit cross-section are determined based on general turbine design principles for vertical Francis turbine units. Each draft tube can be closed by a draft tube flap gate, which allows for maintenance or repair of a turbine unit without affecting the overall operation of the hydropower system. The three draft tube extensions join at the starting point of the tailrace tunnel, which is a concrete-lined tunnel with an equivalent diameter of 4.2 m. This diameter is selected to maintain the flow velocity at the draft tube exit, ensuring the efficient and safe operation of the hydropower system. The headrace tunnel diameter is also carefully selected based on the design flow velocity of 3.04 m/s at rated conditions, which result in a tailrace tunnel diameter of 8 m. From its starting point to the portal of the outlet structure, the length of the concrete lined tailrace tunnel is 128 m to ensure the safe and efficient release of water back into the Swat River.

1.3.2.10 Fish Ladder

A fish ladder will be built in the weir to allow the movement/migration of fish on both up and downstream. The gradient of fish ladder is considered 1 in 14, drops/pool is 1 m, rest pool is provided after four drops, velocity in fish ladder is 0.5 m/sec, cross-section of the entrance is (1.5 m x 1 m) 1.5 m², and the length is 116.5 m. Discharge through fish ladder is 0.25 m³/s. Fish ladder is proposed at low turbulence area, which is more suitable at right-side of the weir to provide a suitable environment for the fish to River. Fish migrate through. Initial consultation has been completed with Fisheries Department by PIC and research has been undertaken to assess the requirements of eFlow for the snow trout. Additional consultation has been conducted on November 23, 2022 with Fisheries Department to share the design details of the fish ladder. The Department is satisfied with the proposed design specifications needed for the indigenous species which require migration up and downstream.

1.3.2.11 Generators

Three-phase synchronous vertical shaft generators, self-ventilating, fully enclosed suitable for direct coupling to Francis' turbines shaft with maximum power output for big and small unit is 114.9-million-volt amperes (MVA) and 45.4 MVA will be used, respectively.

Preferably, a Non-Segregated Bus ducts (NSBD) will be used to connect the generator to the three phases. Using copper windings with class F insulation will be used as it ensures the longevity and reliability of the generator. The class F insulation system provides excellent thermal and mechanical properties. As the long-term performance of the insulation system is affected by the maximum operating temperature of the windings, the rated output of the generators will be related to a temperature rise corresponding to class B insulation. When considering the turbine power output, it is common to assume a generator efficiency of around 98.50%. This assumption typically applies when the power factor lagging at 0.8 leading at 0.9.

1.3.2.12 Transformers

The three main transformers will be installed in dedicated cells within the transformer bay. Each Transformer shall be core type, two winding, oil filled unit, capable of using both Oil Forced & Water Forced (OFWF), cooling systems. The low voltage (LV) winding connection shall be made using non-segregated bus ducts. The high voltage (HV) windings shall be connected via 220KV Gas insulated Bus duct, which will extend from the transformer's oil-filled section to the SF6 gas high voltage bushing.

The project includes the provision of two 115MVA and one 46MVA three-phase Generator Transformers (GT) to set up the generated voltage from 13.8kV to 220kV. The transformers, along with all necessary accessories, will be located in a transformer cavern at an elevation of 1350.0 m. The scope of work for this project includes the provision of a comprehensive functional system that covers all necessary supply and services. 220 kV Gas Insulated switchgear system

1.3.2.13 Outdoor 220 kV Pothead yard and Transmission Line

The two outgoing 220kV transmission lines as shown on the main single line diagrams and as specified in the 220KV GIS Switchyard. Following transmission line connections and ancillaries shall be provided under this:

- Six (06) single phase surge arrestors and associated surge counters connected to the 220KV outgoing lines.
- Six (06) wave traps on outgoing Transmission Lines.
- Six (06) set single phase capacitive voltage transformer in 220 KV outdoor pothead yard.
- Steel support structures and post insulators as required for mounting the above equipment.
- Steel line gantries suitable for terminating the outgoing transmission lines.
- Optical Ground Wire (OPGW) termination enclosures on the line gantry for each transmission line.

1.3.2.14 Access/Construction Road

Access to the powerhouse site, staff colony, dumping site (near the powerhouse) and the corresponding camp will be arranged preferably along an existing small road that runs from Madyan town to Damlai village. After passing through newly built hotels and houses, the road continues as a track for approximately 1,200-1,300 m along the left bank of Swat River downstream to the powerhouse area. From there to the surge tank site, staff colony, camp, and dumping site, new access roads will need to be built. The road in the area of the hotels currently is very narrow and will require widening and reinforcement to accommodate the transportation of heavy equipment, such as transformers, turbine runners, butterfly valves, etc. The main N95 road will be relocated due to the submergence caused by the diversion facilities. The proposed alignment will be such that new alignment will be shifted uphill from 82 m of the confluence of Kedam Nullah in Swat River, extending until the exiting road located at right abutment of weir. The existing road will be widened and rehabilitated accordingly, and it will be connected to N95 road upstream of the weir where the inundation is minimized. At the confluence of existing road with the N95 main road, a bridge is proposed upstream of the weir to provide access to the community located on the right side of the river. The bridge will connect to the existing path via a newly constructed road.

1.3.2.15 Residential Colony

A residential colony will be constructed to accommodate the operation and maintenance (O&M) staff of PEDO. The colony will include approximately 50 residences for the staff, as well as necessary facilities such as water supply and sanitation, roads, a primary school, a dispensary, a mosque, a park, a guest house, a community center, and shops.

1.3.3 Construction Materials

The major construction materials required for the MHPP include cement and aggregates, reinforcement steel (including mesh/mattresses) for concrete, and shotcrete fabrication for all major structures, including the lining of underground works. Additionally, slope and riverbed protection work will require the use of riprap, gabion mesh, gabion fill material and geotextiles as non-mineral fillers. Aggregates will be sourced from surface boulder deposits available on the riverbed and river embankment in the pondage area of the weir. These materials will be carefully selected and utilized to ensure the quality and durability of the MHPP structures, while adhering to appropriate environmental and safety standards.

1.3.4 Labor Requirements

Approximately 400 skilled and un-skilled workers will be required throughout the five-year construction period of the project. Out of these, around 200 will be outside workers including 60 foreigners and another 140 from Pakistan but outside the project area. The remaining 200 laborers will be recruited locally, primarily consisting of unskilled or semi-skilled workers. During the peak construction period, the demand for local labor may increase up to 400. The contractor will be responsible for assessing and arranging the medical requirements for their staff and workers, which will be incorporated in Contractor's Environmental and Social Management Plan (C-ESMP) accordingly. This ensures that the health and safety of the workers and community are prioritized and appropriate measures are taken to address their safety needs during the construction period.

1.3.5 Construction Camp

The construction camps for the MHPP will be strategically located away from main settlements and close to major construction area. One construction camp will be established near the weir site on the right bank of Swat River downstream of the confluence of Kedam village. The available land for the camp is and workers about 25-30 Kanals⁹, located between River Swat and main road N-95. There are just two structures adjacent to camp area which contractors may use) for their accommodation on rental basis. Another potential location for the camp is near powerhouse on the left bank of Swat River downstream of the confluence of Madyan town at Damlai. There

⁹ Kanal is one-eighth of an acre.

are no settlements in the area. The exact locations of the proposed construction camps will be decided by the Contractor in consultation with PMO and approval from PIC. The locations of the proposed camps can be found on the map in the Figure 1-2. The camps will provide suitable accommodation for the workers during the construction period of the locations.

1.3.6 Disposal Sites

Based on the estimated volume of excavated material, approximately 2.75 million m³, generated from construction of weir, tunnel, powerhouse, and other facilities. Five disposal areas have been identified in close proximity to weir site, adits and powerhouse. These locations have been selected as suitable areas for the disposal of the excavated material. Proper management and disposal of the excavated material will be implemented in accordance with the project's environmental and social management plan to minimize any potential impacts on the environment and local communities. Additionally, regular monitoring and reporting will be carried out to ensure compliance with relevant regulations and guidelines.

1.4 Need for the Resettlement Planning

Donors widely recognize that involuntary resettlement without adequate mitigation measures in development projects can result in severe economic, social, and environmental risks. Disruption of production systems can lead to impoverishment when productive assets or income sources are lost. Relocation to unfamiliar environments may reduce the applicability of productive skills. Community institutions and social networks may be weakened, kin groups can be dispersed, and cultural identity, traditional authority, and mutual support systems, may be diminished or lost. The RAP has been prepared in compliance with the statutory requirements of GoKP and the World Bank OP 4.12 on Involuntary Resettlement. It is anticipated that the construction of Madyan HPP will result in physical and economic displacement, as defined by OP 4.12 on Involuntary Resettlement. The acquisition of private land will cause losses in terms of crops, structures, assets and livelihood sources for individuals within the Area of Impact (AOI) of the project, triggering the provisions of the OP 4.12.

As part of the preparation process for RAP, potential positive and negative social impacts of the Project are identified through field surveys, consultation meetings and discussions with PAPs, Government officials, and experts. A socio-economic study is carried out to identify potential impacts and a households and properties that may be affected along the project route.

RAP outlines the objectives, principles, eligibility criteria, and public participation mechanisms for compensating land and other assets. It identifies compensation beneficiaries and incorporates the results of consultations conducted during its preparation. RAP is based on a comprehensive diagnosis of the socioeconomic context and social analysis within which the PAPs operate. The plan emphasizes the significance of culturally sensitive socio-legal milieu and administrative systems for land administration and ownership, entitlement provisions, modes of compensation, and conflict resolution mechanisms. The RAP has been prepared and endorsed by PEDO. RAP and will be disclosed on PEDO's website, and a non-technical summary translated in Urdu will be made available in a format that is accessible to PAPs.

1.5 Objectives of RAP

RAP aims to address the potential involuntary land acquisition and resettlement that will arise as a result of construction of Madyan HPP. The main objectives of RAP are provided as follows.

- To avoid or minimize involuntary resettlement wherever feasible, exploring all viable alternative project designs;
- To conceive, develop and prepare RAP, if involuntary resettlement becomes unavoidable, by providing appropriate mitigation and compensation as part of the resettlement budget;
- To suggest measures to improve the living standards and livelihoods of the affected people or at least restore to the original status and provide adequate financial support during the transition period;
- To encourage the participation of displaced communities in the planning, preparation and implementation of RAP;
- To undertake census and socioeconomic surveys in AOI of the Project to record the project impacts and socio-economic profiles of the affected peoples;

- To conduct consultations with communities and PAPs in order to ensure that their views/ concerns are considered in developing the entitlement matrix, valuation of land, housing, infrastructure and other compensation and calculation of resettlement budget;
- To ensure that a viable Grievance Redress Mechanism (GRM) is provided in RAP;
- To ensure that proper institutional arrangements are in place for the timely implementation of RAP;
- To ensure that financial provisions are made in the resettlement budget for the concerned staff of PEDO to upgrade their institutional capacity for effective planning, design and implementation of RAP;
- To ensure that an effective monitoring and evaluation mechanism is provided in RAP.

1.6 Scope of RAP

The scope of RAP pertains to the identification, quantification and valuation of the project impacts in AOI of the project, to determine the type and extent of project impacts, prepared the compensation package and its implementation.

1.6.1 Area of Impact and Area of Influence

The Area of Impact is confined to project footprints and includes the area within the project boundaries. The Area of Influence (AoI) refers to the adjacent areas to the Area of Impact boundaries where the project impacts may be felt during construction. According to the final design, all the components of the MHPP will be constructed on the left side of the river Swat, about 200m distance from the river bed. EIA of the MHPP has taken AoI as 2km wide (on Right Side, 0.5 km from the right bank of the river and on Left Side, 1.5 km from the left bank of the river), along the Swat river. For the assessment of potential project impacts outside the area of impact, the same AoI has been considered.

The potential impacts within these AoI boundaries may be caused as a result of construction of headrace tunnel, construction of access roads to the audit sites, dumping sites and powerhouse sites. However, the access roads for audit and dumping sites will be constructed on the area already acquired land on permanent basis and will not pose any extended impacts in AoI. But the impacts of construction of access road from Madyan Bridge to Powerhouse site may pose access issues to the settlements served by this road. The road is outside of the area of impact of the project. However, a bridge from N-95 to the powerhouse site has been provided in the design of the project to avoid any negative impacts on the communities and for approaching the powerhouse site and staff colony site.

Similarly, the project includes the construction of 13 km long and 7m diameter headrace tunnel. Its construction will involve blasting. The vibration generated by the blasting may partially or totally affect the residential structures in the villages/ settlements situated in AoI. According to the results of rapid assessment survey, the number of villages falling in the assumed AoI counts to 20. Of these, the 06 villages fall on left side of the river; and 14 villages are situated on right side of the river and fall in AoI. The number of HHs in these villages is 10,238 with a population of 80,573 persons. Residents of these villages will be at a constant risk of damage to their properties during the construction of the tunnel and powerhouse, as the vibrations caused as a result of blasting will be unavoidable. The social and resettlement staff of the contractor will liaise with the people and keep the records of any damages caused to the properties as a result of any project related activity during construction stage and O & M stage.

The survey work involved collecting data for the purpose of land acquisition and resettlement, establishing contacts with relevant officials of line departments, and conducting consultations with affected persons and communities in the villages. This survey was conducted using pre-designed questionnaires to gather information on various aspects of land acquisition and the Resettlement Plan.

PIC undertook consultations from June 8th to June 24th, 2022, to update the RAP by verifying the names of the PAPs listed in RAP. Following the finalization of the project design in November 2022, a new series of consultations and data collection took place from November to January 2023. Through this process, coordination with the relevant authorities and NGOs was maintained to gather the necessary data and information.

The data collected in the field are based on the revised/ final design of the project. The project that will require land on permanent basis and the amount of land for each component is presented in Table 1-2.

Table 1-12: List of Project Components requiring Land on Permanent Basis

Land Type	Project Components						
	Weir Site	Adit 1 & Dumping Site	Adit 2 & Dumping Site	Adit 3 & Dumping Site	Staff Colony	Power House	Overall Total
	Kanals	Kanals	Kanals	Kanals	Kanals	Kanals	Kanals
A. Privately Owned							
Residential Land	7.29		3.93	3.90	0	4.44	19.56
Cultivated/Agriculture Land	278.48	34	86.40	124.06	26.00	90.70	639.64
Waste/Barren Land	159.04	8.66			34.06	83.52	285.28
Total Privately Owned	444.81	42.66	90.33	127.96	60.06	178.66	944.48
No. of AHHs	48	1	25	27	9	31	141
B. State Owned							
State Land (River Bed)	104.92	-			-	-	104.92
Total State Land	104.92	0	0	0	0	0	104.92
Overall Land Required	549.73	42.66	90.33	127.96	60.06	178.66	1049.40

1.7 Approach and Methodology for the Preparation of RAP

RAP has been prepared based on the final design of the Project. A participatory approach was followed for collecting data and information. The tools and techniques used include (i) land plots and ownership identification; (ii) census and socio-economic survey of affected households; (iii) detailed measurement survey (DMS) of the affected structures/ assets; (iv) stakeholder consultation meetings; and (v) focus group discussions (FGDs). Structured questionnaires and checklists were used for collecting data/information. A team of experienced professionals including females along with field staff was engaged in conducting these surveys and consultations.

The prevailing national and provincial laws related to land acquisition, consultations with the stakeholders and World Bank OP 4.12 on Involuntary Resettlement were considered. All parameters and steps were followed firmly to note down the project impacts, valuation of the affected structures/assets, consultations with the stakeholders particularly the PAPs, undertaking the social impact assessment and analysis, determining eligibility for compensation for the lost assets and development of entitlement matrix. Besides primary sources, the information from secondary sources was also collected. The social impact assessment process incorporated consultation and active participation, utilizing participatory rural appraisal tools to facilitate gender and social assessment, as discussed below.

1.7.1 Community Participation

To ensure participation of both directly and indirectly affected population, the RAP incorporated the outcomes of consultations carried out in a manner that was socio-culturally appropriate, involving PAPs and other stakeholders. These consultations were started from the project inception phase and continued throughout the resettlement planning phase. Care was taken to identifying the most vulnerable sub-groups and ensuring that their interests were adequately represented in the process. Community consultations were led by the Resettlement Specialist and Gender Specialist with support from a team of surveyors, with prior notification provided to the communities.

1.7.2 Participatory Rural Appraisal (PRA)

Participatory Rural Appraisal (PRA) techniques were used to conduct social and gender assessment and to supplement the socio-economic profiling of the community. The involvement and participation of the affected households (AHHs) has been an important aspect of the methodology. The PRA process included a range of questions and elements directed at assessing community perspectives and expectations for the project, to assess the impacts of displacement and resettlement on productive activities, daily life, customary practices; and social relationships. This participatory process was intended to facilitate AHHs to fully understand the process of their resettlement and rehabilitation.

1.7.3 Collection of Baseline Information

The baseline information relating to socio-economic aspects of the project was collected from primary and secondary sources. In addition, as per requirements of the WB's OP-4.12 and the prevailing national and provincial regulations for conducting the social assessment, consultations with the stakeholders were carried out. Furthermore, a stakeholder consultation exercise was undertaken to collect information of the project area and their feedback related to project impacts and concerns.

1.7.4 Collection of Data from Secondary Sources and Review of Documents

Information from secondary sources was gathered from all available documents, i.e., Population Census Reports 2017 of Swat district, Development Statistics of KP Province, 2020, Agricultural Statistics of KP province 2020-21, Pakistan Economic Survey, 2022 websites of the relevant tribal districts (Former FATA Agencies). The Social Analysis Sourcebook and guidelines on Involuntary Resettlement of the World Bank (WB) were also followed. Meetings were held with the officials of Irrigation & Power Department, Agriculture Department, Forest Department, Health Department, Education Department, Works and Services (W&S) department and Local Government of the Swat district. Besides, frequent meetings with the other line departments and related agencies were also held.

1.7.5 Collection of Data from Primary Sources - Census of Project Affected HHs

The project will require the acquisition of private and government land, which may result in losses to crops, structures, assets and sources of livelihood, thereby people will be affected. Census surveys were undertaken in the in the project areas based on the revised final design. An inventory of all affected assets of AHHs was prepared, covering 100% of the affected AHHs. Detailed measurements and valuations were conducted for the affected land and structures. The Forest Department officials counted and valued the trees in the area. For affected crops, the data collected from the field was validated from the Agricultural Statistics of KP¹⁰ province 2020-21.

The following features of the PAPs were addressed in the census.

- Name of PAP and total number of dependent members with their educational and occupational status
- Nature of business / occupation
- Type and quantity of total owned land
- Type and quantity of affected land
- Type and value of affected crops
- Type of affected (timber and fruit) trees and their value
- Type, extent and value of affected structures / assets owned
- Replacement costs of affected structures / assets
- Ownership documentation, if any
- Annual income of the affected family
- Vulnerable groups (including female headed households, people with disabilities and those identified below the poverty line)
- Identification of loss of income sources
- A Detailed Measurement Survey (DMS) to measure and record the exact dimensions of the affected structures and assets.

1.7.6 Socioeconomic Baseline Survey

The socioeconomic surveys were carried out to establish a baseline of the population of the project area. A sample of 20% of the affected villages was chosen, based on the population size of the village for the socioeconomic survey. However, in case of census survey, AHHs as identified during the impact assessment survey have been taken on 100% basis for the survey. Interviews were held with the heads of the AHHs to gather information focusing on the following features of the respondents.

- Demographic characteristics
- Education and literacy rates
- Nature of business/occupation
- Farm size and cropping pattern

¹⁰ Website: www.crs.kp.gov.pk/uploads/2020/08/CROP_STATISTICS_2018-19

-
- Source of income
 - Income from farm and off farm sources
 - Household Expenditure Pattern
 - Housing types and amenities
 - Value of land
 - Gender Perspectives
 - Women Role in Socioeconomic Activities
 - Possession of Household Goods
 - Livestock Inventory

1.7.7 Village Profile Survey

The project has impacted the land and structures of six villages in Behrain Tehsil of Swat District. A pre-structured proforma was used to collect information on socio-economic characteristics of these villages. The data collected through this survey has been used in developing the Socio-economic Profile of the project area.

1.7.8 Detailed Measurement Survey

Detailed measurement survey (DMS) was conducted for each affected asset to determine the exact size, type, and quality of each asset (land, structures or other assets appended to land) with quantum of impacted/acquired part, thereof with ownership title, type and use were determined and inventory of losses consistent with the present feasibility level design stage.

The details were documented by using pre-structured questionnaire to enumerate inventory of losses. The DMS was carried with participation of PAPs and relevant departments for identifying and measuring of the exact dimensions and quantities and valuation of all affected assets, including, as applicable, lands, buildings, crops, and trees.

1.7.9 Resettlement Databank

To accomplish the desired objectives and results, different databases were developed using Microsoft Excel such as socioeconomic indicators database, inventory/assets, impacted public and private infrastructure, trees inventory, land acquisition database, community consultations, compensation and entitlements, payments and relocation. Upon completion, the survey data was entered into computer for necessary processing. This data bank will be used as a basis of information for RAP implementation, monitoring and reporting purposes and facilitate efficient resettlement management.

1.7.10 Stakeholder Consultation and Participation

Resettlement planning was conducted with full participation of the key stakeholders. The consultant identified the stakeholders, particularly primary stakeholders, and engaged them closely in the planning process. The stakeholder consultation process was documented and a strategy for their continued engagement during the resettlement implementation process was developed. Care was taken to include women and other vulnerable groups in the consultation process.

1.7.11 Preparing the Cost Estimate and Budget

The consultant prepared cost estimates and proposed the budget for the RAP, as well as its financing arrangements. Costs and budget covered itemized cost estimates for all resettlement and compensation activities including compensation for loss of assets, livelihood restoration, allowances, transaction fees, contingencies and management cost for the RAP implementation.

1.7.12 Preparation of Social Development Plan (SDP)

The project has developed a separate SDP for the affected communities. The investment on SDP will be in addition to the mitigation and compensation for losses, and will aim to maximize and share development benefits with communities in the project affected area. SDP will prioritize the pressing needs of the local people and aim to ensure sustainable community development in the project impacted areas. The investments to be made under SDP will complement the main project investment and aim to promote the project's acceptability among the

community. SDP will serve as a good practice for benefit sharing with the community, demonstrating the project's commitment to responsible and sustainable development.

1.7.13 Preparation of Compensation and Livelihood Restoration Interventions

The required measures for compensation and livelihood restoration will be developed against the identified impacts on private, communal and public assets. A separate Livelihood Restoration and Improvement Plan (LRIP) will be developed. The compensation package and resettlement interventions will be developed in consultation with local communities. This will follow a highly participatory process to ensure that the compensation and resettlement packages are taken into full consideration, feedback received from the communities and will be compatible and acceptable with local cultural preferences and traditions. This participatory approach will ensure that these interventions are implemented in a manner to the needs and aspirations of the affected communities.

1.7.14 Establishment of Cut-off Date

A cut-off date has been established to determine the eligibility for compensation of PAPs to prevent false claims for compensation or rehabilitation. Generally, the date on which the census survey is completed, is taken as the cut-off date. Compensation eligibility is limited by this cut-off date. Any person moving into the project affected area after this date is not considered as entitled to any compensation, i.e., he is not included in the list of PAPs. The census survey was completed on 31 January 2023 and the same date has been established as cut-off date. This date was publicly announced during the scoping sessions and consultation meetings with AHHs.

2 SCOPE OF LAND ACQUISITION AND RESETTLEMENT

The project impacts on land and other assets are provided in this section of RAP. The total land requirements on permanent basis have been estimated to be 1049.40 kanals (53.11 hectares). Of these, 19.56 kanals is residential land, 639.64 kanals is cultivated land, 285.28 kanals is waste land and 104.92 kanals is river land. All the river land is under government ownership. The privately-owned affected land comprising of residential land, cultivated land and waste land is occupied by 141 affected households (AHHs). The number of severely affected households (HHs) is 138 (98% of the total AHHs). The severely affected HHs are those where affected land is more than 10% of their total landholding. The average holding size per AHH works out to be 12.77 kanals.

2.1 Permanent Land Requirements

The permanent land requirements for the project have been determined based on the final revised design. According to the surveys conducted, it has been revealed that the implementation of the MHPP will affect 141 families. Further details can be found in Annex-1. The overall Land requirements provided as Appendix-1 and are summarized in Table-2-1 and details relating to individual ownership can be found in Annex-2.

Table 2-1: Land Requirements of the Project on Permanent Basis

Land Type	Project Components						
	Weir Site	Adit 1 & Dumping Site	Adit 2 & Dumping Site	Adit 3 & Dumping Site	Staff Colony	Power House	Overall Total
	Kanals	Kanals	Kanals	Kanals	Kanals	Kanals	Kanals
A. Privately Owned							
Residential Land	7.29		3.93	3.90	0	4.44	19.56
Cultivated/Agriculture Land	278.48	34	86.40	124.06	26.00	90.70	639.64
Waste/Barren Land	159.04	8.66			34.06	83.52	285.28
Total Privately Owned	444.81	42.66	90.33	127.96	60.06	178.66	944.48
No. of AHHs	48	1	25	27	9	31	141
B. State Owned							
State Land (River Bed)	104.92	-			-	-	104.92
Total State Land	104.92	0	0	0	0	0	104.92
Overall Land Required	549.73	42.66	90.33	127.96	60.06	178.66	1049.40

The information about affected land falling in different villages is provided in Table 2-2.

Table 2-2: Village Wise Permanent Land Acquisition

Sr. No.	Name of Village	Location (River Side)	Land Affected on Permanent Basis (Kanal)	AHHs (No.)
1	Gharijo Mouza Rammit	Left	383.05	38
2	Kedam (Private Land)	Right	61.76	10
	Kedam (Government Land)	Right	104.92	
3	Ponkia Mouza Gornai	Left	42.66	1
4	Darolai	Left	90.33	25
5	Ayeen	Left	188.02	36
6	Kalgaay	Left	178.66	31
Total			1049.40	141

2.2 Impacts on Cropped Area

The survey has determined that about 639.64 kanals of cultivated land within AoI of the MHPP will be affected. This land is cultivated twice in a year. This land is used for cultivating maize during the Kharif season and wheat

during the Rabi season, with a total livelihood impact extending to 1279.28 kanals. Further, information regarding the affected cropped area is given in Table 2-3 and more detailed information is provided in Annex-3.

Table 2-3: Project Impacts on Cropped Area

Sr. No.	Project Component	Affected Crops				Total		
		Wheat		Maize		Kanal	Acre	AHHs. No.
		Kanal	Acre	Kanal	Acre			
1	Weir Site	278.48	34.81	278.48	34.81	556.96	69.62	32
2	Adit 1 & Dumping Site	34	4.25	34	4.25	68	8.50	1
3	Adit 2 & Dumping Site	86.4	10.80	86.4	10.80	172.8	21.60	19
4	Adit 3 & Dumping Site	124.06	15.51	124.06	15.51	248.12	31.02	24
5	Powerhouse	90.70	11.34	90.70	11.34	181.40	22.68	22
6	Staff Colony	26.00	3.25	26.00	3.25	52	6.50	5
Total		639.64	79.96	639.64	79.96	1279.28	159.91	103

2.3 Impacts on Trees

To allow for the construction and subsequent operation and maintenance, trees will need to be removed from the work sites. It is recommended that this clearing be done in a site-specific manner, rather than on an ad hoc basis for the entire project area. Based on the survey, it has determined that a total of 4,391 trees, including 2,321 fruit trees and 2,070 timber trees that are privately owned, will need to be removed from the work sites. Please refer to Table-2-4 for a summary of the affected trees, and Annex-4 for more detailed information on individual tree ownership.

Table 2-4: Privately Owned Fruit & Timber Tree to be removed on Permanent Basis

Type of Tree/ Component	Number of Trees						Total
	Weir Site	Adit-1 & Dumping site	Adit-2 & Dumping site	Adit-3 & Dumping site	Staff Colony	Power House	
A. Fruit Trees							
(1) Apple	60		39	28	20	-	147
(2) Apricot	41		18		35	10	104
(3) Black Persimmon	187	15	16	24	-	116	358
(4) Cherry	72		2		-	-	74
(5) Figs	56				20	6	82
(6) Peaches	153		416		10	-	579
(7) Pear	46		41	2	10	3	102
(8) Red Persimmon	141		37	33	-	173	384
(9) Walnut	356	12	1	24	18	80	491
Sub-Total (A)	1,112	27	570	111	113	388	2,321
B. Wood/Timber Trees							
Bakain	213	32		26	175	44	490
Bhanj	470	30	17	30	157	102	806
Diyar	6	-			-	-	6
Kikar	642	-			-	81	723
Shandai		-			-	4	4
Shatoot	22	-			-	-	22

Type of Tree/	Number of Trees						Total
Sufaida	11	0			-	-	11
Shesham	8	-			-	-	8
Sub-Total (B)	1,372	62	17	56	332	231	2070
Grand Total	2,484	89	587	167	445	619	4,391
AHHs. No.	39	1	16	17	6	24	103

2.4 Temporary Land and Resettlement Impacts

As per final design, the workers camp is planned to be constructed within the area that has been acquired on permanent basis for weir site. In the previous plan, an area of 15 kanals of land was proposed for the construction of workers camp outside the permanently acquired area. Now, this area is no more needed on temporary basis. There will be no temporary land and resettlement impacts of the project.

2.5 Impact on Structures

The privately-owned structures located within the impact area of the proposed project works will need to be removed. According to the census of PAPs, it has been determined that 37 residential houses will be affected within the area of impact. Of these affected houses, 18 are located at weir site, seven at Dumping area-2 site, three at Dumping Area -3 site and nine at the powerhouse site. Further information regarding the affected structures can be found in Table-2-5, with more detailed information provided in Annex-5.

Table 2-5: Project Impacts on Structures

Project Component	Kacha Structures			Semi-Pacca			Pacca			Total		
	Qty	Area	AHHs	Qty	Area	AHHs	Qty	Area	AHHs	Qty	Area	AHHs
	No.	Sq. ft	No.	No.	Sq. ft	No.	No.	Sq. ft	No.	No.	Sq. ft	No.
Weir Site	11	17,249	11	6	10,281	6	1	2,682	1	18	30,272	18
Adit-1 & Dumping site										0		0
Adit-2 & Dumping site				6	6,573	6	1	1,762	1	7		7
Adit-3 & Dumping site	2	3,954	2				1	1,403	1	3		3
Powerhouse	1	1,082	1	5	9,058	5	3	4,401	3	9	14,541	9
Staff Colony		-	0		-	0		-	0	0	-	0
Total	14	22285	14	17	25912	17	6	10248	6	37	44753	37

2.6 Impacts on Public Utilities within Area of Impact (AoI)

Besides privately owned, the project will also impact the government owned infrastructure (seven Poles 220 kV) within the area of impact, as provided in Table-2-6.

Table 2-6: List of Public Utilities within the Area of Impact

Electric Pole	Village	Ownership	No./ Qty.
132 kV Electric Poles	Ayeen	PESCO/ TESCO	2
11 kV Electric Poles	Gharijo Mouza Ramit	PESCO/ TESCO	05

2.7 Impacts on Community Owned Infrastructure

The project will not affect any community owned infrastructure within the AoI.

2.8 Archaeological, Historical and Religious Sites

No archaeological and historical sites were observed within the AoI of the proposed hydropower project. However, once the construction starts and if there is any archeological site or of historical importance will be dealt accordingly as per WB OP 4.11.

2.9 Impacts on Livelihoods and Severely Affected Households

According to the data, out of total 141 AHHs, 138 of them will experience a loss of more than 10% of their productive resources (land), which will have a significant impact on their livelihood and leave them severely affected. For more detailed information, the component-wise details are given in Table 2-7.

Table 2-7: Affected Households Having Impact on Livelihood and Severely Affected

S. No	Project Components	Land Owners/ Title Holders
		AHHs. No.
1	Weir Site	47
2	Adit 1 & Dumping Site	1
3	Adit 2 & Dumping Site	25
4	Adit 3 & Dumping Site	25
5	Staff Colony	9
6	Power House	31
	Total	138

2.10 Impacts on the vulnerable HHs

Vulnerable households have been defined as (i) headed by single woman or woman with dependents and low incomes; (ii) headed by elderly/people with disabilities and people without means of support; (iii) households that are below the latest nationally defined poverty line (PKR 431,590 has been considered as the annual poverty line, details of official poverty line (OPL) are given later in the document). As per Census, the income of 49 AHHs is below OPL and fall under the vulnerable group. Those listed as vulnerable groups will receive benefit from Project implementation. The entitlement matrix has provision for one-time grants for vulnerable in addition to eligible compensation for lost assets. The village-wise list of vulnerable HHs is summarized in Table 2.8.

Table 2-8: Village-Wise List of Vulnerable HHs

Sr. No.	Name of Village	No. of Vulnerable HHs
1	Ayeen	16
2	Darolai	13
3	Gharijo Mouza Rammit	11
4	Kalagay	7
5	Kedam	2
	Total	49

2.11 Impact of Water Diversion in Downstream

A rapid assessment survey was carried out from Weir site to Powerhouse to assess the potential project impacts due to water diversion in upstream to downstream areas of water diversion.

The survey has determined that the present infrastructure/ and economic activity on the river banks do not depend on river water. However, this activity will be continued as usual after the reduced river flow. The water flows in this stretch before construction of Weir is 16 to 313 m³/s, which will be reduced to 16 – 160 m³/s after water diversion. No impact is anticipated due to reduced water flows as the minimum releases after construction of weir will be more than the pre-project condition and will be sufficient to meet the current uses of

the project. This aspect is discussed in detail in the environmental and social impact assessment (ESIA) of the project.

2.12 Impact on Indigenous People

There will be no impact on indigenous people as there are no indigenous people in the Project area. People in three valleys of Kalash in Pakistan are the only indigenous people which are outside of the project area.

2.13 Gender Impacts

The social assessment conducted in the areas affected by the project has revealed that women are an integral part of the socio-economic fabric of the region. However, they face several challenges, including limited access to opportunities and decision-making power. Basic amenities such as vocational training centers, high schools, health facilities, and maternity hospital are lacking in the area, which further exacerbates the situation.

The socio-cultural environment in the project area restricts the role of women outside their homes, with men traditionally being less tolerant of women in public spaces. Only 35 percent of women of the area have, which underscores the importance of empowering them through formal education and skill-building programs. Despite the challenges, women play a critical role in the agricultural and household sectors, which are the main sources of livelihoods of their families. They work in the agriculture fields and look after the livestock which is the main sources of livelihood of residents in the project area, but they have no direct share in the income generated from these sectors.

Many villages lack an easily accessible source of potable water. Women, therefore, have the responsibility for fetching and carrying water from the nearest spring or stream for household use, which is physically demanding and time consuming. Women with children also have less physical mobility to travel to find ways of earning a livelihood. The economic status of women is no better than their social, political and educational status. The women assume important economic roles in a wide range of income generating activities in the agricultural and household sectors to support the livelihood of their families. Besides agriculture, the women are involved in sewing of clothes and almost all of the adult women stitch their and their children's clothes. Some are also involved in embroidery work to supplement the livelihood of the family. For these reasons, the socially and culturally appropriate alternative livelihood opportunities will be explored for women. The women would not be able to benefit from income opportunities during the construction phase as they do not involve in construction activities due to cultural and social reasons. Therefore, it is important to identify and promote alternative sources of livelihoods for women that are culturally and socially appropriate in the context of the Project area.

The rigid tribal culture severely restricts women's mobility. Purdah is strictly imposed on young girls and women. In the presence of other male members of the family. The construction works adjacent to the agriculture land and settlement of villages will have an impact on the privacy, safety and security of the population of affected villages and surrounding communities. The local population demanded that the construction camp should be established away from settlements to respect privacy, safety and security of the communities residing in the adjacent and surrounding areas particularly of women, young boys and girls. Actions have been incorporated in ESMP to protect privacy of women and children.

There will be temporary impacts on mobility and access of women due to construction works, and a few informal walkways will be submerged in the weir, which are used by women to collect wood for fuel and grass for livestock. The contractor will restore the informal walkways through alternative routes and ensure no inconvenience to women and men. Women fear of accidents due to increase traffic. The contractor has to identify these impacts and address them during the construction. No violence against women was reported by any male or female.

A number of measures have been laid down in RAP and ESIA to mitigate the adverse gender impacts and enhance positive impacts. A livelihood restoration and improvement plan (LRIP), and a gender action plan (GAP) has been prepared for the Project, which details actions for gender mainstreaming in the project. The GAP has been prepared based on the key findings of the poverty, social and gender assessment and consultations carried out during RAP and ESIA preparation. The GAP will be implemented in consonance with the RAP. The results of gender assessment have been reported in the ESIA and GAP is a part of the ESIA. The SDP for the project

provides a number of schemes aimed at to improve the basic socioeconomic infrastructure in the project area that will surely positively impact the standard of living of the women in the project area.

2.14 Summary of Resettlement Impacts

The resettlement impacts discussed in this section are summarized in Table 2-9 below

Table 2-9: Summary of Land Acquisition and Resettlement Impacts

Sr. No	Category of Impacts	Affected Land		AHHs (Nos.)	PAPs (Nos.)	Remarks
		(Kanals)	(Hectares)			
A. Permanent Land Acquisition						
i)	Cultivated/Arable land	639.64	32.36	103	811	<ul style="list-style-type: none"> Permanent acquisition of private Land Cultivated and Residential land with multiple ownership with barren land.
ii)	Barren (Uncultivated land)	285.28	14.43	01	8	
iii)	Residential Land	19.56	1.38	37	291	
iv)	River Bed	104.92	5.30			Land under permanent impacts
	Total	1049.40	53.08	141	1110	
B. Affected Cropped Area						
i)	Permanent impact	639.64	32.36	103	811	Permanent Loss of cropped area
	Total	639.64	32.36	103	811	
C. Affected Structures						
i)	Residential structures (Nos.)	37	-	37	291	Permanent Loss of residential structures
	Total	37		37	291	
D. Affected Trees (Private)						
i)	Affected wood/timber trees	348	-	14	110	Permanent Loss
ii)	Affected fruit trees (Nos.)	363	-	31	244	
	Affected Timber Plus Fruit Trees	3680		58	456	
	Total	4391		103	811	
E. Project Affected Household						
i)	Total permanent AHHs			141	1110	These AHHs have multiple impacts as

Sr. No	Category of	Affected Land		AHHs	PAPs	Remarks
ii)	AHHs facing loss of livelihood and severe impact			138	1086	
iii)	AHHs losing permanent Cultivable/Arable	-	-	103	811	
iv)	AHHs losing structures	-	-	37	291	
v)	AHHs losing trees (Nos.)	-	-	103	811	
vi)	AHHs having livelihood related			103	811	
vii)	Vulnerable AHHs	-	-	49	386	

2.15 Significance of Impacts

The project will impact 285 kanals of barren land, 640 kanals of cultivated land, 20 kanals of residential land and 37 structures of different types, 4,391 trees besides impacting government owned two 132 kV electric poles and five 11 kV electric poles. The number of affected families comes to 141. The population of the AHHs works out to be 1,110 persons, including 576 males and 534 females. Moreover, there are 49 AHHs whose income is below the OPL and are categorized as vulnerable. Among the total 141 affected families, about 98% are severely affected¹¹. The magnitude and nature of project impacts classifies the MHPP as resettlement Category "A" project.

2.16 Efforts to Minimize Land Requirements by Adjusting in Design- Analysis of Alternatives

A colony will be built for PEDO operation and maintenance (O&M) staff. The colony will include residences for about 50 staff and facilities such as water supply and sanitation, roads, a primary school, a dispensary, a mosque, a park, a guest house, a community center, and shops. However, since the Madyan town is narrow with small flat area which is use for agriculture purpose, hardly any suitable and flat area for establishing a large colony near to the powerhouse site was available.

A detailed review of the 2009 feasibility report design was made by the social and environmental team. It was found a site identified in the feasibility report design for project colony was close to Madyan town. The site was not considered suitable for constructing the colony because the proposed site was purely agriculture land (which is the only income source of the affected locals) and there were permanent structures (18-20 houses, a family guesthouse). Also, there were about 500 number of fruit and non-fruit trees. Construction of colony and other related facilities at this location would disturb the agricultural (livelihood) activities and large number of trees (fruit and non-fruit) will be cut down. Local people also communicated that it is the only agricultural land at Madyan. The community also had concerns over it as it was the fertile land and community did not want to spare it for the project. To avoid/ minimize social and environmental impacts, a series of consultations with the local people were made to find a suitable alternative site for the establishment of staff colony. The site was identified at the river terraces of the Kalgay Village. During consultation with local population, they also agreed on the newly proposed site for project facilities. Sufficient space is available at this location with relatively more or less levelled area on top of terraces. The site is located opposite to main Madyan-Kalam Road and about 1km upstream from the proposed powerhouse. This site is close enough to the project facilities. The width of road to the alternative site will need to be increased for easy accessibility to Madyan town.

¹¹ A severely affected is a land owner whose affected land is 10% or more than 10% of his total land.

3 BASELINE SOCIOECONOMIC PROFILE OF AFFECTED HOUSEHOLDS

3.1 General

The survey in the project area was carried out to develop socio-economic baseline of the general population for detailed understanding of the social and economic conditions of the AHHs and to provide baseline data for monitoring of RAP implementation and the impacts of the project. Socio-economic profiles of the affected households include demographic characteristics, income and expenditure status and poverty dimension. A village profile survey of the affected village was also conducted. The information was used to develop a socioeconomic baseline profile of the people of the area. These are discussed in the following sections of this chapter.

3.2 Methodology

The survey was conducted by a team of experienced professionals comprising male and female along with the field staff. Pre-structured proformas provided as Appendix-2 and Appendix-3 were used to collect information on the socio-economic characteristics of the project area. For socioeconomic survey, 141 AHHs (the number of AHHs identified during the census survey) were considered. Interviews were held with the heads of the AHHs and the female members of the family at their residences to collect socioeconomic information of the affected population. Table 3-1 provides information about the number of HHs included in the socio-economic survey by village.

Table 3-1: Village-wise Number of AHHs Interviewed

Sr. No.	Village Name	No. of AHHs
1	Ayeen	35
2	Darolai	25
3	Gharijo Mouza Rammit	38
4	Kalagay	32
5	Kedam	10
6	Ponkia Mouza Gornai	1
Total AHHs Interviewed		141

3.3 Demographic Profile of AHHs

3.3.1 Population and Family Size

The population of the respondents works out as 1110 persons comprising 576 males and 534 females, as depicted in Table 3-2. The proportion of male and female works out as 52% and 48%, respectively. The average family size is calculated as 7.87 persons.

Table 3-2: Demographic Characteristics of the Respondents PAPs

Gender	Adult	Children up to 10	Total	%
Male	424	152	576	51.89
Female	407	127	534	48.11
Total	831	279	1110	100.0

3.3.2 Age Distribution

About 48% of the population is within the age range up to 18 years. The economically active age group within the age range of 19-50 years is about 41% of the population. This segment of the population is generally considered the bread earner of the household. The table reveals that about 60% of the population is economically dependent. Table 3-3 provides information about age distribution of the respondent.

Table 3-3: Age-wise Distribution of the Respondent

Age Range (In years)	Number of Respondents					
	Male	%	Female	%	Total	%
0 – 10	152	26.39	127	23.78	279	25.14
11 – 18	98	17.01	151	28.28	249	22.43
19 – 50	248	43.06	202	37.83	450	40.54
51 and above	78	13.54	54	10.11	132	11.89
Total	576	100.00	534	100.00	1,110	100.00

3.3.3 Family Structure and Composition

The number of family members ranges from 2 persons per family to 12 persons per family, as provided in Table 3-4. The average family size works out to be 8.03 persons.

Table 3-4: HH Composition of the Study Sample

Family Structure	Number	Percentage
Nuclear family	32	22.76
Extended families'	109	77.24
Total	141	100.00
Maximum Number of Persons in a Family	12	
Minimum Number of Persons in a Family	2	
Average Number of Persons in a Family	7.87	

3.3.4 Marital Status

Total population of the respondents works out to be 1110 persons. Of these, 486 are below marriageable age (175 in the age range of <10 years to 18 years and 311 below 10 years of age). According to data provided in Table 3-5, about 32% of males and 36% of females are married. On overall basis, about 56% of the surveyed population in the project area is married.

Table 3-5: Marital Status of the Sample Respondents

Marital Status	Male		Female		Total	
	No.	%	No.	%	No.	%
Married	188	32.64	188	35.21	376	33.87
Unmarried	156	27.08	72	13.48	228	20.54
Widow	3	0.52	17	3.18	20	1.80
Persons Between 11-18 Years	65	11.28	111	20.79	176	15.86
Children up to 10	164	28.47	146	27.34	310	27.93
Total	576	100.00	534	100.00	1110	100.00

3.3.5 Characteristics of the Heads of HHs

Regarding age distribution, majority of the family heads was in active age group, as shown in Table 3-6.

Table 3-6: Distribution of HHs Heads According to Age

Age of HH Head (Years)	Respondent Families	
	No.	Percentage
20-30	13	9.55
31-40	33	23.60
41-50	29	20.79
51-60	33	23.60
Above 60	32	22.47
Total	141	100.00

As far as the education levels of the AHHs heads are concerned, about 40% of the heads of respondent families are illiterate. About 47.4% of the family heads possess formal education up to master's level. About 12% can read Quran and about 01% have dars-e-nizami level education (religious education). Information provided in Table 3-7 shows that a considerable proportion of the family heads are educated.

Table 3-7: Education Level of HHs Heads

Education Level	Details	
	No.	Percentage
Illiterate	57	40.45
Read Quran	17	11.80
Primary	18	12.92
Middle	11	7.87
Matric	12	8.43
FA	8	5.62
BA	9	6.18
MA	9	6.18
Dars-e-Nizami	1	0.56
Total	141	100.00

3.3.6 Ethnic Characteristics and Religion

The survey has determined that the overwhelming majority of the people of the project area belongs to Yousafzai Pashtuns and Kohistani community. All the tribes are Pashtun and 100% of the population speaks Pushto, Torwali and Gojri. Urdu is also spoken and understood among the literate persons and among the people who have migrated to other cities of the country for their livelihood. The people of the area are knitted in a tribal social system and they generally respect the civil rights of the other fellows. Women observe purdah, i.e., they remain secluded from outsiders. However, women do participate in agricultural and livestock activities in the rural areas.

According to findings of the survey, the dominant religion practiced in this region is Islam. About 100% of the people are Sunni Muslims. The minorities are found in fractional number.

Yusufzai is one of the major Pashtun tribes. According to the anecdotal history, they originated in Kandahar, Afghanistan. In their migration to eastward, they arrived in the Kabul area when it was ruled by the Turks in 1446. When the Yusufzai spread into the area as far as Swat, their relationship with the local Dilazaks deteriorated and a long war ensued. After 20 years, under their leader Malik Ahmed Khan, the Yusufzai and allied clans (jadoon and uthmankhail) were able to push the Dilazaks eastwards towards the Hazara mountains east of the Indus River. Pir Baba, as the first Emir of the state of Swat. The state lasted until the early 20th

century under its religious leaders known as Akhunds of Swat, and later passed on to the last dynasty of Gujar/Safis, who ruled over the area now encompassing the present-day Swat. Most Yusufzai speak the northern variant of Pashto (Pukhto) with the hard "kh" replacing the softer "sh" of the southern Pashto dialects.

The Kohistani are an effective part of the population of project area. Their primary language is Gawri. The Kohistanis are Muslims. The primary religion practiced by the Kohistani is Sunni Islam. They practice transhumance pastoralism for their sheep and goats; but in the fertile valley bottoms they are also able to plough and irrigate fields, growing maize, millet, and other crops. Thus, Kohistanis move around seasonally between farmlands at about 1,000 meters and summer camps all the way up to 4,500 meters. Cattle and buffalo are kept at the lower elevations. Kohistani villages are made up of several minimal lineages, each of which has representation on a village council, which tends to be the highest authority. Aside from the farmers, a village population normally includes blacksmiths and carpenters (Pashto-speaking) and a few farm laborers or tenants. They are motivated by a reverence for the Quran and its teachings, as well as by *izzat* (male honor). The seclusion of women, however, is rather problematic because of their importance in farm work.

Both the clans are living in harmony in the area. No major disputes are reported by the respondents. It was also reported by the respondents that these inhabitants of the area have even developed family relationship with each other.

3.3.7 Settlement Pattern

The economy is rural based and people prefer to live in a joint family system. The project area lacks in good quality social infrastructure and ancillary facilities. The settlement pattern of the surveyed population is provided in Table-3-8.

Table-3-8: Settlement Pattern of the Respondents

Type of Houses	Number	%
Kacha	63	44.35
Pacca	36	25.56
Semi Pacca	42	30.09
Total	141	100.00

3.4 Prevalence of Conflict and Cohesion

People of the project area have a strong sense of community, and their tribal, social, and cultural systems have fostered a peaceful harmonious environment. The community is homogeneous, and members are known to each other. While there are not many serious issues or tensions in the local communities except few individuals having personal feuds and rivalries, the local Jirga is available to resolve conflicts quickly.

However, the most common sources of tensions are disputes over land and forest. The Forest Department and the local population often clash over the ownership of trees in the forest. The Forest Department requires the locals to inform them before cutting down trees as the trees are legally owned by the Forest Department. However, the locals are of the opinion that the forest belongs to them and they have the right to cut down trees without permission. As a result, illegal tree cutting often occurs at night, and the locals have demanded free electricity from the government to use for heating and cooking and, in exchange for stopping their illegal activities.

3.5 Decision-Making Forums in the Local Communities

The conflicts in the region are resolved through traditional Jirga system. A jirga is a traditional assembly of leaders that make decisions by consensus and according to the teachings of *Pakhtunwali*. The *Pakhtunwali* is a traditional lifestyle of the Pakhtuns and interpreted as "the way of the Pakhtuns" or "the code of honor. In case of some dispute, Jirga is a commonly acceptable decision-making forum in the project area for conflict resolution, as reported by the overwhelming majority of the respondents. The matters that are not resolved by the local Jirga are taken to the court of law. However, no disputes are reported by the respondents.

3.6 Education

3.6.1 Access to Educational Institutions

The project area has a poor educational network. The existing educational facilities are not satisfactory except for primary levels institutions. There are 16 primary schools (09 for boys and 07 for girls) in the project impacted villages. There also exist 03 and 02 middle schools for boys and girls, respectively in the villages comprising the project area. There is only one high school for boys and no high school exists for the girls. Of these institutions, 73% are primary level, 22% middle level and 05% matric level. There is no high school for girls in the area. The student teacher ratio at Primary, Middle and Matric level institutions work out as 39:1, 38:1 and 26:1, respectively. The overall ratio comes to 39:1. There exists no inter or degree level college for boys and girls. There exist no institutions for professional education in the project area.

However, private schools exist in Madyan (07 schools) and Behrain (04 schools). The affording parents send their children to these schools. Pick-up and drop-off facility for school children for these schools is available. Many of the parents use their own vehicles for pick-up and drop-off services for their children. (Motor cycle or cars). Table 3-9 summarizes the information relating to educational facilities in the Project Area.

Table-3-9: Number of Educational Institutions in the Project Area

Institution	No. of Schools		Enrolment (No.)		No. of Teachers		Student Teacher Ratio	
	M	FM	M	FM	M	FM	M	FM
Primary	9	7	1850	830	43	18	43:1	46:1
Middle	3	2	900	240	19	11	47:1	22:1
High	1	0	410	0	16	0	26:1	0
Total	13	9	3160	1070	78	29	41:1	37:1

3.6.2 Literacy Levels

The survey has revealed that out of 1110 (total affected population), the number of literate persons comes to 608 (319 males and 289 females), which calculate to be 53% for the males and 47% for the females showing a male to female education ratio as 1.11:1. The Information regarding literacy levels of the surveyed population is provided in Table 3-10.

Table 3-10: Literacy Status of the Sample Respondents

Sr. No.	Education	Male (No)	%	Female (No)	%	Total (No)	%
1	Illiterate	105	18.23	118	22.10	223	20.09
2	Can Insert Signature	0	0.00	1	0.19	1	0.09
3	Read Quran	34	5.90	121	22.66	155	13.96
4	Primary	61	10.59	63	11.80	124	11.17
5	Middle	53	9.20	30	5.62	83	7.48
6	Matric	71	12.33	36	6.74	107	9.64
7	FA	41	7.12	18	3.37	59	5.32
8	BA	27	4.69	13	2.43	40	3.60
9	MA	17	2.95	6	1.12	23	2.07
10	LLB	2	0.35	0	0.00	2	0.18
11	Tech. Diploma	3	0.52	1	0.19	4	0.36
12	Dars e Nazami	10	1.74	0	0.00	10	0.90
13	Children up to 10 Y	152	26.39	127	23.78	279	25.14

Sr. No.	Education	Male (No)	%	Female (No)	%	Total (No)	%
	Total	576	100.00	534	100.00	1,110	100.00

3.7 Agriculture

The survey has revealed that agriculture is the mainstay of the economy of the area. The livelihoods of about 64% of the population solely depend on agriculture. The main crops grown in the area include maize in kharif season (October to March) and wheat in Rabi season (April to September). Vegetables are grown as homestead farming activity and mainly looked after by the females in the family.

3.7.1 Distribution of Land Holdings

The size of land holdings is essential to examine the level of household well-being and livelihood. The survey results presented in Table 3-11 indicate that on overall basis, it can be concluded that the majority of the sample households (83%) possess small landholdings up to 2.00 acres, and remaining 18% have land holding more than 2.00 acres. The average size of holding in the project area comes to 14.85 kanals (1.86 acres or 0.75 ha.)

Table- 3-11: Land Holdings in the Project Area

Holding Size	No.	%
Up to 8 Kanals or (One Acre)	71	50.00
From 8.1 to 16 Kanals (1-2 Acres)	47	33.15
From 16.1 to 24 kanals (2-3 Acres)	8	5.62
From 24.1 to 32 kanals (3-4 Acres)	7	5.06
From 32.1 to 40 Kanals (4-5 Acres)	3	2.25
More than 40 kanals (> 5 Acres)	6	3.93
Total	141	100.00

3.7.1.1 Land Tenure, Land Use and Natural Resources

The project area falls in the settled area per revenue records. In general, the area is hilly/ mountainous and there is a scarcity of flat and arable land. The land use in the area is a mixed type including forest cover, agricultural, and barren land. According to the officials of the Revenue Department, Behrain, about 82% of the land of area is hilly/ mountainous and barren. The land use, according to Revenue Department officials indicates that 36.79% is under forest cover, 33.9% is barren land, 17.81% is agriculture land, 6.23% under river and streams, and 5.27% comprise built-up area. Terrace cultivation is practiced in the area.

3.7.1.2 Income from Crops

It was revealed during the socioeconomic survey that affected farmers in the proposed MHPP were found cultivating two main crops. The major crops grown in Kharif and Rabi seasons were Maize and Wheat, respectively. Their average annual gross farm income works out to be PKR 15,804,203 (or PKR 24708 per Kanal). Information in respect of cropping pattern, production and farm incomes is provided in Table 3-12.

Table 3-12: Assessment of Value of Crops

Crop	Area Sown (Kanal)	Total Production (Kgs.)	Gross Value (PKR)	Gross Income (PKR/ Kanal)
Maize	639.64	123,711	7,993,264	12,497
Wheat	639.64	120,889	7,810,939	12,211
Total	1,279.28	244,600	15,804,203	24,708

3.8 Employment and Business Opportunities for the Locals in the Project Area

3.8.1 Cropping Pattern and Intensity Per Kanal Yield

The survey has revealed that about 639.64 kanals of cultivated land will be affected within the AoI of the MHPP. This land is cultivated twice in a year. During Kharif season for Maize crop and during Rabi season for wheat crop. The livelihood impact extends to 1279.28 kanals. The annual cropping intensity works out as 200%. The per kanal yield of Maize and Wheat crops works out to be 193.41 kgs and 189.00 kgs, respectively.

3.8.2 Livestock Inventory

As depicted in Table 3-13, about 94% of the surveyed families have livestock (mainly cows and goats), with an average number of 02 cows and 04 goats/sheep per household, respectively. The average number of poultry birds per household is works out as 06.

Table 3-13: Livestock Inventory of Surveyed HHs

Type of Animal	No. of HHs with Animals	No. of total Animals
Buffaloes	2	3
Cows	68	147
Donkey	3	3
Sheep, Goat	65	230
Poultry	76	470

3.8.3 Income Analysis of Surveyed Households

The aspects covered under this sub-heading include major occupation, sources of income and income analysis.

3.8.4 Sources of Income/ Livelihood

The sources of income in the project area are very limited in general except agriculture and some local level trade/business activities. Majority of the population rely on farming. Many of the locals have gone to Gulf states for earning their livelihood. The survey has revealed that the earning segment of the sample population works out about 25% and about 75% of the population is non-earning. Among non-earning segment are unemployed, students and household women with no outside economic activity and the children. The income of the AHHs from different professions is given in Table 3-14.

Table 3-14: Professions and Income Status of the Respondent Families

Professions	AFs Involved	% Of Total	Annual Income/ Occupation (PKR)	Monthly Income/ Family (PKR)
Farming	60	42.55	37,764,000	52,450
Farming/Shopkeeper	10	7.09	8,268,000	68,900
Farming/Government Service	7	4.96	6,336,000	75,429
Farming/Pvt. Service	20	14.18	16,800,000	70,000
Farming/Laborer	17	12.06	7,536,000	36,941
Farming/Livestock Keeping	2	1.42	1,332,000	55,500
Shopkeeper General	2	1.42	1,500,000	62,500
Farming/ Trading	6	4.26	3,612,000	50,167
Government Service	3	2.13	1,500,000	41,667
Private Service	3	2.13	984,000	27,333
Laborer	4	2.84	1,752,000	36,500
Gone Abroad	2	1.42	1,560,000	65,000
Farming/ Driver	3	2.13	1,380,000	38,333
Trading	2	1.42	3,444,000	143,500

Professions	AFs Involved	% Of Total	Annual Income/ Occupation (PKR)	Monthly Income/ Family (PKR)
Total	141	100.00	93,768,000	55,418

3.8.5 Household Income

Based on the sources of livelihood, the average annual income of per surveyed family works out as PKR 665,021. The average monthly income comes to PKR 55,418. The income was related to the Official Poverty Line (OPL). The OPL of PKR 3030 per capita / month was estimated by the Planning Commission in 2014–2015¹². The latest estimate of inflation-adjusted poverty line per capita per month for 2021-22¹³ comes to PKR 4570 or PKR 35,966 per family per month (4570*7.87). The OPL for an average household in the project area works out to be PKR431,590 (4570x7.87x12=431590). The calculated average monthly income of PKR 55,418 per HH is higher than the OPL. However, the income is 50% less than the World Bank estimated OPL of \$ 1.90 per capita per day¹⁴ (or PKR 475 per capita per day). The income analysis of the surveyed HHs is provided in Table 3-15.

Table 3-15 Income Analysis of the Surveyed HHs

Total Surveyed Families	141
Average Family Size (No.)	7.87
Total Annual Income of Surveyed Families (PKR)	93,768,000
Av. Annual Income Per Surveyed Family (PKR)	665,021
Av. Monthly Income Per Surveyed Family (PKR)	55,418
Av. Daily Income Per Surveyed Family (PKR)	1,847
Av. Daily Income Per Capita (PKR)	234.65

3.8.5.1 Income Distribution Pattern

The income status of the respondents was analyzed in relation to the poverty situation in Pakistan. The per capita monthly income of AHHs works out to be PKR 7,042. The income was related to OPL. OPL of PKR 3030 per capita / month was estimated by the Planning Commission in 2014–2015¹⁵. The latest estimate of inflation-adjusted poverty line per capita per month for 2021-22¹⁶ comes to PKR 4570 (or PKR 152 per capita per day) or PKR 35,966 per family per month (4570 x 7.87). The calculated average daily income of PKR 235/capita is higher than OPL.

OPL for an average household in the project impacted area works out to be PKR 431,590 per year (4570 x 7.87 x 12 = 431,590). The income distribution analysis reveals that about 35% of the affected families are living below the OPL. The remaining 65% AHHs have income greater than OPL. These may be categorized as non-poor or rich. The income levels of the respondent households are shown in Table 3-16.

Table 3-16: Income of Surveyed HHs with Different Income Ranges

Range of Yearly Income (PKR)	Affected Families	
	No.	Percentage
Up to 150,000	2	1.42
150,001 - 300,000	17	12.06
300,001 - 450,000 (Equal to OPL)	30	21.28

¹²http://www.finance.gov.pk/survey/chapters_16/Annexure_III_Poverty.pdf - Pakistan Economic Survey 2014-15

¹³ <https://www.finance.gov.pk/PES07-INFLATION>

¹⁴ <https://blogs.worldbank.org/opendata/september-2019-global-poverty-update-world-bank>

¹⁵http://www.finance.gov.pk/survey/chapters_16/Annexure_III_Poverty.pdf - Pakistan Economic Survey

¹⁶ Pakistan Inflation Rate 1960-2023: <https://www.macrotrends.net/countries/PAK/pakistan/inflation-rate-cpi>

Range of Yearly Income (PKR)	Affected Families	
	No.	Percentage
Above 450,000	92	65.25
Total	141	100.00

3.8.6 Household Expenditure

The baseline information relating to the family expenditure pattern in respect of sample population is shown in Table 3-17.

Table 3-17: Average Monthly Expenditure of the Respondents

Expenditures	Total Monthly (PKR)	Total Annual (PKR)	%
Food Expenditure	25,026	300,306	58.38
Non-Food Expenditures	8,290	99,485	19.34
Utilities	1,820	21,837	4.25
Education of Children	2,370	28,440	5.53
Clothes & Shoes	2,089	25,071	4.87
Occasional Expenditures	2,146	25,755	5.01
Healthcare	1,125	13,504	2.63
Total	42,866	500,894	100.00

The data indicates that the expenditure on food and non-food items comes to about 77.72%. The expenditure on clothes and shoes and on occasions works out as 4.87% and 5.01%, respectively. The expenses on utilities and education amount to 4.25% and 5.53% of the total household expenditure whereas the expenses on health care amounts to 2.63%. The average annual family expenses of PKR 500,894 worked out as 75% of the average annual income of PKR 665,021.

3.8.7 Meals per Day

The AHs in the project take meals three times a day (breakfast, lunch and dinner) wherein, both male and female can have access to same food. The people are very fond of meat.

3.8.8 Status of Credit Obtained by the Households

The aspects discussed in this section include the extent of surveyed households who obtained credit, amount of credit, major sources of credit and the purpose of credit. Generally, credit is obtained to supplement income to meet routine and some occasional expenditure of the household, construction and maintenance of the house, purchase of farm input/ livestock and investment on social needs. The credit is mainly obtained from the non-formal sources. The survey has revealed that 40% of the surveyed households obtained credit from non-formal sources, including money lenders, relatives/ friends, and shopkeepers. A major proportion of the households (22%) have obtained credit above PKR 50,000, while the remaining 18% of households obtained credit up to PKR 50,000. Details are given in Table 3-18.

Table 3-18: Average Amount of Credit Obtained by Sample Households

Amount of Credit Bracket	Households Obtained Credit	
	(Nos.)	%
< PKR 20,000	11	7.80
PKR 20,000 – PKR 50,000	15	10.64
>PKR 50,000	31	21.99
No Credit Obtained	84	59.57
Total	141	100.00

3.8.8.1 Source of Credit

The majority of the respondents had taken credit for investment purposes in some business activities and have taken a loan from their relatives. Among surveyed households who obtained credit, most of them have obtained it from non-formal sources. None of the sample households obtained credit from formal institutions due to the requirements of collaterals and payment of interest rates. The details regarding sources of credit are presented in Table 3-19.

Table 3-19: Sources of Credit

Sources of Credit	Households who Obtained Credit (Nos.)	Percentage (%)
Private money lender	29	50.00
Relatives	15	27.27
Shopkeeper	8	13.64
Other	5	09.09
Total	57	100.0

3.8.8.2 Purpose of Credit Obtained

The main purpose of obtaining credit is to supplement family income to meet routine and some occasional expenditures of the household. Most of the households (about 50%) obtained credit for domestic matters (meeting social obligations) and treatment of the members of the family.

3.9 Housing Conditions

The ownership and housing condition are some of the key indicators for the assessment of the living standard and well-being of households. The main household structures consist of living rooms, animal shed/ room, and washroom. The details regarding the type of construction/ housing conditions of different structures/ sub-structures are presented in Table 3-20.

Table 3-20: Details about Housing Types and Conditions

Type of Structure	No.	%
Houses		
With 1 Living Room	2	1.69
With 2 Living Rooms	25	17.42
With 3 Living Rooms	32	22.47
With 4 Living Rooms	29	20.79
With 5 Living Rooms	18	12.92
With 6 Living Rooms	13	8.99
More than 6 Rooms	22	15.73
Sub-Total:	141	100.00
Kacha	55	38.76
Pacca	47	33.15
Semi Pacca	40	28.09
Sub-Total:	141	100
Animal Sheds		
Kacha	42	29.78
No Animal Shed	99	70.22
Sub-Total:	141	100.00
Kitchens		
Kacha	55	38.8
Pacca	47	33.1

Type of Structure	No.	%
Semi Pacca	40	28.1
Sub-Total:	141	100
Bathroom		%
Kacha	55	38.8
Pacca	47	33.1
Semi Pacca	40	28.1
Sub-Total:	141	100
Latrine		%
Flush	141	100.0
Sub-Total:	141	100.0

3.9.1 Possession of Household Items

The information on the possession of electronics and other household items by the AHHs was collected to estimate their lifestyle with regard to present day technological advancement in household goods. The survey has revealed that the people of project area tend to enjoy the modern-day life. It is very much reflective from the possession of household items analysis. The firm supply of electricity and improvement in the electricity distribution system will make positive impacts on the socio-economic behavior of the people of area with respect to personal attitudes, economic efficiency and acceptance of developmental activities. The data in respect of possession of household items is provided in Table 3-21.

Table 3-21: Possession of Household Items

Items	No.	%
Refrigerator	53	37.64
Television	29	20.79
Washing Machine	120	85.39
Fan	119	84.27
Geyser	9	6.18
Electric Iron	141	100.00
Sewing Machine	100	70.79
Motor cycle	31	21.91
Van/Pickup	2	1.12
CAR	17	12.36
Gas Cylinder	86	61.24
Dish Antenna	12	8.43
Mobile Phone	141	100.00
Electric water Pump	63	44.38
Computer	3	2.25

3.10 Household Health

3.10.1 Common Diseases and Health Facilities

The survey has revealed the people of the area have multiple health issues. The most common diseases reported by the respondents are Pulmonary Congestion by 2%, Cough by 4%, Diarrhea by 2%, flu by 4%, Fever by 7%, Diabetes by 2%, seasonal diseases by 5% and stomach problems by 8% of the respondents. Women described that bearing of children without any break is a cause of concern for their health and is also added a financial burden on the household. Tuberculosis (TB) was reported by 4% of the respondents and reasons for prevalence of these diseases were described as, i) unhygienic water, ii) lack of sewage/ drainage facilities, and iii) indoor smoke from cooking and heating.

3.10.2 Health Facilities

The healthcare facilities such as Hospitals, Rural Health Centre (RHC), Basic Health Units (BHU) and Rural Dispensaries are almost non-existence in the AoI of the project. There exists no hospital at tehsil headquarter Behrain. There exists one RHC and one BHU at Behrain. However, recently, Tehsil Headquarter Hospital at Madyan has been operationalized. It is spread over 64 kanals of area and contains 5 emergency rooms, 6 private rooms, 01 labor room, 10 OPD rooms, 05 houses for staff, 42 beds and hostel one each for nurses and paramedical staff. It is hoped that the hospital will provide relief to the local people in their health care. The other nearest place with medical facilities is at Mingora city which is about 56 km away from the project area. It is hoped that the operationalization of hospital at Madyan will help in providing the better medical facilities to the people of the area at their door step.

3.11 Access to Social Amenities

During the field survey, the availability of the social amenities/basic infrastructure for the communities in the project area was examined. The results indicate that facilities such as drinking water, electricity and safe access to roads are generally available in the villages. The availability of fuel such as liquefied petroleum gas (LPG) and access to telecommunication facilities is quite limited. The details are shown in 3-22.

Table 3-22: Access to Social Amenities (% of respondents)

Road	Electricity	School	Drinking Water	Dispensary	Mobile	Fuel	LPG
90.00	92.10	85.50	78.30	3.56	98.50	62.50	27.00

3.12 Sources of Drinking Water

As shown in Table 3-23, natural water springs, tap water installed to get water from springs to the settlement and streams are the major source of drinking water in the project area.

Table 3-23: Major Sources of Drinking Water (% of respondents)

Springs	Tap Water	Stream/river Water	Water Supply Scheme
93.25	10.12	19.60	25.00

3.13 Sanitation in the Project Area

In majority of the AHHs flush latrines are available within the compounds of better-off and middle-income households and they have dug 5 to 6 feet deep trenches to dispose of drain water being used in the washrooms. Whilst lower income households, have Ventilated Improved Pit Latrines within their houses. The sanitation water is collected and drained from the kitchen and cleaning areas in to the adjacent agriculture fields through open drains from their houses to an open space. Some women take clothes and utensils to the banks of River swat for washing.

3.14 Modes of Transportation

The survey has revealed that majority of the better-off income households have their own means of transportation whilst the middle income and lower income households use public transportation. Private taxis are also available in the area and in case the locals are unable to catch the public transport, they use private taxis. Thus, the middle income and poor income households use the local jeeps, cars and motorcycles for transport.

3.15 Access Roads

The villages of the project area are connecting to each other through Katcha roads. The condition of these roads is very poor. A number of earthen tracks also run around the project area and are frequently used by the men, women and children of the AHHs. Due to land sliding and bad weather, the local roads are not in good condition. These roads have not been repaired for years and hence these are bumpy and difficult to drive on. These tracks also attract a lot of tourists, however, the locals do not want outsiders and tourists to use these tracks as these tracks run around their homes and agriculture lands, where women work outside of their homes in routine. The local culture is conservative and the women observe strict purdah, therefore, it is seen as an intrusion. The tourists use the local jeeps and fielder vans for transportation.

3.16 Natural Disasters in the Project Area

Floods, earthquakes, land and glacier outbursts are the most common natural disasters in the Project area. In the last ten years, the project area has been flooded twice and has badly affected the local people and their assets. The natural disaster flood in August 2022 was the worst and severely affected large area of Swat. The disaster of this flood has badly affected countless resources and property of the masses of the area. The Bahrain and Madyan falling in the project area were among the most affected areas. The Seven bridges and five Mosques and a several hotels and other infrastructures and property of the people have been completely destroyed unrepairable. Most of the hotels which were very near on the bank of the river were completely sink in the floodwaters. The flood water overflowed on the beautiful narrow bazaar of Bahrain. The flood completely vanished 173 shops (112 in Bahrain and 61 in Madyan) depriving thousands of people from their livelihood. Beside 21 Trout hatcheries at Madyan and one at Bahrain were completely washed away. In both towns 554 house (396 in Bahrain and 158 in Madyan) were fully or partially damaged leaving behind millions in need of urgent shelters. The flood also affected 37 Drinking water supply (20 in Bahrain and 17 in Madyan). The 28 irrigation channels (13 in Bahrain and 15 in Madyan), the sewerage system of Madyan and Bahrain bazar is almost completely damaged in the area. The road between Bahrain and Kalam which was built in 2018, completely destroyed. Up to several kilometers it was washed away in the flash floods. Besides, 2 link road were also scratched.

Besides government assistance to the flood affected people, the local community and NGOs provided relief to the flood affected people in terms of providing food, clothes and medical care. However, the disaster was so big that it requires full attention of the government departments to relieve the people from flood effects.

3.17 Presence of Local Organizations/ NGOs/ Civil Society Organizations in the Project Area

According to the findings of the survey, seven (07) CBOs and four (04) NGOs exist in Behrain and Madyan. Information in respect of their name, area of work and date of establishment is provided in Table 3-24.

Table 3-24: CBOs and NGOs Working in Madyan and Bahrain

Name of Organization	Areas of Work	Date of Establishment
CBO		
Al-Khidmat Citizen Community Board	Infrastructure development, Women Empowerment, Livelihood Development, Gender Mainstreaming	2004
Volunteers Network Forum (VNF)	Women Empowerment, WASH, Gender, Education, Livelihood	2020
Biwadani (Rehabilitation)	Women Empowerment, WASH, Gender Mainstreaming, Education, Health	2010
Pak Women Integrated Network	Women empowerment, Food for	1998

Name of Organization	Areas of Work	Date of Establishment
(PAKWIN)	poor during crises	
Idara baray Taleem w tarqi (IBT)	Education, Culture and Languages	2010
Umed Falahi Tanzem	Electricity, WASH	2014
Maa (Mother)	Welfare of children's, youth, women and physically are mentally handicapped people, environment protection	2010
Naujawanank Paklay	Working with Orphan and widows for improvement of their livelihood	2020
Storay (Stars)	Women empowerment	2022
NGO		
QAFELA (Quick change Association for Educational Promotion, Livelihood development and Awareness)	Promotion of education, livelihood development and awareness raising about the protection and promotion of human rights with primary focus on the right of women and children	2009
MANDOB (Madyan Active Network for Development of Basics)	Needs Identification of the poor, provision of services as per the identified needs plus utilization of local resources both human and produced in collaboration with national and international organizations to achieve the goals and objectives of the organizations.	2018
IDEAS (Innovations for Developmental Empowerment and Accessible Services)	IDEAS has been working on NRM, Education, Human rights and gender mainstreaming,	2005
Environmental Protection Society (EPS)	Clean and healthy environment where all people live with dignity and peace. To strive for inclusive development with community participation for deserving people with care and respect.	1990

3.18 Seasonal Migration Trends in the Project Area

Bahrain and Madyan are tourist destinations during the summer and winter seasons and therefore, the men in the area are engaged in seasonal employment. These areas receive comparatively very less snowfall during winter months and provide an attractive spot for the tourists. Like Kalam and upper valleys, where the weather is very harsh during winter months due to heavy rains and minus temperature, the people from these areas are forced to migrate to the lower districts of the country. Contrary to this trend, the people from Bahrain and Madyan do not migrate to down country plain areas. However, some of the well-off families in the area also own homes in the lower districts and move there in winter season at their choice but not as a weather-related compulsion. Their businesses and other income generation activities remain continued in the project area.

3.19 Tourism

The region is famous for lush green hills, thick forests and bestowed with mesmerizing streams, meadows, and waterfalls which are worth seen features of the landscape. The valley of Madyan is situated about 56 kilometers to the north of Mingora city. It lies on the main road that leads to Bahrain, Kalam and other beautiful valleys of Swat. Its riverside location and cool climate make it an attractive spot with rows of shops, hotels and restaurants queued along the road. A trout hatchery adds to its fascination. Local handicrafts, embroidery and antiques are

displayed at roadside shops. There are about 13 hotels in Madyan. Almost every type of modern facility and amenity is available here, i.e., internet, cellular networks, cable and satellite TV, hotels, restaurants and other basic necessities of life.

About 8 km upstream from the Madyan, there lies a picturesque Behrain town. This small riverside town, is the most frequently visited resort because of its location on the road leading to other beautiful resorts. A humming bazaar with shops, eateries and hotels make it a popular place. Household traditional decoration items are available at shops. Nearby valleys full of lush green thick jungles offer hiking on narrow mountainous paths. The 2022 floods made a wide range destruction to the infrastructure of this valley. There existed about 30 hotels at this town before 2022 floods. Of these, 15 hotels that were located on the river bank were washed away by the flood. Both these sites are located within the area of influence of the project.

3.20 Use of Forest by Local Communities

The local communities use the forest for multiple purposes including fuel wood, construction, and for income generation purposes. Throughout the summers, the locals from middle income and low-income groups collect 500-600 kg of wood, and store this wood for the winter season. The wood is also used for construction purposes to manufacture doors, roofs, and windows of the houses. The wood is sold to better-off and middle-income households and thus becomes a source of income for the poorer families. The wood is also used to keep houses warm and for cooking purposes. The locals also produce furniture and make decoration pieces from wood. The locals believe that the forest keeps them safe from land erosion and land sliding. The women and girls collect fodder or bushes in the winters to feed animals, and use their branches as firewood and for fuel purposes.

3.21 Security Situation in the Project Area

It is required for the success of a project that peaceful working conditions prevail in the project area and the construction site are safe from the malicious actions of the anti-social elements. The survey has revealed that presently, the security situation in the project area and surrounding areas is satisfactory and is under control of the local authorities. The people are peace loving, helpful and cooperative with the project staff. However, there are reports that security risks in the District Swat may arise in the near future due to terrorist activities of Tehrik-e-Taliban Pakistan (TTP) insurgents. Furthermore, there may be security risk to foreign experts from groups with malicious intents. Under such situation, it is a pre-requisite that a Security Plan like China Pakistan Economic Corridor (CPEC) projects is prepared with the active involvement of national security agencies, local administration, the security experts from PEDO, contractors and the PIC.

3.22 Gender Assessment

3.22.1 General

In the present-day life, the gender is considered as one of the central determinants of differential access to, use of and control over economically productive resources (land, labor and capital) and opportunities. According to the results of 2017 population census, women constitute about 50% of the population of the country and the same ratio holds good for the KP and at Project Area levels. The Pakistani women face numerous gender inequalities in the social context and therefore, it impacts their participation in water resources related debates, policy, programs and community-level initiatives. As per Human Development Report 2022¹⁷, Pakistan ranks 161 out of 192 on the Gender Development Index, with a value of 0.544 and on the Gender Inequality Index¹⁸ ranks at 135 out of 192 and has a value of 0.534. As per the Global Gender Gap Report 2022, Pakistan ranks at 145 out of 146 countries and has a score of 0.564 points. The importance of empowering women across the

¹⁷ <https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22overviewenpdf.pdf>

¹⁸ <https://www.weforum.org/reports/global-gender-gap-report-2022/>

board and mainstreaming women in the management and governance of water has been recognized at the global level since the 1980s, and Pakistan is a signatory to all the relevant water declarations and commitments. Gender inequalities are deeply rooted in the country's social and cultural norms and practices, resulting in discrimination with women and girls, which affect the quality of their life. Gender inequality in Pakistan in general and specifically in KP is characterized by the society and thereby, men on average are better positioned in social, economic, and political spheres.

Gender assessment seeks to understand the distinct culturally and socially defined roles and tasks that woman and men assume both within the family and household system and in the community. The gender perspective recognizes that some issues and constraints related to project success are gender specific, and stem from the fact that men and women play different roles, have different needs, and face different constraints on a number of different levels.

The gender assessment is based on the findings of the socioeconomic and gender surveys, consultations with the elders including both men and women, discussions with the project office staff, with officials of the line departments and other key stakeholders. Gender surveys were carried out in the project impacted villages during June 2022 to October 2022. The objectives of the surveys aimed at to hold discussions particularly with groups of women to understand their issues, priorities, challenges and participation in the project. Gender roles are constructed on the basis of the concepts of production and reproduction. The unequal gender roles are reinforced and maintained and influence male and female life circumstances. Women and girls experience differential access to food, education, medical care and access to resources and opportunities; their general and reproductive health is negatively affected due to restrictions on decision making and their mobility. Most of the women's roles are limited to family and are excluded from main decision making at household and society level. Lack of sufficient time, gender bias, social and cultural norms as well as family responsibilities are the most significant challenges women face to achieve balance in a patriarchal society. The sections below documented the outcome of gender assessment. As a result of gender assessment, a Gender Action Plan has been developed for gender mainstreaming in the Project, attached to ESIA of the project.

3.22.2 Family Composition

The population of the respondents works out as 1110 persons comprising 576 males and 534 females. The average family size is calculated as 7.87 persons. The proportion of male and female works out as 52% and 48%, respectively depicting a male to female ratio as 1:1.08.

3.22.3 Education Facilities

Education facilities in the project area are very meagre. There are only 09 schools for girls in the project area. Of these, 07 are primary level and only 02 are middle level institutions. There exists no inter or degree level college for girls. There exist no institutions for professional education in the project area for females.

People of the area are aware of the importance of education, especially for girls. They are of the view that by getting a formal education, girls to become good wives, mothers, and daughters and thus become aware of their duties, rights, and responsibilities in society. They are also aware that education helps them improve their lifestyles and provide them with a ray of hope to get out of the darkness towards light. The project area may be characterized as one which is underpinned by the traditional patriarchal setting, which has always dominated women and has created a spell of uncertainties on them by constraining their education and participation. The survey has revealed that about 31% women possess formal education against 44% men showing a male to female education ratio as 1.42:1. Most of the lower-income families do not send their children outside of the locality for getting education due to financial unaffordability, non-availability of educational facilities in the periphery, and due to social pressures to keep the girls at home. On the other hand, non-formal education is a big source of socialization within society. The reasons for this are the non-availability of schools or madrasas (religious schools) in the nearby locality.

3.22.4 Constraints in Accessing Schools

Due to hilly terrain, hard weather, lack of transport facilities, non-affordability of transportation, and due to social and cultural barriers, the children are deprived of education. There are some small *madrassas*

(seminaries) where students are getting religious education. There is a need for skill development in the project area, including that of making decoration items, embroidery, and dressmaking, etc.

3.22.5 Health Facilities for Women

The survey has revealed that there exist very limited healthcare facilities such as Hospitals, Rural Health Centre (RHC), Basic Health Units (BHU) and Rural Dispensaries in the project area. Only one RHC and one BHU are operational at Behrain. The analysis had further revealed that women are the most vulnerable due to this situation and are in dire need of medical facilities. Even in case of delivery, traditional birth attendants are not available in the nearby localities. According to the information gathered, very few women of better income families receive treatment from antenatal care centers outside the project area; similarly, a very negligible number of women receive any form of post-natal care from skilled birth attendants. To get any type of treatment, they have to travel a long distance to the health facilities, lack of roads and financial constraints, and social pressures.

3.22.6 Health Issues of Women

The gender survey has revealed the women of the area have multiple health issues. The most common illnesses among women are joint pain, anemia, seasonal fever, and depression. Women described that bearing of children without any break is a cause of concern for their health and is also added a financial burden on the household. There are no registered traditional Birth Attendants, Midwives available within the project area and people turn to local midwives and, in case of emergencies, either visit the RHC or BHU at Behrain. The better-off families take their women to Private hospitals in Mingora. The women from middle income and lower-income groups give birth to their children at home with the help of elderly women.

3.22.7 Participation and Role of Women in Decision Making

According to the socioeconomic survey, the participation rate of women in various activities relating to the household economy in the project area is generally high, however, their participation remains limited to domestic matters only. Women are generally excluded from decision-making processes. A male elder, often also the head of the household is in control. He makes all decisions regarding the household income and its sources, education, health, marriage, and conflicts. When needed, he consults with other male members. However, within the household, women wield much influence in the decision making. The head matriarch is often the person who selects the brides for the family's sons and holds authority over younger wives. Information in respect of women participation and decision making in the routine socio-economic life at household level is presented in Table 3-25.

Table 3-25: Participation and Decision Making by Women in Different Socioeconomic Activities

Activities	Participation (%)	Decision Making (%)
Household Activities	96	90
Child Caring	100	75
Farm/Crop Activities	15	08
Livestock Rearing	45	15
Sale & Purchase of Property	35	10
Social Obligation	88	55
Political Representation/ Participation	02	-

Gender inequalities in the project area are pronounced and entrenched, particularly in the arena of participation and decision-making. This exclusion translates through to the economic realm where it contributes to the impoverishment of women as well as to inefficiencies and lost productivity, negatively impacting the whole society. Employing a gender perspective from design to monitoring and evaluation offers insights that allow for better targeting and improved efficiency of the MHPP.

3.22.8 Mobility of Women

Women visit families, friends, and weddings and go out for shopping. However, as the markets are an average of 4.5 km away from the villages, and the women are accompanied by either an elderly woman or a male member of the family or a male child. Women travel for up to 30 minutes, 3-4 times a day to collect water from nearby streams and springs and use the water for drinking, cooking and cleaning and washing purposes. They also help the male members of their families in agriculture fields, which are generally next to their homes. However, women go in pairs and do not travel alone. Women always accompany the male members of the households to the BHU and to the hospital. Women rear animals and collect wood. It is pertinent to mention here that the women are allowed to visit their relatives and family friends on their own tribe within or outside of their villages. Women rarely go out for the purchase of grocery items and grocery shopping is mostly done by the male members of the family.

3.22.9 Women Social Protection

The women in consultation reported that none of the households have access to any social protection program such as the Benazir Income Support Program, Baitul Mall, or any other charity organization.

3.22.10 Availability of Skill Centers

There are no technical or vocational training centers for the women in the project area or in other nearby towns. The local artisans, both male, and female prepare many items from the local wood, including decoration pieces, beaded bracelets, and other such items. Some of the women are engaged in embroidery, but their products are taken to the market by men for selling. About 30 % of women of affected households are involved in stitching for women and children's clothing and earn up to PKR 200 per suit. On a monthly basis, a woman earns up to PKR 5000. About 25% of women from households' stitch clothes of female members of their families and children.

3.22.11 Women's Participation in Income Generating Activities

Women are involved in several household and income generation activities, including:

- Employment as private and government school teachers, lady health visitors/ workers and traditional birth attendants.
- Poultry, cleaning cot, supervise hatching, feeding, and animal rearing.
- Other household chores include washing clothes, fetching water and firewood, cooking, child caring, cleaning and repairs of household items, participation in social obligations/ marriages and gathering.
- Agricultural and farming activities such as harvesting, picking of vegetables and drying fruits.
- Livestock rearing, collection of fodder, grazing, washing buffaloes, processing the milk products.

3.22.12 Routine Activities of Women and their Employment Status

The survey has revealed that there are very few occupational opportunities available for the women in the area. Very few women are doing jobs, due to social and cultural pressure. A few of them are teachers. Some women from the lower income group working in the agriculture fields, alongside the male members of the household. The cash crop of the project area is vegetable and maize. Women are mostly busy in their household activities such as cooking, cleaning of houses, fetching water and taking care of their children as well as other family members. Due to heavy load of household work, it is very difficult for women to have any leisure time. But whenever they find some time, they stitch, do embroidery, and sew clothes. Some girls keep themselves busy in making decoration items in different designs.

According to the findings of the survey, the situation relating to employment of women is not encouraging in the project area. The survey has revealed that out of total population of 1110 persons; only 04 women (0.28%) were reported serving in different institutions. The serving women constitute only a fraction of the total sample population. The employment status of the women in the project area is shown in Table 3-26.

Table 3-26: Employment Status of Women

Sr. No.	Village	Age (Years)	Education Attained	Department	Monthly Earnings
1	Kedam	50	Matric	Govt. School Teacher	40,000
2	Kedam	48	MA	Private School Teacher	45,000
3	Ayeen	49	Matric	Govt. School Teacher	40,000
4	Kalagay	45	Middle	Private Hospital (Dai)	20000

The project offers great opportunity to positively work towards improving the lives of both women and men. However, without adequately taking into consideration the stark gender inequalities in the project area, the implementation of the project activities may have unintended negative consequences. Gender inequalities in the project area are pronounced and entrenched, particularly in the arena of participation and decision-making. This exclusion translates through to the economic realm where it contributes to the impoverishment of women as well as to inefficiencies and lost productivity, negatively impacting the whole society. Employing a gender perspective from design to monitoring and evaluation offers insights that allow for better targeting and improved efficiency of the MHPP.

3.22.13 Women Issues and Development Needs

As revealed through socioeconomic and gender surveys, the cultural environment in the Pashtun society restricts the role of women outside their homes. This leaves them without economic and political rights, and without education, thereby, undermining half of the population in its contribution to the overall development. Women are denied their rights and education, results in cascading problems. Women's role is seen mainly as child rearing, and her lack of education means that she has few options in the labor force. In these settings, women often lack basic economic security and legal rights. Their social circumstances turn even more dreadful during hard times such as security crisis and disasters when social setups are disturbed and women are often left unaccompanied. The following conclusions are drawn from the proceedings of the social and gender surveys.

- Prevalent view of decision-making arena as a male domain.
- Extremely low participation of females in public and community life in the project area due to patriarchal tribal structures, limited mobility, lack of communication, and limited time due to household burdens.
- Lack of gender sensitivity in the rules for Jirga meetings, time and venue.
- Land ownership in general and control in particular is under the name of the male head of the family. Despite constitutional legal and Islamic rights for women to have a share in ownership of land and property in Pakistan, and to receive a share in inheritance, the traditional practices in the project-affected area deny these guaranteed entitlements in name of women.
- Low levels of education and literacy, particularly among females.
- Healthcare is limited, particularly for females, due to poor infrastructure and lack of female medical service providers in the area.
- Forms of gender-based violence are commonly accepted and practiced in the area, including early child marriage and denial of economic rights to property.
- Furthermore, it was found that women were the least aware of the upcoming changes in their socioeconomic patterns and irrigated agriculture due to implementation of MHPP. This lack of awareness can be attributed to the fact that women did not perceive the project as relevant to their interests or concerns.

3.22.14 Development Needs

Table 3-27: Ranking of Development Needs of the Surveyed Households

Rank their needs on the scale	Road	Water Supply	Health Care Center	Primary and High school for girls	Vocational Center for Women
Less than 1	-	-	-	-	-
Between 1 and 5			22.00%	19%	28%
5 and above	67%	75%	62%		

3.22.15 Women Social Inclusion¹⁹

Due to the patriarchal tribal structure in the project area, women generally lack access to and control over the productive resources. Women's marginalization within and outside the household is mirrored in the social life patterns in the project area. They are not considered by the males in making the decisions about various socio-economic matters, particularly relating to activities which require interaction with others such as decisions about children education, farm business, sale and purchase of livestock or property, participation in the political activities/ process, etc. About this attitude, the male respondents were of the view that women had nothing to do with the outside world. They are required to remain within their houses and look after the children. Traditionally, the males have been undertaking out outside home responsibilities and according to them, the females have not exposure or courage to deal and decide upon such matters. This attitude is a source of social deprivation, stress for the women of the tribal society and render them socially excluded.

3.22.16 Women Empowerment

Women Empowerment refers to increased and improved social, economic, political and legal strength to ensure equal-right to the socially excluded segment of the society (the women), and to make them confident enough to claim their rights. Women are key agents for achieving the transformational economic, environmental and social changes required for sustainable development. But in the tribal society, they stand socially excluded. The situation may be improved by empowering the women²⁰. This requires that, i) their access to services, resources and materials is increased, ii) they are provided with information on merits and demerits of hydropower development with special reference to the MHPP via the most appropriate medium, iii) their abilities are improved to present their issues at the proper forums, iv) their self-confidence and self-respect are stimulated, and v) they organize themselves for group work.

A Gender Action Plan (GAP) provided in the ESIA report will be implemented that include different actions to ensure the empowerment and inclusion of the women and. The development needs of the women will be addressed in the SDP and LRIP based on broader consultations with the communities.

¹⁹ When gender concerns are not mainstreamed, they stand socially excluded. Social exclusion comes from the existing social practices, beliefs, values and norms which puts the marginalized groups outside of mainstream development and are excluded from its gains. Hence, women in project affected tribal districts are at risk of benefitting in limited way and are marginalized. **Social Inclusion** on the other hand is defined as the removal of institutional barriers and the enhancement of incentives to increase access of diverse individuals and groups to development opportunities (World Bank Sectoral Analysis Sourcebook).

²⁰ The important indicators to understand different components of social empowerment include:

- level of participation in self-help groups,
- participation in decision making at home,
- freedom from domestic violence,
- level of self-confidence,
- self-esteem,
- freedom of movement,
- increased awareness

4 LEGAL AND POLICY FRAMEWORK FOR LAND ACQUISITION AND RESETTLEMENT

The land for the project will be acquired through negotiations with the AHHs. The Deputy Commissioner will constitute a Land Valuation Assessment Committee (LVAC) for negotiations with the AHHs. The Project Director/ Deputy Director Purchase of Land, PEDO will also join LVAC in its proceedings. The committee will devise its terms of reference (ToR) and timelines to negotiate with the AHHs on replacement costs keeping in view the recently determined negotiated prices for GKHPP that were agreed and received by PAPs. PEDO had a successful experience to carry out consultations with the affected people to reach at a negotiated price. If for any reason, the parties fail to reach at the agreed negotiated price of land, the lands will be acquired by invoking the Land Acquisition Act (LAA) provisions. The legal and policy framework of Pakistan, which applies to the project in respect of land acquisition and compensation together with the relevant WB Policies, is described as follows.

4.1 National Legal Framework

4.1.1 The Constitution of Pakistan

There are two key articles provided in the Constitution of Pakistan that relate to land acquisition and resettlement. Article 23 of the constitution establishes the right of every citizen to acquire hold and dispose of his or her property in any part of Pakistan and Article 24 of the constitution relates to the protection of property rights and has direct relevance to the Project. Its first two clauses are:

- No person shall be compulsorily deprived of his property save in accordance with law.
- No property shall be compulsorily acquired or possession taken except for in the case of a public purpose, and only by the authority of law which provides for compensation. The authority of law will either fix the amount of compensation or specify the principles on and the manner in which compensation is to be determined and given.

These clauses form the basis of the law formulated under the constitution for acquisition of property for public purposes.

4.1.2 Land Acquisition Act (LAA), 1894

The only Pakistan law governing land acquisition is the LAA of 1894 and successive amendments. The LAA regulates the land acquisition process and enables the federal and provincial governments to acquire private land for public purposes through the exercise of the right of eminent domain. Land acquisition is a provincial responsibility and provinces have also their own province specific implementation rules. The LAA and its Implementation Rules require that, following an impact identification and valuation exercise, land and crops are compensated in cash at the current market rate to titled landowners. The LAA mandates that land valuation is to be based on the last 3 to 5 years average registered land-sale rates. However, in several recent cases, the median rate over the past 1 year, or even the current rates, have been applied with an added 15% Compulsory Acquisition Surcharge according to the provision of the law. The displaced persons, if not satisfied, can go to the Court of Law to contest the compensation award of the Land Acquisition Collector (LAC). According to provisions of LAA, only legal owners and tenants registered with the Land Revenue Department or possessing formal lease agreements, are eligible for compensation or livelihood support.

From operational point of view, the LAA is a provincial law and each province has its own version and interpretation of this law, mostly procedural in nature. Provincial governments have also evolved mechanisms for calculation and payment of compensation, suited to their specific needs and socio-cultural contexts. The Act specifies a systematic approach for acquisition and compensation of land and other properties fixed to the land. However, the procedures so far adopted for compensation, grievance redress, appeal periods, interest rate calculations, etc. do not aggregate to the resettlement policy of the WB. The salient features of LAA 1894 are provided in Table 4-1.

Table 4-1: Salient Features of Pakistan's Land Acquisition Act, 1894 (Amended)

Key Sections	Salient Features of the Key Sections of LAA 1894
Section-4	Publication of preliminary notification and power for conducting survey and investigation.
Section-5	Formal notification of land needed for a public purpose
Section-5A	Providing right of complaints to PAPs for review/ inquiry for quantities and compensation.
Section-6	The Government makes a more formal declaration of intent to acquire land.
Section -7	Land Commissioner shall direct Land Acquisition Collector (LAC) to take order for the acquisition of land.
Section-8	The LAC to direct the land required to be physically marked out, measured and planned.
Section-9	The LAC gives notice to all affected/displaced persons (APs/DPs) that the Government intends to take possession of the land and if they have any claims for compensation then those claims are to be made to him at an appointed time.
Section-10	Delegates power to the LAC to record statements of APs/DPs in the area of land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgagee, and tenant or otherwise.
Section-11	Enables the LAC to make enquiries into the measurements, value and claim and then to issue the final "award". The award includes the land's marked area and the valuation of compensation.
Section 11 A (applicable in KP)	Enables the Collector to acquire land through private negotiations upon request of Head of the acquiring department. Upon receipt of any such request the collector is empowered to constitute/notify a committee for assessment of market value of land and verification of title of ownership. On agreement by Head of Acquiring Department, with negotiated market value determined by the committee, the collector shall then direct parties to execute sale deed in favor of acquiring department on stamp paper.
Section 11 B (applicable in KP)	Provides time limit of six months to complete land acquisition process from the date of notification under Section-4.
Section 11 C (applicable in KP)	Provides that "notwithstanding anything contained in the LAA or any other law for the time being in force, in the Merged Districts as defined in paragraph (c) of Article 246 of the Constitution of Islamic Republic of Pakistan, where no record of rights exists, the land acquisition and subsequent determination of price shall be made, on the basis of prevailing local customs, traditions and usages regarding determination of ownership of land and its sale or purchase, including but not limited to qaumi commission of elders of the locality, nikat or private negotiation where the ownership is undisputed, in the manner as may be prescribed".
Section-16	When the LAC has made an award under Section 11, he will then take possession and the land shall thereupon vest absolutely in the Government, free from all encumbrances.
Section-18	In case of dissatisfaction with the award, DPs may request the LAC to refer the case onward to the court for a decision. This does not affect the Government taking possession of the land.
Section -23	Matters to be considered in determining compensation: i) market value of the land, ii) loss of standing crops, trees and structures, iii) any damage sustained at the time of possession, iv) injurious affect to other property (moveable or immovable) or earnings, v) expanses incidental to compelled relocation of the residence or business, and vi) diminution of the profits between the time of publication of Section 6 and the time of taking possession. A 15% premium is added to the amount in view of the compulsory

Key Sections	Salient Features of the Key Sections of LAA 1894
	nature of the acquisition for public purposes.
Section-28	Relates to the determination of compensation values and interest premium for land acquisition
Section-31	Authorizing LAC, instead of awarding cash compensation in respect of any land, to make any arrangement with PAPs having an interest in such land, including grant of other lands in exchange.
Section-35	Refers to the temporary occupation of arable or waste land subject to the provision of Part VII of the Act. The provincial government may direct the Collector to procure the occupation and use of the same for such term as it shall think fit, not exceeding three years from the commencement of such occupation.
Section-36	Provides information relating to the power to enter and take possession, and compensation on restoration. On the payment of such compensation, or on executing such agreement or on making a reference under Section 35, the Collector may enter upon and take possession of the land, and use or permit the use thereof in accordance with the terms of the said notice.

4.2 World Bank Involuntary Resettlement Policy

The major objective of WB's OP 4.12 on Involuntary Resettlement is to avoid or minimize the impacts on people affected by a project, and to provide support and assistance for those who lose their land and property, as well as for others whose livelihood is affected by the Project or temporary construction activities. Resettlement planning has the objectives of providing PAPs with a standard of living equal to, if not better than, that which they had before the project. The policy is based on the following principles:

- Involuntary resettlement is to be avoided or at least minimized;
- Compensation/rehabilitation must ensure the maintenance of PAPs' pre-project living standards;
- PAPs should be fully informed and consulted on compensation options;
- PAPs socio-cultural institutions should be supported/used as much as possible;
- Compensation will be carried out with equal consideration of women and men;
- Lack of formal legal land title should not be a hindrance to compensation and/or rehabilitation;
- Particular attention should be paid to households headed by women and other vulnerable groups, such as people with disabilities and ethnic minorities, and appropriate assistance should be provided to help them improve their status;
- Land acquisition and resettlement should be conceived and executed as a part of the project, and the full costs of compensation should be included in project costs and benefits; and
- Compensation/rehabilitation assistance will be paid prior to ground leveling, demolition, and in any case, before an impact occurs.
- The RAP implementation should be regularly monitored and disclosed.

4.2.1 Scope and Application of WB Involuntary Resettlement Policy

The policy covers both direct economic and social impacts that are caused by involuntary taking of land, resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; or (iii) loss of income sources or means of livelihoods, whether or not the PAPs must move to another location; or (iv) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

Displaced persons that are eligible for compensation and resettlement assistance will include not only the PAPs with legal rights under the law but all those without formal legal rights to own or use land and other assets or

natural resources such as people with customary rights. The policy also requires that compensation and resettlement assistance should be paid, prior to the displacement, or before the impacts occur.

4.2.2 Harmonization of Legal Framework with WB Policy on Involuntary Resettlement

This RAP has been developed by harmonizing the gaps between LAA 1894, and WB OP 4.12 on involuntary resettlement.

A key gap between LAA 1894 and World Bank policy is that WB policy encourages the purchase of land through negotiated resettlement or expropriated through full compensation at replacement value, independently with advance public notice, negotiation and right of appeal. The processes undertaken in MHPP comply with WB IR Policy guidelines. As explained earlier, the entire processes of land acquisition will be through private negotiation, including the role of DC/Revenue Office demonstrate both the legitimacy of the processes and ensure transparency from the part of PEDO and Revenue Department.

For MHPP, the compensation rates are determined based on the discussions with the affected land owners and recent land valuation data (obtained from nearby Matiltan and Gabral-Kalam Hydropower Projects for which land has been purchased through negotiations); and the rates are eventually above market value and represent replacement cost. This rate assessment will be further refined before implementation of RAP based on the final round of negotiations before RAP implementation and may result in upward or downward revision of rates. DC may also negotiate with affected persons to finalize the RAP allowances. For other land-based assets (trees and crops), consultations with the relevant government departments (forest, agriculture) were undertaken. In case of delay in RAP implementation, the compensation will be adjusted as per the inflation rate. In case the negotiations would fail, and parties do not agree on rates, the LA Act (1894) will be applied to complete the entire acquisition process. The land to be acquired under MHPP will be registered in the name of PEDO. Table 6.2 summarizes the differences between the LAA and WB IR Policy. GoKP and WB agreed on measures to address these gaps as given in Table4-2 below:

Table 4-2: GAP Analysis between LAA 1894, and WB OP- 4.12 on IR

No.	WB Involuntary Resettlement Policy Principles	Pakistan Land Acquisition Act	Approaches to Address the GAPS
1	Screen the project early to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through surveys related to resettlement impacts and risks.	No equivalent Requirements (though the Pakistan Environmental Protection Act (PEPA) 1997 does require screening of social impacts that also include resettlement impacts)	Screening and categorization will be done as a part of social and resettlement planning. Scope will be defined; social, poverty and gender assessment will be undertaken.

No.	WB Involuntary Resettlement Policy Principles	Pakistan Land Acquisition Act	Approaches to Address the GAPS
2	<p>Carry out meaningful consultations with APs, host communities, concerned nongovernment organizations and other stakeholders.</p> <p>Inform all PAPs of their entitlements and resettlement options. Ensure their participation in planning implementation, and monitoring & evaluation of RAPs. Pay particular attention to the needs of vulnerable groups and ensure their participation in consultations.</p> <p>Establish a grievance redress mechanism to receive and facilitate resolution of the APs' and other stakeholder concerns.</p> <p>Support the Social and cultural institutions of PAPs and their host population.</p> <p>Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.</p>	<p>No equivalent requirements other than consultations being a key requirement of PEPA 1997</p> <p>Land Acquisition Collector (LAC) or District Judge (in case of the Telegraph act) are the final authorities to decide disputes and address complaints regarding quantification and assessment of compensation for the affected lands and other assets.</p>	<p>Consultations will be conducted during the preparation and implementation of RAPs;</p> <p>Grievance Redress Mechanism (GRM) included in the present RPF and will be implemented as a part of each RAP.</p> <p>RPF including provisions to address the needs of vulnerable groups.</p>
3	<p>Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter negotiated settlements will maintain the same or better income and livelihood status.</p>	<p>Partially equivalent, provide opportunity to affected persons for negotiated prices but no clear procedure. No livelihoods restoration requirements</p>	<p>Procedures put in place for negotiated resettlement.</p> <p>A livelihood restoration plan will be prepared and included as a part of the RAP.</p>
4	<p>Compensation to titleholders or registered non-titleholders.</p>	<p>The LAA recognizes only the titleholder as eligible for compensation and compensation provided only to titleholders and registered share-crop/lease tenants</p>	<p>Compensation for losses will be provided to all PAPs even without having legal titles of the land or other assets to be affected, whether registered or not</p>

No.	WB Involuntary Resettlement Policy Principles	Pakistan Land Acquisition Act	Approaches to Address the GAPS
5	Provide needed resettlement and rehabilitation assistance to physically and economically displaced persons.	No provisions for the resettlement and rehabilitation assistance.	The present RPF addresses the requirements for requisite allowances and Social Development Plan will also be developed and implemented to share benefits of each Project.
6	Pay compensation and provide other resettlement entitlements before physical or economic displacement.	Partially equivalent	Compensation payments will be made before damages occur.
7	Implement the RAP under close supervision throughout project implementation.	No requirement for RAP development and implementation including supervision and monitoring	RAP implementation, supervision, monitoring, and evaluation will be done. The requirements have been included in RPF.
8	Disclosure requirements	Partially covered. The decisions regarding land acquisition and compensations to be paid are published in the official Gazette and notified in convenient places so that the people affected are aware.	Information related to losses of land, structures and other affected assets, and entitlements will be disclosed to the PAPs. The amounts of compensation and financial assistance will be disclosed to relevant individuals only. The present RPF will be disclosed locally as well as internationally through multiple means of communication.
9	Monitor and assess resettlement outcomes, their impacts on the standards of living of PAPs, and whether the objectives of the resettlement plan have been achieved by considering the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	No evaluation of resettlement outcomes and impacts on living standards.	Evaluation will be conducted; reports will be prepared and disclosed. The requirements have been included in RPF.

In principle, Pakistan's Law and WB Policy (and IR policies of other international funding institutions) adhere not only to the objective of compensation for affected HHs, but also to the objective of rehabilitation. However, Pakistan's law is unclear on how rehabilitation is to be achieved and in practice the provision of rehabilitation is left to ad-hoc arrangements taken by the local governments and the specific project proponents. To clarify these issues and reconcile eventual gaps between Pakistan's Law, local customs and WB Policy, EA has adopted the following resettlement principles for the eligibility and compensation of the affected.

4.2.3 Resettlement Principles adopted for MHPP

The following core involuntary resettlement principles are devised for the Madyan HPP.

- Land acquisition, and other involuntary resettlement impacts will be avoided or minimized as much as possible;
- Where the negative impacts are unavoidable, the affected persons will be assisted in improving or regaining their standard of living;
- Consultations with PAPs on compensation, disclosure of resettlement information to PAPs and their participation in planning and implementing the project will be ensured;
- Vulnerable and severely affected PAPs will be identified and provided special assistance;
- Non-titled PAPs (informal dwellers of squatters) will be considered for the payment of a livelihood allowance in lieu of land compensation and will be fully compensated for losses other than land;
- Provision of income restoration and rehabilitation to all eligible PAPs will be ensured;
- Payment of compensation and resettlement assistance will be completed prior to the contractor taking physical possession of the land and prior to the commencement of any construction activities;
- It will be ensured that as far as possible the vulnerable affectees will receive additional financial support from the project.
- Appropriate grievance redress mechanisms will be established. A Grievance Redress Committee (GRC) including representatives of PAPs will be established to resolve any conflicts which may arise during the preparation and implementation process of RAP;
- Rehabilitation assistance, i.e., compensation for lost business and workdays (including employees) due to relocation and disruption of business enterprise will be paid;
- Regular monitoring of implementation of RAP will be ensured.

4.2.4 Land and Resettlement (LAR) Impacts Covered

Based on Resettlement Principles adopted for the project, the following LAR impacts that will be caused with the implementation of project have been covered in RAP.

- a) The involuntary taking of land resulting in displacement of 141 HHs.
- b) Relocation or loss of structures of 37 HHs.
- c) Loss of agriculture-based source of livelihood of 103 HHs,
 - Loss of income sources or means of livelihood, whether or not the affected persons must move to another location.
 - Where necessary, to achieve the objectives of the policy, the resettlement action plan also includes measures to compensate at replacement costs, resettlement provision, livelihoods, attention to vulnerable groups, social development plan to ensure that displaced persons are;
 - Offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
 - Provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.

5 COMPENSATION ELIGIBILITY AND ENTITLEMENTS

The compensation eligibility and entitlements framework for Madyan HPP is provided as follows:

5.1 Compensation Eligibility

PAPs entitled for compensation or at least rehabilitation provisions under the Project are:

- i. All PAPs losing land either with legal title/traditional land rights or without legal status;
- ii. Tenants whether registered or not;
- iii. Owners of buildings, crops, plants, or other objects attached to the land; and
- iv. PAPs losing business, income, and salaries.

5.2 Compensation Entitlements

Entitlement provisions for PAPs losing land, houses, assets, income, and rehabilitation subsidies, will include provisions for permanent and temporary land losses, house and buildings losses, crops and trees losses, a relocation subsidy, and a business losses allowance based on tax declarations and/or lump sums. These entitlements are detailed below:

5.2.1 Permanently Acquired Land

The permanent land will be compensated at replacement value in: (i) cash at replacement value of affected land; or (ii) through replacement land equal in value/ productivity to the plot lost.²¹

When more than 10% of a PAP income or agricultural land is affected, PAP (owners, leaseholders and sharecroppers) will get an additional allowance for severe impacts equal to the market value of a year's gross yield of the land lost (inclusive of both winter and summer harvest). The PAP will not be liable for any eventual transaction taxes/ fees; these will be paid by the implementing agency or waived by local governments.

5.2.2 Residential land

Legal settlers will be compensated at replacement value either (i) in form of land-for- land or, (ii) cash at replacement value, free of deductions for transaction costs.

Non-titled and non-legalizable land users will be compensated with one-time self-relocation allowance in cash. This allowance is not dependent on the number of PAPs or land characteristics and constitutes fixed amount per family equal to 12 months at inflation adjusted official poverty line.

5.2.3 Houses, buildings, structures

Will be compensated in cash at replacement cost without any deductions for depreciation, salvaged materials, or transaction costs. The compensation for houses/ buildings will include the cost of lost water and electricity connections. In case of partial impacts (>15%), building impacts will cover only the affected portion of the building and its full rehabilitation to previous condition and use. Full compensation will be paid if partial impacts imperil the viability of the whole building.

5.2.4 Temporary Land Acquisition

In addition to permanent land acquisition, land on temporary basis will also be needed to establish camp sites for the labor and machinery. For the land needed for these activities, legal/legalizable owners and or encroachers will receive cash compensation mutually agreed between both parties for the leased period in addition to land rent and by the restoration of both, cultivable and uncultivable land, to pre-construction conditions. Through specification in the contract agreements, contractors will be required to carry out

²¹Replacement value will be assessed by the District Land Price Assessment Committee which will be established by the Revenue Department. In case of failure of private negotiations process for determining the replacement value of land, the LAA will be invoked for the acquisition of land.

restoration works before handing land back to the original occupiers, or PAPs will be provided with cash to rehabilitate the land.

5.2.5 Crops

The acquisition of land will cause permanent crop loss equal to the area of affected land. The owners will be entitled to compensation equal to one-year (two crop seasons) crop loss in addition to land price. Crop compensation will be paid both to landowners and tenants based on their specific sharecropping agreements.

5.2.6 Trees

Cash compensation at market rate, based on type, age and productivity of trees shall reflect income replacement.

5.2.7 Businesses

Compensation for permanent business losses will be in cash for three-year income based on tax declaration or, if unavailable, based on the inflation adjusted OPL for 12 months. Compensation for temporary business loss will be in cash covering the income of the interrupted period up to six months, based on tax declaration or, if unavailable, for three months according to inflation adjusted OPL.

Permanent business loss refers to a situation where the business sites (for example shops) are impacted by the project on permanent basis. The owners have to shift to alternative places. The temporary business loss refers to a situation where the project impacts on the business are for a short period. For example, improvement of roads within the available right of way (RoW) for accommodating the heavy traffic caused by the project. The business activities in this situation will be affected for a short period, i.e., during road constructing period.

5.2.8 Business workers and employees

Indemnity for lost wages for the period of business interruption up to a maximum of six months based on inflation adjusted OPL. However, no business workers or employees were found in the project impact area.

5.2.9 Agricultural land leaseholders and workers

Affected leaseholders will receive either a renewal of the lease in other plots or cash corresponding to the yearly gross yield of land lost for the remaining period of the lease up to a maximum of 3 years.

Sharecroppers will receive their share of harvest at market rates (if impact is temporary). In case of permanent land loss, they will receive 1 additional crop compensation.

Agricultural worker with contracts to be interrupted will get an indemnity in cash corresponding to their salary in cash and kind for full agricultural year (inclusive of both winter and summer crop). It was found during the census of the PAPs that all the affected land was self-cultivated.

5.2.10 Residential Land Renters/ Leaseholders and House Renters

Individuals who have leased land or a house for residential purposes will receive a cash grant equal to twelve (12) months' rent at the current market rate in the area; No PAPs have been identified in this category. Community Structures and Public Utilities will be fully replaced or rehabilitated so as to satisfy their original functions.

5.2.11 Severe Impact Allowance

One-time paid severe impact allowance equal to market value of gross harvest of the affected land for 05 year (inclusive of winter and summer crop in addition to standard crop compensation) to the PAPs losing 10% or more of their land.

5.2.12 Transitional Allowance

All PAPs will receive a one-time paid transitional allowance for a period of 18 months, equal to inflation adjusted OPL to meet with the living expenses.

5.2.13 Self-Relocation Allowance

All physically displaced PAPs will receive one-time paid cash assistance as self-relocation allowance equivalent to 12 months- of prevailing average rent in the area for moving to alternate premises or equal to six months of inflation adjusted OPL (PKR 36,697 x 12= PKR440,364)

5.2.14 Transport Allowance

All PAPs forced to relocate will receive a one-time paid lump sum shifting allowance of PKR 100,000 which is sufficient to cover transport costs of their affected assets, as per prevalent rates in the area. The transportation rates in the area have been increased due to damaged road infrastructure.

5.2.15 Assistance for vulnerable people

Vulnerable people (PAPs below the poverty line, widows, elderly, or women headed households) will be given one-time paid allowance equal to 12 months inflation adjusted OPL in cash in addition to other admissible allowances and priority in employment in project-related jobs.

5.2.16 Entitlement Matrix

In the light of review of LAA, 1894, WB OP 4.12 and consultations with the project affected people; an Entitlement Matrix (EM) has been prepared keeping in view the nature of losses, entitlements and implementation issues. The EM is provided in Table 5-1.

Table 5-1: Entitlement Matrix

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
Permanent loss of land for siting of Project facilities	All land losses (arable, commercial, residential and barren	Titleholders and landholders under customary rights	Cash compensation of land at full replacement cost ²² on prevailing market rate through private negotiations free of taxes, registration, and transfer costs.
	Additional provisions for severe impacts (More than 10% of land loss)	Farmer/Titleholder Leaseholder	One-time paid severe impact allowance equal to market value of gross harvest of the affected land for 05 years (inclusive of winter and summer crop in addition to standard crop compensation)
Residential/Commercial Land	PAPs losing their commercial/residential land	Titleholder	Cash compensation for affected land at full replacement cost free of taxes, registration, and transfer costs.
Loss of temporary access to agriculture land/ productive asset	Restriction to access	Titleholders/ land holders under customary rights	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Cash payment for loss of standing crops and trees (if affected) at market rates. ▪ Cash payment for loss of future

²² The replacement cost is equivalent to the market value of the land/assets, sufficient to replace the lost assets and cover transaction costs.

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
			<p>crop production (if affected) at market rates for the period of loss of crops due to restriction of access.</p> <ul style="list-style-type: none"> ▪ Cash payment for loss of income for the period of loss, up to a maximum of 3 years.
		<p>Sharecroppers/ tenants/ encroachers /squatters</p>	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Cash payment for loss of standing crops and trees at market rates, if trees are affected and cultivated by the affected sharecropper/ tenant/encroacher/squatter. ▪ Cash payment for loss of future crop production (if affected) at market rates for the period of loss of crops due to restriction of access. ▪ Partial payment to the sharecropper/tenant/encroacher for loss of crops based on their specific sharecropping/tenancy agreement with the owner/possessor (verbal or written). ▪ Cash payment for loss of income equal to 12 months of inflation adjusted OPL or for the period of loss of access if less than 12 months. However, no squatter found in MHPP.
<p>Severance impacts (permanent or temporary)</p>	<p>Access restricted to: agriculture lands cultivated by landholders/ male or female seasonal agriculture labor/ sharecroppers / squatters' encroachers, infrastructure, social</p>	<p>All AHHs (Non-titled user or squatter on private or state land).</p>	<ul style="list-style-type: none"> ▪ Connect severed pieces of lands through access ways, roads or bridges. ▪ Restoration of pipes to irrigate severed land plots. ▪ Restoration of formal and informal walkways, roads or bridges. ▪ The lessees or tenants of injurious affection and severance will receive cash payment at the rate of the rental fee proportionate to the size of the severed piece of land for the duration of the remaining lease/rental period

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
	services, social networks; drinking water supply, irrigation water channels, walkways, formal or informal roads, bridges		<p>as per written agreement. However, no lessees or tenants found among the project affected persons.</p> <ul style="list-style-type: none"> ▪ Non-titled land users (squatters or encroachers) of affected land will not receive any payments for injurious affection and severance. No squatters or encroachers identified in the project area
Temporary impacts on arable land or non-arable land	Land required temporarily during civil works	Titleholders/ landholders under customary rights/ leaseholders	<ul style="list-style-type: none"> ▪ No payment for loss of land. ▪ Land will be temporarily acquired by a short-term lease agreement between the landholders/ leaseholder and Contractor with the approval of Project Director. ▪ Rental terms to be negotiated to the satisfaction of the PAPs. ▪ Full restoration/ reclamation of land to original use by the Contractor, as agreed with PAPs. Or ▪ The Contractor will make the payment of temporary land acquisition and full restoration cost, as agreed with the PAP with the approval of the Project Director. ▪ Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused.
Loss of crops	Arable land	Titleholders/ landholders under customary rights	<p>Compensation at full gross market rate for the affected crops for one crop year (including kharif and rabi seasons) based on average production as calculated by Agriculture Department, GoKP.</p>
Loss of wood trees	Affected Trees	All PAPs owning trees (including squatters)	<ul style="list-style-type: none"> ▪ Cash compensation of timber trees to the cultivator based on the market value of their dry wood volume as calculated by Forest Department, GoKP. ▪ The wood of the fallen tree will

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
			<p>remain with the owner and its value will not be deducted from the compensation</p>
Loss of fruit trees	Affected trees	Title holders/ cultivators	<p>Cash compensation to reflect replacement-based income on market value of annual net product multiplied by 5 years and investment cost needed to re-grow the tree to the fruit bearing age, based on the information provided by Agriculture Department, Madyan.</p>
Loss of structures	All type of structures	Owners of built-up structures both titled or non-titleholders (squatters/ encroachers), in case of community structures, the members of the committee or appointed administrator by concerned gov't department /community	<ul style="list-style-type: none"> ▪ Cash compensation at replacement cost²³ for affected structures by type of construction and other fixed assets calculated at the latest Market Rate System (MRS) as fixed by the Communication and Works Department-GoKP, free of depreciation, exclusive of taxes. ▪ Cost of salvaged material will not be deducted and salvaged material will be the property of AH(s). ▪ In case of partial loss, cash assistance (compensation) will be provided to restore the remaining structure. If more than 15% of the building's area is affected, cash compensation will be computed for the entire building/structure without deducting depreciation and salvaged material costs. ▪ Cash compensation at the replacement cost for immovable assets attached to the land and/or buildings based on the latest MRS of GoKP to be calculated by Communication and Works

²³ Replacement cost for structures includes reference to the market price of materials and labor, and the cost of transporting materials to the building site. The replacement cost further includes the cost of any registration and transfer taxes for land and buildings. The compensation against loss of structures will be compensated at the replacement cost calculated by following latest MRS rates of the GoKP

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
			<p>Department of GoKP.</p> <ul style="list-style-type: none"> ▪ One-time paid shifting allowance @ PKR 100,000 to owners of affected structures to transport salvage material of affected structure to cover transportation expenses of salvage material including loading/ unloading labor charges and other items.
Business/ Employment	Temporary or permanent loss of business or employment	All PAPs regardless of legal status (including squatters)	<p>(i) The owner of the affected business will get cash compensation equal to three-year income based on valid documentary proof and in its absence, equal to 12 months inflation adjusted OPL</p> <p>(ii) in case of temporary loss, cash compensation for the period of business interruption based on valid documentary proof and in its absence equal to three months of inflation adjusted OPL.</p> <p>(iii) For business workers and employees, indemnity for lost wages for the period of business interruption up to a maximum of six months based on inflation adjusted OPL. However, no business workers or employees were found in the project impact area.</p>
Loss of common property resources	Community/ Public assets	Community/ Government	<p>Reconstruction of the loss of resource/ asset in consultation with affected communities and restoration of their functions. However, the MHPP is not going to impact any common property resources</p>
Self-Relocation Allowance	Loss of residence	Physically displaced households of owners/tenants	<p>One-time paid cash assistance as self-relocation allowance equivalent to 12 months of prevailing average rent in the area for moving to alternate premises or equal to 12 months of inflation adjusted OPL. (PKR 36,697 x 12 = PKR</p>

Type of Loss/ Impact	Application	Entitled PAPs/AHHs	Entitlements for Compensation, Resettlement and Rehabilitation
			440,364)
Transitional Allowance		Physically displaced households of owners/tenants	Provision of one-time paid transitional allowance to cover extraordinary living expenses at alternate premises, equal to 18 months of inflation adjusted OPL to the dislocating AHHs
Support to Vulnerable PAPs	Livelihood support to vulnerable households	All vulnerable affected households (below poverty line (small landholders /tenants/ squatters, full time agriculture workers, female headed households, disabled PAPs)	<ul style="list-style-type: none"> ▪ One-time paid allowance equal to 12 month's inflation adjusted OPL in cash, in addition to other admissible allowances. ▪ Preference for full time employment opportunity to at least one member of the AHHs during construction and operation, subject to meeting the requirements.
Livelihood Restoration	Livelihood restoration and rehabilitation of affected households		<ul style="list-style-type: none"> ▪ One adult member of the affected household will be entitled for skill development and improvement training under the Livelihood Restoration and Improvement Plan (LRIP) provisions. ▪ Eligibility of affected households to livelihood restoration interventions as per provisions under the LRIP.
Loss of public services and facilities/ community assets	Schools, health centers, administrative services, infrastructure services, graveyards etc.	Service Provider	Full restoration/rehabilitation at original site or re-establishment at relocation site of lost public services and facilities or community assets, including replacement of related land and relocation of structures according to provisions (i.e., mosques, footbridges, roads, schools, health centers, etc.).
Project benefits		All PAPs	All affected households are entitled to get some sort of benefit from the interventions under Social Development Plan.

Type of Loss/ Impact	Application	Entitled PAPs/AHs	Entitlements for Compensation, Resettlement and Rehabilitation
Unanticipated impacts			<p>During the entire course of project implementation, the EA will deal with any unanticipated adverse impacts in the light of spirit of the Entitlement Matrix, if required; the Entitlement Matrix will be updated to mitigate adverse impacts by following Resettlement Policy Framework for KHRE Program in compliance with WB OP 4.12 on Involuntary Resettlement.</p>

6 RELOCATION AND RESETTLEMENT

6.1 Introduction

Displaced persons are those people who are required to be resettled, i.e., those who are physically displaced by the project. These include people who have formal legal rights, as well as customary or traditional rights. In addition to compensation for the economic displacement and loss of assets, displaced persons are offered options regarding how the project will support them to re-establish their homes, living arrangements and livelihoods. Self-re-settlers are those who relocate themselves with cash compensation and potentially other forms of project support, usually as one of the relocation options presented to them.

While carrying out census survey, the PAPs were asked about their preferences for relocation and compensation options. Relocation refers to shifting affected families to a location near or within the original village. In the project context, the affected families are those whose land crops and structures (houses and shops) are affected due to project implementation and they will shift to new locations. These have been identified during social assessment process and relocation options discussed with them so that physically displaced persons can elect where they go. The relocation options vary greatly from project to project. Examples include: new resettlement villages constructed on available land in the same area; houses moved up a hillside to a higher elevation to avoid the new reservoir; and PAPs moved to existing villages or townships where they need to assimilate into the host communities.

Practical examples of resettlement measures include provision of: better quality housing, agricultural land, and services (such as access to electricity); livelihood support (e.g. agricultural assistance, enterprise development, fish culture, small business); transitional food support; better access to natural resources or areas of importance for the community; and construction of community assets (e.g. health clinics, schools, community and religious centers, water supply systems, electricity supplies, wastewater treatment plants).

6.2 Preference for Relocation and Resettlement Options by the AHHs

Although providing land or a new house for those affected by resettlement is generally considered the best option, the rising monetary benefits for compensation packages has led to people opting for cash instead. The payment of land compensation at the GKHP is the recent example in the area. Sometimes, people initially opt for alternative land or structures, but then change their minds when they see others who opted for cash compensation enjoying better living conditions. This has happened before, such as the Mangla Raising Project, where a new township was built for displaced families but most of them refused to move there. At the Dasu Hydropower Project, 40 resettlement sites were developed as requested by affected families, but only five families actually moved there, while the other demanded cash compensation instead. In some cases, people who are displaced families end up moving to a larger urban area. Compensation Options Discussed during Census of PAPs

During the consultation, PAPs were asked about their preferences for compensation and rehabilitation options. They were given the choice between receiving land or cash compensation for their affected properties. Of the 141 PAPs, 138 who were losing 100% of their land opted for cash compensation instead of land. Similarly, 34 out of 37 PAPs who were losing their structures also preferred cash compensation. As a result, there will be no relocation required at the project level. For more details on the preferred compensation options for structure owners, please refer to Table 6-1.

Table 6-1: Preferred Compensation Options by the Owners of Affected Structures

Components	Affected Structures (NO.)	Compensation Option (No. of PAPs)					
	Houses	Cash	%	Structure for Structure	%	Total	%
Weir Site	18	17	94.44	1	5.56	18	100.00
Adit-1 & Dumping Site-1							
Adit-2 & Dumping Site-2	7	7	100.00	0	0.00	7	100.00
Adit-3 & Dumping Site-3a	3	3	100.00	0	0.00	3	100.00

Components	Affected Structures (NO.)	Compensation Option (No. of PAPs)					
	Houses	Cash	%	Structure for Structure	%	Total	%
Dumping Area-A3b							
Dumping Area-A3c							
Staff Colony & Dumping Site							
Power House Site	9	7	77.77	2	22.23	9	100.00
Total	37	34	91.89	3	8.11	37	100.00

6.3 Jirga Consultations Involving Elders/ Local Leadership, Communities and PAPs to Obtain Consensus on Relocation Options

Three Jirga meetings were conducted as part of the consultation process to involve the elders/ representatives and PAPs for determining the relocation and resettlement options. The participants were appraised by the Project Team on the merits of the land for land option and how it will be beneficial for them. The main topics discussed in this respect were the criteria for the selection of alternative relocation sites and its importance to the PAPs; and the cash compensation options. The following selection criteria were shared with the participants of the Jirga meetings for their clarity about selection of sites.

- The land will be suitable for residential area development with suitable biophysical attributes, such as soil, topography, slope and drainage.
- The area will be easily accessible and be connected with their existing village area, if possible.
- Availability of year-round water supply and electricity for household consumption and usage.
- Access to forest and other legally exploitable natural resources will be as convenient as possible.
- A location relatively close to village infrastructure and facilities.
- The location will provide opportunities for relocating families to maintain their former livelihood activities such as small shops, services, or as the case maybe.

Based on the assessment of the above criteria, discussions were held between PAPs and elders/ community leaders. It was noted during their discussions that land availability for the relocation of AHHs in the area is very limited. Most of the affected villages in the project area have no reserved community land or land area large enough to satisfy the need of relocation of the anticipated project affected families. The available lands have been used for terrace agriculture for growing crops such as maize and wheat to support the household dietary needs and the HH incomes. The land area that may be considered for relocation sites is privately owned. The village elders/ community leaders had to ask the resident land occupants if they were interested in providing parts of their land for the development of house plots for the people who will be displaced due to the project. Most of them agreed to provide part of their land at the prevailing land prices. Some requested that they should be considered entitled to participate in any livelihood development program the project will provide to PAPs. Depending on the actual land location, the relocation site for different PAPs houses may not be in one entire land. When PAPs were asked to give their opinion on land for land option, they refused the option due to the factors mentioned above. They were of the view that by opting land for land option, their resettlement process may be delayed and they may be resettled by the project at far away areas or secluded areas as there is not enough government land in the affected villages or in the nearby vicinity for their relocation. The PAPs unanimously optioned for cash compensation to purchase land and construct their houses at their own will and choice. The owners of affected land expressed that they will purchase alternate land at their will and choice. The Project Team shared with the Jirga participants the roles of Project in implementing the Cash Option by the PAPs as provided below.

6.4 Steps to Ensure the Self-Relocation Successfully Takes Place

The following initiatives will be taken by the Project to ensure that the activities relating to self-relocation by the PAPs are implemented in a successful manner.

6.4.1 Resettlement assistance

PAPs were informed by the Project team that each physically displaced family will be eligible for cash compensation at replacement cost of their affected residential structure. A minimum compensation package has been applied to ensure all physically displaced households can replace their lost house with a 'basic modern structure'. This will ensure that all physically displaced families, even those losing very basic structures, will end-up with a replacement house of acceptable standard. Physically displaced households will also receive the following assistance:

- Self-relocation assistance to find a replacement plot to build their replacement houses.
- Vulnerable physically displaced households will receive specific assistance.

6.4.2 Assistance to Self-build Efforts

If the physically displaced households wish to, they will be supported (in the form of technical support by the Project) to self-build their replacement house by themselves using the compensation they received. This approach provides flexibility in the design of the replacement housing.

Beyond support in securing a replacement residential parcel, the Social Team of PEDO and/or the specialized NGO will provide the following support.

- Assistance with planning, scheduling and budgeting for self-build houses.
- Technical training in construction methods if required.
- Technical oversight during replacement house construction.

During the public consultations held in November 2022, the PAPs emphasized the need for regularly monitoring by an NGO and for them to be supported during all the Project phases.

6.4.3 Support to Vulnerable Households

In addition to the above measures, the PEDO Social Team and/or the specialized NGO will engage the vulnerable HHs to identify specific assistance measures required during the physical resettlement process. One of this assistance measures could for example be that the Project should contract workers to build the replacement house for the vulnerable households.

6.5 Monitoring Arrangements

The PEDO Social Team and/ or NGO will monitor the self-resettled HHs to ensure that the compensation amounts are spent effectively by the PAPs in a timely manner to protect their livelihood and increase their standard of living from the pre-displacement conditions two bi-annually surveys will also be conducted in this respect to assess the satisfaction levels of the AHHs.

7 PUBLIC CONSULTATIONS AND DOCUMENT DISCLOSURE

7.1 General

According to guidelines of World Bank and the Government of Pakistan, consultation with stakeholders is the starting point for a development project and that will continue throughout the project cycle. The aim of consultations is to involve deliberations of social issues with the project stakeholders including the affected families, local community leaders, local governments, local NGOs and other concerned; to ensure that all social issues and concerns are discussed and impacts are identified. The consultative process for the preparation of the RAP has included the affected households, relevant departments and local communities of the area to ensure that their views have been considered in the formulation of the RAP. The main objectives of the consultation were to provide a platform to the stakeholders, to voice concerns or suggestions to the Project team and to develop a collective sense of ownership for the activities of the Project team. The objectives of consultations were to:

- Informing the stakeholders about the proposed project;
- Providing an opportunity to those who remained unable to present their views and values, therefore allowing more sensitive consideration of mitigation measures and trade-offs;
- Providing those involved with planning the proposal with an opportunity to ensure that the benefits of the proposal are maximized and that no major impacts have been overlooked;
- improve or propose changes in project feasibility design to avoid social and resettlement impacts in compliance with WB Policy;
- Providing an opportunity for the public to influence the project design in a positive manner;
- Providing better transparency and accountability in decision making;
- Creating a sense of ownership of the proposal in the minds of the stakeholders; and
- Developing the project which is truly sustainable.

7.2 World Bank Policy Requirement on Information Disclosure and Consultations

The WB Policy requires the provision of relevant project information in a timely manner, at an accessible place and in a form and language(s) understandable to the PAPs and other stakeholders. Information disclosure involves delivering information about a proposed project to the PAPs and other stakeholders. The purpose of the information disclosure requirements specified under WB Policy is to facilitate engagement of people so that a constructive relationship between the parties is established at the outset and maintained over the life of the project. Special efforts were made to reach vulnerable groups lacking access to public media and information exchange. Some of the disclosing information methods are:

- information campaigns through electronic and print media;
- public meetings;
- focus group discussions;
- household/individual interviews;
- workshops/seminars;
- program websites; and
- Local information boards at village information centers.

7.3 Stakeholder Engagement

Stakeholder engagement is required to systematically carry out socially and gender inclusive consultations with the primary and secondary stakeholders, to record their views and concerns and implement mitigation measures. The process is aimed at enabling active and meaningful engagement of the stakeholder groups, especially PAPs and venerable groups, and assures disclosure of information in a timely manner. The key features of the stakeholder engagement are (i) identification and analysis of primary and other key stakeholders of the MHPP; (ii) principles and key considerations for stakeholder engagement; (iii) stakeholder engagement approach; (iv) detail of grievance redress mechanism (GRM) in the legal framework

of GoKP and program/projects specific GRM; (v) Stakeholder engagement implementation methodology; (vi) a structured approach for stakeholder engagement activities throughout the program/projects lifecycle; (vii) monitoring, reviews and reporting (viii) key issues identified through stakeholder engagement activities during preparation of RAP of MHPP and their addressable.

7.4 Identification of Stakeholders of the Project

The public consultation and participation processes start by identifying the stakeholders of the Project. The stakeholders of the MHPP were identified through a 'stakeholder mapping exercise'. The identified primary stakeholders are the persons whose land, crops, structures and other assets are impacted by the project interventions. The secondary stakeholders identified included the public representatives, local government administration, the executing agency, financing institutions, consultants, etc. The list of secondary stakeholders for the project includes: the informed representatives of the local administration, the police department, forest department, agriculture department, local governments, Health department, NGOs, CBOs, public health department, C&W department and education department.

7.5 Consultations Conducted with PAPs and Other Stakeholders

Extensive consultations were conducted for the preparation of MHPP with primary and secondary stakeholders by consultants in collaboration with PEDO in the project areas with PAPs, officials of relevant government departments, general public, experts from academia, NGOs, public representatives, community leaders, and local journalists including women and vulnerable PAPs.

A series of public consultations were conducted to get the feedback/concerns of the different segments of stakeholders including provincial departments, district level departments, potential PAPs, local community and general public residing in the Project Area. During the consultation process, the stakeholders were briefed about the project objectives and scope. Their concerns and suggestions were recorded. The information dissemination and consultation activities were conducted from June 2022 up till December 2022. The consultation activities included 12 FGDs with 197 males and 51 females in 6 villages, 12 meetings with government officials with 17 individuals, after preparation of RAP to present key finding of environment and social impact assessment and mitigation measures. Summary of consultation meetings with Primary state holders is given in Table 7-1.

Table 7-1: Details of Public Consultation Meetings with primary stakeholders

Sr. No.	Location/Village	Date	Number of Participants		Remarks
			Male	Female	
1	Ayeen (Adit 3)	14 June, 2022	10	8	10 male and 6 female consultations meeting held in the first round of consultation with community level
2	Kalagay (Powerhouse)	15 June, 2022	12	7	
3	Kedam (Weir Site)	29 June, 2022	24	15	
4	Gharijo (Mouza Rammit) Weir Site	29 June, 2022	8	6	
5	Ponkia (Mouza Gornai) (Adit 1)	30 June, 2022	8	7	
6	Darolai (Adit 2)	30 June, 2022	7	8	
7	Kedam	11 July, 2022	9	—	
8	Gharijo (Mouza Rammit) Weir Site	12 July, 2022	10	—	
9	Ponkia (Mouza Gornai) (Adit 1)	13 July, 2022	13	—	
10	Ayeen (Adit 3)	17 July, 2022	12	—	
11	Darolai (Adit 2)	19 July, 2022	9	—	2 consultation meeting organized for WB Social Safeguard Consultant and PEDO Independent Environment and Social

Sr. No.	Location/Village	Date	Number of Participants		Remarks
					Consultants.
12	Kalgay (Powerhouse)	19 July, 2022	20	—	2 consultation meeting organized for WB Social Safeguard Consultant and PEDO Independent Environment and Social Consultants.
13	Kedam	17 Nov. 2022	19	-	A Jirga meeting held to discuss concerns of the local community relating to the MHPP
14	Madyan	27 Nov. 2022	19	-	A Jirga meeting held to discuss concerns of the local community relating to the MHPP
15	Behrain	02 Dec. 2022	17		A Jirga meeting held to discuss concerns of the local community relating to the MHPP
Total			197	51	

7.6 Feedback from the Stakeholder and their Addressal

Feedback received from the consultations was overall supportive of project from primary and secondary stakeholders but request was made to enhance the benefits of the project to the local population through provision of social services, in addition to compensation, resettlement and rehabilitation assistance. Participants appreciated PIC's efforts in bringing them together from a variety of stakeholders and representatives of PAPs for formal consultations in the workshops. All participants unanimously agreed that the draft RAP report was very comprehensive and extensively covered all social aspects including entitlement for resettlement and rehabilitations assistance. However, they have raised some concerns, which have been summarized in tables below. The main concerns raised during consultations include:

- Impacts on private land and properties should be minimized, if minimization is not possible then impacts should be mitigated completely and sufficiently;
- Provisions should be made under the project for compensatory tree plantation and preservation of natural environment;
- Provision of employment during construction and operation phase to affected households;
- infrastructure development under social development plan; and
- Adequate measures should be taken to mitigate impacts on human health, water quality, and emissions and other environment issues.

The key issues raised by participants and addressal are summarized in Table 7-2.

Table 7-2: Concerns of Project PAPs and their Addressal

KEY CONCERNS	RESPONSE/ADDRESSAL
Minimize land acquisition to the extent feasible since the availability of suitable agricultural land is scarce in the project area.	While carrying out the feasibility studies for the MHPP, PIC/PEDO ensured the minimum acquisition of private land by considering different design and weir location alternatives.
Adequate compensation for the loss of land. Payments to be made only to the legitimate owners at the prevailing market rates.	The principles and procedures for the valuation of assets at market rate have been laid down in RAP, in detail.

KEY CONCERNS	RESPONSE/ADDRESSAL
<p>Compensation for land and structures to be paid prior to the construction.</p>	<p>Construction activities will start only after the payment of compensation to the affected communities of their lost land and other assets including resettlement and rehabilitation assistance.</p> <p>Compensation for loss of land, crops, trees, and structures will be paid in accordance with the</p> <p>Entitlement matrix presented in this RAP including compensation based on the market rate as well as replacement cost.</p> <p>Vulnerable APs have been identified and assistance will be provided to them in addition to entitled compensation.</p>
<p>Development schemes such as schools, drinking water supply schemes, health centers, mother and child health care centers, vocational training centers separately for men and women should be implemented in the affected villages. Access road from Darolai to Bahrian should be rehabilitated and bridge on swat river.</p>	<p>A Social Development Plan will be implemented as a part of the MHPP having several interventions to address priority needs of the local communities particularly the affected population. In addition, a LRIP will be implemented to support the improvement of existing means of livelihoods and alternative off-farm income earning opportunities including women specific interventions.</p>
<p>Employment opportunities should be provided to local skilled and unskilled labor in the project, as to improve the livelihood of the locals. At least one third of the local community, especially APs, should be engaged in the project related jobs</p>	<p>Contractors will give preference to the local skilled and unskilled labor. Preference will also be given to the APs.</p> <p>PEDO will also support the local communities to improve their skills in construction activities.</p>
<p>Clearance of land should be minimized to the best possible extent.</p>	<p>Cultivated fields have been avoided to the extent possible while selecting the area for MHPP. Where unavoidable, compensation will be paid as detailed in the present RAP/entitlement matrix.</p>
<p>Compensation should be fair and should be delivered before start of work. Payment of compensation for project PAPs especially vulnerable PAPs should be ensured.</p>	<p>Compensation for any loss to crops, trees, and structures will be paid in accordance with the rates. These rates have been established based upon the official rates.</p> <p>APC will be established to ensure that compensation is fair and paid in a timely manner.</p> <p>Vulnerable PAPs have been identified and assistance will be provided to them in addition to the compensation.</p>
<p>While selecting the place for weir and powerhouse, impacts on the structures should be avoided and relocation of settlements should be minimized by changing the design, where possible.</p>	<p>Settlements, houses, and other structures would be avoided to the extent possible until and unless impacts cannot be mitigated and the settlement falls under the proposed site. In such situation compensation will be paid as per the RAP.</p>

KEY CONCERNS	RESPONSE/ADDRESSAL
Transport for relocation of assets and timely compensation to all PAPs should be provided.	Transition/ shifting assistance will be provided to the eligible/ entitled persons in addition to the compensation for the lost assets.
Policy framework should be made for compensation of land at market rate.	Compensation against losses of land, crops, trees, structures and other assets will be paid to the PAPs at replacement cost basis, in accordance with the provisions of the present RAP.
Spoiled/damaged lands should be rehabilitated/ restored after the construction work is completed.	Contractor will rehabilitate/ restore the lands damaged by the construction activities.
Local norms should be honored; and construction work should be completed in time.	<p>Liaison with the community will be maintained during construction activities.</p> <p>The construction staff will be provided trainings regarding local norms.</p> <p>The construction staff will comply with the code of conduct.</p> <p>Construction activities will be completed in the shortest possible time.</p>
<p>Wall along the river side should be built as to ensure waste in not dumped.</p> <p>Bridge over the river should be constructed.</p>	<p>Proper mitigation measures have been proposed to minimize waste generation and to facilitate efficient waste dumping.</p> <p>SDP will be implemented and assistance will be provided to the communities to address the community needs.</p>
<p>Existing roads should not be damaged and new access road should be provided.</p> <p>Livelihood losses should be as minimized as possible.</p>	<p>Contractor will take care during construction not to damage any roads. If roads will be damaged, Contractor will repair them.</p> <p>LRIP will be implemented and assistance will be provided to the communities to address the community needs.</p>
<p>Respondents showed that they had no issue with the completion of this project.</p> <p>Barren land of some respondents will come under proposed muck disposal sites.</p>	The compensation issue for such land has been addressed in the RAP for MHPP.
Land compensation for all types of affected land should be provided.	The compensation provisions have been included in the RAP.

KEY CONCERNS	RESPONSE/ADDRESSAL
The PAPs told that as compared to others in the nearby vicinity the only available land for agriculture and residential purposes is costly. They elaborated that due to exorbitant prices it is difficult to find suitable land for both agriculture and residential purposes.	PAPs will be compensated as per prevailing market rate based on private negotiations so that they can purchase land and construct their houses in the new location.
Main concern is that they want their land back after restoration which will be used for muck disposal, after completion of construction activity.	The contractor will restore and return the land to owners in its original condition. The conditions will be made in the bidding document.

7.7 Gender Involvement in the Consultation Process

In the project area, several cultural and economic obstacles exist for women's participation in consultation and decision making. This is compounded by constraints on mobility and limited interaction of the women. In this situation, to conduct effective consultations separately with women, local female staff was included in the survey teams. Meetings with the females from the affected communities were held to explore their views related to the construction of the project. The female enumerators of the Social Team conducted these consultations. The participants were appraised about the MHPP and its impacts on their social and family life. They were asked to share their views, concerns and expectations with respect to the construction of MHPP. These included housewives, students, and teachers. The main objectives of involving the women in the consultation process are described as follows.

- To include the voice of the half of the population segment in the planning and implementation of resettlement documentation.
- To conduct focus discussions with groups of women throughout the project area to understand their priorities, challenges and participation in the project.
- To consult with the key stakeholders, who will be responsible for implementing the gender action plan, on potential priorities and challenges.
- To gather data from relevant government representatives about gender in the national policy and legislative context.

The details of the concerns raised by the women and their replies by the project team are provided in Table 7-3.

Table 7-3: Concerns of Women and their Addressal

KEY CONCERNS	ADDRESSAL
Women participation in the activities outside the home is limited. However, in case of loss of any property/assets, crops/trees, compensation should be provided.	<p>Compensation will be provided to the eligible and entitled PAPs including women and vulnerable people in accordance with the entitlement matrix of compensation given in the present RAP/entitlement matrix covering the current market rates and replacement cost.</p> <p>Entitlements and compensation issues were also discussed with women. Women will be entitled for the compensation.</p>

KEY CONCERNS	ADDRESSAL
In some cases, local women are working in agricultural fields, so their routine activities should not be disturbed due to the construction activities.	Liaison with the community will be maintained during construction activities. The construction staff will be provided trainings regarding local norms. The construction staff will comply with code of conduct. A GRM will also be established to address community complaints.
Females of the community were eager to know if there will be any provisions in the project for area development.	An SDP has been designed and it will be implemented as provided in RAP to cater to the priority development needs of the area. Gender inclusion will be ensured and a dedicated Gender Action Plan will be implemented in the project area.
The local community should be allowed to collect the wood material from the trees cut.	Compensation for any tree to be chopped will be paid to the owner. The owner will be allowed to take the fallen trees.
Resettlement issues should be discussed in the presence of whole local community/local population including female.	Extensive consultations with women have been carried out while preparing the present RAP Finalized summary of RAP will be disclosed and an Urdu translation will also be shared with the communities and women. RAP implementation will be carried out in a participatory manner as explained in the present RAP. APCs both for men and women will be established to ensure PAPs' participation in the process.
Females of the project area should be employed during project implementation stage for undertaking some office work/file management etc.	Contractor will maximize employment of the locals and preference will be given to the PAPs including women.
Family male members should be employed in the project related jobs so that they can get the jobs in their own city/village instead of moving towards other cities for jobs. In this way their social safety could be enhanced.	One member from the affected family will be selected for skills training under LRIP. After getting training he may find suitable job at the project. Contractor will maximize employing the locals and preference will be given to the APs.

7.8 Consultations with the Institutional Stakeholders

The consultations with the institutional stakeholders were conducted to know their views and concerns about the project. Twelve meetings with the 17 representatives of different line departments were held. The details are provided in Table 7-4.

Table 7-4: Details of Public Consultation Meetings with Secondary stakeholders

Sr. No	Date & Time	Venue	Stakeholder Category
1	2-6-2022 12:20 pm	Bahrain (Swat)	SDEO Education Department
2	2-6-2022 1:15 pm	Bahrain (Swat)	ADO/ASDEO (Girl), Education department

Sr. No	Date & Time	Venue	Stakeholder Category
3	3-6-2022 2:00 pm	Matta (Swat)	SDO - PHD, Bahrain
4	3-6-2022 4:25	Mingora (Swat)	Health Department (Public Health Coordinator)
5	3-6-2022 12:30pm	Matta (Swat)	SDO C&W - Highway Division Khwaza Khela Engineer C&W Khwaza Khela SDO (Building) Matta
6	17-6-2022 1:30pm	Saidu Sharif (Swat)	District officer, social welfare special Education and women empowerment department (Assistant District Officer)
7	17-6-22 3:00pm	Madyan (Swat)	Divisional Forest Officer (SDFO)
8	17-6-22	Saidu Sharif (Swat)	Tourism Department Assistant controller Officer Malakand Region,
9	17-6-22	Mingora (Swat)	Lasoona Organization (NGO) Program Manager Human Resource Coordinator (HR)
10	24-6-22	Mingora (Swat)	Principal Government Technical and Vocational center (boys) Mingora Swat
11	24-6-22	Mingora (Swat)	Agriculture specialist Department of Agriculture (Extension) Swat
12	24-6-22	Mingora (Swat)	District Director on Farm Water Management.

7.8.1 Concerns Raised by Institutional Stakeholders

The major concerns raised by the representatives of different line departments are provided in Table 7-5

Table 7-5: Concerns Raised by Institutional Stakeholders and their Responses

KEY CONCERN	RESPONSE/REDRESSAL
Communications & Works (C&W) Department, National Highway Authority (NHA) and other stakeholders should be kept in loop as other road project passes in same vicinity.	Institutional arrangement for the implementation RAP covering all relevant departments/ agencies has already been included in the present RAP. The line departments will be kept in loop.
Engineering team and Revenue team should be involved for land and structure assessment and compensation.	Need based liaison will be maintained with these departments during the preparation and implementation of RAP implementation as and when needed.

KEY CONCERN	RESPONSE/REDRESSAL
<p>The key informants/representatives of Revenue Department were aware about the MHPP project and its location.</p> <ul style="list-style-type: none"> • The rates should be properly negotiated with the PAPs. • Government should impose section 4 as soon as possible. • Evidences available for the minimum and maximum range of rates with the office of Tehsildar Madiyan. • The respondent enumerated this project as beneficial for the people of area and overall, for Pakistan. • The owners will agree for the project provided they will be compensated for their property as per market rates. • The project requires meticulous planning and careful implementation including complete and accurate information of all land holders. • Compensation to the PAPs should be based on their lost property and payment should be made at the existing market rate, so that they are able to reconstruct their houses and purchase agriculture land in the nearby vicinity to regenerate their livelihood. 	<p>The comments from revenue department have been taken care of while developing the entitlement matrix and RAP.</p>

7.9 Consultations through Local Jirga

The involvement of local Jirga was considered necessary for consultations on the MHPP. The Jirga participants generally expressed welcome attitude towards MHPP. The views/ concerns raised in Jirga meetings are provided in Table 7-6.

Table 7-6: Details of Jirga Meetings

Discussions	Responses by the Project
<p>Kedam</p> <ul style="list-style-type: none"> • The land owners are exclusively dependent on the land that will be acquired for the project and they will lose a stable source of food for their families, livelihoods and income. Landowners losing their land for due to the project should be paid a higher compensation over and above the Mouza rate to enable them to purchase alternate agricultural land. • Project should consider allocating alternate land of similar quality to people who lose their land who are exclusively dependent on acquired land for their livelihoods and incomes. Affected people mainly cultivate wheat and maize in the affected land and 	<ul style="list-style-type: none"> • The participants were told that compensation for all losses caused to the PAPs will be paid at replacement cost irrespective of the title of the PAP in compliance with WB-OP-4.12. If there is a gap between statutory compensation and the replacement cost, the gap will be bridged by PEDO based on assessments and recommendations of the Land Valuation Committees (LVC) to be appointed by the KPK government. • Compensation will be paid at replacement cost enabling PAPs to purchase alternate land. The social staff of the PEDO/ PIC will assist the PAPs in finding alternate land. The local NGO will also be involved to assist the PAPs to find alternative

Discussions	Responses by the Project
<p>thus, will lose their income and livelihoods;</p> <ul style="list-style-type: none"> • PAPs losing their houses and other structures should be paid compensation at higher rates considering the rates of residential land in the nearby villages where the residential land is priced at per foot basis. This will enable them to purchase land for constructing their houses. • Before payment of our lands a consultation/ JIRGA meeting should be held with affected community and market rates should be paid for the acquired land. The payment process should be clear, easy and corruption free • On behalf of JIRGA the concern department should decide about the prices of land and consult with affected community for the payment. • Land sliding will increase due to tunnels boring and walls of houses will be damaged due to vibrations from tunnel boring • Male family members of affected community should be employed in the project related activities. • Traffic increase due to project activity would result in congested of main Kalam Road, their fore the alternate road should be constructed to avoid the conjunction of traffic. • In some cases, local women are working in agricultural fields, so their routine activities should not be disturbed due to the construction of activities. • In village Kedam and Gharijo the land is insufficient; the project is requested to utilized minimum land that community may not be disturb or migrate to other areas. • If possible, the project should provide us land instead of land and house instead of house and if not possible then they should give us hand sum amount that we can buy better place for living. • The people of Gharigo requested for link road and cross River Bridge to be constructed for batter access to other areas. 	<p>land.</p> <ul style="list-style-type: none"> • Compensation for crop losses will be paid for a period of one year and taking into consideration the loss of incomes and investments of the farmers. • The local community leaders will be taken on-board at the time of payment of compensation. The payment of compensation will be through LAC of Revenue Department. • The issue of land sliding considered in the Project Design and mitigation measures suggested. • Provisions made in the Project Contract. The contractor will preferably employ the local skilled and un-skilled labor. • A traffic Management Plan will be implemented to control and manage the traffic. • The local culture will be respected and the project activities will be carried out in such a way that these causes minimum disturbance to the common life of the people. • The project is designed in such a way that minimum land is acquired for the project. • The PAPs will be paid cash compensation as per their demand. The payment of compensation will be on replacement cost principle. • The provision of these facilities will be considered in the project design.
<p>Madyan</p> <ul style="list-style-type: none"> • Compensation for land should be given as per market rate. • Prior to payment a consultation/ JIRGA meeting should be organized, payment procedure will be discussed and the minutes will be documented. • Madyan Bridge to village Kalagay the land for road should be acquired, the road must be constructed by concern department (this is about 1.5 KM road). This road is very important as it's near to our village and the other paths are for a way. If this is not 	<ul style="list-style-type: none"> • The participants were told that their land and other assets will be paid at replacement cost principle. • The local community leaders have been taken on-board to have the community views on compensation options by the PAPs. At the time of payment of compensation, they will be taken on-board. The payment of compensation will be through LAC of Revenue Department. • This issue relates to Local Government and the local communities. The road is not in the project design. At this point of time, the project cannot

	Discussions	Responses by the Project
	<p>constructed it will a big burdened on our livelihood and mobility.</p> <ul style="list-style-type: none"> • They have also requested for the construction of JANAZGA for the Kalagay village. The villager also requested for Drinking water supply rehabilitation as it is the desire need of women. Irrigation channels rehabilitation is also required for the benefit of our agriculture products. • Civil works of the project will lead to influx of migrant labor, their possible misconduct and engagement in sexual harassment of women; drug peddling and abuse, human trafficking, etc. • In some cases, local women are working in agricultural fields, so their routine activities should not be disturbed due to the construction activities • Dumping side at village Ayeen is affecting most of the cultivated land, the villager requested that, if possible, it should be redesign that less land may be affected. • Staff Colony and Dumping side (Reference to survey 2008) of Madyan is affecting mostly our Agriculture land and fruit trees, therefore we highly requested that the area should be reconsider. 	<p>make any commitment on this issue.</p> <ul style="list-style-type: none"> • The asked utilities like construction of Janazgah, rehabilitation of drinking water schemes and rehabilitation of Irrigation Water Channels will be considered under the social development plan. • PEDO and the contractors will endeavor to minimize labor influx and place priority in local labor. Awareness raising programs will be conducted for labor. It will be a mandatory requirement for the contractors to enforce a code of conduct for the labor teams. PEDO will establish a grievance redress mechanism (GRM) to facilitate any affected/aggrieved parties to report their grievances/complaints and seek resolution within a prescribed reasonable time frame; • The project will provide drinking water project under SDP. • The water channels will be rehabilitated under SDP. • The local culture will be respected and the project activities will be carried out in such a way that these causes minimum disturbance to the common life of the people. • The project is already trying their best to not use the cultivated land as far as possible. • The site has been shifted to a barren piece of land with the consultations of the community.
Bahrain	<ul style="list-style-type: none"> • Compensation payments should not be delayed. The process of compensation payment should be corruption free and transparent. It should be a trouble-free process for PAPs. • Employment opportunities should be provided to local skilled and unskilled labor in the project to improve the livelihood of the locals. • The Darall Khor Project have done some commitment which was not fulfilled their fore we have fear from the same project. • The name of the project must be Bahrain HPP as mostly Bahrain area is covered under this project. • When the weir side of Kedam is constructed our area beautification will be affected and it might decrease Tourism in the area. <ul style="list-style-type: none"> • • The project should construct small Micro Hydro Power Project for the community. 	<ul style="list-style-type: none"> • The contractor will consider local skilled and unskilled manpower as per their need • All the compensation of affected land and assets will be paid before the start of project works. • The LRIP and SDP will be implemented at the moment the project is not yet started and your points will be well taken. • The project will increase the beauty of the area and instead of decreasing, there will increase in the tourists the persons who are more affecting will be more benefitted. • The demand for micro hydropower scheme will be considered in the SDP. • The local culture will be respected and no issue will be raised on behalf of the project. • The issues will be addressed by implementing the environmental management plan. • The road (N-95) will not be congested. A traffic

Discussions	Responses by the Project
<ul style="list-style-type: none"> • Local norms should be honored during the course of execution of project works. • Machinery and vehicles used in project activities would cause environmental problems (air, noise, pollution, oil spill). • Traffic increase due to project activity would result in congested of roads. • Male member asked about female activities to be carry forward for the benefit of women of the project area. • Construction of primary, middle, high and higher secondary schools for girls in the area. • Construction of skills center/ institute for boys and girls. • Rehabilitation of water supply and sewerage system and plantation in the area must be done. 	<p>management plan will be prepared by the contractor and implemented during construction phase.</p> <ul style="list-style-type: none"> • A GAP will be implemented and schemes for females will be included in the LRIP and SDP. • Provisions for professional training for the affected persons will be made. • The construction of Schools is the mandate of Education department but we will try to consider the demand under SDP. • Provisions for plantation included in the ESMP. Water supply and sewage schemes will be considered in the SDP.

7.10 Consultation with Non-Profit Organizations and Academia

Two non-profit organizations were involved in consultations named Sarhad Rural Support Program (SRSP) and Kalam Development Foundation (KDF), as they advocate for the sustainable management of environment, provision of social services and community infrastructure development, and conserving of the natural resources. They emphasized that concerns and suggestions of PAPs should be considered at the stage of the Project planning and implementation, and efforts should be made to avoid or minimize the adverse social and economic impacts. In case of non-avoidance, sufficient and timely payment of compensation and resettlement assistance, full mitigation of social and environmental impacts, effective consultations and participation of stakeholder particularly PAPs in resettlement concerns of the project should be ensured. The major points of the consultations with the local CBOs and NGOs are provided in Table 7-7.

Table 7-7: Consultations with the Local CBOs and NGOs

Community Recommendations	Project's Response
<p>The local organizations should be engaged during the project execution phase, especially in community mobilization/conflict resolution and capacity building initiatives.</p>	<ul style="list-style-type: none"> • A local NGO with past experience of working with the affected persons to address their issues and RAP implementation will be engaged by the Project. • A Community Grievance Redressal Mechanism is in place for this purpose and will continue to function throughout the course of the project's execution to ensure timely and agreeable resolution to any/all possible conflicts and complaints.
<p>Construction of primary, middle, high and higher secondary schools for girls in the area.</p>	<p>A Social Development Plan will be implemented as part of the Project having several interventions to address priority needs of the local communities.</p>
<p>Local Contracts should be given to local CCBs, CBOs and NGOs</p>	<ul style="list-style-type: none"> • As per contract provisions, the Contractors will give preference to the local skilled and unskilled labor. Preference will also be given to the APs. • PEDO will also support the local communities to improve their skills in construction activities.
<p>Support should be taken from the local organizations in identification of alternate land for agriculture and housing for the displaced persons.</p>	<p>The compensation for affected land and assets will be paid as per the RAP at replacement costs. The PAPs opting for self-relocation will need help in finding</p>

Community Recommendations	Project's Response
	new resettlement sites. The engaged NGO will provide all help to the PAPs in their resettling efforts.
Livelihood development, tourism development and agriculture development programs should be initiated by the Project.	A LRIP will be implemented to support the improvement of existing means of livelihoods and alternative off-farm income earning opportunities including women specific interventions
Establishment of skills development centers should be provided.	SDP will be implemented and assistance will be provided to the communities to address the community needs
Programs for linking the existing skilled women with local market should be included in the social development plan.	The Social Development Plan has been prepared for formulating such programs, where the project's implementation work on Gender Action Plan will look into the gender-inclusiveness aspect of these programs.
Provision of employment to local people should be ensured.	Contractors will give preference to the local skilled and unskilled labor. Preference will also be given to the APs.
People should be taken in confidence before project initiated in the area.	The project is in constant contact with the PAPs through a consultations process. Construction activities will start only after the payment of compensation to the affected communities of their lost land and other assets including resettlement and rehabilitation assistance. Furthermore, public consultations with the locals will continue as an ongoing process.
Hospital /RHC should be constructed in the project area.	Rehabilitation of existing BHU/RHU is part of the SDP along with a medical camp for the local communities.
The fears of the affected people should be addressed/removed.	A Grievance Redressal Committee/Body will be established consisting of representatives from the project affected families which will act as a means for conveying affected people's concerns, apprehensions, and grievance and come up with agreeable solutions for their redressal and mitigation.
Plantation of new trees, a higher number of trees in the area will be cut.	Contractor will rehabilitate/ restore the lands damaged by the construction activities. Compensation plantation for affected trees will be made at Ten trees for one lost tree.
Aqua culture should not be affected badly	Environment Social Management Plan (ESMP) has been prepared for the project to ensure the preservation of marine life as well as mitigation of all possible impacts on the project area's flora and fauna.

Community Recommendations	Project's Response
Local culture should be respected.	<ul style="list-style-type: none"> • Liaison with the community will be maintained during construction activities. • The construction staff will be provided trainings regarding local norms. • The construction staff will comply with the code of conduct.

7.11 Information Disclosure

RAP will be disclosed at PEDO and WB websites in accordance with WB Policy. The summary of final RAP (also including entitlement matrix and cut-off-date) will be translated into Urdu for local disclosure and both English and Urdu versions will be made available at key publicly accessible and convenient locations such as village information centers, the Project site, and office of PEDO, district and tehsil administration, land acquisition collector (LAC), PIC, contractor(s), sub-contractors and other parties involved in the Project implementation. An Information Booklet consisting of salient aspects of RAP in Urdu will be distributed to PAPs and each of the AHHs. The important aspects of the RAP will be further disclosed to the male and female PAPs by organizing face-to-face orientation sessions, by the EA through location specific meetings.

7.12 Consultations with PAPs during Project Implementation

EA through its consultants will conduct meaningful consultation with PAPs and other affected groups throughout the project lifecycle. Consultation proceedings will be properly documented. The essential documents will include: date, location, a list of the key issues raised by the participants, agreed actions, photographic records, and list(s) of participants. The minutes of the consultations, together with scanned sign-in sheets of the participants will be included in the monthly and quarterly reports and in RAP. The data will be disaggregated by gender, with the key information recorded at the top of the minutes, stating the number of participants, the number of men, and the number of female participants.

8 LIVELIHOOD RESTORATION & SOCIAL DEVELOPMENT PLANS

8.1 Livelihood Restoration

The livelihood restoration is not required under Pakistan's law, but WB OP-4.12 requires that livelihood restoration measures be considered when livelihoods are adversely affected by a project activities and land acquisition. As a result of social impact assessment and consultations with PAPs and other stakeholders, an LRIP has been developed to ensure the restoration and sustainability of vulnerable PAPs' livelihoods. The basic objective of income and livelihood restoration and improvement activities is to restore the economic and social status of the economically displaced vulnerable households to at least pre-project level or better, in line with the requirements of WB OP 4.12.

Although the entitlement matrix developed for the project has adequate provisions for livelihood restoration and improvement of economically displaced households, but a well- planned management plan is required to restore the livelihoods and income levels of vulnerable households, in real terms, to pre-displacement level who are at a high risk of impoverishment.

The poor and extreme poor households showed willingness to take advantage of LRIP to avoid hardships due to loss of agriculture land that is their major source of income. An assessment of means of livelihoods of AHHs was conducted through participatory appraisal tools to identify the full range of means of livelihoods of AHHs to make a living. The results revealed that the primary source of income of 103 AHHs are land based. Of these, 34 are vulnerable HHs. They have high dependency on the affected agriculture lands for their incomes and household food security. The vulnerable AHHs primary sources of income can be classified as following:

- Agriculture
- Seasonal agriculture labor or daily wage labor

They are also dependent on the lands for the fodder of their livestock and firewood/crop, animal dung and crop residues are also used as fuel for cooking food. They will also lose in-kind income in the form of grains for household consumption.

The skill base analysis of vulnerable households show that men are having skills in cultivation of crops, irrigate them, apply fertilizer and pesticides to crops, and harvest crops while women are involved in weeding of vegetable fields, picking vegetables, and placing vegetables in bags. Men and women also having skills in animal rearing. Men also work on daily wage labor particularly during seasonal migration and some work as drivers in the Kalam town. During summer, they establish small retail businesses to sell snacks/refreshments to tourists. The 15 AHHs also involve in fishing to sell fried trout fish to tourists at their temporary and semi- permanent stalls.

8.1.1 Short Term Assistance

The PAPs losing their livelihood as a result of the MHPP will be supported with short-term income and livelihood restoration assistance for subsistence. These short-term income and livelihood restoration measures will be for immediate assistance in the form of one-time subsistence allowance for transitional period to meet minimum living expenses against temporary disruption to income during relocation of businesses.

i). Assistance to re-establish the Owners of Affected Houses

- Compensation for the affected house/ structures (house construction assistance) will be provided at replacement costs.

ii). Provision of Subsistence/Transition Allowance

- One-time paid transitional allowance equal to one year of inflation adjusted OPL has been provided to facilitate them for hiring the residences during construction period of their houses;
- The AHHs losing their residential houses will receive a self-re-location allowance equal to 12 months of inflation adjusted OPL as house rent in addition to other admissible compensation to re-build their houses at new locations.

iii). Provision of Shifting Allowance

The 37 physically displaced household will receive one-time financial assistance for transportation/shifting of household items, agriculture machinery, animals, loading and unloading expenses and shifting of salvage material to owners of residential structures.

iv). Special Assistance for Vulnerable and Severely Affected HHs

- Since vulnerable groups are at risk of becoming particularly disadvantaged as a consequence of involuntary resettlement, special assistance would be provided to them to assist in their rehabilitation and income restoration. In addition, priority in employment in project-related jobs during the construction phase and other training opportunities.
- The severely affected titleholder households who will lose more than 10% of family income will be provided with a severe impact allowance equal to market value of gross annual yield of lost agriculture land for five years

8.1.2 Implementation of Livelihood Restoration Plan

The impacts on the AHHs income and livelihoods were assessed as part of the RAP preparation, which confirms that livelihoods of the PAPs will be affected in multiple ways. The pertinent findings of the RAP impacts accounted for formulating the LRIP. This LRIP has been developed to guide implementation throughout the project period or even later, if the social and economic conditions of vulnerable PAPs would not revive to the pre-project level.

8.1.3 Purpose of Livelihood Restoration and Improvement Plan

The purpose of the LRIP is to stabilize, if not improve, the livelihood and income of vulnerable and severely affected households. The minimum acceptable scenario is to ensure that the net effect of the project on the livelihoods of the affected population is neutral. This objective will be achieved through developing household economies and improving skills and employment opportunities through provision of a number of interventions.

Development of skills and capabilities, technical and vocational training, provision of in-kind and financial support will contribute to enhancement of capacity of PAPs to find employment. Livelihoods consist of the capabilities, the assets - both material and social resources - and the activities required for means of living, which are sustainable, robust and are sufficiently diverse and could cope with impacts of the Project.

8.1.4 General Principles of the Livelihood Restoration and Improvement Plan

Since the MHPP will be financed by WB, the LRIP must be compliant with WB Policy. The aim is to improve the socio-economic conditions of the AHHs that they are better off than they were previously. The Core Labor standards will be maintained including applicable workplace occupational safety norms. The provisions in the LRIP for PAPs are additional to compensation and resettlement support. The general principles for planning and implementation of LRIP have been presented below:

Eligibility criteria: The LRIP is for all adult members of those AHHs whose livelihoods have been affected by the project. The AHHs entitled to the livelihood restoration are severally affected and vulnerable AHHs. Vulnerable are less capable of re-establishing themselves than the others due to their social and economic conditions and, therefore, face greater risks of hardship or impoverishment; these are households below poverty line and female-headed household with dependents. Severely affected AHHs are the ones losing 10% or more of their income or productive assets due to impacts on income from subsistence agriculture. Following changes in the detailed design of the project, the eligibility criteria may need revision to accommodate new categories of AHHs.

Participatory approach, social and gender inclusion: The LRIP will be implemented by following a participatory approach, eligible households will be facilitated to participate in all the LRIP processes (planning implementation, implementation, monitoring). Implementation and monitoring activities of LRIP shall be with participation of women to assess their need and concerns in particular are regarding their choices for livelihood restoration activities. Following actions will be taken to ensure participation of women and to consider their needs, priorities, ambitions and concerns:

- Organized gender specific focus group discussions with women of vulnerable AHHs on livelihood restoration issues to assess their needs and priorities, ambitions, concerns in particular regarding the choices of livelihood restoration activities;
- Aid women to coordinate with vocational training centers to organize training courses considering their specific needs.

- Women showed their preference to choose household based small businesses as it is convenient for women to operate such business within their house due to social and cultural restrictions. They will be given training and will be provided with follow-up support to help to set up businesses.

Support in the use of Compensation, Resettlement and Livelihood Restoration Money: The NGO/firm will provide guidance and technical assistance for the use of compensation and resettlement and livelihood restoration assistance for the most feasible income generating activities. The past experience has showed that the compensation money and resettlement and livelihood assistance is usually used in non-productive activities such as building new houses, buying household items, marrying children etc.

Linkages and Combination with Existing and Planned Programs/Projects: The LRIP shall combine with but shall not overlap with the existing and planned government run livelihood development programs/projects in the project area. Existing national, provincial training and livelihood development programs/projects under implementation will be identified, targeting AHHs. Combination with existing programs/projects is desirable to avoid duplication of budget. Women who have already been trained under a similar training program, will not be entitled to training under the LRIP; they could, however, use the total support amount to buy equipment/tools to apply new skills for generating income; PAPs who have been trained under any other programs but who could not find jobs will be eligible to more advanced refresh training.

Consultations with AHHs and Other Stakeholders: The livelihood restoration interventions are developed in close consultations with the AHHs for their livelihood restoration. Therefore, while formulating the implementation plan of the LRIP, a two-fold engagement with the PAPs will be ensured beginning with a household level baseline survey to identify needs and aspirations followed by a set of focus group discussions for feedback from them about the efficacy of the proposed interventions and activities and prioritization of the same. Their suggestions will be integrated into the final detailed LRIP at the early stage of project implementation/detailed design.

Context Specific and Appropriate Livelihood Restoration Activities: The livelihood restoration interventions should be doable, affordable and suitable with the needs of the eligible households, particularly the marginalized among them such as women and disabled. Risk assessment will be done and mitigation measures will be developed for each livelihood restoration intervention.

Flexibility: The LRIP should have flexibility since it is known that there are many variables that can influence the effectiveness of LRIP during design and implementation. Such flexibility ensures that risks and needed resources and improvements are identified and adjustments are made to respond to feedback from various groups and due to changing conditions.

LRIP is Based on Voluntary Adherence from Participants: The participation of AHHs in the LRIP is purely voluntary; AHHs not willing to participate will sign a form confirming their non- participation.

No Return from the PAPs for the Investment by under LRIP: LRIP support involves provision of training and/or equipment/material/livestock. AHHs are not required to return the investment to the Project, which will be clearly written in contract signed between AHHs and the Project.

LRIP is Non-Transferable: AHHs cannot transfer LRIP to other AHHs. AHHs also cannot sell the equipment or other items received from the Project.

Transparency and Disclosure: Information that relates to LRIP planning and implementation (eligibility, entitlements, level of support, contributions of the households) shall be properly disseminated to the LRIP participants prior to accepting their application to benefit from the LRIP. Implementation of LRIP will be carried out with full transparency and disclosure.

Monitoring: The implementation and impacts of the activities done under the LRIP will be tracked through monitoring and evaluation and database will be maintained in the MIS of the Project. The household level baseline survey will serve as a comparison for evaluators to assess progress.

Grievance Redress Mechanism: In case of a complaints or disputes regarding LRIP formulation and implementation, the GRM developed for the Project will be used to address them.

8.1.5 Livelihood Restoration Activities

The list of livelihood restoration activities is provided as under.

- Skills Upgrading/Improvement
- Livelihood Support to Agriculture Tenants
- Livelihood Activities for Women
 - a) Vocational Training for Women

b) Support to Women in Establishing Small Business

- Support from the Project to PAPs for training, provided by the KP-TEVTA, the cost of training will be provided by the project. The LRIP implementing NGO/consultants will be responsible for following tasks:
- Establish and maintain linkages with the management of construction contractors or other government led projects, commercial, and industrial businesses in the Project area with the intention of identifying their manpower requirements (i.e., number, qualification, skills, schedule of deployment, etc.) and securing agreements for deployment of qualified PAPs to fill job vacancies;
- Establish an information communication mechanism to provide information to PAPs on the availability of jobs through posting of job vacancies in village information centers or through face-to-face communication;
- Close follow up of training at least once every month;
- Maintain close coordination and establish linkages with the project contractors, service providers, and consultants to recruit PAPs on a priority basis; and
- The NGO/consultants will help trained male and female PAPs to create linkages with organizations, district and tehsil governments, concerned authorities or an established employment agency to explore employment avenues to bridge the information gap, where they can employ their upgraded/new skills for a sustainable livelihood.

8.1.6 Preparation of Livelihood Restoration Improvement Plan (LRIP)

Based on these criteria, a Livelihood Restoration Improvement Plan has been prepared as part of this RAP, as a standalone document.

8.1.7 Financial Provision for LRIP Implementation

An initial amount of PKR 300 million has been budgeted in RAP for the implementation of LRIP. The estimated cost will be revised after preparation of LRIP implementation plan. These cost estimates will include cost of training courses and equipment or other items to be provided to PAPs after training.

8.1.8 Implementation Schedule For LRIP

After endorsement/approval of PEDO, the implementation plan LRIP along with TORs of the NGO/consulting firm will be sent to WB for review and clearance and its implementation will start soon after the clearance of WB. The LRIP will be implemented over a period of 4 years. An implementation schedule for LRIP activities and vocational training as a part of LRIP implementation plan is provided in the LRIP document. The LRIP is expected to start within a quarter after start of the project implementation.

8.1.9 Monitoring and Evaluation of the LRIP

The LRIP implementation will be monitored internally and externally by a third party as part of the overall RAP monitoring and reporting. And evaluation of LRIP will also be conducted as part of the RAP evaluation. At the end of LRIP, an evaluation will be conducted to document the lessons learned to be used as guidance for other projects for PEDO and World Bank.

8.2 Social Development Plan

8.2.1 Context

Project operations are likely to create many indirect economic benefits and opportunities through assistance to local communities to realize their development aspirations. As observed from the resettlement experiences, cash compensation and relocation assistance are not necessarily sufficient to re-establish and improve the living standards of the PAPs and communities. To address the needs, the project should invest in long-term social development programs to ensure that benefits are widely distributed among communities for bringing about social and economic development in the area.

8.2.2 Approach

A Social Development Plan (SDP) has been prepared to provide benefits to the communities beyond compensation and resettlement. SDP is built on the principle to enabling project affected populations to reap

the project benefits as a form of development strategy to enhance investment effectiveness. SDP for the project can be defined as a systematic mechanism to sustainably benefit local communities affected by the project's investment. The strategy substantiates the comprehensive compensation and resettlement policy of the project.

The benefit of SDP is to make the community better-off and to support the community in such a way that their right of getting basic necessities are fulfilled. The benefits of social development plan adopted in the project will offer multiple advantages or measures, for instance, (i) it can help reduce and/or prevent potential risks of impoverishments from involuntary resettlement; (ii) the programs can contribute to quickly regaining income and livelihoods in post-resettlement period; (iii) it can promote support to the project implementation by the local stakeholders; (iv) with local support, the project can be completed sooner than later and therefore, the streams of project benefit begin to flow earlier; and finally (v) it promotes sustainable resettlement and local development.

8.2.3 Scope and Objectives

Since the affected communities are remote and rural, they lack many amenities and services. The SDP will be designed to ensure that the affected populations share the envisaged social and economic benefits of the project. The objectives of SDP are to ensure that communities, particularly the poor and vulnerable, also benefit from this investment. The primary focus of SDP will be to provide needed social and infrastructural development in the project area to facilitate and enhance socio-economic development of the local communities in and around the Project. The SDP also aims at to promote human and community well-being. SDP may require the support of government line departments or non-profit organizations to implement the development interventions.

8.2.4 Identification of Priority Potential Projects

During the household survey the community prioritized broadly their development needs such as roads, electricity, water supply, health facilities. PAPs are spread over the entire length of the project. However, identification of specific locations, stakeholder engagement is essential in initiating and designing social and community development projects. The approach further requires participation of community, government line departments and PEDO towards successful identification of project locations where maximum villages around or population will benefit from the social development projects. The process will be carried out in a socially inclusive and consultative manner to ward off any form of "elite capture".

All relevant social and environmental guidelines will be followed for screening, identify and preparing the SDP. The range of projects will be further refined through focus group discussions. The following would likely be potential community-based projects.

- Provision of water supply schemes
- Education Facilities:
- Establish health clinics
- Access Roads
- Assistance in Sports and Culture clubs
- Construction of Bridges
- Construction of mini hydroelectric schemes
- Construction of roads/ streets.

Preference would be given to those schemes that do not need any land. However, land donated by the community would be admissible for the schemes under SDP. If acquisition of private land will be needed, then appropriate resettlement planning instruments will be prepared in accordance with RPF.

8.2.5 Preparation of Social Development Plan

SDP for MHPP will be finalized based on the scope, objectives and results of the Need Assessment Survey and consultations with the communities as part of this RAP, as a standalone document.

8.2.6 Financial Provision for SDP Implementation

An initial amount of PKR 1500 million- has been budgeted in RAP for the implementation of SDP. The estimated cost will be revised after preparation of SDP implementation plan. These cost estimates will include cost of proposed development schemes under SDP.

8.2.7 Implementation Schedule For SDP

After endorsement/approval of PEDO, the implementation plan of SDP along with TORs of the NGO/consulting firm will be sent to WB for review and clearance and its implementation will start soon after the clearance of WB. The SDP will be implemented over a period of 4 years. An implementation schedule for SDP activities and development schemes as a part of SDP implementation is provided in SDP. SDP is expected to start within a quarter after start of the project implementation.

8.2.8 Monitoring and Evaluation of SDP

SDP implementation will be monitored internally and externally by a third party as part of the overall RAP monitoring and reporting. And evaluation of SDP will also be conducted as part of the RAP evaluation. At the end of SDP implementation, an evaluation will be conducted to document the lessons learned to be used as guidance for other projects for PEDO and World Bank.

9 GRIEVANCES REDRESS MECHANISMS

9.1 Regulatory Framework for Grievance Redress Mechanism

The Land Acquisition Act 1894 contains provisions pertaining to objections and hearings of PAPs of land and associated assets. The Act is limited to address grievances with respect to compensation and there is no provision in the legal framework for a continuous grievance redressal mechanism on the concerns and grievance of PAPs and other stakeholders other than land acquisition, compensation and related matters.

9.2 World Bank OP 4.12 Involuntary Resettlement Requirements

WB requires establishment of a suitable project level grievance redress mechanism in accordance with OP 4.12 Involuntary Resettlement to address concerns and grievances of project PAPs and other stakeholders. This mechanism can receive and facilitate resolution of the concerns or grievance of people who believe they are adversely affected by the project(s) under the Project's environmental or social impacts or the people who believe that their interest are at risk due to the project(s) including construction and operations activities. There is also provision for protection of complainants from retaliation and the right to remain anonymous, if requested, to receive and facilitate resolution of the PAP's concerns and grievances regarding the project's social, resettlement and environment performance.

9.3 Existing Grievance Redress Mechanism of PEDO

PEDO has a provision for receiving written complaints manually and their redressal but does not have standard operating procedures to receive and redress complaints and there is no practice of redressing anonymous complaints. Currently the PEDO has been receiving and redressing complaints under the "Pakistan Citizen Portal," a government-owned Mobile Application established by Prime Minister's Performance Delivery Unit since, 2019 and is being used as a tool to promote citizen-centric and participatory governance. It is an integrated citizens' grievance redressal system connecting all government organizations both at the federal and provincial levels.

A Project-specific grievance redress mechanism (GRM) for Gabral Kalam Hydropower Project (GKHPP) under KHRE is already established and functional. Based on the same model project specific grievances redressal mechanism for MHPP will be established to receive, evaluate, and facilitate the resolution of affected parties' concerns, complaints, and grievances about the environmental and social performance of the Project. Additionally, a separate workers' GRM specific to address labor and workers grievances at construction phase of the project will be made part of the bidding document of the contractor for effectively receiving, evaluating and facilitation of the resolution of labor. The PEDO project staff and labor union representatives along with contractor's representatives will be made part of the GRM specific for MHPP.

A three-tier GRM has been designed to provide a time-bound, early, transparent and fair resolution for PAPs and other stakeholder grievances regarding E & S management of each project. All complaints received verbally or in writing will be properly documented and recorded in the Complaint Management Register(s). In addition, an easy-to-access web-based GRM will be developed. All possible efforts will be made to redress complaints through project-specific GRM and the complainants will also be encouraged to seek redressal of their complaints through this mechanism. Despite all efforts, if the complainant will not be satisfied with the resolution, s/he will have a right to lodge his/her complaint at the higher government administration or at the related court. If the complaint cannot be resolved at these three tiers, the complaint will have a choice to lodge his/her complaint at the related court of law.

9.4 Grievance Redress and Mechanism for the Project

A project-specific grievance redress mechanism (GRM) will be established to receive, evaluate, and facilitate the resolution of affected parties' concerns, complaints, and grievances about the environmental and social performance at the level of the Project. The existing grievance redress system will be used in conjunction with the project-related GRM. The GRM will function during all phases of the project implementation. It will provide a time-bound and transparent mechanism to address and resolve grievances arising from the implementation of the project. Besides Area of Impact, the PEDO will follow the GRM to address any dissatisfaction and complaints by PAPs or residents of area of influence as well, as set out for the Project.

9.5 Aims and Objectives of GRM

GRM will aim to investigate charges of irregularities and complaints and grievances received from PAPs and other stakeholders and provide a time-bound early, transparent and fair resolution to voice and resolve environmental and social concerns and grievances linked to the project. The fundamental objectives of GRM are to:

- Allow PAPs and other stakeholders the opportunity to raise concerns, complaints and grievances with a clear process using several intake locations and modes;
- Reach mutually agreed solutions satisfactory to both the Project and PAPs, and to resolve any grievances locally, in consultation with the aggrieved parties;
- Facilitate the smooth implementation of RAP, particularly to cut down on lengthy litigation processes and prevent delays in project implementation; and
- Ensure that concerns and grievances are handled in a fair and transparent manner, in line with provincial laws and regulations, and WB's applicable Operational Policies.

9.6 Nature of Complaints to be redressed

It is anticipated that during the Project implementation and operational phase, the nature of such complaints will relate to compensation and resettlement and rehabilitation assistance; income and livelihood restoration matters; damages, mobility and access issues of general public or disruptions of services/utilities during civil works will be related to the project functionalities, environmental issues, non-observance of project principles, by different parties, as laid down in RAP.

9.7 Information Dissemination about GRM

PAPs will be fully informed of their rights and the procedures for addressing complaints, verbally, in writing or anonymously during the consultations in environment and social impact assessment surveys and studies, and will be informed again when the compensation is disbursed. The site office staff of Environment and Social Unit – Project Management Office (ESU-PMO) with the assistance of E&S staff of Project Implementation Consultants (PIC) and contractor(s) shall make the male and female PAPs, general public and other concerned stakeholders aware of GRM, particularly PAPs, through information dissemination campaigns, information dissemination material, face-to-face meetings, and formal workshops for both literate and illiterate APs. GRM shall be publicized through the notice boards at the projects site offices, Contractors' construction camps at accessible and visible locations and affected villages. The illiterate men and women will be facilitated in documenting their verbal complaints by the ESU site office staff, PIC and the Contractors' staff and subsequent follow ups until their resolution. The names of the ESU, PIC and contractors' focal person their addresses and contact numbers of PMO/complaint registration number of PEDO will serve as hotlines for registering verbal concerns, complaints and grievances. The project information brochure will include a topic on GRM and a dedicated brochure on GRM will be prepared in Urdu language and shall be widely disseminated throughout the project area of influence and corridor of proposed roads and power transmission lines by the ES staff of PMO, PIC and Contractors. Grievances may be reported verbally, can be placed in the complaint boxes or filed in writing in the form of a letter, the Program website or by phone through designated staff of the ESU of PMO, PIC Contractor or telephone of PEDO.

9.8 Structure of Grievance Redress Mechanism

A three-tier GRM has been designed to provide a time-bound, early, transparent and fair resolution for PAPs and other stakeholder grievances (Figure 10-1). All complaints received verbally or in writing will be properly documented and recorded in the Complaint Management Register(s). In addition, an easy-to-access web-based GRM will be developed. All possible efforts will be made to redress complaints through project specific GRM and the complainants will also be encouraged to seek redressal of their complaints through this mechanism. Despite all efforts, the complainant will have a right to lodge his/her complaint at the higher government administration or at the related court. GRM for the projects is outlined in Figure 9-1 below and consists of three levels with time-bound schedules for addressing grievances.

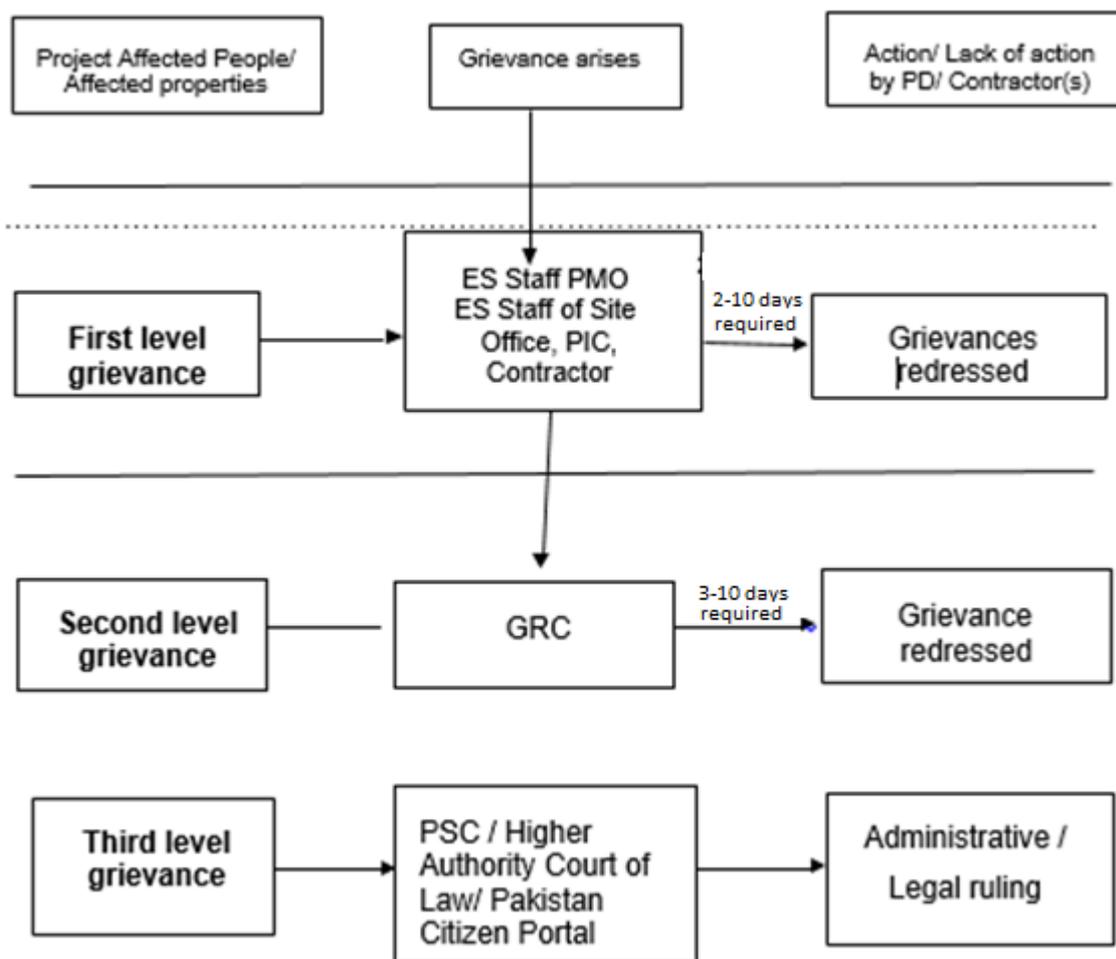


Figure 9-1: Grievance Redress Mechanism

9.8.1 First Tier of GRM

PMO's project site office will be the first tier of GRM which will offer the fastest and most accessible mechanism for resolution of grievances at local level either by the ES of PMO site office or any other site staff of PMO, PIC, and Contractors through the involvement of the representatives of APCs and informal mediators through negotiations. A local level GRC will be formed for this purpose headed by the Project Director with membership of Assistant Director-ESU, LAC and other relevant staff of Revenue Department, contractors' representatives (chief resident engineer), representatives of other relevant departments, and PIC representative and two members from each PAPs Committee. At this tier, the designated ES staff of PMO site office or other project implementing parties will make attempt to resolve the complaints within two (2) to ten (10) working days, depending on the nature of grievance. The PD will convene the meetings of local GRC and conduct proceedings informally to reach an amicable settlement between the parties within 10 days of receiving a complaint (verbally or in writing) from a PAP or their representative. The sample form for recording the grievances is attached as Annexure-8.

The minutes of the GRC meetings will be recorded in writing, and copies will be provided to the parties involved. At this stage, ES staff of PMO or PIC may ask PMO head office staff support and guidance in grievance redressal matters. Investigation of grievances will involve site visits and consultations with relevant parties (e.g., PAPs, staff of District Collector office, contractors, general public, utilities companies etc.). Grievances will be documented with personal details (name, address, date of complaint, nature of complaint etc.) will be included unless anonymity is requested. A tracking number shall be assigned to each complaint/grievance. Should the grievance remain unresolved or the PAP not satisfied with the decision, the grievance can be lodged with the Program level grievance redress committee, led by the head of PMO.

9.8.2 Second Tier of GRM

The ES staff in PMO will refer the unresolved issues or grievances (with written documentation) to the second tier of GRM, the PMO central level GRC. The central level GRC shall be established by PEDO so that PAPs and other stakeholders have recourse to refer their concerns and grievances. The GRC will consist of the following persons: (i) PEDO representative from senior management; (ii) Head of PMO (or his representative) as member of the GRC; (iii) Project Director of MHPP; (iv) Director Social PMO, will act as secretary of GRC, (v) representative of DC office; (vi) representative of PIC; (vii) Chief Resident Engineer (CRE) of Contractor (on call); (viii) representative of relevant government offices (on call); (ix) two to three representatives of respective APC (on call).

A hearing will be called with GRC, if necessary, where the PAP(s) can present details of his/her/their concern/grievance. The GRC will meet as necessary when there are grievances to be addressed. The GRC will suggest corrective measures at the field level and assign clear responsibilities for implementing its decision within 3-15 working days, depending on the nature of grievance. All possible efforts will be made to redress complaints through project specific GRM and the complainants will also be encouraged to seek redressal of their complaints through this mechanism. Despite all efforts, the existence of the GRC shall not impede the complainant's access to the government's higher administrative authorities or relevant court of law.

9.8.3 Third Tier of GRM

If a grievance cannot be resolved directly by the second tier GRC or if complainant is dissatisfied with the decision of GRC, the aggrieved can seek alternative redress through CEO or Board of Directors of PEDO, district administration, the Secretary Energy and Power Department or higher-level administrative authorities, the Pakistan Citizen Portal or the court of law, as appropriate.

The monitoring reports of RAP implementation shall include the following aspects pertaining to progress on grievances: (i) number of cases registered, level of jurisdiction (first, second, third tiers), number of hearings held, decisions made, status of pending cases; and (ii) lists of cases in process and already decided upon, may be prepared with details such as name with copy of NIC, complaint number, date of application, date of hearing, decisions, remarks, actions taken to resolve issue(s), and status of grievance (i.e., open, pending, closed).

9.9 Grievance Redressal Committee

The central level GRC will be formed by PEDO and as a continuing and functional structure, engaging personnel of PMO and other parties. The PEDO will specify that representatives of local/ community authorities, elders, auditors, displaced persons and any other persons or entities can be included in the Committee as members.

The purpose of this grievance redressal committee (GRC) is to provide means to seek investigation and effective resolution of grievances related to any of the issues on social, resettlement and environment performance of the program/projects. And the purpose of LAR Coordination Committee (LCC) is to provide means to seek effective redressal of issues related to land acquisition and compensation. The detail of GRC chair and members is provided in Table 9-1. A minimum two members of GRC will be females.

Table 9-1: Composition-Program Level GRC

Sr. No	PEDO Senior Management	Chair of the Committee
1	PMO Head	Deputy Chair (Will preside over meetings when Chair is unable to)
2	Project Director	Member
3	Director Social – PMO	Member/ Secretary
4	Concerned LAC	Member
5	ESU Staff of PMO and respective	Member
6	Team Leader-PIC	Member (on call)
7	Chief Resident Engineer-Contractor	Member (on call)

The functions of the GRC are: (i) resolve problems and provide support to PAPs arising from various social, resettlement and environmental issues such as land acquisition (temporary or permanent, as applicable), asset acquisition, eligibility for entitlements, compensation and resettlement assistance as well as environment issues including dust, noise, utilities (electric power, gas, telephone optical fiber, water supply), waste disposal, traffic interference, access and public safety; (ii) reconfirm grievances of APs, categorize and prioritize them

and aim to provide solutions maximum within 3 to 15 working days; and (iii) report to the aggrieved parties about developments regarding their grievances and decision(s) of the GRC. The ES staff of PMO will be responsible for processing and presenting all relevant documents, field enquiries and evidences/proofs to the GRC, maintaining a database of complaints, recording decisions, issuing minutes of meetings and monitoring to see that formal orders are issued and to ensure that required actions against decisions are being carried out. The PIC and Contractor ES staff will assist PMO in these tasks as and when required.

At the Program level, the Director Social Safeguards of ESU-PMO will be responsible for processing and placing all papers before the PMO GRC, recording decisions, issuing minutes of the meetings, and taking follow-up action to see that formal orders are issued, and decisions carried out. In the event that a grievance is not addressed at the previous levels, the PAPs can seek legal redress of the grievance in the appropriate courts.

9.10 Role of Land Acquisition and Resettlement Coordination Committee

LAR Coordination Committee (LCC) will play the role of Grievance Redress Committee to redress the grievances related to land acquisition and compensation issues, detail of members is provided in Table 9-2, minimum two members of LCC will be female. The ES staff will fully inform the PAPs of their rights and of the procedures for addressing complaints both verbally or in writing during the process of land acquisition and compensation. Care will always be taken to prevent grievances rather than going through a redress process. This can only be obtained through careful implementation of the ESMP and RAP, by ensuring full participation and consultation of the APs, and by establishing extensive communication and coordination between the affected people, the PMO, the LAC and local government.

Table 9-2 : Composition- LAR Coordination Committee

Sr. No	Concerned Deputy Commissioner (District Land Acquisition Collector)	Chair of the Committee
1	Additional Deputy Commissioner Revenue (land acquisition)	Deputy Chair, will preside over meetings when Chair is unable to attend
2	LAC	Member (also act as secretary of the committee)
3	Tehsildar	Member
4	Environment and Social Staff-PMO	Member
5	Chief Resident Engineer-Design and Supervision Consultants	Member (on-call)
6	Staff of concerned departments	Member (on-call)

LCC will serve a due diligence function on land acquisition. It will meet once in a month and will review the progress of the land acquisition and compensation process of the Project, seek reports from LAC, the Project Director and APCs, take cognizance of delays and anomalies in the process, suggest remedial measures and, if necessary, bring them to the notice of the Deputy Collector and KP Board of Revenue.

9.11 Functions of GRC and LAR Coordination Committee

GRC and GRM will perform following functions:

- Ensure effective implementation of the Grievance Redressal Mechanism on the issues that fall under their jurisdiction.
- Ensure an easy access to GRM having provision to file grievances verbally or by phone, in writing or via web-based provision including the option of submitting grievances anonymously.
- GRC and LCC will look into all referred grievances and effectively address and resolve them within 15 days from the receipt of the grievances, in a timely and impartial manner.
- The GRC and LCC will deal promptly with any issues relating to land acquisition, resettlement, compensation or resettlement assistance that is brought before it.
- The GRC and LCC will take decisions on the basis of consensus or majority of votes.
- When required, the GRC and LCC would seek the assistance of other persons/institutions.
- Speaking orders/decisions of the committee on the grievances shall be recorded and replied to aggrieved parties/persons with a copy kept as record.
- In case aggrieved is not satisfied by the decision of the GRC and LCC, s/he can prefer an appeal within 10 days of the receipt of decision, and the GRC could refer the case to the appropriate forum after examining the appeal.

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- In the event that a grievance cannot be resolved by GRC, the PAPs can seek alternative redress through the higher administrative authority or court of law or as appropriate.

9.12 Capacity Building

The ESU staff of PMO shall organize training on GRM for the PEDO relevant staff, PMO, contractor, sub-contractors and service providers with the assistance of ES staff of PIC to orient about the GRM, grievance registration and handling procedures as laid down in the RAP. The orientation will focus on the methods of negotiations with community leaders and representatives of APs.

10 INSTITUTIONAL ARRANGEMENTS AND RAP IMPLEMENTATION

This Chapter describes the institutional arrangements to administer social aspects of the Project, provide details of entities that will be involved in implementation of RAP and their responsibilities, and measures to enhance the capacity of those who will be directly involved in implementation of RAP.

10.1 Program Steering Committee

A Program Steering Committee (PSC) has been established by GoKP for policy guidance and to coordinate the project implementation. The PSC members comprise of senior officials of Planning and Development Department, PEDO, Energy and Power Development, Revenue Department, Forest, Wildlife and Environment Department, Labor Department, Communication and Works Department, Agriculture Department, and Peshawar Electric Supply Company. The PSC is supposed to (i) meet every quarter or more frequently if required; (ii) take stock of program's progress; (iii) make policy decisions; (iv) resolve issues of project implementation; (v) review semi-annual and annual project performance reports, and based on periodic discussions issue directions for effective project implementation.

10.2 Energy and Power Department

The Energy and Power Department (E&P) is the lead government department for the project development and implementation. The proposed project will be implemented under the overall guidance of the Secretary, E&P. The Department aims to sustainably develop the potential of the province in hydroelectric power generation, alternate energy, and petroleum resources to contribute significantly in mitigating energy crisis and to generate resources for self-sustainability.

10.3 PEDO

PEDO is implementing agency of the proposed project. PEDO is an autonomous body with a Board of Directors under the overall administration of Secretary; E&P. PEDO is headed by a Chief Executive Officer (CEO) who is assisted by five General Managers and six Chief Engineers. The GM hydro (PEDO) is responsible for oversight of the proposed Program.

PEDO has the overall responsibility of project planning, design, implementation, land acquisition and resettlement, construction, environment and social management during construction, supervision and monitoring of the Program implementation. PEDO is overall responsible for preparation, implementation and financing the present RAP. The specific responsibilities of PEDO include (i) establishment of PMO; (ii) recruit and retain social, resettlement and gender staff at PMO head office and field office(s) by PIC, contractors and other project implementing parties and their capacity strengthening in environment and social management; (iii) identification of projects to be developed under the project; (iv) ensure that the project is compliant with the requirements of WB OP 4.12 Involuntary Resettlement and other Operational Policies, RAP and LAA 1894 (with KP specific amendments); (v) cross-agency coordination; (vi) social impact assessment and preparation of RAP for other project identified under the program (vii) poverty, social and gender assessment and preparation of Gender Action Plan (GAP) for other project identified under the program; (viii) review and approval of RAP; (ix) local disclosure of RAP; (x) submission of approved RAP to WB for compliance review and clearance; (xi) public disclosure of RAP; (xii) financing for RAP Implementation; (xiii) implementation of RAP; (xiv) supervision and monitoring of RAP implementation; and (xv) preparation of RAP completion report.

10.4 Program Management Organization (PMO)

PEDO has already established the Program Management Organization (PMO), which will manage the project on day-to-day basis under the overall supervision of PEDO. PEDO will exercise its functions through PMO, which will be responsible for planning and implementation of the project related activities, including social safeguards management.

An Environment and Social Unit (ESU) has been established under PMO. The Head of PMO is designated as the Chief Safeguards Compliance Officer (CSCO). All the designated Social, Resettlement and Gender team for PMO

has already been employed at the PMO head office. The team comprise of one Director Social Safeguards and two Deputy Directors (i-Resettlement & Social Development, ii-Gender (gender and Labor). MHPP Project level site office social staff is comprised of four Assistant Directors to liaise with male and female community members. These are yet to be engaged. There is a legal section in PEDO having permanent staff to provide legal support by representing it in the court of law related to cases regarding land acquisition and compensation. PMO will engage NGO or consultants to provide guidance and assistance to the affected families in effectively utilizing the cash compensation. Figures 10-1 and 10-2 show the institutional arrangement for RAP implementation.

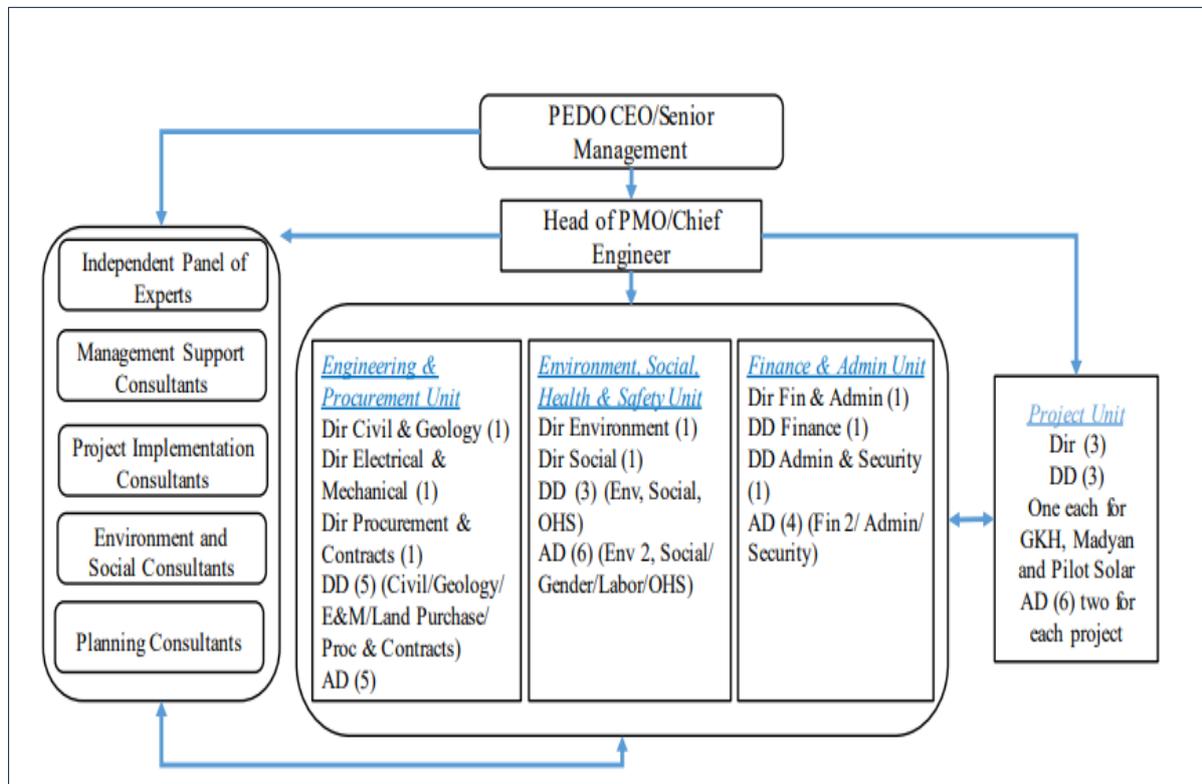


Figure 10-1:PMO Organogram

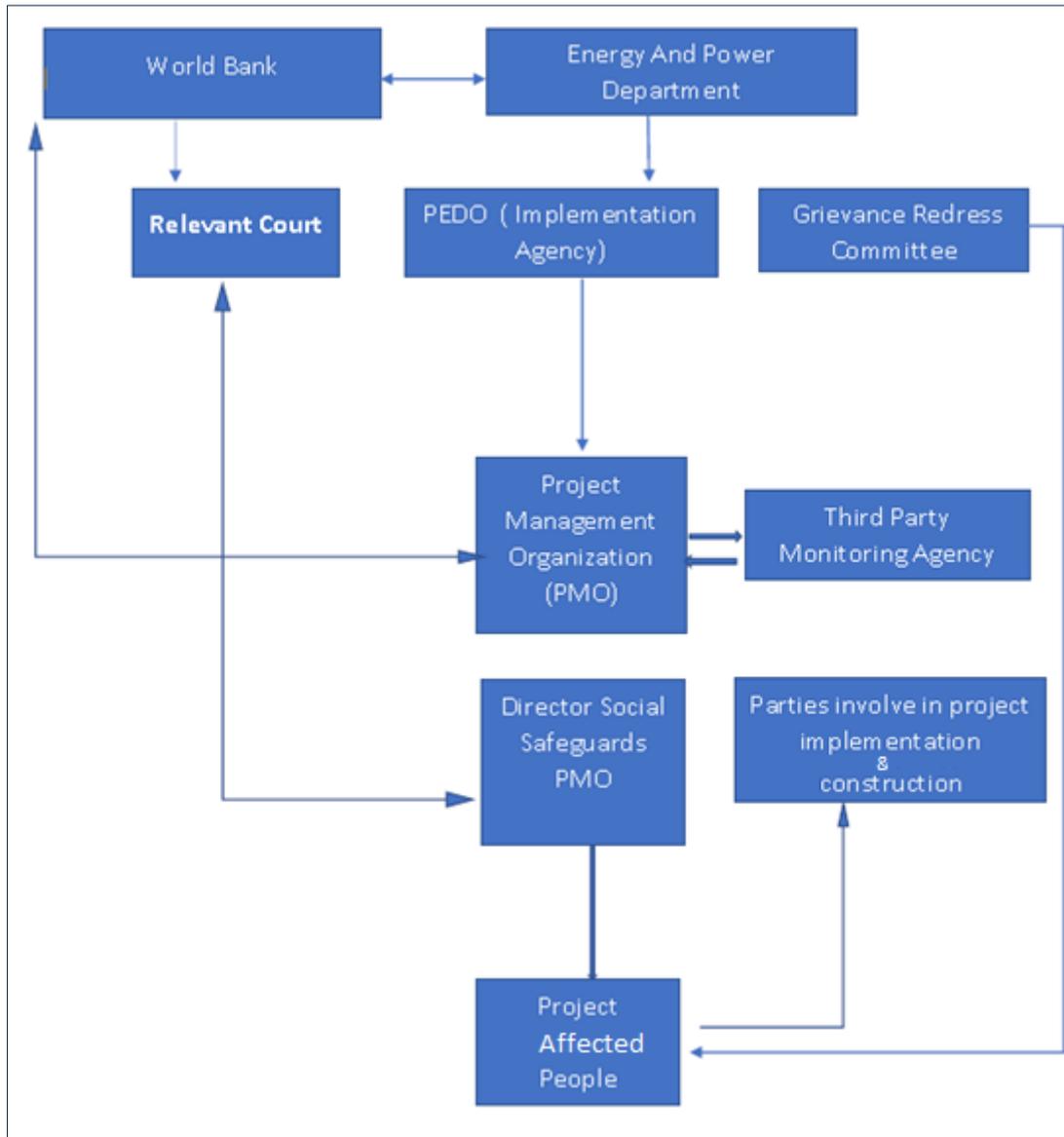


Figure 10-2: Institutional Arrangements for RAP Implementation

10.4.1 Role and Responsibilities of PMO Head Office Social Staff

The Director Social Safeguards of ESU and his/her team will support PMO in LAR related tasks and the ESU staff of project site office will facilitate communication and coordination with APs, district and tehsil staff of Revenue and other relevant departments, and assist in RAP implementation. The key responsibilities of Social and Resettlement Staff (SRS) within ESU of PMO head office are listed below.

- Ensure that the Projects comply with LAA 1984 and WB OP 4.12 on Involuntary Resettlement;
- Take actions to avoid and minimize involuntary resettlement impacts by assisting in exploring alternative design options in collaboration with design engineers at the stage of project design;
- Ensure that bidding and contract documents include the clauses on the relevant provision of RAP implementation;
- Orient and coordinate closely with the Board of Revenue and relevant departments at provincial, district and tehsil regarding LAR activities;
- Develop an action plan for the implementation of RAP;
- Ensure that the required funds for implementation of RAP are approved and available;

- Synchronization of LAR activities with projects construction schedules;
- Facilitate disbursement of compensation in close coordination with the Revenue staff and the resettlement assistance with the Project Director as per schedule;
- Implement GRM by facilitating resolution of PAPs and other stakeholders' concerns, complaints, and grievances about the project's social performance, monitor implementation of GRM;
- Ensure transparency in compensation and Resettlement & Rehabilitation (R&R) payments;
- After completion of compensation and R&R payment, facilitate in taking over possession of acquired lands free of encumbrances;
- Based on the results of internal monitoring, identify corrective actions and prepare corrective action plans to redress the grievances by taking remedial action to rectify any non-compliances of RAP and WB OP 4.12;
- In case of occurrence of unforeseen impacts, prepare addendum to the RAP and facilitate approval from PEDO and subsequent clearance from the WB;
- Internal monitoring and supervision of RAP implementation and manage database of LAR, GRM and other related LAR activities in the Management Information System;
- With support from field office staff, prepare monthly, quarterly/semi-annual monitoring and progress reports for submission to PMO, PEDO and WB;
- Liaison with contractors, sub-contractors, and service for the provision of employment to PAPs during construction and operations phase of the project;
- Facilitate hiring of third-party monitoring agency (TPMA) for external monitoring of RAP implementation;
- Facilitate TPMA in providing the record and all relevant data; and
- Any other social, gender and LAR related tasks.

10.4.2 Social Staff in Field Offices

The ESU field office staff will facilitate RAP implementation activities and provide easy access of GRM to people who have concerns or grievances or want to discuss specific aspects of the land acquisition and resettlement, or any other social related matters. The field staff will be provided offices with adequate facilities including transport, computers and communication. The key tasks of the ESU Site Office staff are given below.

- Ensure that project is implemented in compliance with LAA 1894, WB OP 4.1, and WB OP 4.12;
- Disclosure of RAP and other LAR related information to PAPs through face-to-face meetings and distribution of RAP information and GRM brochures in Urdu;
- Local disclosure of RAP at district and tehsil, general public and relevant government departments, academia, CSOs and other stakeholders;
- Distribute information brochure and GRM brochure to PAPs and other stakeholders and orient PAPs through face-to-face meetings;
- In case of occurrence of unforeseen impacts, conduct social impact assessment and prepare addendums to RAP and facilitate approval from PEDO and subsequent clearance of the WB;
- Close coordination with all stakeholders including APs, officials of district and tehsil Revenue and other relevant Departments, affected communities for smooth functioning of LAR activities;
- Distribute advance notices to the PAPs for vacating structures or lands;
- Distribute notices to the entitled PAPs of the project regarding their payment of compensation;
- Facilitate PAPs in completion of necessary documentation to receive their entitled payments;
- Develop a close interaction with the APs, affected communities and general public to address their concerns;
- Support PMO in conducting regular consultations with PAPs and for preparing and implementing the RAP;
- Support PMO in the effective implementation of the RAP, including relocation activities, LRIP, GAP and SDP;

- Help resolve grievances of AHHs at local level, monitor and regularly report on the implementation of the GRM, and maintain a grievance log;
- Help PAPs to put their complaints (if any) in front of GRC;
- Maintain and update database on LAR activities;
- Prepare monthly progress reports on RAP implementation for submission to the Director Social Safeguards of PMO head office; and
- Help PAPs in other related activities.

10.5 Local/District Government

District-based agencies have jurisdiction over land acquisition and compensation through application of Land Acquisition Act 1894 (the Act), rules, orders, and notifications. Land acquisition functions rest with Board of Revenue represented at District level by the District Collector (Deputy Commissioner) and Land Acquisition Collector (LAC). The LAC works under the powers of District Collector/Deputy Commission as per LAA 1894. Other staff members of the Revenue Department, most notably Kanungo (Kanungo or Girdawar/expounder of law or supervisor of Patwari), Patwari (an official who keeps record regarding ownership of land) and Survey Khlassi (land surveyor) to carry out specific roles such as land survey, titles identification and verification of the ownership. Functions pertaining to assessment of compensation of non-land assets rest on other line-agencies and their District level offices.

PEDO will request to the Senior Member Board of Revenue to designate a dedicated LAC for the PEDO to assist in the land acquisition and compensation activities. LAC works as an arbitrator between land acquiring agency and public. The LAC is independent in the decision making as per LAA and under the powers of District Collector (the Deputy Commission). The LAC notify land owners of the requirement of land for public interest in the official gazette, and providing public notice. The LAC and the KP Revenue Department will be part of the rate negotiation committees, valuation and determine the unit cost and other assets. The LAC can receive the objections / grievances, after notifications under the Act within a specific period of time under Section 5-A as well as other sections.

10.6 Other Government Departments

LAC requests the concerned government departments to carry out DMS of (i) structures; (ii) crops; (iii) fruit trees; and (iv) wood trees. The assessment of the affected structures pertains to the Communication and Works Department; the assessment of affected wood trees pertains to the Forest Department; the assessment of crops and fruit trees pertains to the Agriculture Department. The LAC will be responsible for payment of the compensation to the affected titleholders and registered tenants, and cultivators of village common lands.

10.7 Affected Persons Committees

In order to formalize the process of consultation and coordination with PAPs and make fair and timely compensation, and R&R assistance, location specific Affected Persons Committees (APCs) will be formed, separately for male and female. Each committee will comprise two to seven members and comprise of a president, a vice president, secretary and executive members nominated by various categories of APs. These APCs will hold meetings minimum twice a month, however, during the process of RAP implementation, APCs will hold more frequent meetings, as and when required. APCs will act as forum/ platform for: a) disclosure of information and consultations; b) maintaining an on-going interaction between the staff of PMO, PIC, contractor, LAC, PAPs and other implementing partners; and c) identify problems and coordinate with project implementing parties to undertake remedial/ corrective actions before they turn into grievance. APC will be responsible for the following activities:

- Interaction within the community particularly PAPs (male and female)
- Interaction between a) the community particularly PAPs; and b) PMO (PEDO) and RAP Consultants.
- Participate in the survey of the affected communities and PAPs
- Participate in the consultations to be varied out by PMO, RAP Consultants and Monitoring and Evaluation Consultants.
- Disclosure of project and RAP information among the communities particularly the PAPs.

- Help and facilitate PAPs in completing the requisite documents for compensation payments.
- Ensuring payment of compensation in accordance with the entitlement matrix given in the approved RAP.
- Facilitate early resolution of grievances and complaints raised by the communities particularly PAPs.

10.8 Consultants Support for Social and Environment Safeguards

PEDO has acquired the services of a consultancy firm as the Program Implementation Consultants (PIC) to act as Employer's Representative/the Engineer as defined in Federation International Engineer Council (FIDIC). PIC will Document to perform all the duties and obligations needed for the successful implementation and accomplishment of the Program activities. The key task of the consultancy services is to support recruiting contractors and to supervise them during the project implementation on behalf of PEDO. The consultant shall also carry out construction supervision and commissioning of projects. The role and responsibilities of PIC social staff are provided below.

- The lead social specialist under PIC will ensure that prior to bidding stage, social safeguard requirements are included in the design and bidding documents and contracts of contractor, sub-contractors and service providers for environment and social management;
- Assist PMO in the overall project management and implementation including implementation of RAP and ESMP;
- Review and finalize all kinds of reports including environment and social safeguard documents (ESMP and RAP); and supervise and monitor all program/project activities including implementation of social and environment safeguard instruments (ESMP and RAP) by assuming the role of "PEDO representative". The PIC will Prepare Standard Operating procedures for the implementation of ESMP and RAP prior to start of their implementation;
- Provide guidance and assistance to the affected families in effectively utilizing the cash compensation. This guidance should emphasize the importance of productive use of compensation money to purchase land and construct their houses and retore/improve their livelihoods.²⁴
- Establish a system for regular monitoring and oversight of the above process, potential gender disparities, as well as gender-based violence (GBV)/ sexual harassment (SH) and other similar issues.
- Carry out capacity building of PMO, PEDO, contractors and other relevant agencies in environment and social management. The PIC will ensure that the Contractor and other parties are fully coordinating with PEDO and WB, and other stakeholders for the implementation of RAP and ESMP;
- Conduct independent investigation of grievances and prepare factual documentation describing the circumstances of the grievances with necessary documentation, records and photographs, which may result in resolution or arbitration between the PAPs and PMO. Contractor, sub-contractors or service providers, and will attend hearings and provide all legal and other support to the PEDO;
- Ensure that proper Health and Safety measures are put in place as per WB's Operational Policies;
- PIC shall attend monthly progress meetings of LAR Coordination Committee (LCC) with other stakeholders (the Consultant, the Contractor, the Client, the KP Revenue Department, line departments) as well as any other required meetings, and maintain record of meetings and follow up on the agreed actions;
- Maintain records, files and reports of RAP and ESMP implementation including other necessary documentation such as photographs in a manner suitable to meet PEDO and WB requirements;
- Supervise the implementation of the required environmental and social mitigations measures as defined in RAP and ESMP by the Contractor(s);
- Prepare and issue all necessary reports on implementation of RAP and ESMP and overall environment and social management as required by PEDO and WB, the format and contents of which are agreed with PEDO and WB. The reports shall include monthly photographs (referenced and dated) comprising overview and focal photograph of all key issues. The format of report will include the records of supervision and monitoring of ESMP, RAP, GAP and SDP implementation, and other aspects of environment and social management.
- The main reports shall include (i) monthly progress reports to be submitted not later than the 5th day after the end of the month; (ii) detailed quarterly/six-monthly reports; (iii) a detailed completion report of RAP and ESPM implementation;
- The social staff will oversee implementation and conduct internal supervision and monitoring of environment and social safeguard instruments (ESMP, RAP and GRM) throughout project

²⁴ A separate consultant or a non-governmental organization (NGO) can also be engaged for this purpose.

operation and ensure the quality of services provided by PMO in the implementation of ESMP and RAP and validate the monthly and detailed quarterly/bi-annual reports on environment and safeguards;

- Ensure that social staff hired by the Contractor and other implementing parties are having relevant qualification and experience. The ES staff of the contractor will work in collaboration and other implementing parties with ES staff of PIC throughout the implementation of ESMP and RAP;
- Assist the PMO social staff in conducting capacity building activities on social safeguards for the PEDO, PMO, contractors and other implementing agencies staff as necessary; and
- Supervise the work of the contractors in the field for the compliance with RAP.

PMO will prepare monthly progress reports to be submitted to WB, social staff of PIC will review, validate, and ensure quality of these reports and compile them into quarterly progress reports to submit to WB for review and clearance. The social staff of PIC will also provide support to PMO in the preparation of a compensation and R&R payment completion report(s), prior to the start of civil works, to indicate the clearance of that sections/sub components, where civil works could not commence before full payment of compensation and R&R assistance to APs. The report(s) will be validated by TPMA.

10.9 LAR Coordination Committee

A LAR Coordination Committee (LCC) will be formed at the district/local level before start of Project implementation. The key members of the LCC will be the following:

- District Collector as Chairperson
- Project Director MHPP as Co-chair
- Land Acquisition Collector
- Assistant Director LAR
- Representatives of relevant District Departments (members)
- Representatives of APC Members
- Community Liaison Officer (a male and a female)
- Representatives of parties involve in project implementation (on call)

The purpose of LCC is: (i) to serve a due diligence function on land acquisition and resettlement; (ii) to facilitate and coordinate the on-going land acquisition and resettlement activities as per the approved RAP; (iii) coordinate disbursement of compensation and R&R assistance; and (iv) to solve LAR related issues. It will encourage local participation; ensure transparency and accountability by effective and efficient implementation of the RAP. It will also ensure payments to the PAPs according to the RAP entitlements and schedule provided in the RAP, and safeguards the rights of the severely affected and vulnerable APs. It will review progress of the land acquisition and compensation and R&R payments process of the Project, seek reports from LAC and PD on compensation and R&R disbursement, take cognizance of delays and anomalies in the process, suggest remedial measures and, if necessary, bring them to the notice of the PMO head, senior management of PEDO, KP Board of Revenue as appropriate. The on-call members of LCC include representatives of district and tehsil level relevant departments, the representatives of PAPs from respective APCs, and any other stakeholders such as public representative, community leaders etc. The LCC will meet fortnightly and approve weekly schedules for the payments of compensation and R&R assistance as per provisions made in the Entitlement Matrix of RAP. The LAR Coordination Committee will act as local level GRC, the details of LCC roles and responsibilities as local level GRC are provided in Chapter 8.

10.10 World Bank

The World Bank, being the financier of the Program, besides supervising the activities periodically, will review the internal and external/third party monitors' compliance reports.

10.11 Third Party Monitoring Agency

PEDO will appoint a third-party monitoring agency (TPMA). TPM will be executed by an individual expert or a firm. The TPM monitoring will cover all aspects of RAP implementation.

10.12 Capacity Enhancement

The environment and social staff of PMO, technical staff of PMO, PIC, PEDO relevant staff, contractor(s), sub-contractors, service providers, and relevant staff from other concerned departments will require capacity enhancement particularly in relation to social safeguards management in both resettlement and post-resettlement phases. The training program will help in enhancing their capabilities to better implement RAP, GAP and social aspects of ESMP, and enhance awareness and sensitivity of social and environment aspects of the projects.

The key objective of training program is an effective environmental and social management of the project including GRM. The main objective of the training is to ensure that the requirements of WB Policy and RAP are clearly understood and followed throughout the project implementation. The project works will be started after approval of the Project by BOD of WB, and engagement of PIC. The social staff of PMO and other parties involve in project implementation will be engaged to deal with the social, resettlement and gender issues. The training will help them to better understand and deal with these issues. A training/capacity enhancement program is planned for the project functionaries, which will be expanded as per requirements. The training program will consist of formal training workshops, share experience visits, a number of short mentoring sessions, and on-the-job training of the relevant staff, as and when required. A minimum of seven training workshops will be organized and several short mentoring sessions, details are given in Table 10.1.

Table 10-1: Training Program for Capacity Enhancement

Sr.#	Participants	Training Imparting Agency / Person	Topics	Duration
1.	PEDO Project Management, PMO technical staff and social staff; Contractor, sub-contractors and service providers or relevant staff of any other project entities	Chief Social, Development & Resettlement, and Gender Specialists of PIC	<ul style="list-style-type: none"> ▪ Introduction to WB Policy OP 4.12; ▪ Brief on gaps between LAA and WB Policy, and measures to bridge the Gaps; ▪ Brief on process of LAR planning and administration; ▪ Introduction to RAP, GAP and ESMP, their importance and step-by-step process for identification of impacts and mitigation measures, RAP, GAP, ESMP preparation, implementation, and monitoring requirements; ▪ Incorporation of ES safeguards and gender into project design and construction works contracts by following RAP developed for the Project; ▪ Social sensitivities, human and gender aspects of the Project; ▪ Implementation of LRIP; ▪ Development and implementation of Social Development Plan; ▪ Consultation, participation and disclosure; ▪ Entitlements and compensation/R&R assistance; ▪ Institutional arrangements; ▪ GRM importance and processes; ▪ Monitoring and evaluation of RAP; and ▪ Budget and Financing for RAP implementation. 	Two courses, each of 2 days duration, (one prior to the start of the Project and the other just before start of civil works)
2.	Selected site personnel including project, contractor's and service	Chief Social, Development & Resettlement and Gender Specialists of PIC	<ul style="list-style-type: none"> ▪ Introduction to WB Policy; ▪ Introduction to the RAP, its importance and implementation; ▪ Social and gender sensitivities of the project; 	Prior to start of construction 2 days

Sr.#	Participants	Training Imparting Agency / Person	Topics	Duration
	providers staff		<ul style="list-style-type: none"> ▪ Consultation, participation and information dissemination; ▪ GRM importance and processes; and ▪ Dealing with Aps and communities and general public regarding social, gender and resettlement issues 	One day
			<ul style="list-style-type: none"> ▪ Importance, requirements and techniques of Social Monitoring and Reporting. 	One day
			<ul style="list-style-type: none"> ▪ Awareness of transmissible diseases; and ▪ Social and cultural values and sensitivity (including gender as well as sexual exploitation and abuse (SEA) and sexual harassment (SH) issues). 	One day
3.	Relevant staff of PEDO, PMO, contractors Survey and other technical Staff	Chief Social, Development & Resettlement and Gender Specialists of PIC	<ul style="list-style-type: none"> ▪ Explanation of social parameters to be considered while carrying out surveys or interaction with PAPs of the project. 	One day
4	Drivers,	Traffic Police relevant staff of contractors, sub-contractors and service providers	<ul style="list-style-type: none"> ▪ Road Safety, Defensive Driving, Waste Disposal, Cultural Values and Social Sensitivity. 	One day (2 hours session to be held after every 3 months)
4.	PMO staff, PIC, Contractors' staff	Chief SDRE and Gender Specialists of PIC	<ul style="list-style-type: none"> ▪ Issues and Challenges in RAP, GAP, LRIP, and SDP implementation; and ▪ Review and Revision/Development of Corrective Action Plans. 	1 day every month throughout project cycle
5.				
6	PMO staff, PIC, Contractors' staff	Social and Gender Specialist of PIC	Sharing Experiences and Best Practices Followed	Semi-annual

10.13 Social Impact Mitigation

The social impact mitigation activities during design, pre-construction and construction will be implemented by the contractor(s) and sub-contractors; Table 10.2 shows detail of such activities and responsibilities. RAP related clauses shall be included in the tender and contract documents for civil works and provision of services. The Contractors’ conformity with social mitigation measures and procedures shall be regularly supervised and monitored by PIC, and results shall be reported in the monthly and quarterly/bi-annual progress and monitoring reports to be submitted to PEDO and WB.

Table 10-2 : Responsibilities for RAP Implementation and Social Mitigation

Agency	Responsibilities
PEDO	<p>EA with overall responsibility for project construction and operation and will be responsible for:</p> <ul style="list-style-type: none"> • Ensure that sufficient funds are available to timely implement RAP; • Ensure that the Project, regardless of financing source, complies with the provisions of RAP and WB Policy; • Ensure the PIC retained social, resettlement and gender staff for the duration of the project construction and until the completion of RAP implementation; • Ensure that all design mitigation and monitoring measures as specified in RAP are incorporated in the contractor(s) agreements; • Ensure that Project implementation complies with WB OPs, and relevant government laws and regulations, as applicable; • For project duration ensure that the PIC and contractors commit and retain sufficient dedicated staff as to accomplish the RAP implementation effectively; • Ensure that social mitigation measures in RAP are incorporated in the detailed design of the Project; • Obtain necessary certification of payment of compensation, resettlement and rehabilitation assistance as defined in RAP, prior to mobilization of contractor for civil works at components with LAR impacts; • Confirm that RAP included in the bidding and contract documents of the contractor(s), sub-contractors and service providers; • Establish and implement a grievance redress mechanism, as described in RAP, to receive and facilitate resolution of APs’ concerns, complaints, and grievances about the RAP implementation and project’s social performance; • Undertake regular supervision and periodic monitoring of the implementation of RAP (mitigation and monitoring measures) with assistance from ESU staff of PIC; and <p>Submit monthly and detailed quarterly monitoring reports on RAP implementation to WB with the assistance of ESU of PIC</p>
PIC	<ul style="list-style-type: none"> • Support PEDO to implement project in line with WB Policies; • For project duration, commit and retain social, resettlement and gender specialists to assist in implementing RAP. The PIC shall: <ul style="list-style-type: none"> (i) Ensure disclosure of RAP including GRM; (ii) Conduct consultations and support PEDO in making payments of compensation and R&R assistance before start of civil works on sites with LAR impacts;

Agency	Responsibilities
	<p>(iii) Ensure proper and timely implementation of tasks specified in the RAP;</p> <p>(iv) Assist in conducting training on social safeguards and gender mainstreaming as specified in the RAP for relevant staff of PEDO, PMO, contractor, sub-contractors, service providers and other interested/relevant parties as necessary;</p> <p>(v) Conduct contractor workers' orientation on provisions in RAP before start of civil works;</p> <p>(vi) Undertake regular supervision and periodic monitoring of the contractor's social performance, as scheduled in RAP;</p> <p>(vii) Conduct field observations on the implementation of all mitigation measures, specified in RAP;</p> <p>(viii) Assist the contractor(s) to prepare monthly progress reports, as specified in the RAP, for submission to PEDO for review and subsequent submission to WB; and</p> <p>(ix) Assist in preparation of quarterly RAP implementation monitoring reports for PEDO, as specified in the RAP, for submission to the WB</p> <ul style="list-style-type: none"> • During detailed design phase, ensure PEDO prepare bid documents with inclusion of social safeguard management including social issues related to utilities re-provisioning, waste management and spoils disposal, noise and dust control as described in RAP and ESIA; • Assist PEDO to ensure that all RAP requirements are incorporated in the bidding and contract documents and drawn to the attention of bidders, especially at the pre-bid meeting by PEDO; • When detailed design is confirmed, on behalf of PEDO (project proponent) update RAP and obtain approval from PEDO and clearance from WB; • If after the detailed design, the footprint or alignment of the project changes and envisage to cause additional adverse social impacts that are not within the scope of RAP that was prepared during loan processing, conduct additional social impact assessment and prepare addendum(s) to RAP or update RAP, get it approved from PEDO and subsequent submission to WB for clearance. And disclose and implement it prior to construction works at the sites/sections with LAR impacts; • Undertake awareness training and capacity enhancement activities for PEDO, Contractor, Sub-contractors and service providers for effective implementation of RAP including LRIP as described in this RAP; • Submit monthly RAP implementation status reports to PEDO and WB; • Play an effective role in implementing grievance redress mechanism, as described in the RAP, to receive and facilitate resolution of PAPs concerns, complaints, and grievances about the RAP implementation and Project's social performance; • Report to WB on all aspects of RAP management through quarterly monitoring reports, based on the results of supervision and monitoring of RAP implementation; • Based on the results of RAP supervision and monitoring, identify corrective actions and prepare corrective action plans, as necessary, for submission to PEDO and WB; and • Ensure contractor, sub-contractors and service providers implement all social measures as specified in RAP and their contracts. • Provide guidance and assistance to the affected families in effectively utilizing the cash compensation. This guidance should emphasize the importance of productive use of compensation money to purchase land and construct their houses and retore/improve their

Agency	Responsibilities
	livelihoods. 25 <ul style="list-style-type: none"> • Establish a system for regular monitoring and oversight of the above process, potential gender disparities, as well as gender-based violence (GBV)/ sexual harassment (SH) and other similar issues.
Contractor	The RAP, with all its provisions will be a part of the contractors’ contract documents. No civil work will be initiated until all compensations and R&R payments are made to PAPs as per provision in RAP. The contractor must possess the expertise in the application of national legislation, provincial laws and regulations and WB Policy relating to land acquisition, resettlement, protecting child and gender rights, occupational health and safety issues. Following clauses will be included in the contract documents for social mitigation: <ul style="list-style-type: none"> • The contractor must possess knowledge of the WB OPs, especially with regard to R&R of APs, public consultations; timely information dissemination and grievance redress mechanism; • (ii) The contractor, as a first priority, will make efforts to offer the available skilled and unskilled jobs to the identified affected households and particularly to the vulnerable and severally affected AHHs. For this purpose, details will be provided to the APs; • (iii) The contractor will comply with all applicable provincial labor laws and regulations, and international Core Labor Standards (CLS) of ILO; • (iv) The contractor will not differentiate between men and women wages and benefits for work of equal nature; • (v) The contractor will not employ child labor; and • (vi) The contractor will disseminate information and raise awareness at work sites on the risks of GBV and transferable diseases, i.e., HIV/AIDS, TB, dengue fever and COVID-19 for those employed during construction.

To facilitate RAP implementation, during construction the contractors, sub-contractors and service providers must cooperate with the social staff of PIC, PAPs and local population in avoiding, minimizing and mitigation social and resettlement impacts. However, experience suggests that contractors may have little impetus or interest in dealing with social issues in the absence of performance-related criteria. Clearances for payments will include certification from the Director Social Safeguards and Director Environment Safeguards of PMO as for the effective implementation of the mitigation measures of social and environment safeguard issues as specified in the RAP and subsequent documents. The completion of implementation of mitigation measures will therefore be linked to payment milestones.

10.14 RAP Implementation

PEDO will be overall responsible for implementation of the RAP through social, resettlement and gender staff with other relevant staff of PMO, LAC and social and resettlement Staff under PIC (the consultants). After the approval of RAP by PEDO and its compliance review and clearance by WB, the PMO will disclose it publicly as well as the WB on its website and other means of communication. After disclosure and approval of the Program by World Bank, the PEDO will initiate the RAP implementation process. A timeline showing implementation steps, required actions and responsible persons for RAP implementation and post implementation scenario has been prepared and presented later in the chapter.

10.14.1 Procedures for Disbursement of Payments

A step-by-step procedure has been established for disbursement of compensation and R&R assistance amount/cheque to the PAPs, detail is as under:

a) Verification of PAPs

Verification of PAPs will be made through their National Identity Cards (NIC) numbers. It is important to mention that a few PAPs do not have updated cards. Such PAPs will also be eligible to receive resettlement and rehabilitation assistance. These PAPs will provide an affidavit with a photograph duly attested/signed by the two

²⁵ A separate consultant or a non-governmental organization (NGO) can also be engaged for this purpose.

of APC members and identification of such PAPs will also be verified by minimum two members of respective APC. The Social Resettlement Specialist (SRS) of PIC will be responsible for verification process. All PAPs must bring their original NIC and a copy of it at the time of receiving cheque. In the case of married couples/households, the compensation will be paid to the one who owns the assets. This is usually the man but if these assets are jointly owned by couple, then the amount is paid to both the parties.

b) Timing of Payment of Compensation, R&R Assistance

The payment of compensation to titleholder and registered non-titleholders of affected land will be made by LAC as per procedures laid down in LAA and rules, but the payment of resettlement and rehabilitation assistance will be made by minimum three months in advance through cross cheques before start of civil works for which a schedule will be issued separately for each category of APs. No land will be possessed by PEDO or handed over to the contractor for commencement of construction works without full payment of due compensations and R&R assistance to the PAPs except extraordinary cases. However, in case of delays from the PAPs side, the assessed/allocated amount of compensation and R&R assistance will be pledged in the names of the concerned APs, in the LAC on account for land related compensation and in the Project account for R&R assistance. In such cases, PEDO will document detail of each case and may possess land before payment of compensation and R&R assistance, and will follow the decision of GRC, in consultation with APCs as per defined procedures in RAP.

c) Vacation of Site

PAPs will be given advance written notices of the date, time, and place of payments in their own villages through APCs and public announcements through village information centers. The payments of compensation against land and other fixed assets will be made by LAC as per provisions in the LAA and by the cheques of the resettlement and rehabilitation assistance will be signed by the Project Director. All payments will be made through cross cheques. The AHHs (title/non-titleholders) of agriculture land and residents of housing units will be provided three months advance notices in writing, dissemination of information in village information centers and face-to-face meetings with PAPs before handing over possession of land to the contractor, to facilitate the relocation of residents of houses after receiving compensation and R&R assistance. If a PAP does not vacate the land or structure after getting payment of compensation and/or R&R assistance after a period of one month, the SRS of PMO will apply to the GRC. GRC will decide action on case-to-case basis in coordination with APCs.

d) Cases of Disputes/Grievances Regarding Payments

In case of a dispute, the allocated amount of compensation and R&R assistance will be pledged in the names of the concerned PAPs, pending until a final decision by GRC. In such exceptional cases, the PEDO may possess the land without payment of compensation and resettlement assistance. Grievances or objections (if any) will be redressed as per procedures laid down in the grievance redress mechanism. However, PEDO reserves the right for removal of crops, trees and structures in case of disputes, in consultation and coordination with APCs and district government representatives.

e) Absentee PAPs

If any PAPs could not be traced during the Project implementation stage, the PMO will make all possible efforts to contact him/her, if not possible then PEDO will issue three consecutive official notices at local level in the all three villages and a public notice in local newspaper informing the PAPs to contact the PMO for payment. Non-resident PAPs may receive the compensation after the notified schedules of payments by providing a proof of his/her absence. They will be eligible to receive R&R assistance before completion of the project and compensation of land and situated assets as per procedures laid down in LAA and rules. PMO must deposit the money in the LAC account for land related compensation and in the account of the Project for R&R assistance, as applicable.

f) Release of Funds for Compensation Payments and R&R Assistance

The compensation payments will be made as per implementation schedule provided in RAP. In Kalam area, people tend to migrate to the other areas during winter months, but as far as Madyan area is concerned, no such migration trend is found here, as revealed during the consultations with the AHHs and local communities. So, the weather will not be a constraint in the distribution of compensation process.

PEDO is responsible for timely provision of finances for RAP implementation, for the compensation, and R&R assistance and PMO will be responsible for administration. Allocations will be reviewed on monthly and quarterly basis, based on the budgetary requirements to be indicated in the updated RAP. As mentioned earlier, the compensation funds will go from the PEDO to designated account of the LAC and will be disbursed by the LAC on behalf of District Collector/Deputy Commissioner (DC) Office to PAPs. But the funds of

R&R assistance will go from PEDO to PMO for direct disbursement to PAPs. However, it would be admissible for LAC or DC to disburse the R&R assistance amounts to PAPs, in consultation and coordination with PEDO/PMO.

g) Facilitation to Women in Payments

PMO through SRS and female staff of PIC will organize women specific meetings to ensure that women are equally consulted and have participated in the implementation of RAP with timely access to payments of compensation and R&R assistance. If women will face any problems in getting compensation and resettlement assistance, male and female APCs will facilitate the PMO to resolve the problems.

h) RAP Implementation Schedule

The Project works will be implemented over a period of 05 years. This includes first year as pre-implementation period and four (4) years for construction. The detailed engineering design works have commenced from Q 1, 2023. The pre-construction period is expected to be 12 months for preparing detailed design, cost estimates, BOQs, drawings specifications and bidding documents for contracts Award. The work will be executed/ completed under the project PIC. The information of construction schedule will be shared with the AHHs and general public including installation of signage in the Project area.

In case of any changes to the scope, technical design, construction or operation of the project and associated infrastructure at the stage of Project implementation or operations, which would result in additional environment and social impacts, PEDO will carry out E&S assessments and stakeholder engagement activities to prepare E&S documents to enhance positive and mitigate adverse impacts in accordance with WB OP. The E&S documents will be approved by PEDO/GoKP and will be submitted to WB for compliance review and clearance, and will be disclosed in the manner provided in WB OP and RAP. During Project implementation and operation, the information about ES updates will be regularly disclosed to the PAPs and other key stakeholders.

A composite tentative implementation schedule has been prepared for tasks such as RAP disclosure, pre-implementation, and implementation activities, in accordance with timeline matching with the tentative timeline of land acquisition and civil works schedule and presented in Table 11-3. The proposed schedule will be revised at the stage of updating the RAP. However, the schedule is subject to modification depending on progress of land acquisition process, the detailed design, the civil works schedule, and other project activities. The LRIP activities will be implemented during the construction phase. The proposed activities in RAP are divided into two broad categories based on the stages of work and process of implementation (i) Pre-implementation phase (ii) RAP implementation phase.

i) Preparatory / Pre-Implementation Stage

The major tasks during the preparatory stage are setting up relevant institutional arrangements for the resettlement activities, recruitment of SRS of PMO and PIC. RAP at this stage will be updated for approval by PEDO, if required, and cleared by WB, and disclosed to the PAPs through distribution of information brochure in Urdu and translation of RAP in Urdu. The translation will also include the Cut-off-Date. Upon the clearance of RAP, all the arrangements for disbursement of compensation and R&R assistance need to be done.

j) RAP Implementation Stage

At this stage, the payment of compensation and R&R assistance will be made and relocation of PAPs of affected houses will be done; LRIP activities will be initiated; and at the completion of RAP implementation, delivery of proposed land to the Contractor for commencement of the civil works.

During RAP implementation, management of unforeseen social safeguard issues, consultation and participation, disbursement of compensation and R&R assistance and effectiveness of GRM will be the activities to be monitored at this stage. Internal monitoring will be the responsibility of PMO in general and SRS under PIC in particular starting from early stage of RAP implementation and will continue till the completion of RAP implementation and the Project, as per WB requirements. SRS of PIC will assist PEDO in internal monitoring function and compiling the internal monitoring/progress reports.

Table 10-3 : Proposed Timeline for Update, Approval, and Implementation of RAP

Steps	Tasks	Responsibility	Quarters																							
			Year				Y-1				Y-2				Y-3				Y-4				Y-5			
			Quarter				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Pre-Implementation Stage																										
	Recruitment of SRS	PEDO PMO																								
	Updating of RAP after detailed engineering design, if required	PIC																								
	Consultations (on-going)	SRS of PMO, PIC																								
	Disclosure of RAP on PEDO and WB websites	PMO, PEDO																								
	Disclosure of final RAP both in English and Urdu at the websites of PEDO and WB	PMO/PEDO, WB																								
	Urdu translation of RAP and disclosure to PAPs	SRS of PMO and PIC																								
	Distribution of Information leaflet in Urdu to the PAPs and other stakeholders	PMO with the assistance of PIC																								
	Training of PMO and relevant staff of other implementing parties	SRS of PIC																								
RAP Implementation Phase																										
	Development of micro plan(s) for RAP compensation and resettlement assistance disbursement	SRS of PMO																								
	Three-month advance notices to the titleholder and tenants of agriculture land, and PAPs of housing units before handing over of land for civil works	SRS of PMO and PIC																								
Compensation Income Restoration and Rehabilitation of Aps																										

Steps	Tasks	Responsibility	Quarters																	
	Notices for receiving assistance to all PAPs and through face-to-face meetings	SRS of PMO and PIC																		
	Award of cheques and distribution of final notices for relocation/shifting of concerned APs	SRS of PMO																		
	Implementation of Livelihood Restoration Plan (on going)	SRS of PMO and NGO																		
	Implementation of Social Development Plan (on going)																			
	Reporting summary of complaints & grievances/disputes and objections in progress reports (on going)	SRS of PMO																		
Internal and External Monitoring																				
	Monthly Internal Monitoring (on-going) and six-monthly TPM Monitoring Reports to WB	PIC																		
Post Implementation Stage																				
	Third Party Monitoring: Quarterly reporting to PEDO and 6-monthly reporting to WB	TPM Consultant																		
	Evaluation of the RAP implementation	TPM																		
	Submission of RAP evaluation report to WB and clearance by WB	PEDO																		

11 RESETTLEMENT BUDGET AND FINANCING

All LAR preparation and implementation costs, including cost of compensation and LAR administration, have been considered an integral part of Project cost. The work out of resettlement budget for MHPP is detailed as follows.

11.1 Valuation of Project Losses

11.1.1 Compensation for Affected Land

The sale and purchase data from the revenue office for the last year was collected. However, there was a vast gap between the land office data and the negotiated land prices agreed with the land owners for the GKHP. To be on the realistic side, the affected land has been valued at replacement cost by applying a per unit land price that was applied for valuation of land in the Gabral Kalam HPP land compensation. The unit rate for different land categories has been raised by applying a 30% escalation factor to meet any eventual increases in land price as a result of negotiations between the Land Price Assessment Committee and the AHs. The rates for GKHP are based on negotiations between the government representatives and the affected people. The total compensation for affected land works out to be PKR 5,169,866, 780 as per unit rates provided in Table 11-1. The details are provided in Annex-7.

Table 11-1 : Compensation for Affected Land

S. No.	Village Name	Rate (PKR /Kanal)		
		Agriculture	Barren/River Bed	Residential
1	Gharijo Mouza Rammit	5,629,000	3,003,000	5,629,000
2	Kedam	11,050,000	3,003,000	11,050,000
3	Ponkia Mouza Rammit	5,629,000	3,003,000	5,629,000
4	Darolai	5,629,000	3,003,000	5,629,000
5	Ayeen	5,629,000	3,003,000	5,629,000
6	Kalagay	11,050,000	3,003,000	11,050,000

11.1.2 Compensation for Crops

The compensation for affected crops is based on the crop's income analysis provided in sub-section 5.7 (Income from Crops). The average income per year/ kanal calculates to be PKR 24,701. The income is derived from total crop production reported by the respondents. The compensation for affected crops works out to be PKR 15,799,846. Crop compensation for individual affected families is provided in Annex-8.

11.1.3 Compensation for Affected Trees

The mechanism used in determining tree prices is given as under.

Timber Trees: Different species of timber trees are found in the project affected area. Data with respect to their type, number, age and ownership was collected during the Census Survey. To determine per tree value on the basis of their girth size, discussions with the Divisional Forest Officer (DFO) Madya, the officials of the department and owners of private trees were made. The value of different types of trees based on their girth sizes were obtained from the DFO. The per square foot rate of the trees with girth size 0-24 inch was PKR 2000 and for trees above 24 inches was PKR 4000. The compensation for affected timber trees works out to be PKR 4,202,000.

Fruit Trees: Fruit trees have been compensated based on rates sufficient to cover income replacement for the time needed to re-grow a new tree to the productivity of the one lost. Table 11-2 provides the basis for per tree compensation. The compensation for affected fruit trees works out as PKR 64,125,846.

The overall compensation for affected trees comes to PKR 68,327,846 as provided in Annex-9.

Table 11-2: Unit Rates for Fruit Trees

Type of Tree	No. of Plants	Bearing age of Tree	Average yield /plant (kg)	Farm gate Price/kg (PKR)	Estimated Value of Fruit plants	cost of Nursery Plants (PKR)	Total Value of Fruit plants (PKR)
Apple	1	5	70	100	35000	100	35100
Apricot	1	5	80	50	20000	70	20070
Peaches	1	4	60	40	9600	60	9660
Persimmon	1	6	100	30	18000	70	18070
Black Persimmon	1	6	80	30	14400	70	14470
Pear	1	8	100	30	24000	100	24100
Figs	1	8	50	50	20000	70	20070
Chari	1	6	80	50	24000	70	24070
Walnut	1	9	80	200	144000	80	144080

11.1.4 Compensation for Structures

The compensation rates of various construction types' structures were based on Composite Schedule Rates 2021, District Swat and information obtained from the owners of the affected structures. These were applied to various construction types of affected structures to calculate the compensation. The construction types and their unit rates are provided in Table 11-3. Based on these per unit rates, total compensation for 37 residential structures works out to be PKR 136,766,185. Compensation details for individual AHHs are provided in Annex-10.

Table 11-3 : Structures Types and Their Unit Rates

Structure Type	Material Type	Unit	Unit Rate (PKR)
Katcha	Made of Mud	PKR / Sq. Ft.	1,500
Semi- Pacca	Mud+ Wood/ T. Iron	PKR / Sq. Ft.	2,500
Pacca	Bricks+ Concrete	PKR / Sq. Ft.	3,500

Source: Composite Schedule Rates 2021, Swat District and discussions with the AHHs.

11.1.5 Compensation for Other Affected Assets

The replacement costs of 05 electric poles of 11 kV and 02 poles of 132 kV work out as PKR 8,000,000, as depicted in Table 11-4.

Table 11-4 : Government Owned Infrastructure

Sr. No.	Type of Affected Asset	Ownership	No./ Qty.	Total Costs (PKR)	Source
2	11 kV Electric Poles	PESCO	05	5,000,000	PESCO
3	132 kV Electric Poles	PESCO	2	3,000,000	PESCO

11.2 Resettlement Budget

Based on the compensation for different losses, as provided above, the total amount of LAR budget come to be PKR 9.445 billion (about USD 32.63 million)²⁶ as presented in Table 11-5. The admissibility of compensation package (including allowances) for individual AHHs is provided in Annex-11.

²⁶ 1 USD = PKR 289.47 on 28 September 2023.

Table 11-5 : Resettlement Budget

Description		Quantity	Unit	No. of AHHS	Total Costs (PKR)
A. Compensation for Privately Owned					
1	Land Losses	944.48	Kanal	141	5,169,866,780
2	Crops Losses	639.64	Kanal	103	15,799,846
3	Tree Losses	4391	No.	103	68,327,846
4	Structure Losses	37	No.	37	136,766,185
Total for (A)					5,390,760,657
B. Government Owned Infrastructure					
1	Electric Poles 11 kV	5	No.		5,000,000
2	Electric Poles 132 kV	2	No.		3,000,000
Total for (B)					8,000,000
Total Compensation					5,398,760,657
C. Allowances					
			No. of AHHS	Amount (PKR)	
1	Severe Impact Allow.		138		17,043,690
2	Transitional Allow.		37		23,953,356
3	Self-Relocation Allowance		37		15,968,904
4	Vulnerability Allowance		49		21,569,064
5	Shifting Allow.		37		3,700,000
6	Utility Connections		37		3,700,000
Total for (C)					85,935,014
Sub-Total-A (A+ B+C)					5,484,695,671
D) Training Costs					2,000,000
E) External Monitoring Agency					10,000,000
Sub Total-B (D+E)					12,000,000
Sub Total-C (Sub-Totals A+B)					5,496,695,671
F) Contingencies @ 20% of Sub-Total (C)					1,099,339,134
G) Management Costs @ 15% of Sub-Total (C)					824,504,351
H) LRIP Costs					300,000,000
I) SDP Costs					1,724,354,134
Total Land Acquisition and Resettlement Budget (Sub-Total C+F+G+H+I)					9,444,893,290

The available allocation for SDP is PKR 1,500 million. However, the tentative calculated cost for SDP schemes for MHPP comes to PKR 1,724.354 million. An additional amount of PKR 224.35 million will be needed for the implementation of SDP.

11.3 Source of Financing

Finances for compensation, allowances, and administration of RAP preparation and implementation will be provided by the Government of KP. Being the project owner, PEDO is responsible for the timely arranging of allocation of funds needed to implement RAP. The budget for land, crop and structures as included in the Section-4 of LAA announcement, compensation will be disbursed by PEDO to the District Collector Office which in turn, through LAC will disburse the compensation to PAPs/ or concerned department/ agency. In case of compensation funds for other assets such as severe impact allowance, crop restoration allowance, transitional allowance, etc., will go from PEDO to PMO which will disburse the funds to PAPs with assistance from PIC.

12 MONITORING AND EVALUATION

12.1 Introduction

Monitoring and Evaluation (M&E) is a process that helps to improve performance and establish RAP implementation procedures and achieved results. The goal of Monitoring and Evaluation is to improve current and future management of outputs, outcomes and impact. The Monitoring of RAP implementation helps in timely identification, analysis and removal of the bottlenecks at various stages of project implementation and expediting actions. The monitoring and evaluation of RAP implementation will serve the interests of the project planners, executors, and financier, as they share the common concern for timely corrective measures. Specifically, the objectives of the monitoring and evaluation of RAP implementation are: (i) administrative monitoring whether the time lines of RAP implementation are being met, (ii) to assess whether compensation, resettlement and rehabilitation assistance measures are implemented and are sufficient, (iii) to identify problems or potential problems and ensure that grievances are dealt on a timely basis and consistent with the process defined in RAP, (iv) to identify methods of responding immediately to mitigate hardships/issues, and most importantly, (v) socio-economic monitoring during and after the land acquisition and resettlement process to ensure that PAPs are settled and their standard of living is restored or improved. Monitoring and evaluation (M&E) of RAP implementation will be taken up at all stages of the project. The M&E activities to ensure the effective implementation of RAP are described as follows.

12.2 Monitoring Tasks and Activities

Both internal and external monitoring will be conducted to provide feedback PEDO and to assess the effectiveness of RAP policy and implementation. Internal monitoring will be carried out by PMO through their field offices/ PIC and a monthly report on the progress of RAP implementation will be prepared. The services of an external monitoring consultant are required to carry out the evaluation of the RAP implementation on the progress of resettlement activities covering monitoring activities in three consecutive stages of the process for RP implementation; preparatory stage, relocation stage and rehabilitation stage. The external monitoring consultant would be engaged by PEDO to submit (i) half-yearly resettlement reports (every six months after the beginning of the resettlement processes) and (ii) Resettlement Completion report (submitted within 30 days of the end of resettlement process).

The process of RAP implementation will be monitored through setting up indicators. The important indicators to be monitored will include the contents of the activities and entitlement matrix. RAP contains a set of indicators for achievement of the objectives under the resettlement program. These indicators shall be assessed for the implementation process, outcomes and impacts as applicable.

Table 12-1: Monitoring and Evaluation indicators

Process Indicators	- Consultation and participation programs with various stakeholders on entitlements
	- Grievance mitigation
	- Setting up Environment and Social Unit (ESU)
	- Placement of Project staff
	- Deployment of implementing agencies
	- Training of ESU staff
	- Survey for the identification of PAPs
	- Household Census, Baseline and Socio-Economic Survey
	- Placement of funds for land acquisition
	- Deployment of Individual consultant for external monitoring
Outcome Indicators	- Procedure of determining loss and entitlements
	- Inventory of losses
	- Procedure of allocation of resettlement plots
	- Development of livelihood options and income restoration programs
	- Disclosure and consultation events
	- GRM in-place and functioning
	- Public awareness on RAP policy and provisions
	- Cost of compensation collection by PAPs
- Monitoring reports submission	

	- Number of vulnerable households resettled
	- Number of households compensated and assisted
	- Number of affected persons purchasing replacement agricultural land
Impact Indicators	Amount of compensation disbursed
	- Amount of resettlement benefits disbursed
	- Number of affected persons who purchased replacement agricultural land
	- Number of affected persons who re-established their businesses
	- Number of persons renting land/structures from private owners
	- Average income of affected person
	- Number of affected persons below the poverty line
- Share of affected households satisfied with resettlement process	

12.3 Internal Monitoring

Internal monitoring of all resettlement tasks will be conducted by Social Staff of PMO-PEDO, assisted by the social/resettlement team of PIC. Internal monitoring will include process monitoring and reporting on progress in the activities envisaged in the implementation schedule with particular focus on public consultations, land acquisition, record of grievances and status of complaints, financial disbursements, and level of satisfaction among PAPs. Potential indicators for internal monitoring are briefed in the following Table 12-2.

Table 12-2: Internal Monitoring Indicators

Monitoring Issues	Monitoring Indicators
1. Budget and Timeframe	<ul style="list-style-type: none"> • Have safeguards staff under PMU been appointed and mobilized for field and office work? • Have capacity building and training activities been completed on schedule? • Are resettlement implementation activities being done as per agreed implementation plan? • Are funds for resettlement being transferred to resettlement agencies on time? • Have resettlement offices received the allocated funds? • Have funds been disbursed according to Entitlement Matrix of RAP. • Has all the land made encumbrance free and handed over to the contractor in time for project implementation?
2. Delivery of PAP Entitlements	<ul style="list-style-type: none"> • Have all PAPs received entitlements according to quantity and categories of loss set out in the entitlement matrix? • How many affected households have land titles? • How many affected households are relocated and built their new structures at new location? • Are income and livelihood restoration program activities being implemented as planned? • Have affected businesses received entitled benefits? • Have PAPs losing their land received proper compensation? • Have the squatters, encroachers been displaced due to the project, been compensated? • Have the community structures been compensated and rebuilt at new site?
3. Consultation, Grievances and Special Issues	<ul style="list-style-type: none"> • Have resettlement information brochures/ leaflets been prepared and distributed among the PAPs? • Have consultations taken place as scheduled including meetings, groups, community activities? • Has the GRCs been notified as described in RAP? • Have any PAP used the grievance redress procedures? • What grievances were raised • What were the outcomes? • Have grievances and resolutions been documented? • Have any cases been taken to court? • Have conflicts been resolved?
4. Benefit Monitoring	<ul style="list-style-type: none"> • What changes have occurred in patterns of occupation compared to the pre-project situation? • What changes have occurred in income and expenditure patterns compared to pre-project situation?

Monitoring Issues	Monitoring Indicators
	<ul style="list-style-type: none"> • Have PAPs income kept pace with these changes? • What changes have occurred for vulnerable groups?

12.4 Management Information System (MIS)

PMO with the assistance of social, resettlement and IT staff of PIC will establish a Management Information System (MIS) to collect and organize monitoring outputs on a regular basis. The database generated through the census, baseline socioeconomic survey, land acquisition, resettlement and rehabilitation payments, and consultations/stakeholder engagement activities will become essential inputs of the MIS. It will include specific systems to track the implementation of RAP in accordance with the mechanism set out in RAP. The monitoring data of RAP implementation will be recorded in a database, analyzed and used to generate facts and figures for the monthly monitoring reports, which will be consolidated into quarterly monitoring reports. It will start tracking the progress from the social impact assessment to the implementation completion of RAP, especially payment of compensation, and the resettlement and rehabilitation assistance, relocation and income restoration activities.

12.5 External / Third Party Monitoring

The World Bank policy requires monitoring activities to correspond with the Project's risks and impact. The projects by their nature may cause physical and economic displacement. Therefore, third party/external monitoring will be carried out by a third-party monitoring agency (TPMA). TPM results will be included in the PMO periodic reports. The provision of third-party monitoring and evaluation will be made in RAP/projects budget.

If unanticipated involuntary resettlement impacts are found during the project implementation, the PMO will follow the mechanism set out in RAP for monitoring and reporting of the implementation of safeguards plans; ensure compliance with LAA 1894 and WB OP 4.12 and Disclose monitoring results; and identify necessary corrective and preventive actions if needed.

PMO will hire services of a qualified and experienced Social and Resettlement Specialist or a firm as External Monitor/ TPMA with advice and concurrence of WB on the selection process, to verify monitoring information of project to undertake resettlement monitoring during the RAP implementation and an evaluation after the implementation of RAP. TPM will be carried out on quarterly basis. Prior to mobilization of civil works for project components with LAR impacts, a completion report on payments of compensation and resettlement assistance and clearing of the site will be prepared by PMO which will be verified by the external monitor/ TPMA.

The key responsibilities of third-party monitor will be assessing the status of RAP implementation in the light of the policy, principles, targets, budget and duration and providing inputs to the PMO by developing a corrective action plan with specific actions, responsibilities and timeframe to resolve any outstanding issues/grievances. The key tasks of TPM include:

- Develop specific monitoring indicators for undertaking monitoring and evaluation of RAP implementation including the participation, consultation and disclosure;
- Review results of internal monitoring and verify claims through random checking in the field to assess whether resettlement objectives have met. Involve the all categories of PAPs and their representatives in assessing the impacts of resettlement for monitoring and evaluation purposes;
- Review and verify the progress of RAP implementation and prepare quarterly reports for the PMO and including the implementation of GRM;
- Transparency in disbursement of compensation and R&R assistance;
- Evaluate and assess the adequacy of compensation and resettlement and rehabilitation assistance given in RAP and the livelihood opportunities and incomes as well as the quality of life of PAPs after project-induced changes;
- Evaluate and assess the adequacy and effectiveness of the consultation process with APs, particularly those vulnerable, including the adequacy and effectiveness of grievance procedures and legal redress available to PAPs and other affected parties, and dissemination of information about these;
- Verify RAP implementation completion report prepared by PMO on payments of compensation and resettlement assistance before clearing of the sites with resettlement impacts;
- Sufficiency of resettlement and rehabilitation assistance to cover loss of land, income and other assets;
- To check if PAPs were able to sustain their living standard;
- To check if PAPs were able to restore their sources of income;

- How many semi-skilled, skilled and unskilled labor, and employment opportunities were provided to AHHs in the projects related works;
- Any changes in restoration of income levels;
- How do the AHHs assess the extent to which their own living standards and livelihoods have been restored;
- Communications and reactions from PAPs on entitlements, resettlement and rehabilitation assistance; and
- Grievance procedures; recording of complaints, reporting and processing time, and their redressal.

The results will be communicated by PMO to the PEDO and the WB through the quarterly Program progress reports or as specified in the respective RAP. ToR for employing the Third-Party Monitoring Agency (TPMA) is provided in Annex-12.

12.6 Evaluation/Audit of RAP Implementation and Management

TPMA will also conduct evaluation/audit of RAP implementation after its completion. Evaluation is summing up of an assessment of overall implementation approach and process, of RAP implementation, and their intended objectives and outcomes. An assessment of resettlement objectives and outcomes is measured against baseline conditions. The evaluation exercise assesses resettlement efficacy, effectiveness, impact, and sustainability, drawing lessons to guide future resettlement planning. The evaluation will provide gender disaggregated information and concentrates on following parameters:

- Efficacy of mechanisms and indicators for internal and third-party monitoring;
- Disclosure of monitoring reports as per procedures laid down in RAP;
- Institutional arrangements and effectiveness and efficiency of PMO and PIC roles in RAP Implementation;
- Mechanism used for consultation, participation and disclosure of information to APs;
- Evaluation and assessment of the adequacy and effectiveness of the consultations process with APs, particularly those vulnerable and severely affected, including the adequacy and effectiveness of LRIP, grievance procedures and administrative and legal redress available to the affected parties, and dissemination of information about these;
- Assessment of the resettlement efficiency, effectiveness, impact and sustainability for drawing lessons for future resettlement policy formulation and planning;
- Evaluation of adequacy of compensation given to PAPs and livelihoods and employment opportunities and incomes as well as the quality of life of PAPs due to project-induced changes;
- The impact of compensation, resettlement and rehabilitation assistance, and livelihood restoration and improvement support on standards of living of AHHs, to evaluate whether the objectives of RAP have been achieved and AHHs regained their living standards or improved;
- Evaluation of results of LRIP; and
- Level of satisfaction of PAPs in the post resettlement period.

12.7 Preparation and Disclosure of M & E Reports

PMO-PEDO will prepare monthly progress report (MPR) highlighting progress, issues, constraints, targets for every month. PIC will monitor implementing progress and submit quarterly progress report (QPR) of RAP to the PD. These reports will closely follow the involuntary resettlement monitoring indicators agreed at the time of Resettlement Plan approval. Project Director, responsible for supervision and implementation of the RAP, will review the MRPs and QPRs and prepare annual monitoring reports that describe the progress of the implementation of resettlement activities and any compliance issues and corrective actions, then submit quarterly to WB for comments. The benefit monitoring and evaluation exercise will be included in these reports to ascertain whether various programs have adequately benefited the PAPs.

PMO will submit TPM reports of RAP implementation to the WB for review and posting on the PEDO and WB websites, and promptly disclose to the PAPs and other key stakeholders through localized means of communication with executive summary in Urdu particularly the Information relevant to PAPs interest such as information related to disbursement of compensation of land and related assets and R&R assistance, relocation, livelihood/income restoration, grievances; and corrective actions. These issues are of direct relevance to PAPs, which also have the elements of participatory monitoring. The evaluation report of TPMA will be shared with PEDO and WB, and disclosed to the public. The provision of third-party monitoring and evaluation will be made in RAP/projects budget. The reporting requirements of the resettlement program are summarized in Table 12-3.

Table 12-3: Reporting Arrangements and Requirements

Type of Report	Content	Frequency	Responsibility
Monthly Progress Report	Progress on land acquisition and resettlement activities, progress on indicators, results, issues affecting performance, constraints, variation from RP (if any) and reason for the same and corrections recommended.	Monthly	Contractor/ PMO
Half Yearly Resettlement Monitoring Report	Progress on land acquisition and resettlement activities, indicators, and variations if any with explanation and outcome, recommended corrective actions.	Bi-Annual	Contractor/ PMO
External Monitoring Report	Progress on land acquisition and resettlement activities, indicators, variations if any with explanation and outcome, affected person's satisfaction with process, compliance with WB-OP 4.12, corrective actions recommended	Bi-Annual	External Monitoring Team Engaged by PEDO
Resettlement Completion Report	Overall narrative of the land acquisition and resettlement process, outputs and outcomes of indicators from baseline, key variations/changes, lessons learned.	Once	PMO
Resettlement Evaluation Report	Overall assessment of the land acquisition and resettlement process, compliance with WB-OP 4.12, indicators achievement when compared to baseline, lessons learned.	Once	External Monitoring Team Engaged by PEDO

Annexures

Annex-1: Terms of Reference for Third Party Monitoring Firm

Terms of Reference for Third Party Monitoring Firm

External Monitor expert is required to verify and assess the monitoring information relevant to the implementation of this RAP of MHPP. The external expert will (i) verify the internal monitoring undertaken by PMO; (ii) conduct site visits, (iii) conduct meeting with relevant stakeholders district and provincial authorities involved in land acquisition and review implementation of resettlement activities semi-annually; (iv) review records of compensation payments, verify provision of entitlements to affected people and assess the significance of identified measures in restoring or enhancing PAP's quality of life or livelihood; (v) advise PMO on safeguard compliance issue that arise in connection with the Project and agree on timeline in the conduct of agreed activity; (v) in the event of non-compliance, report to WB any non-compliance identified and recommend corrective actions to be incorporated in the corrective action plan to be prepared by the PMO.

Scope of Work

- To prepare a monitoring and evaluation plan, for review and approval by the PMO and WB. The plan should clearly define the activities and deliverables per reporting, schedule and highlight the scope and strategy of monitoring system, key indicators and methodology in the collection and analysis of data;
- Validate the internal monitoring and reporting of PMO. The external monitor is expected to review the adequacy of PMO's internal monitoring and reporting procedure, including the number and qualification of company staff engaged in implementing the RAP at different stages, determine adequacy and integrity of the process, recommend corrective actions and agree on the schedule of implementation of these corrective actions, if necessary;
- Validate the adequacy of public consultation and disclosure of information as designed and described in the RAP. Where necessary, the External Monitor should advise PMO if additional public consultation and disclosure of information need to be undertaken. The External Monitor should validate on ground that appropriate consultations and information disclosure took place;
- Assess the extent to which the entitlement matrix, list of displaced/APs or households (authorized representative of affected households), and specific entitlements such as compensation amount and procedure, are followed including timeliness of payment. The Monitor must closely look into the veracity/correctness of available proof of compensation such as receipt or any other document stating acceptance of compensation by the representative of APs/households;
- Assess the adequacy of income restoration strategy and evaluate the matching of specific livelihood development activities against the needs of the intended recipients/beneficiaries. The External Monitor should document the implementation of each activity and determine effectiveness to affected people including women and vulnerable groups;
- Assess the adequacy of institutional arrangements, specifically the capacity of PMO, the local authorities involved in the land acquisition and resettlement process and other
- Organizations expected to implement the RAP to ensure that the objectives of the RAP and the OP 4.12 are achieved, and suggest necessary enhancement measures, if necessary;
- Validate the adequacy of the GRM and suggest necessary enhancement measures, subject to further public consultations and disclosure, if necessary. Verify on ground the level of awareness of the community within the project impact area on the existing GRM, common issues raised, resolution of each registered case and level of satisfaction of community on the GRM;
- Conduct an interim audit of land acquisition and compensation and resettlement activities for people affected by the Project. As part of the audit, the following will be conducted:

- Socio-economic survey will be undertaken to gather information on the PAP's land area, land use including farm and livelihood activities, yield and income derived from the affected land, and PAPs sources of incomes, etc. prior to the Project taking possession of the land;
- Audit of status of compensation payments, use of funds received by the affected people and current socio-economic living conditions;
- Audit of project impacts on women as well as their needs and concerns and identify any additional potential assistance for women in affected villages;
- An assessment of whether compensation at replacement cost has been paid, whether the livelihoods and standard of living of the PAPs have been restored and whether all activities implemented are in line with WB's policy requirements;
- Based on the findings of the audit, the external monitor will prepare a Corrective Action Plan with estimated budget, timeline and implementation arrangements;
- When unanticipated involuntary resettlement impacts are found during RAP implementation, the External Monitor should assess and advise PMO the need to conduct additional social impact assessment and/or updating of RAP, and ensure all existing applicable requirements, entitlements and provisions are followed;
- Document and highlight major problems/issues encountered and lessons learned;
- Where necessary, participate in discussion with PMO and among various Project lenders (Such as WB) and its consultants;
- The External Monitor will conduct semi-annual site visits, interview affected people and conduct consultations;
- Immediately after completion of RAP implementation, the External Monitor will undertake a RAP Completion Audit covering all APs. The audit will also be supported by findings of the socio-economic survey which will include data on livelihoods and income levels of affected people that would help to determine whether affected households have been able to restore or improve their socio-economic status compared to the pre-Project level;
- In the event that the RAP Completion Audit finds that the objectives of the RAP and the OP 4.12 have not been met, the External Monitor will continue with the quarterly site visits during the duration of the implementation of the Corrective Action Plan; and
- Within 2 years following the completion of RAP implementation (or Corrective Action Plan in case Audit findings show non-compliance), conduct annual site visits to monitor whether affected people have maintained or improved their socio-economic status.

Deliverables

The External Monitor will deliver the following reports:

- ✓ A Monitoring and Evaluation Plan, within one month after appointment
- ✓ Interim Audit Report, within 3 months after completion of land acquisition compensation payments
- ✓ External monitoring reports
- ✓ In the event that a Corrective Action Plan is prepared following the audit, prepare a close out report upon completion of CAP implementation.
- ✓ Following completion of RAP/CAP implementation, prepare annual monitoring reports hereafter.

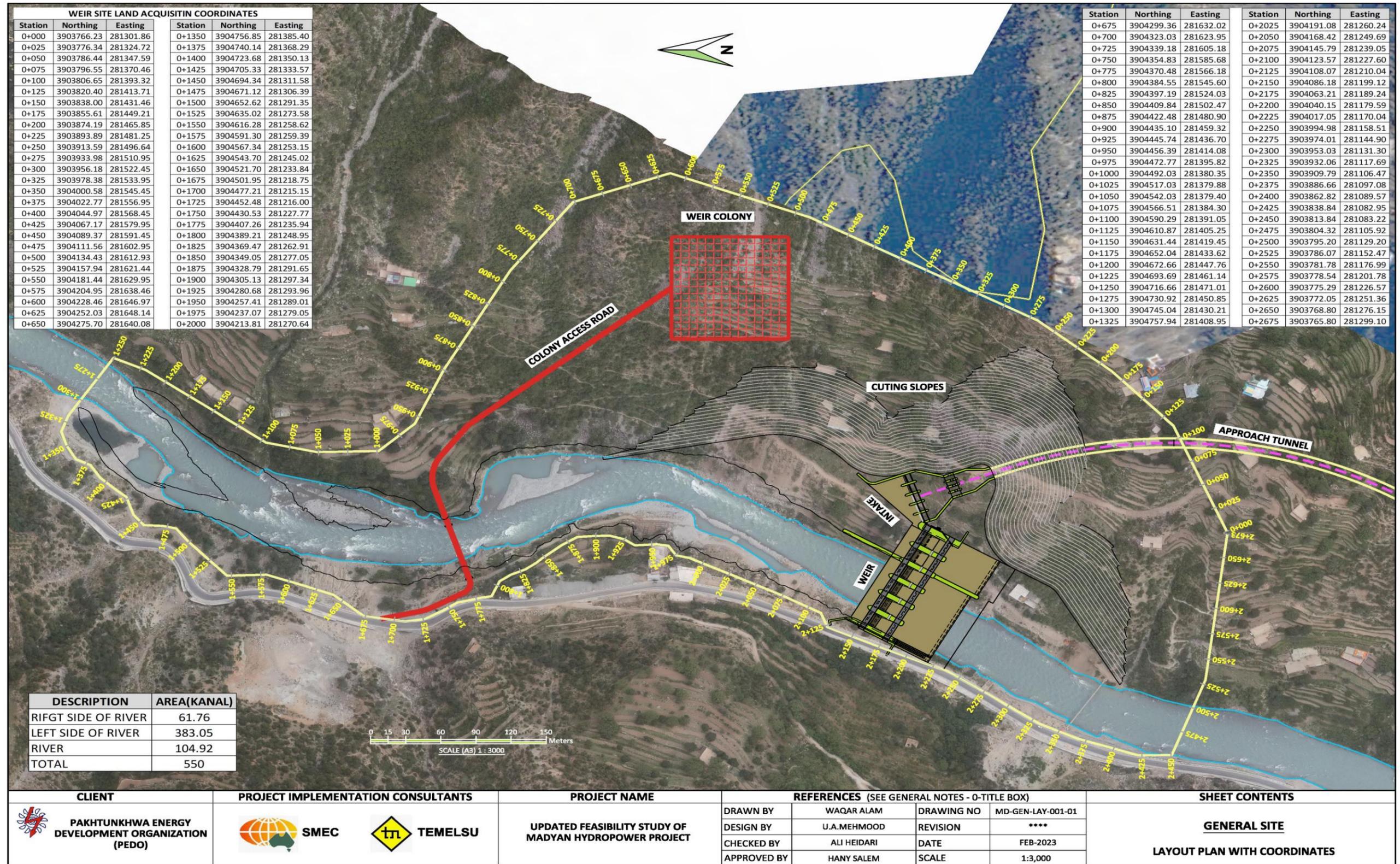
External monitoring reports and all other reports will be submitted simultaneously to PMO and WB. An evaluation report at the end of the project will be prepared with critical analysis of the achievements of the program and performance of the project as well as PMO.

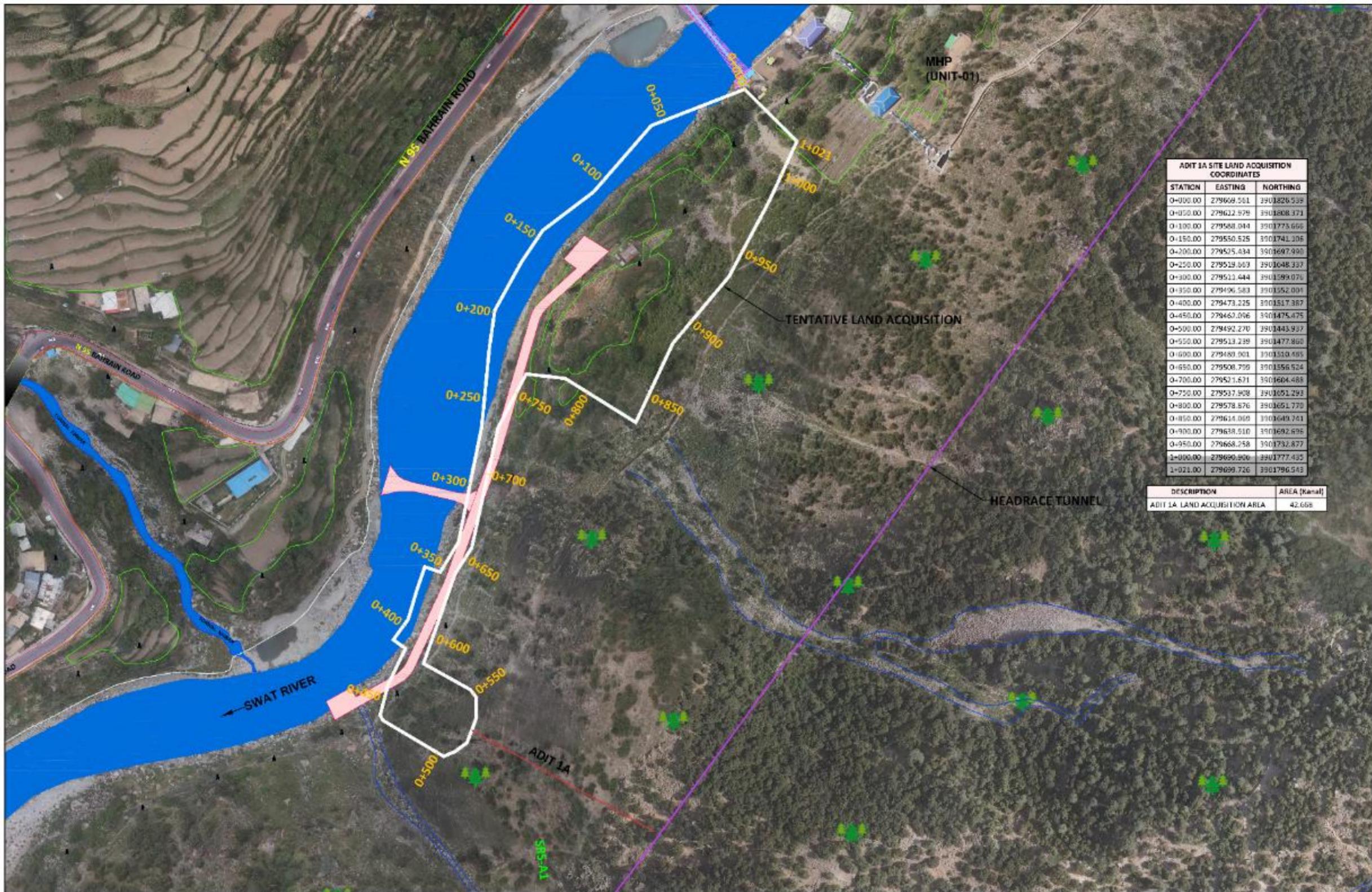
Qualification and Experience of Consultant

The Consultant will have sufficient technical capacity to provide the above services and the specialists will have a Master degree in social science or relevant field and a minimum of 10 years' experience in dealing with social/community development projects and demonstrated experience in the resettlement monitoring requirements, as per involuntary resettlement/land acquisition, WB's involuntary resettlement operational policy, Pakistan's Land Acquisition Act of 1894, etc.

Appendices

Appendix-1: Land Acquisition Details - Maydan HPP





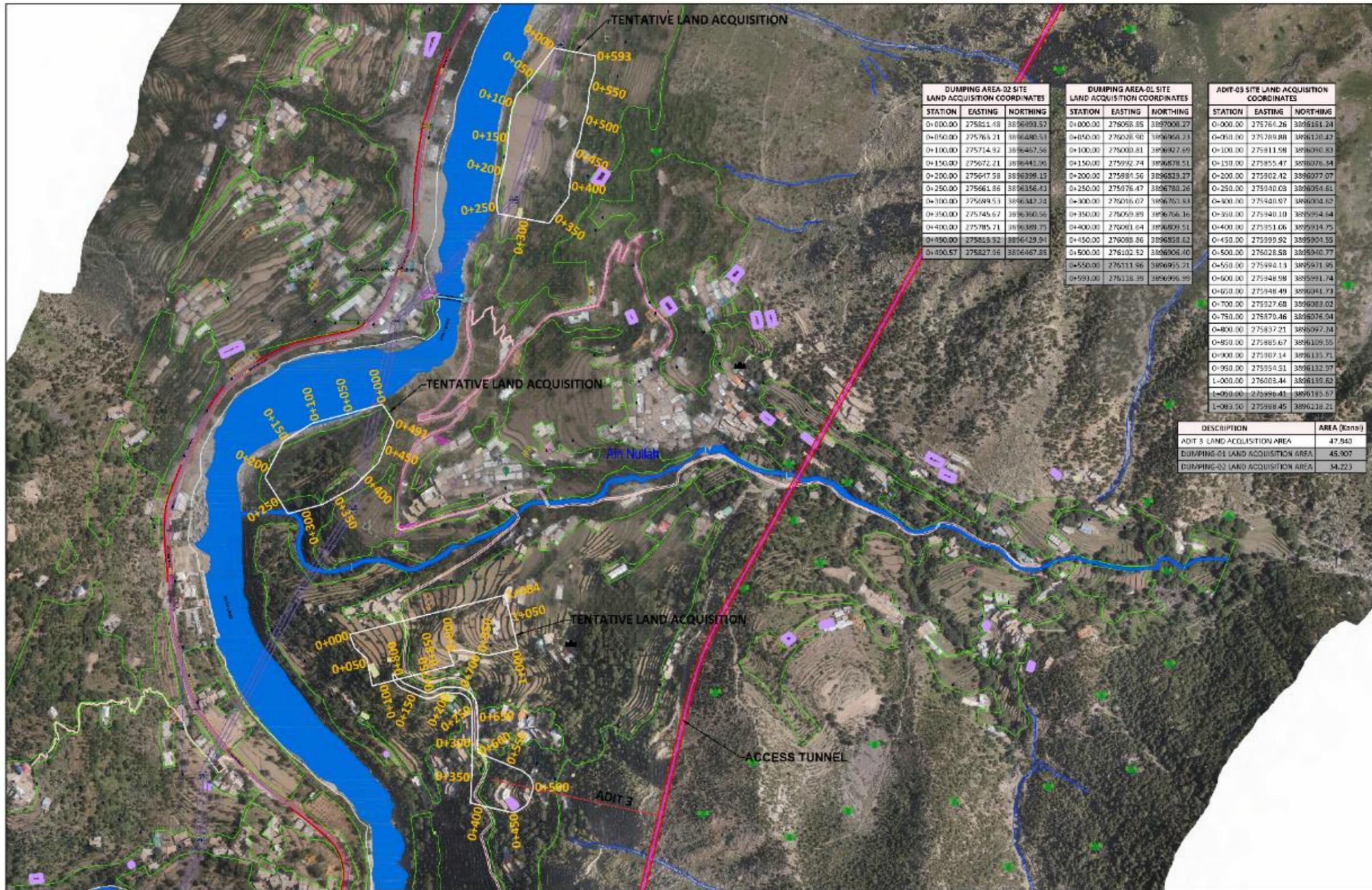
ADIT 1A SITE LAND ACQUISITION COORDINATES		
STATION	EASTING	NORTHING
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0+050.00	279622.979	3901808.371
0+100.00	279588.044	3901773.666
0+150.00	279550.525	3901741.106
0+200.00	279525.434	3901697.990
0+250.00	279519.603	3901648.337
0+300.00	279511.444	3901593.076
0+350.00	279496.583	3901552.001
0+400.00	279473.225	3901517.387
0+450.00	279462.096	3901475.475
0+500.00	279492.270	3901443.937
0+550.00	279513.239	3901477.860
0+600.00	279489.501	3901510.585
0+650.00	279508.799	3901556.524
0+700.00	279521.671	3901604.488
0+750.00	279537.908	3901651.293
0+800.00	279578.576	3901651.770
0+850.00	279614.069	3901649.741
0+900.00	279638.510	3901692.696
0+950.00	279668.258	3901732.877
1+000.00	279690.900	3901777.435
1+021.00	279699.726	3901796.543

DESCRIPTION	AREA (Kanal)
ADIT 1A LAND ACQUISITION AREA	42.668

<p>CLIENT</p>  <p>PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO)</p>	<p>PROJECT IMPLEMENTATION CONSULTANTS</p>   <p>SMEC TEMELSU</p>	<p>PROJECT NAME</p> <p>REVISED / NEW FEASIBILITY STUDY OF MADYAN HYDROPOWER PROJECT</p>	<p>REFERENCES (SEE GENERAL NOTES - G-TITLE BOX)</p> <table border="1"> <tr> <td>DRAWN BY</td> <td>AZMAT ALI</td> <td>DRAWING NO</td> <td>MD-GEN-AD-001-02</td> </tr> <tr> <td>DESIGN BY</td> <td>LIMER AMMAR</td> <td>REVISION</td> <td>****</td> </tr> <tr> <td>CHECKED BY</td> <td>RICHARD/AHMEI/CEMGIZ</td> <td>DATE</td> <td>NOV, 2022</td> </tr> <tr> <td>APPROVED BY</td> <td>HANY SALEM</td> <td>SCALE</td> <td>1:2000</td> </tr> </table>	DRAWN BY	AZMAT ALI	DRAWING NO	MD-GEN-AD-001-02	DESIGN BY	LIMER AMMAR	REVISION	****	CHECKED BY	RICHARD/AHMEI/CEMGIZ	DATE	NOV, 2022	APPROVED BY	HANY SALEM	SCALE	1:2000	<p>SHEET CONTENTS</p> <p>ADIT-01 SITE LAND ACQUISITION COORDINATES</p>
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DESIGN BY	LIMER AMMAR	REVISION	****																	
CHECKED BY	RICHARD/AHMEI/CEMGIZ	DATE	NOV, 2022																	
APPROVED BY	HANY SALEM	SCALE	1:2000																	



<p>CLIENT</p> <p>PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO)</p>	<p>PROJECT IMPLEMENTATION CONSULTANTS</p> <p>SMEC TEMELSU</p>	<p>PROJECT NAME</p> <p>REVISED / NEW FEASIBILITY STUDY OF MADYAN HYDROPOWER PROJECT</p>	<p>REFERENCES (SEE GENERAL NOTES - 0-TITLE BOX)</p> <table border="1"> <tr> <td>DRAWN BY</td> <td>AZMAT ALI</td> <td>DRAWING NO</td> <td>MD-GEN-AD-001-03</td> </tr> <tr> <td>DESIGN BY</td> <td>UMER AMMAR</td> <td>REVISION</td> <td>****</td> </tr> <tr> <td>CHECKED BY</td> <td>RICHARD/AHMEI/OLMGIZ</td> <td>DATE</td> <td>NOV, 2022</td> </tr> <tr> <td>APPROVED BY</td> <td>HANY SALEM</td> <td>SCALE</td> <td>1:2000</td> </tr> </table>	DRAWN BY	AZMAT ALI	DRAWING NO	MD-GEN-AD-001-03	DESIGN BY	UMER AMMAR	REVISION	****	CHECKED BY	RICHARD/AHMEI/OLMGIZ	DATE	NOV, 2022	APPROVED BY	HANY SALEM	SCALE	1:2000	<p>SHEET CONTENTS</p> <p>ADIT-02 SITE</p> <p>LAND ACQUISITION COORDINATES</p>
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CHECKED BY	RICHARD/AHMEI/OLMGIZ	DATE	NOV, 2022																	
APPROVED BY	HANY SALEM	SCALE	1:2000																	



DUMPING AREA-02 SITE LAND ACQUISITION COORDINATES		
STATION	EASTING	NORTHING
0+000.00	275821.48	3896493.57
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0+100.00	275714.92	3896467.56
0+150.00	275672.21	3896441.90
0+200.00	275647.59	3896399.13
0+250.00	275661.86	3896356.43
0+300.00	275689.51	3896347.24
0+350.00	275745.67	3896360.56
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0+450.00	275823.92	3896429.94
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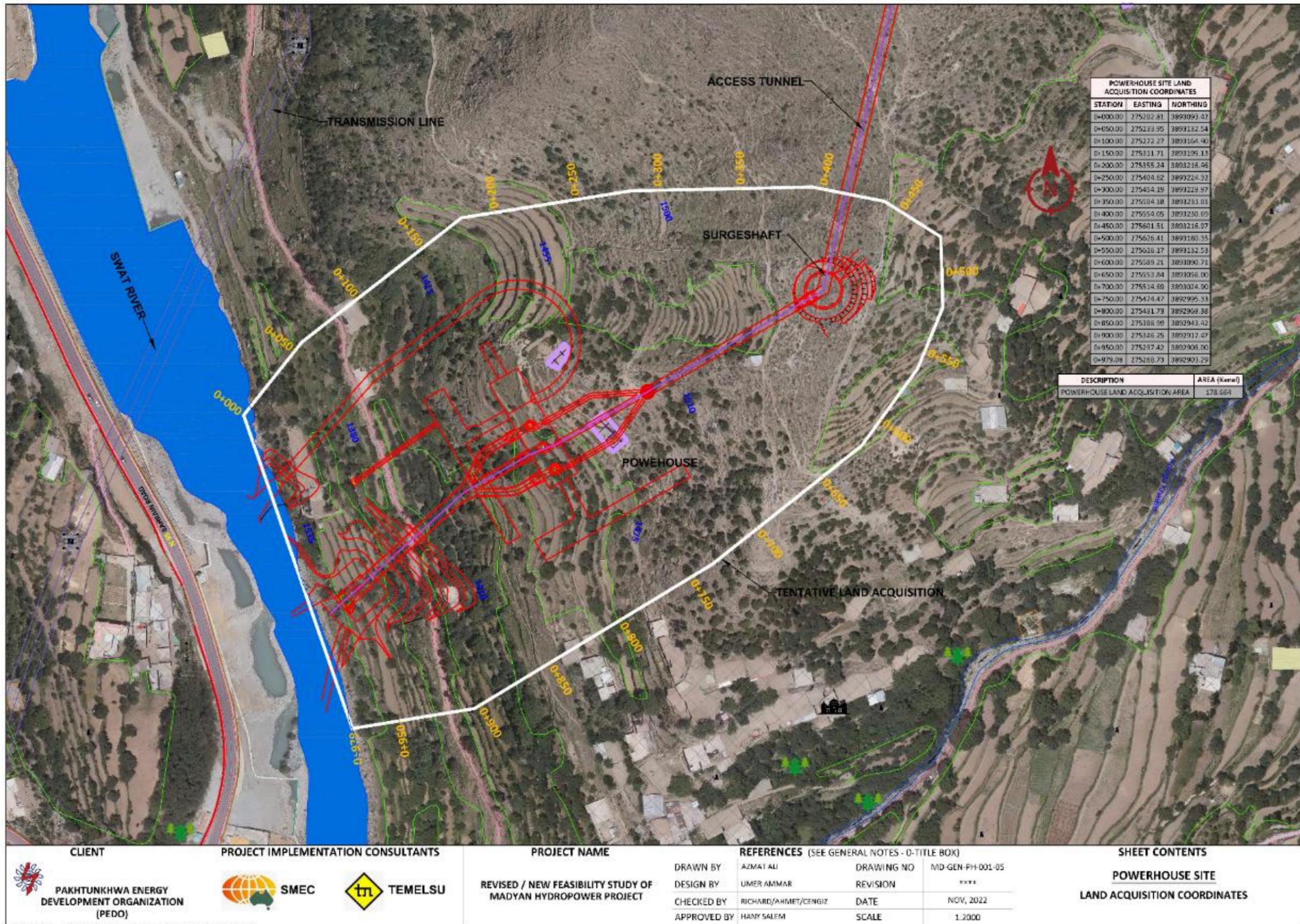
DUMPING AREA-01 SITE LAND ACQUISITION COORDINATES		
STATION	EASTING	NORTHING
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0+050.00	276028.90	3896961.23
0+100.00	276000.81	3896927.69
0+150.00	275992.74	3896878.51
0+200.00	275981.56	3896829.27
0+250.00	275976.47	3896780.26
0+300.00	275976.07	3896751.63
0+350.00	275959.89	3896756.16
0+400.00	275961.64	3896809.51
0+450.00	276088.86	3896838.62
0+500.00	276102.52	3896906.40
0+550.00	276111.96	3896955.21
0+593.00	276138.39	3896956.99

ADIT-03 SITE LAND ACQUISITION COORDINATES		
STATION	EASTING	NORTHING
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0+050.00	275789.88	3896130.42
0+100.00	275811.58	3896080.83
0+150.00	275855.47	3896076.54
0+200.00	275902.42	3896077.07
0+250.00	275940.08	3896054.61
0+300.00	275940.87	3896034.62
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0+400.00	275951.06	3895914.75
0+450.00	275999.92	3895904.59
0+500.00	276028.58	3895940.77
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0+600.00	276048.98	3895991.74
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0+950.00	276054.51	3896132.97
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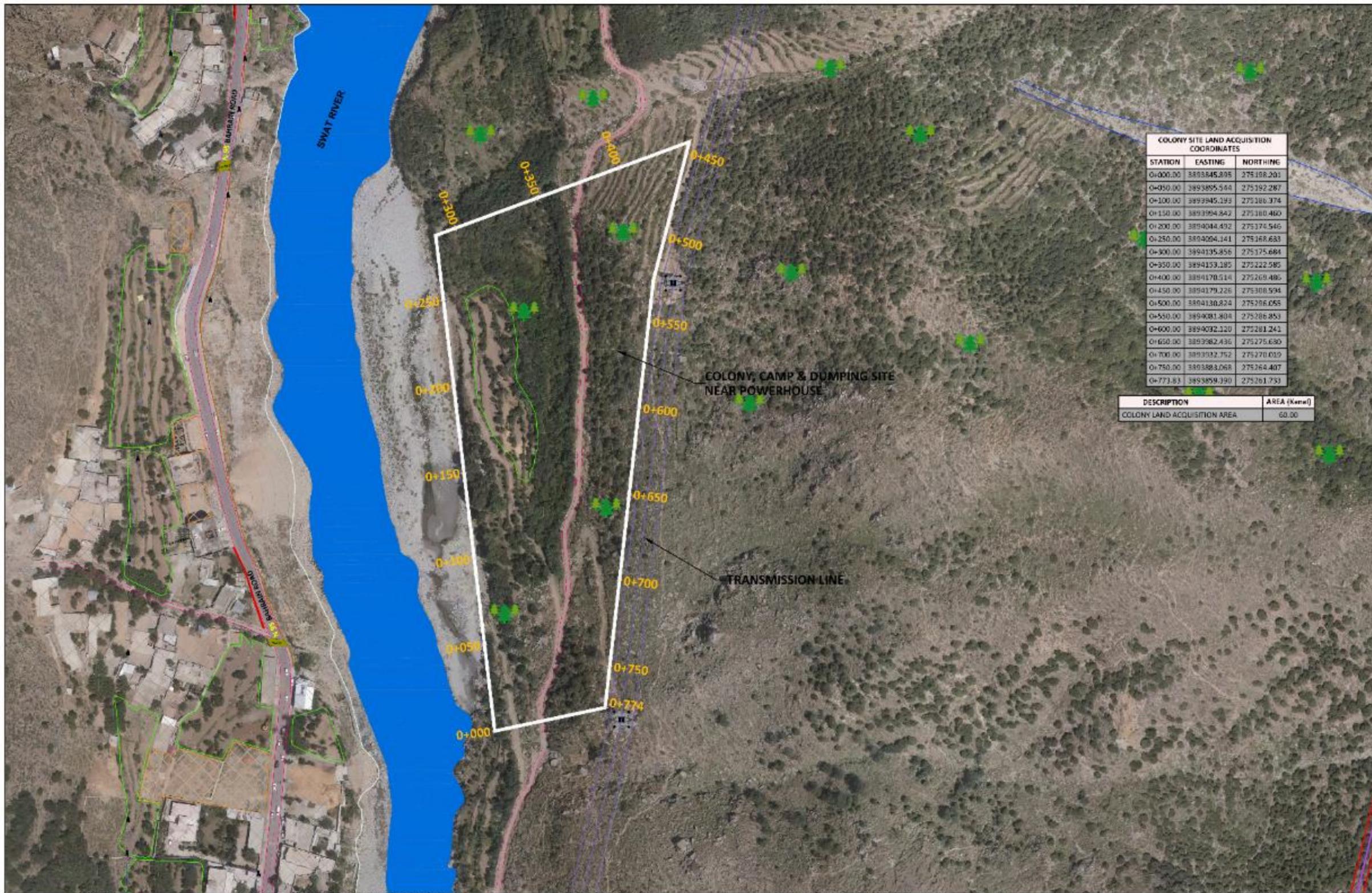
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DUMPING-01 LAND ACQUISITION AREA	45.907
DUMPING-02 LAND ACQUISITION AREA	14.223

CLIENT  PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO)	PROJECT IMPLEMENTATION CONSULTANTS   SMEC TEMELSU	PROJECT NAME REVISED / NEW FEASIBILITY STUDY OF MADYAN HYDROPOWER PROJECT	REFERENCES (SEE GENERAL NOTES - G-TITLE BOX) DRAWN BY: AZMAT ALI DESIGN BY: UMER AMMAR CHECKED BY: RICHARD/AHMEI/CEMGIZ APPROVED BY: HANY SALEM	SHEET CONTENTS ADIT-03 & DUMPING AREA SITE LAND ACQUISITION COORDINATES
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REV: 001-10-2022 - 01/01/2022



<p>CLIENT</p>  <p>PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO)</p>	<p>PROJECT IMPLEMENTATION CONSULTANTS</p>   <p>SMEC TEMELSU</p>	<p>PROJECT NAME</p> <p>REVISED / NEW FEASIBILITY STUDY OF MADYAN HYDROPOWER PROJECT</p>	<p>REFERENCES (SEE GENERAL NOTES - 0-TITLE BOX)</p> <table border="1"> <tr> <td>DRAWN BY</td> <td>AZMAT ALI</td> <td>DRAWING NO</td> <td>MD-GEN-PH-001-05</td> </tr> <tr> <td>DESIGN BY</td> <td>UMER AMMAR</td> <td>REVISION</td> <td>****</td> </tr> <tr> <td>CHECKED BY</td> <td>RICHARD/AHMET/CENGIZ</td> <td>DATE</td> <td>NOV, 2022</td> </tr> <tr> <td>APPROVED BY</td> <td>HANY SALEM</td> <td>SCALE</td> <td>1:2000</td> </tr> </table>	DRAWN BY	AZMAT ALI	DRAWING NO	MD-GEN-PH-001-05	DESIGN BY	UMER AMMAR	REVISION	****	CHECKED BY	RICHARD/AHMET/CENGIZ	DATE	NOV, 2022	APPROVED BY	HANY SALEM	SCALE	1:2000	<p>SHEET CONTENTS</p> <p>POWERHOUSE SITE LAND ACQUISITION COORDINATES</p>
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DESIGN BY	UMER AMMAR	REVISION	****																	
CHECKED BY	RICHARD/AHMET/CENGIZ	DATE	NOV, 2022																	
APPROVED BY	HANY SALEM	SCALE	1:2000																	



COLONY SITE LAND ACQUISITION COORDINATES		
STATION	EASTING	NORTHING
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0+100.00	3893845.193	275186.374
0+150.00	3893954.842	275180.460
0+200.00	3894044.492	275174.546
0+250.00	3894064.141	275168.633
0+300.00	3894135.856	275175.664
0+350.00	3894153.185	275222.585
0+400.00	3894170.514	275269.486
0+450.00	3894179.226	275308.594
0+500.00	3894130.824	275396.055
0+550.00	3894081.804	275286.853
0+600.00	3894032.320	275281.242
0+650.00	3893982.436	275275.630
0+700.00	3893932.752	275270.019
0+750.00	3893883.068	275264.407
0+773.83	3893859.190	275261.753

DESCRIPTION	AREA (Karna)
COLONY LAND ACQUISITION AREA	60.00

CLIENT  PAKHTUNKHWA ENERGY DEVELOPMENT ORGANIZATION (PEDO)	PROJECT IMPLEMENTATION CONSULTANTS  SMC  TEMELSU	PROJECT NAME REVISED / NEW FEASIBILITY STUDY OF MADYAN HYDROPOWER PROJECT	REFERENCES (SEE GENERAL NOTES - 0-TITLE BOX)			SHEET CONTENTS COLONY SITE LAND ACQUISITION COORDINATES
			DRAWN BY: AZMAT ALI DESIGN BY: UMER AMMAR CHECKED BY: RICHARD/AHMET/CENGIZ APPROVED BY: HANY SALEM	DRAWING NO: MD-GEN-PH-001-06 REVISION: **** DATE: NOV, 2022 SCALE: 1:2000		

Appendix-2: Census and Socioeconomic Survey Questionnaire

A. Census Survey Questionnaire

Questionnaire ID #			
Name of Enumerator			
Date of Interview			
Location (Tick Relevant)	Power House	Weir Site	Other

1. Identification Data

a.	Name of Respondent				
b.	Father's Name of Respondent				
c.	Name of Tribe/Sub tribe/Clan				
d.	CNIC # of Respondent				
e.	Cell # of Respondent				
f.	Address of DP/Respondent (Village/UC/Tehsil/District)				
g.	Category of DP (Tick Relevant)	i. Land Owner	ii. Land Tenant	iii. Lease Holder	iv. Encroacher
		v. Business Owner Operator	vi. Business Tenant Operator	vii. Squatter	viii. Others (Specify)
h.	Title of Ownership	i. Legal Documents	ii. Informal Documents	iii. Possession	iv. Any Other

2. **Demographic Profile** (Children up to 10 yrs (#): M __, F __=T ____)

Sr. No.	a. Relationship with Respondent (See Codes)	b. Sex Male=1 Female=2 Transgender=3	c. Age (Yrs.)	d. Education (See Codes)	e. Business/ Occupation (See Codes)		f. Income (PKR Per Annum)		g. Resident at Site Yes=1 No=2
					Main	Secondary	Main	Secondary	
1	SELF								
2									
3									
4									
5									
6									
7									
8									
9									
10									

Codes:

a) Relationship:

1=Self, 2=Wife, 3=Son, 4=Daughter, 5=Father, 6=Mother, 7=Brother, 8=Sister, 9=Grand Father, 10=Grand Mother, 11=Nephew, 12=Niece, 13=Father-in-Law, 14=Mother-in-Law, 15=Sister-in-Law, 16=Brother-in-Law, 17= Daughter in Law, 18=Son-in-Law, 19 =Bhabbi 20+ Grand Son 21= Grand Daughter 22=other

b) Marital Status:

1=Married 2=Un-married 3=Widow 4=Divorced

c) Education:

1= Primary 2= Middle 3= Matric, 4= Intermediate, 5= Graduate, 6= Masters, 7=LLB, 8=Engineer, 9=MBBS, 10=Technical Diploma, 11=Dars-e-Nizami, 12=Can Read Quran, 13= Can Insert Signatures, 14= Illiterate,

d) Occupations:

1=Agriculturist, 2=Shopkeeper, 3= Trader, 4= Govt. Employment, 5=Private Employment, 6=Agri. Labour, 7=General Labour, 8=Livestock Keeping, 9=Fishing, 10=Driver, 11=Health Related, 12=Educator/Teacher, 13=House-Maid, 14= House Wife, 15=Gone Abroad,

16= Student 17=Other

3. Detail of Affected Asset

3.1	Type of Property/Asset Likely to be Affected (Tick Relevant)	a: Land	b: Structure	c: Land & Structure
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3.2. Detail of Affected Land

Sr.No	Type of Land	Total Land (Owned)		Affected Land		
		Kanal	Marla	Width (ft.)	Length (ft.)	Status: Titled/ Leased (Govt./Private)/ Encroached
i.	Cultivated					
ii.	Forest Land					
iii.	Un-Cultivated					
iv.	Grazing					
v.	Waste Land					
vi.	Residential					
vii.	Commercial					
viii.	Rocky					
ix.	Orchard					
x.	Other					

3.3 Detail of Affected Structures

Type of Structure	No.	Total Area		Covered Area		Affected Area		Affected Structure (see material codes)			Year of Construction	Cost Incurred (PKR)	Present Value (PKR)
		W (ft)	L (ft)	W (ft)	L (ft)	W (ft)	L (ft)	Roof	Wall	Floor			
House													
Shop													
Shed													
Cattle Shed													
Kiosk													
Mosque/ School etc													
Others													

Walls: 1=Bricks + Cement, 2= Bricks + Cement+ Decorative Tiles, 3= Brick = Mud, 4=Stoned + Mud+ Wood, 5= Mud
Roofs: 1= Concrete, 2= Steel Grider = T. iron +Brick Tile, 3= Wooden Grider + Wooden Ribs with Wooden Planks, 4=Mud +Thatched
Floors: 1= Concrete Mosaic / Marble), 2= Brick + Cement, 3= Brick + Mud, 4= Kacha (Mud)

3.4 Details of Affected Crops

Sr. No.	Type of Crop	Affected Cultivated Area		Production (Kg)	Total Production Costs (PKR)	Qty. Marketed (Kg)	Qty. Consumed at Home (Kg)	Price (PKR/40 Kg.)
		Kanal	Sft.					
i.								
ii.								
iii.								
iv.								
v.								

3.5 Detail of Affected Trees

Sr. No.	3.3. Shade/ Timber Trees					3.4. Fruit Trees				
	Description	No.	Width	Girth	Value (PKR)	Sr. No.	Description	No.	Age (Years)	Value (PKR)
i.	Shesham					i.	Peach			
ii.	Popular/ Simble					ii.	Plum			
iii.	Eucalyptus					iii.	Pomegranate			
iv.	Kikar					iv.	Apricot			
v.	Phulai					v.	Walnut			
vi.	Bakian/ Neem					vi.	Injeer			
vii.	Jand					vii.	Beri or Shahtoot			
viii.	Other					viii.	Others			

3.6 Details of Other Affected Assets

Sr.no	Type of Asset	No.	Year of purchase/ Installation	Value at time of Purchase	Present Value (PKR)
i.	Hand Pump/Donkey Pump				
ii.	Tube well Bore				
iii.	Irrigation Channel				
iv.	Water Storage Tanks				
v.	Other (specify)				

3.7 Details about shareholders, if any:

Sr. No.	Name	Relationship with DP	Type of Affected Assets	Share in %age	Any Documentation
i.					
ii.					
iii.					
iv.					
v.					

3.8 Detail of Employees if any:

Sr. No.	Name of Employee	Nature of Employment	Average Monthly Wage (PKR)	Other Annual Income	Stay at Site (Tick)		Total Family Member (No.)	Male (No.)	Female (No.)	Children (No.)
					Alone	With Family				
i.										
ii.										
iii.										
iv.										
v.										

4. Compensation/Relocation Options

4.1 In case your house and land affected due to project, do you have any other place to move? Yes/No					
4.2 If yes, how far that place locates (distance in Km) _____ Do you own that place? Yes/No					
4.3	If no, what kind of assistance you expect from the project? (Tick)	i. Cash Compensation	ii. Land for Land	iii. House for House	iv. Shop for Shop

4.4 In case of relocation, what will be your preference for relocation place?	a. Closer to original Habitat on higher elevation	b. Within tehsil	c. Settled Village	d. Other
---	---	------------------	--------------------	----------

B: Socioeconomic Survey Questionnaire

Respondent's Name : _____ Father's Name _____

5. LAND UTILIZATION

Land	Kanal	Marla
a. Total Area owned		
b. Irrigated Area by:		
• Irrigation Channel from River		
• Lift Irrigation		
• Spring		
• Dug well		
c. Barani		
d. Uncultivated Area		
• Area Under Trees		
• Area Under Farm Structure		
• Waste land		

6. Cropping Pattern, Yield and Input

Code	Crops	Area Sown		Use of Inputs						Production (40 Kgs.)
		Kanal	Marla	Seed (Kgs.)	Urea (Bags)	DAP (Bags)	Tractor Hrs.	Manual Labor (days)	Spray	
1	Potatoes									
2	Cabbage (Gobi)									
1	Rice									

2	Maize									
3	Fodder (kharif)									
4	Millets									
5	Vegetables									
6	Wheat (Irrigated)									
7	Wheat (Barani)									
8	Fodder (Rabi)									
9	Oilseed									
10	Orchards									
11	Other									

7. Prevalent Land Rate (PKR /kanal)

8. Unit Rates of Farm Inputs (PKR)

a) Residential _____

b) Cultivated _____

c) Grazing Land _____

d) Waste Land _____

e) Urea Bag _____

f) DAP Bag _____

g) Tractor Hr. _____

h) Spray _____

i) Labourer Per Day _____

2.2 Land Rent (PKR/ Year) _____

9. POSSESSION OF HOUSEHOLD ITEMS

Item	No.	Value (PKR)	Item	No.	Value (PKR)
Refrigerator			Van/Pickup		
Television			Car		
Washing machine			Gas Cylinder		
Geyser			Dish Antenna		

Electric fan			Telephone/PTCL		
Electric iron			Mobile Phone		
Sewing machine			Air Conditioner		
Radio/tape recorder			Electric Water Pump		
Bicycle			Computer		
Motor cycle			Other		

10. AVERAGE MONTHLY EXPENDITURE ON FOOD AND NON- FOOD ITEMS (RS.)

4.1 Food Items	PKR	4.2 Non-Food Items	PKR
Meat		Bath Soap	
Ghee		Washing Soap	
Sugar		Gas Cylinder	
Flour		Fuel Wood	
Lentils/Legumes		Kerosene Oil	
Vegetables		Vehicle Fuel	
Spices		Others	
Tea			
Rice			
Milk			
Fruits			
Others			

10.1 Av. Monthly Bills (PKR)

Electricity _____ Telephone _____ Water _____ Gas _____ Cable _____

10.2 Expenditure on clothes and shoes during last year (PKR) _____

10.3 Occasional expenses during last year (PKR) _____

(Expenditures on social obligation such as wedding ceremonies, funerals, etc.)

10.4 Annual Expenditure on Healthcare (PKR) _____

10.5 Total Annual Expenditure (PKR) _____

10.6 Total Annual Income (PKR) _____

4.3 Amount of loan (if any) taken to meet expenditures: _____

11. HOUSING CONDITIONS

11.1 Total Area of the House: _____ Kanal _____ Marla

11.2 Year of Construction _____

11.3 Present Value of the House (PKR) _____

11.4 Type of Structure a) Katcha b) Pacca c) Semi-Pacca

12. Structure Details

Type of Structure	No. of Rooms	Type
Living rooms		
Kitchen		
Animal shed/room		
Other shed		
Bathroom (Separate / Attached)		
Latrine		
-Open		
-Flush		

13. ACCESS TO SOCIAL AMENITIES (TICK)

Social Amenities	Available	Not-Available	Quality of Services	
			Satisfactory	Not-Satisfactory
Electricity				

Gas				
Water Supply				
Telephone				
Sewerage/Drainage				
BHU				
School				

14. LIVESTOCK INVENTORY

Livestock	No.	Present Value (PKR)
Buffaloes		
Cows		
Horse		
Donkey		
Camel		
Sheep/Goat		
Poultry		
Other		

15. ROLE OF WOMEN IN DIFFERENT HOUSEHOLD ACTIVITIES AND THEIR EARNING STATUS

15.1 Participation and Decision Making (Tick):

Activities	Participation Extent (%)	Decision Making Extent (%)
1. Household activities		
2. Child caring		
3. Farm/Crop activities		
4. Livestock rearing		
5. Sale & Purchase of properties		
6. Social obligations (marriage, birthday, etc.)		
7. Local representation (councilor/political gathering)		

16. PERCEPTION OF RESPONDENTS FOR ACTION ASSOCIATED WITH THE PROJECT

Possible impacts/effects of the Project

1	Increase	2
	Decrease	

- Employment opportunities
- Industrial Development
- Living standard Improvement
- Reduce Unemployment
- Income generating activities
- Availability of Irrigation Water
- Improve Crop Yields/Production
- Mobility (Access to Resources)
- Other specify_____

17. Presence of Local Organization/N.G.O in the Project Area. Yes/No

If Yes

Name_____ Working Area. e_____

18. Suggestions/Pressing needs regarding Livelihood Restoration

19. Suggestions/Pressing needs regarding Social Development/Area Development

Name of Interviewer _____ Dated_____

Appendix-3: Village Profile Survey Questionnaire

VILLAGE PROFILE SURVEY QUESTIONNAIRE

(Note: To be collected in a joint gathering of villagers at some central place)

Serial No. _____

Observations/ Instructions for Facilitator (s)

- 1) "Village" means Mauza as defined in census reports. This Questionnaire would be filled in during "Scoping Session"(SS).
- 2) All information would be filled in concerning to the settlement and not for the whole village.
- 3) Separate "Scoping Sessions" would be conducted at each settlement to cover each affected village.
- 4) Settlement mean forming the part of village irrespective of size and structure.
- 5) The checklist provided separately will be used for one/ each settlement
- 6) When starting the scoping session please introduce yourself and explain the purpose of the survey and the project
- 7) Introduce the Project details to the participants during the scoping session.

1. IDENTIFICATION:

1.1 Name of Union Council: _____

1.2 Name of Village: _____

1.3 Total Number of Settlements of Village: _____

1.4 Name of Settlement of Scoping Session: _____

1.5 Total Attendance of Scoping Session: _____

2. ETHNIC AND DEMOGRAPHIC STRUCTURE

	Name of the Main Tribe	Name of the Clan	Name of the Cast	Names of Prominent members of Tribe/Clan	Total Household of Respective Tribe	Population	
						Male	Female
1							
2							
3							
4							
5							
6							
7							

3. LANGUAGES SPOKEN IN THE VILLAGE:

1. Pashto	2. Urdu	3. Punjabi	4. Punjabi
-----------	---------	------------	------------

4. LITERACY LEVEL

Description	No. of institutions		Enrolment (No.)		No. of Teachers	
	Boy	Girl	Boy	Girl	Male	Female
Primary School						
Middle School						
High School						
College						
Madrassa						
Vocational						
Other						

5. HOUSES EXISTING IN THE VILLAGE (NOS.)

House Type	Kacha	Pacca	Semi Pacca	Other
No.				

6. AVAILABLE UTILITIES (NO. OF HOUSES HAVING FACILITY)**6.1 Mode of Supply of Water:**

a) Self-Carried b) Tapped c) Hand/ Donkey Pump _____ d) Other -----

6.2 Waste water Disposal System:

a) Sewerage System b) Open Drains c) Soakage Pits d) Other

6.3 Latrine:

a) Open Fields b) Flush System

6.4 Access to Services and Amenities

Services/ Amenities	Electricity	Gas	Fuel	Telephone	Mobile	Post Office	Bank	Mosque	Graveyard
Available									
Not Available									

6.5 Accessibility from Main Road to Village:

1. Metaled Road		Unmetalled Road		Track		Others	
-----------------	--	-----------------	--	-------	--	--------	--

6.6 Distance from main road to Village: ----- km**6.7 Type of transport available in the Village?**

Public Transport		Private Transport		No Transport Facility	
------------------	--	-------------------	--	-----------------------	--

7. HEALTH FACILITIES

Facility Within Village	Exists (Y/N)	Functioning (Y/N)	Medical Staff available (Nos.)	Nearby Similar facility (Name of Place)
Hospital				
Basic Health Unit				
Mother Child Care Center				
Child Immunization Center				
Other				

7.1 Is there any private medical practitioner in the village?

Homeopathic		Paramedical		Hakeem	
M.B.B.S		Midwife		Others	

7.2 Common diseases in the Village (Tick):

Diarrhea		Measles		Hepatitis	
Typhoid		Tuberculosis		Malaria	
HIV/AIDS					

8. OCCUPATIONAL STATISTICS (No of Households with Major Source of Income)

Occupation	Agriculture	Trader (Within Village)	Self-Employed	Employment (Public)	Employment (Private)	Labor	Remittance from inside Pakistan	Remittance from outside Pakistan
No of Households.								

9. IRRIGATION WATER

1) Barani 2) Canal 3) Tube well 4) Dug well 5) River

10. WHO ARE THE INFLUENTIAL IN YOUR VILLAGE?

Head of the Tribe		Local Political Leader		Local Religious Leader	
Heads of the Families		Government Servants		Others	

10.1 How are property disputes about the control and consumption of the natural resources of the area are settled?

Jirga		Head of the Tribes		Council of Ulamah	
Heads of the Families		Government Servants		Others	

11. WHAT ARE THE MAJOR CROPS AND YIELDS?

Major Crops	Irrigated		Barani	
	Area (Kanal)	Production (Kg/Kanal)	Area (Kanal)	Production (Kg/Kanal)
Rabi Crops				
Wheat				
Barley				
Gram				
Pulses				
Vegetables				
Fodder				
Others				
Kharif Crops				
Sugarcane				
Maize				
Vegetables				
Fodders				
Others				

12. TYPES OF ANIMALS IN THIS VILLAGE

Animal type	Buffalo	Cow	Sheep	Goat	Horses	Donkeys	Mules	Others
No.								

Enumerated by: _____ Date: _____

Photolog

Photo log of Consultation Meetings



Figure 13: Consultation with affected people Phonkiya Gumai



Figure 14: Census Survey in village Ayeen



Figure 15: Consultation with affected people in village Kalagay



Figure 16: Census Survey in village Kedam



Figure 17: Measurement of Affected structure



Figure 18: Census Survey in Village Kedam



Figure 7: Affected Crop in Project Area



Figure 8: Affected Trees in Village Ayeen



Figure 9: Affected Fruits Trees in village Darolai



Figure 10: Affected House in Weir site village Ghorejo Ramait



Figure 11: Affected House in Village Kedam



Figure 12: Affected House in Village Ghorejo Ramait



Figure 1: Consultation with District Social Welfare Officer



Figure 2: Education Department Female Bahrain



Figure 3: Tourism Department Saidu Sharif Swat



Figure 4: Education Department Male Bahrain



Figure 5: C&W office matta Swat.



Figure 6: Consultation with DFO Divisional Forest office Madyan



Figure 19: Consultation with village Ramait



Figure 20: Consultation with village Phonkiya Gurnai



Figure 11: Female Consultation with village Kalagay



Figure 22: Female Consultation with village Kedam