



Pakistan Poverty Alleviation Fund

ENVIRONMENTAL & SOCIAL MANAGEMENT FRAMEWORK

6th Edition

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IMPRINT

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PPAF's Environmental and Social Management Framework is a living document which will be updated as per emerging requirements of the PPAF.

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Acronyms and Glossary

ADB	Asian Development Bank
AIB	Asian Infrastructure Investment Bank
Biosphere Reserve	Biosphere reserves promote solutions reconciling the conservation of biodiversity with its sustainable use. They are learning areas for sustainable development under diverse ecological, social and economic contexts. ¹
CFLs	compact fluorescent lamp
CHMP	cultural heritage management plan
CLF	community livelihood fund
CNIC	computerised national identity card
CO	community organisation
CPI	community physical infrastructure
CSO	civil society organisation
DWSS	drinking water supply scheme
EIA	environmental impact assessment
EPA	Environmental Protection Agency
ESA	environmental and social assessment
ESM	environmental and social management
ESMF	environmental and social management framework
ESMP	environmental and social management plan
ESMU	Environmental and Social Management Unit [of PPAF]
ESR	environmental and social review
Game Reserve	In a Game Reserve, hunting of wild animals shall not be allowed, except under a special permit, which may specify the number and kind of animals to be hunted, method of hunting, the area and duration for which such permit shall be valid. ²
IEE	initial environmental examination
IP	indigenous people
IPM	integrated pest management
IPP	indigenous peoples plan
IPPF	indigenous peoples planning framework
LARP	land acquisition and resettlement plan
LMST	livestock management and skills training
LSO	local support organisation
MHP	micro-hydel plant
MoU	memorandum of understanding

¹ UNESCO: Biosphere Reserves (<https://en.unesco.org/biosphere>).

² *Khyber Pakhtunkhwa Wildlife and Biodiversity (Protection, Preservation, Conservation and Management) Act, 2015*. Government of Khyber Pakhtunkhwa.

National Park Large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.³

In a National Park, hunting, shooting, trapping, killing or capturing of any wild animal; carrying of arms, pet animals, livestock, firing any gun or doing any other act which may disturb any wild animal or doing any act which interferes with the serenity and tranquillity of the park and breeding places of wild animals; logging, felling, tapping, burning or in any way damaging or destroying, taking, collecting or removing any plant or tree; grazing of livestock; fishing; clearing or breaking up any land for cultivation; mining or quarrying of stones or for any other purpose; polluting or poisoning water flowing in and through the National Park; littering and dumping of wastes; writing, inscribing, carving, disfiguring, defacing, painting, chalking, advertising; use of vehicular transport, except on recognized roads and routes; blowing of pressure horns within one kilometre radius of the park boundary; and play back music, using radios, players or any other audio-video equipment, or making noise are prohibited.⁴

NEQS	National Environmental Quality Standards
NGO	non-governmental organisation
NOC	no objection certificate
NRM	natural resource management
NWFP	North-Western Frontier Province [now Khyber Pakhtunkhwa]
O&M	operation and maintenance
OPD	out-patient department
PKR	Pakistani Rupees
PO	partner organisation
PPAF	Pakistan Poverty Alleviation Fund
Ramsar Site	Ramsar sites are wetlands of international importance that have been designated under the criteria of the Ramsar Convention on Wetlands for containing representative, rare or unique wetland types or for their importance in conserving biological diversity.
SMDs	surface mounted devices
SOPs	standard operating procedures
TDS	total dissolved solids
TPV	third party validation [of ESMF compliance]
VDP	village development plan
VO	village organisation
WHO	World Health Organization

³ IUCN Protected Areas – Category II: National Park (<https://www.iucn.org/theme/protected-areas/about/protected-areas-categories/category-ii-national-park>).

⁴ *Khyber Pakhtunkhwa Wildlife and Biodiversity (Protection, Preservation, Conservation and Management) Act, 2015*. Government of Khyber Pakhtunkhwa.

Wildlife Sanctuary	Wildlife Sanctuary is set aside as safe breeding grounds for the protection of wildlife and access thereto for public shall, except in accordance with the rules, be prohibited and no exploitation of forest therein shall be allowed except for reducing fire hazards, epidemic or insect attacks or other natural calamities. No person shall enter or reside; cultivate any land; damage or destroy any vegetation; hunt, kill or capture any wild animal or fire any gun or other firearm within one mile of the boundaries; introduce any exotic species of animal or plant; introduce any domestic animal or allow it to stray; cause any fire; and pollute water, in a Wildlife Sanctuary. ⁵
World Natural Heritage Site	Any UNESCO designated site having natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; or natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty. ⁶

⁵ *Khyber Pakhtunkhwa Wildlife and Biodiversity (Protection, Preservation, Conservation and Management) Act, 2015*. Government of Khyber Pakhtunkhwa.

⁶ *Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972*. UNESCO.

1. INTRODUCTION

The Pakistan Poverty Alleviation Fund (PPAF) is the leading institution focused on eliminating poverty in Pakistan. As one of the largest establishments spending on the poor, PPAF facilitates public-private partnerships with a mutual goal to achieve social and economic change in Pakistan by addressing multi-dimensional issues of poverty. Established by the Government of Pakistan in 1997 as an autonomous not-for-profit company under the Companies Ordinance, 1984 (now Companies Act, 2017), PPAF began its operations in year 2000. With its head office in Islamabad, PPAF has access to nearly 2,000 union councils across 147 districts of Pakistan through its network of around 130 partner organisations. (Figure 1).

PPAF works through civil society organisations (CSOs) that are value-driven and based upon neutral and inclusive models structured specifically to target the poorest and most marginalised regions of Pakistan. In creating these alliances, PPAF focuses on ensuring that these partner organisations (POs) are well governed, and transparency and accountability remains priority. Through these alliances, PPAF has an outreach across Pakistan, supporting communities to access improved infrastructure, green energy, health, education, livelihoods, finance, and develop resilience to disasters. It ensures that its core values of social inclusion, participation, accountability, transparency, and stewardship are built into all processes and programmes. So far, PPAF has invested in developing the capacities of over 130 implementing partners (civil society organisations), around 144,000 Community Organisations, 440,000 Credit/Common Interest Groups, 15,000 Village Organisations, and over 700 union council level federations to date.⁷

With an experience of almost two decades, PPAF concludes that local and community-based institutions are key to creating a positive outcome and proving effective. For poverty reduction efforts to be successful over the long-term, PPAF invites participation from diverse stakeholders who demonstrate ownership of and commitment to its mandate. PPAF is proud to have built alliances and partnerships within the national public and private sectors, both, as well as working with international institutions.

1.1. PPAF's Overall Approach and Strategy

Since its inception, PPAF's approach towards poverty alleviation has been to implement carefully synchronised interventions that respond to basic community needs. However, over time, PPAF has realised that for people to be empowered to lead their own development, a core factor of PPAF's work must focus on social mobilisation. A multidimensional approach to empowerment⁸ must consider both individual capacities and collective action to address inequalities that cause poverty. PPAF's goal rightly reflects this new focus.

Evolving over time, and building upon its core values—*inclusion, participation, accountability, transparency and stewardship* (Box 1)—PPAF's strategic focus encompass SDGs, spatial dimension of poverty, growth dimension of poverty, reinforcing writ of the state, and introducing integrated multi-sector programmes. Led by poverty graduation approach, PPAF strategy is centred upon leveraging its footprint, deepening and intensifying its operations to ensure a long-term impact and supporting the government's social protection programme to achieve the Vision 2025.

PPAF believes that for its efforts to have a meaningful impact, its core values must be reflected in the work of its POs, CSOs and other community-based organisations (CBOs) that PPAF support.

PPAF's Goal

To alleviate poverty through empowering poor people and increasing their access to income and opportunities, ensuring a focus on the most vulnerable and marginalised groups.

⁷ The PPAF statistics are as of March 2021.

⁸ A progression that helps people to gain control over their own lives and increases their capacity to act on issues they themselves think are important.

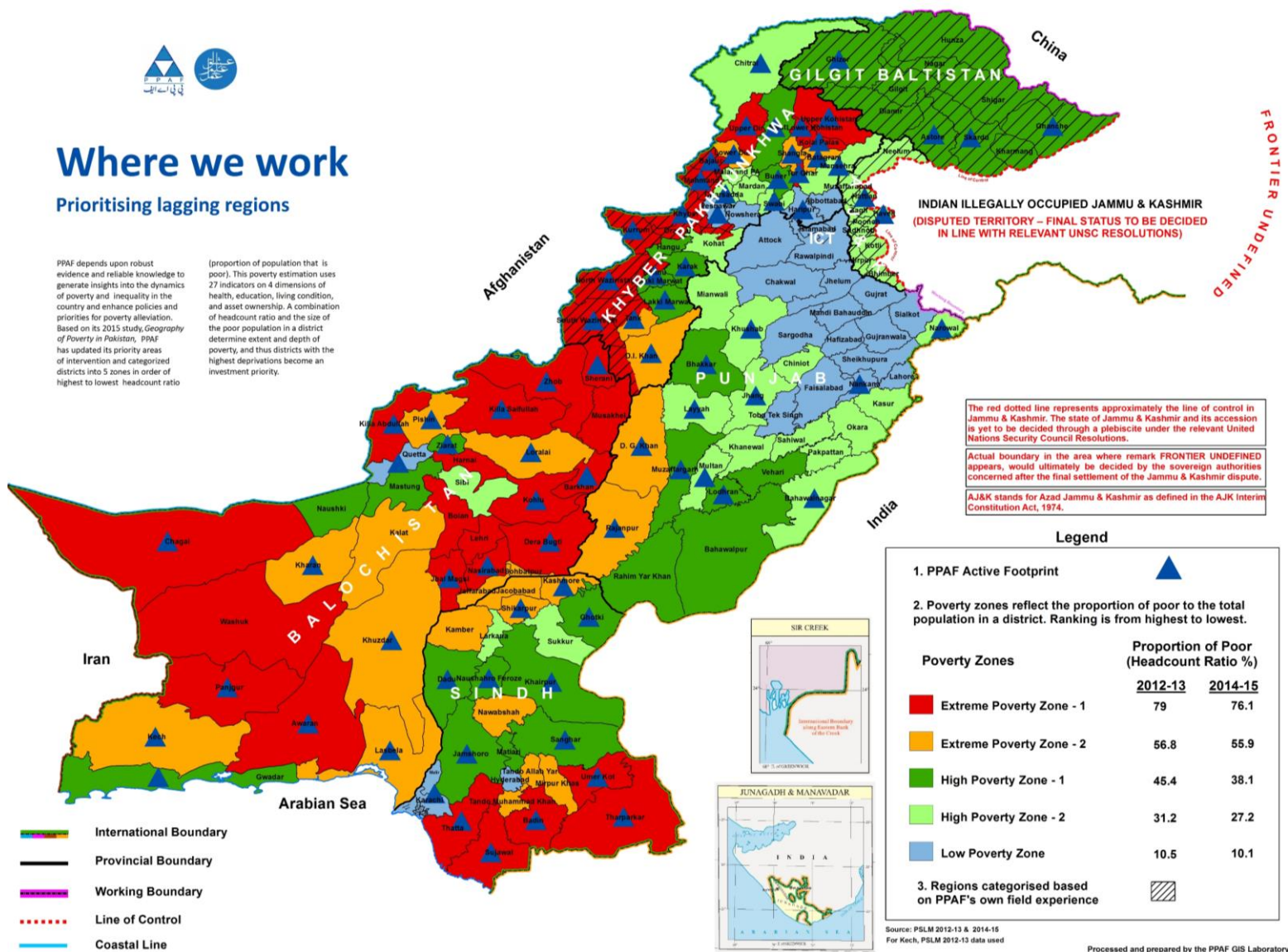
Box 1: PPAF's core values

1. **Inclusion** — Recognising demographic diversity—women, children, elderly, persons with disabilities, indigenous groups and religious minorities—and connecting different views, experiences, issues and vulnerabilities as a methodology to reducing poverty.
2. **Participation** — Increasing community input by having a broad process of consultation so that decisions on contents of intervention, policies and programmes are not dominated by one group's perspective.
3. **Accountability** — Having in place legal and reporting framework, organisational structure, processes and procedures to make sure regularity and the efficiency of the use resources and personnel help responsible for their actions.
4. **Transparency** — Substantiating achievements by evidence, clear reporting on activities, and financial proof that would reflect on implementation of strategies and adherence to mandates and outcomes; advancing the practice of downward accountability to beneficiaries; and upholding the democratic traditions by having community institution leadership elected and follow a structure and processes for governance.
5. **Stewardship** — Responsible management of that which has been entrusted to PPAF in the ecosystems and communities we serve. As caretakers of the environment and its resources it believes in having a constructive effect on the ambit of its influence. PPAF commits to fulfil its shared responsibility to our planet, our children, and our future.

PPAF has always anchored its efforts in a strong partnership with the federal as well as provincial governments. PPAF and the governments share common policy and practice agenda and have a well-founded commitment towards joint implementation. PPAF has signed memorandums of understanding (MoUs) with number of federal and provincial institutions augmenting cooperation and possibilities of joint implementation of interventions. PPAF will continue exploring avenues of collaboration with government and civil society organisations across Pakistan to enhance its policy and practice domain.

PPAF strives to be a dedicated market developer committed to the emergence of professional and sustainable civil society organisations by supporting community institutions (institutions of the poor) and POs (institutions for the poor).

Figure 1: PPAF's operational coverage



1.2. Environmental and Social Management Framework

PPAF developed its first Environmental and Social Management Framework (ESMF) at the project preparation stage of the PPAF-III Project in 2009. The ESMF sets out the environmental and social assessment procedures required by PPAF and its POs to assess the environmental and social effects of PPAF supported interventions. These assessment procedures are designed with a view to obviate interventions with significant negative environmental and social impacts. The ESMF provides guidelines and technical and legal instruments to minimise potential negative impacts by incorporating mitigations at the design stage, and subsequently implementing them at the implementation stage of the interventions.

So far, the ESMF has been revised five times with an objective to incorporate emerging organisational as well as donors' requirements. The 5th Edition of ESMF was developed in July 2014, which now needs to be updated in the light of emerging and diversified organisational requirements, and to ensure compliance with industry standards and adopt best practices from emerging knowledge in the market.

The objectives of the ESMF include:

- Prevent execution of interventions with significant individual or cumulative negative environmental and social impacts.
- Minimise potential individual and cumulative negative impacts by incorporating mitigations at the design stage and at the implementation stage of the interventions.
- Enhance the positive impacts of interventions.
- Protect environmentally and socially sensitive areas from additional disturbance caused by human interventions.

1.3. ESMF 6th Edition

This 6th Edition of the ESMF is different in many aspects from its former editions. The first and foremost, it aims to simplify the environmental and social safeguards compliance for the practitioners. At the same time, going beyond project-specific requirements, it incorporates the environmental and social safeguard standards from a range of international financial institutions, national and provincial environmental legislation, and ESM best practices. It is inspired by a range of environmental and social safeguards policies and protocols, and frequently uses their terminologies, definitions and elaborations of the safeguards. It also benefits from the recent developments in terms of PPAF Environment Policy 2015 (Annex 1), Indigenous Peoples Planning Framework (2015), and International Organization for Standardization (ISO) 14001:2015 certification.

An extensive consultative process has been followed for revision of the ESMF to understand and incorporate the needs and expectations of various actors and stakeholders into the 6th Edition. The consultations have been held through individual and group meetings, as deemed necessary, with the PPAF functional units, the Partner Organisations (POs) and their respective communities, and other development organisations.

2. ENVIRONMENTAL AND SOCIAL SAFEGUARDS⁹

As reflected in its Environment Policy (2015), PPAF “appreciates the significance of managing and mitigating the impact of its activities on the environment.” PPAF commits to protect its communities against any potential adverse impacts of PPAF supported interventions through an environmentally and socially responsible development model which not only avoids environmental and social damages but also promotes integrated natural resource management to ensure sustainability for the current and future generations. As the environmental and social safeguards are closely linked, the assessment and management of both environmental and social impacts are dealt with together.

PPAF, and all its POs, are responsible for assessing, managing, and monitoring environmental and social risks and impacts associated with each stage of any intervention supported by any donor or PPAF’s own resources, to achieve environmental and social outcomes consistent with the national and provincial environmental quality standards.

These safeguards are designed to help PPAF and its POs to manage the risks and impacts of an intervention, and improve their environmental and social performance, through a risk and outcomes-based approach. The desired outcomes for the intervention will be achieved through adaptation and/or mitigation measures that are appropriate to the nature and scale of the intervention and proportionate to the level of environmental and social risks and impacts.

Proportionate to the risks and impacts of the intervention, PPAF and its POs will conduct environmental and social assessment of the intervention to help ensure that the intervention is environmentally and socially sound and sustainable. The environmental and social assessment will inform the design of the intervention and be used to identify adaptation and/or mitigation measures and actions, to improve decision making, and to manage environmental and social risks and impacts of the intervention throughout the life cycle in a systematic manner. It will also apply to the associated interventions.¹⁰

Unless desired by the donor specifically, PPAF and its POs will adhere to national and provincial (as applicable) environmental and social legal framework¹¹ as well as international laws, conventions and treaties to which Pakistan is a signatory. Since province-specific environmental legislation has been promulgated by all provinces, the environmental assessment, approval, and compliance process for each intervention will have to follow the legal framework of the province within which the intervention is being implemented. The trans-provincial interventions will follow the federal laws. An indicative list of federal and provincial legislation is given at Annex 2.

The environmental and social safeguards aim at:

1. Identifying, evaluating, and managing the environment and social risks and impacts of the interventions.
2. Adopting a mitigation hierarchy (as elaborated in Figure 2) approach to:
 - a. Anticipate and avoid risks and impacts.
 - b. Where avoidance is not possible, minimise or reduce risks and impacts to acceptable levels.
 - c. Once risks and impacts have been minimised or reduced, rectify.

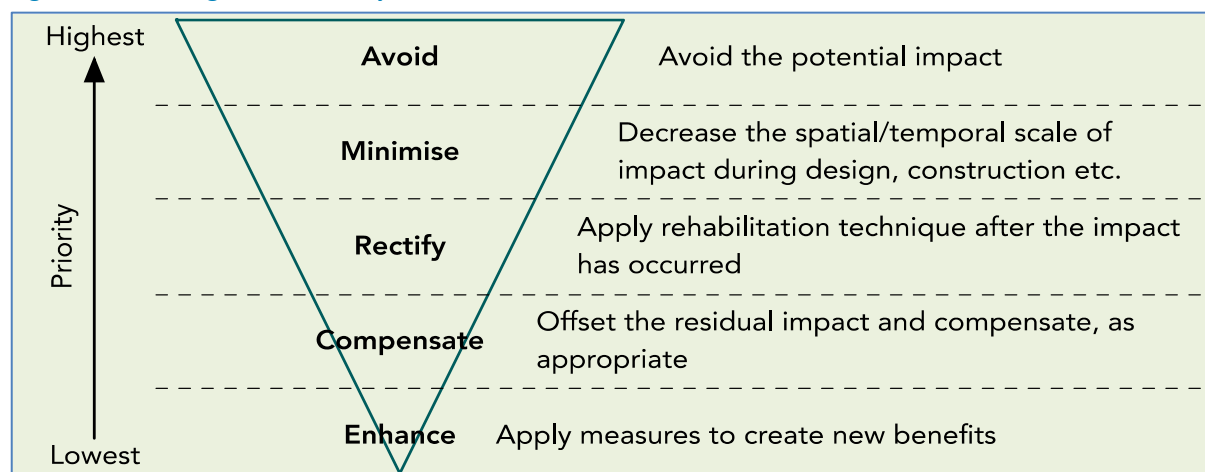
⁹ This section heavily draws upon definitions, elaboration and interpretation of environmental and social safeguards developed by international development institutions, such as ADB, Green Climate Fund (GCF), International Finance Corporation (IFC) and the World Bank (WB).

¹⁰ Associated activities are those funded or implemented as part of the intervention and are: (a) directly and significantly related to the intervention; (b) carried out, or planned to be carried out, contemporaneously with the intervention; and (c) necessary for the intervention to be viable and would not have been constructed, expanded, or conducted if the original intervention did not exist.

¹¹ The relevant multilateral environmental agreements, environmental laws, rules, and regulations are listed at **Error! Reference source not found.**

- d. Where significant residual impacts remain, compensate for, or offset them, where technically¹² and financially¹³ feasible.
3. Adopting differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the interventions.
4. Utilising national and provincial environmental and social institutions, systems, laws, regulations and procedures in the assessment, development, and implementation of interventions, whenever appropriate.
5. Promoting improved environmental and social performance, in ways which recognise and enhance executing entities' capacity.

Figure 2: Mitigation hierarchy



Source: Adapted from Fischer, Thomas B. and Obaidullah Nadeem. 2014. *Environmental Impact Assessment (EIA) Course Curriculum for Higher Education Institutions in Pakistan*. Islamabad: IUCN Pakistan.

The environmental assessment safeguards committed under the ESMF fully apply to all PPAF supported POs; hence, the subprojects would be subjected to the same risk categorisation, assessment, and management planning as otherwise. PPAF and its POs will assess, manage, and monitor the environmental and social risks and impacts of the interventions throughout the project life cycle. They will:

- a. Conduct an environmental and social assessment of the proposed interventions, including stakeholder engagement.
- b. Undertake stakeholder engagement and disclose appropriate information in accordance with Section 2.7.
- c. Develop an environmental and social management plan (ESMP), and implement all measures and actions set out in ESMP.
- d. Conduct monitoring and reporting on the environmental and social performance of the interventions against the set indicators.

2.1. Environmental and Social Assessment (ESA)

The PPAF and its POs will carry out an environmental and social assessment of the interventions proportionate to the nature and magnitude of the interventions, and potential risks and impacts of the interventions, and will assess, in an integrated way, all relevant direct, indirect, and cumulative environmental and social risks and impacts throughout the project life cycle.

¹² Technical feasibility is based on whether the proposed measures and actions can be implemented with commercially available skills, equipment, and materials, taking into consideration prevailing local factors such as climate, geography, demography, infrastructure, security, governance, capacity, and operational reliability.

¹³ Financial feasibility is based on relevant financial considerations, including relative magnitude of the incremental cost of adopting such measures and actions compared to the project's investment, operating, and maintenance costs, and on whether this incremental cost could make the project nonviable for PPAF and its POs.

The Environment and Social Management (ESM) Unit of PPAF will categorise the interventions, based on severity of the potential environmental and social impacts, as following:

- **Environmental & Social Category A:** Interventions which individually or cumulatively may have diverse, irreversible, unprecedented, and significant adverse environmental and/or social impacts which may go beyond physical boundaries of the intervention. However, such interventions are expected to be much larger in the scope; hence better be called as projects. All projects listed at Annex 3 will be subjected to a full-scale environmental impact assessment (EIA), to be developed and submitted to the relevant Environmental Protection Agency (EPA) for environmental approval.
- **Environmental & Social Category B:** Interventions which individually or cumulatively may have potential adverse environmental and/or social impacts (less adverse than those of category A), which are few, generally site-specific, largely reversible, and readily addressed through mitigation measures. However, such interventions are expected to be much larger in the scope; hence better be called as projects. All projects listed at Annex 4 and Annex 5 are included in this category. An Initial Environmental Examination (IEE) or an Environmental Checklist,¹⁴ as the case may be, will be developed for such projects, and submitted to the relevant EPA for environmental approval.
- **Environmental & Social Category C:** Interventions which individually or cumulatively may have minimal or no adverse environmental and social impacts and are not listed under any of Schedules of the federal or provincial EPA Review of IEE/EIA Regulations (given at Annex 3, Annex 4 and Annex 5); hence, not subjected to any environmental assessment. Most of the interventions implemented by PPAF or its POs fall under this category. However, given the cumulative impact these interventions may cause any adverse environmental and social impacts in a specific geographical area, PPAF advises to screen such interventions for any adverse environmental and social impacts, no matter how minimal, using Environmental and Social Review (Section 2.1.1) checklists and guidelines developed by the PPAF under this ESMF. However, it is important to note that since the national and provincial environmental legislation as well as the industry standards do not require use of any specific environmental assessment for the projects and intervention falling under Environmental & Social Category C, the application of PPAF's ESR Checklists and Guidelines is optional unless required otherwise by PPAF through the Financing Agreement.

If mandated, Category C being the most relevant to PPAF's portfolio will be given special attention, especially because the checklists and guidelines are not required to be submitted to any EPA for seeking environmental and social approval. Hence, PPAF will employ its own environmental and social management system (ESMS) to ensure compliance in this category. The ESMS is elaborated in Section 3.

The environmental and social assessment will be based on current information, including an accurate description and delineation of the intervention and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterisation and identification of risks and impacts, and adaptation and/or mitigation measures. The interventions screened affirmatively on the Environmental Screening Checklist (Annex 6) will neither be implemented nor supported. The assessment will evaluate the intervention's potential environmental and social risks and impacts; examine intervention's alternatives; identify ways of improving intervention selection, siting, planning, design, and implementation to apply the mitigation hierarchy (as elaborated in Figure 2) for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the intervention. The environmental and social assessment will include stakeholder engagement as an integral part of the assessment, in accordance with Section 2.7.

The environmental and social assessment will be an adequate, accurate, and objective evaluation and presentation of the risks and impacts, prepared by qualified and experienced persons. For A category interventions, as well as situations in which the PPAF staff has limited capacity, PPAF will retain independent specialists to carry out the environmental and social assessment (indicative terms of reference for commissioning ESA is given at Annex 7). Figure 3 summarises the process of preparation, approval and monitoring of ESAs under categories A, B and C while detailed guidance on ESAs is available in the *Pakistan Environmental Assessment Procedures* (1997).¹⁵

¹⁴ Currently, being used by Sindh EPA only.

¹⁵ Government of Pakistan. 1997. *Pakistan Environmental Assessment Procedures*. Islamabad: GoP.

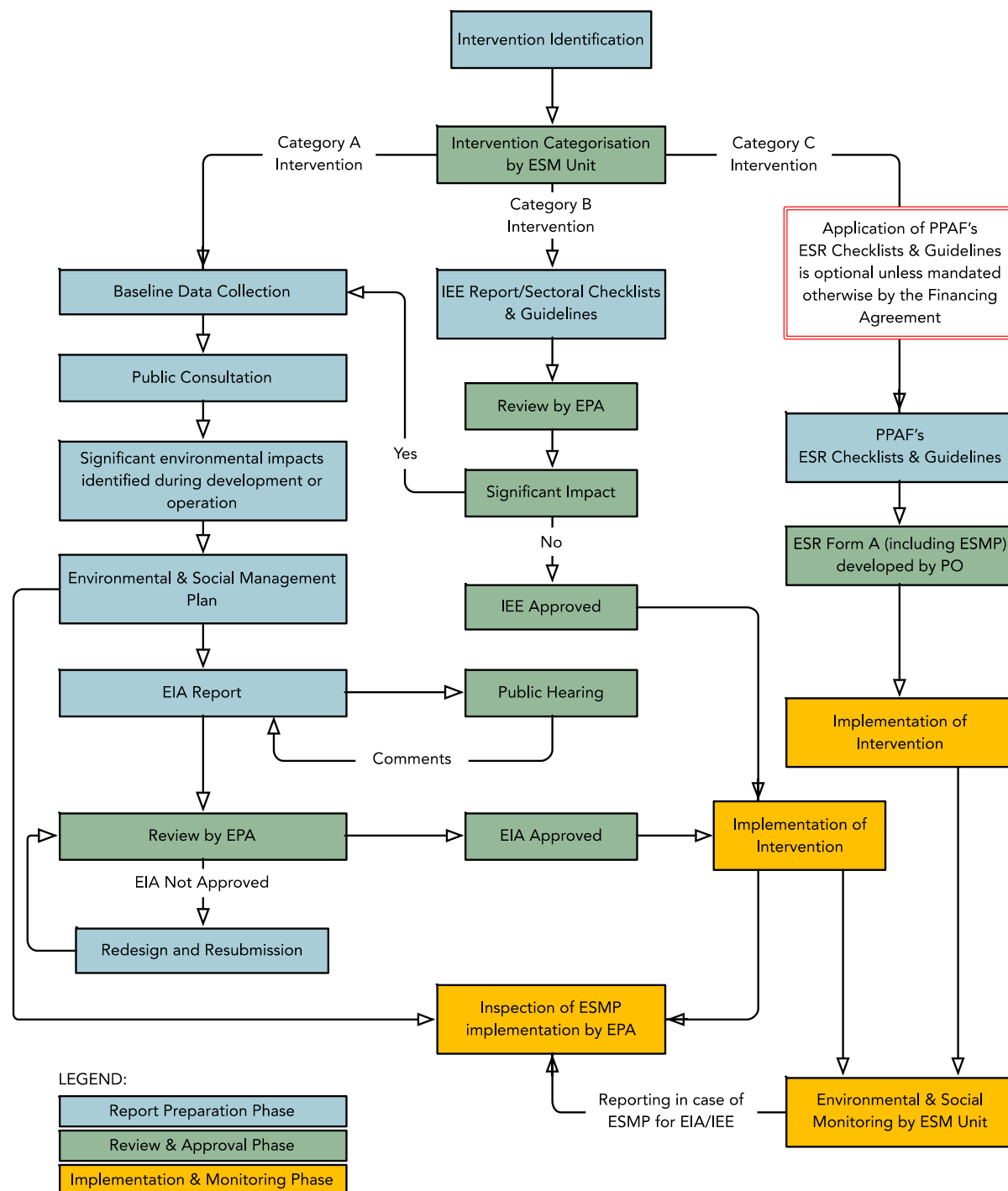
The environmental and social assessment (an indicative outline of the ESA report is given at Annex 8), informed by the scoping of the issues, will consider all relevant environmental and social risks, and impacts of the intervention, including:

- Environmental risks and impacts, including (i) those related to community safety (including safe use of pesticides); (ii) those related to climate change; (iii) any material threat to the protection, conservation, maintenance and restoration of natural habitats and biodiversity; and (iv) those related to ecosystem services and the use of living natural resources, such as fisheries and forests.
- Social risks and impacts, including: (i) threats to human security through the escalation of personal, communal or anti-state conflict, crime or violence; (ii) risks that intervention's impacts fall disproportionately on individuals and groups who, because of their particular circumstances, may be disadvantaged or vulnerable; (iii) any prejudice or discrimination toward individuals or groups in providing access to development resources and benefits, particularly in the case of those who may be disadvantaged or vulnerable; (iv) negative economic and social impacts relating to the involuntary taking of land or restrictions on land use; (v) risks or impacts associated with land and natural resource tenure and use, including (as relevant) potential impacts of intervention on local land use patterns and tenurial arrangements, land access and availability, food security and land values, and any corresponding risks related to conflict or contestation over land and natural resources; (vi) impacts on the health, safety and well-being of workers, especially women and children of working age, and intervention-affected communities; and (vii) risks to cultural heritage.

Where the environmental and social assessment of the intervention identifies specific individuals or groups as disadvantaged or vulnerable, PPAF or its POs will propose and implement differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing any development benefits and opportunities resulting from the intervention.

Based on the identified adverse environmental and social impacts, an Environmental and Social Management Plan (ESMP) will be developed. Where the ESMP requires PPAF or its POs to plan or take specific measures and actions over a specified timeframe to avoid, minimise, reduce, or mitigate specific risks and impacts of the interventions, the PPAF and its POs will not carry out any activities in relation to the interventions that may cause material adverse environmental or social risks or impacts until the relevant plans, measures or actions have been completed in accordance with the ESMP.

Figure 3: ESA preparation, approval and monitoring process flowchart



The environmental and social assessment will also identify and assess, to the extent appropriate, the potential environmental and social risks and impacts of Associated Facilities.¹⁶ PPAF or its POs will address the risks and impacts of Associated Facilities in a manner proportionate to its control or influence over the Associated Facilities. To the extent that PPAF or its POs cannot control or influence the Associated Activities to meet the

¹⁶ Facilities or activities that are not funded as part of the intervention and, in the judgment of the PPAF, are: (a) directly and significantly related to the intervention; (b) carried out, or planned to be carried out, contemporaneously with the intervention; and (c) necessary for the intervention to be viable and would not have been constructed, expanded, or conducted otherwise. For facilities or activities to be Associated Facilities, they must meet all three criteria.

requirements of the ESA safeguards, the environmental and social assessment will also identify the risks and impacts the Associated Facilities may present to the intervention.

The ESM Unit will identify and use appropriate methods and tools, including scoping, environmental and social analyses, investigations, audits, surveys, and studies, to identify and assess the potential environmental and social risks and impacts of the proposed interventions. The ESM Unit will guide the relevant projects, PPAF units or POs to undertake environmental and social assessments, develop ESMPs, and take appropriate adaptation and/or mitigation measures. It will also monitor implementation of ESMPs and report any violation or anomaly to the Environmental and Social Committee for appropriate action.

2.1.1. Environmental and Social Review

The environmental and social review (ESR) for this ESMF is defined as a confirmation statement that the intervention qualifies the minimum environmental and social criteria; proposed adaptation and/or mitigations measures, and costs are made part of the proposal and implemented accordingly; and finally, the proponent verifies the same at the completion stage. So, the primary focus of this ESMF is on facilitating PPAF and its POs to adopt, use and monitor intervention specific and structured ESR formats.

PPAF has developed these ESR Checklists and Guidelines to be used to assess negative environmental and social impacts of interventions which fall under Environmental & Social Category C. The Section 4 presents ESR Checklists and Guidelines (commonly known as Form A) for most of the interventions being planned and implemented under current projects of PPAF. These can be amended, added or deleted during next revisions of the ESMF. However, it is important to note that since the national and provincial environmental legislation as well as the industry standards do not require use of any specific environmental assessment for the projects and intervention falling under Environmental & Social Category C, the application of PPAF's ESR Checklists and Guidelines is optional unless required otherwise by PPAF through the Financing Agreement. In such cases, PPAF will make the use of ESR Checklists and Guidelines mandatory by making it a condition precedent in the Financing Agreement with the PO for the specific project or activity.

Also, since most of the PPAF supported asset transfers are at very small scale with negligible impact individually; hence whenever mandated, use of ESR Checklists and Guidelines (commonly known as Form A) for each of the asset transfer is not needed. Instead, the ESR Checklists and Guidelines should be applied at clusters level, i.e., a Revenue Village. However, for each of the community physical infrastructure (CPI) and non-structural interventions, individual ESR Checklists and Guidelines should be used.

When mandated, the ESR Checklist and Guidelines (Form A) should be developed by the relevant PPAF or PO staff for each of the CPI and non-structural interventions at the planning stage and during the design and implementation stage of that intervention. Similarly, it will be developed for each incidence of asset transfers, though at cluster level, before the assets are transferred. Once the intervention is complete, the ESM Compliance Certificate (commonly known as Form B; Annex 14) will be filled-in and signed by the relevant PPAF or PO staff. In case of asset transfers, the ESM Compliance Certificate will be completed after the duration mentioned at the beginning of the relevant ESR Checklists and Guidelines (Form A).

2.1.2. PPAF Operations and ESA

PPAF has two main streams of operations: (a) grants-based livelihood support actions, and (b) microcredit. The grants operations are diverse in nature, ranging from structural to non-structural interventions. The environmental and social assessment is more relevant to the structural interventions, which can be grouped as following:

- Drinking water – including securing the source, the conveyance system and the end point of drinking water ensuring that the beneficiary community gets safe drinking water in compliance with national and international water quality standards.
- Irrigation and agriculture – including efficient conveyance systems, high efficiency irrigation systems, on-farm water management, and making agriculture more productive as well as economically viable.
- Sanitation – making the human settlements safe in terms of contaminants and disease vectors by employing measures such as community led total sanitation, school led total sanitation, open

defecation free villages, construction, or rehabilitation of missing sanitation facilities. These efforts are complimented through health and hygiene education to achieve intended results.

- Community link roads – to provide commutable link, with stone or brick soling, from human settlements or farms to the nearest roads enabling the beneficiary communities to enhance their productive and economic activities.
- Health and education related community infrastructure – including classrooms or missing infrastructure in schools and health facilities, drinking water and sanitation facilities, biogas plants, desalination Plants, flood rescue platforms, and disaster prevention infrastructure such as flood protection bunds or water ponds in drought prone areas.

The PPAF Community Physical Infrastructure Project Manual¹⁷ provides detailed guidance on how to identify, design and implement community based structural interventions. At the eligibility stage, it makes environmental and social sustainability a key criterion for the intervention. Then, at the design stage, it requires environmental and social assessment of the intervention as a prerequisite through use of ESR Checklists and Guidelines to identify environmental and social adverse impacts of the intervention and appropriate measures according to the mitigation hierarchy (as elaborated in Figure 2). At the completion of the intervention, an ESM Compliance Certificate is required, necessitating the environmental monitoring as an ongoing activity. Additionally, all interventions will be assessed in terms of resilience against disasters and climate change effects. However, as per ESMF, application of ESR Checklists and Guidelines is optional unless required otherwise by PPAF through the Financing Agreement.

The non-structural interventions may include distribution of assets (mostly livestock) and small-scale livelihood support. In isolation, these interventions may not cause any significant environmental and social risks but if being implemented cumulatively in one geographical unit, these interventions need to be screened for any cumulative environmental and social impacts. The Prohibited Activities List (Annex 9) will be mandatory to be complied with for the small-scale livelihood support interventions.

Under microfinance, PPAF is providing the interest free microcredit to target beneficiaries. It is simple in terms of environmental and social assessment, requiring a formal commitment, as part of the loan agreement, by the borrower to strictly adhere to the Prohibited Activities List (Annex 9) and the ESM Guidelines for Microcredit (Section 5.2). While the burden of adherence is on the borrower, PPAF and its POs will employ their monitoring systems to ensure that the commitment is being honoured. Failing to do so will make the borrower ineligible for further lending.

2.2. Resource Efficiency and Pollution Prevention

PPAF and its POs support the communities in improving their livelihoods through economic activities which have potential to generate pollution to air, water, and land, and may consume finite resources. This environmental safeguard sets out the requirements to address resource efficiency and pollution¹⁸ prevention and management¹⁹ throughout the project life cycle to meet the following objectives:

- To promote the sustainable use of resources, including energy, water, land and raw materials.
- To avoid or minimise adverse impacts on human health and the environment by avoiding or minimising pollution from the intervention.
- To avoid or minimise intervention-related emissions of short and long-lived climate pollutants.
- To avoid or minimise generation of hazardous and non-hazardous waste.
- To minimise and manage the risks and impacts associated with pesticide use and fertilisers.
- To minimise and manage the risk of air and water pollution due to emissions and effluents.

¹⁷ PPAF. 2001. *Community Physical Infrastructure Project Manual*. Islamabad: Pakistan Poverty Alleviation Programme.

¹⁸ The term pollution refers to both hazardous and non-hazardous chemical pollutants in the solid, liquid, or gaseous phases, and includes other components such as thermal discharge to water, emissions of short- and long-lived climate pollutants, nuisance odours, noise, vibration, radiation, electromagnetic energy, and the creation of potential visual impacts including light.

¹⁹ Pollution management includes measures designed to avoid or minimise emissions of pollutants, including short- and long-lived climate pollutants.

The applicability of this safeguard will be established during the environmental and social assessment described in Section 2.1.

2.2.1. Resource Efficiency

PPAF and its POs will consider ambient conditions and apply technically and financially feasible resource efficiency measures in use of energy, water, land and raw materials. Especially the interventions with high water demand will take the following measures into consideration:

- Opportunities for improvement in water use efficiency will be identified and implemented.
- Specific water use (measured by volume of water used per unit production) will be assessed.
- Operations will be benchmarked to available industry standards of water use efficiency.

PPAF and its POs will assess, as part of the environmental and social assessment, the potential cumulative impacts of energy and water use upon communities, other users and the environment and will identify and implement appropriate adaptation and/or mitigation measures. Similarly, measure will be adopted to maximise land productivity.

2.2.2. Pollution Prevention and Management

PPAF and its POs will avoid the release of pollutants or, when avoidance is not feasible, minimise and control the concentration and mass flow of their release using the performance levels and measures specified in national and provincial laws, especially the environmental quality standards. This applies to the release of pollutants to air, water, and land.

As part of the environmental and social assessment of the interventions, PPAF and its POs will characterise and estimate sources of air pollution related to the intervention and take adaptation and/or mitigation measures. Similarly, they will avoid generation of hazardous and non-hazardous waste.²⁰ Where waste generation cannot be avoided, they will minimise the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment. Where waste cannot be reused, recycled, or recovered (such as hospital waste), PPAF and its POs will treat, destroy, or dispose of it in an environmentally sound and safe manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material. The pollution risks and adaptation and/or mitigation measures will be identified through the environmental and social assessment.

PPAF and its POs will avoid the manufacture, trade, and use of chemicals and hazardous materials subjected to international bans, restrictions, or phase-outs, while use of pesticides and chemical fertilisers will be discouraged. PPAF and its POs will neither fund nor implement any of the activities listed under Prohibited Activities List at Annex 9.

2.3. Biodiversity Conservation and Sustainable Management of Living Natural Resources

PPAF and its POs recognise that protecting and conserving biodiversity²¹ and sustainably managing living natural resources are fundamental to sustainable development; hence will identify the adverse impacts on biodiversity during the environmental and social assessment and propose adaptation and/or mitigation measures accordingly. This safeguard aims at:

- Protecting and conserving biodiversity and habitats.
- Applying the mitigation hierarchy (as elaborated in Figure 2) and the precautionary approach in the design and implementation of interventions that could have an impact on biodiversity.

²⁰ These wastes may include municipal waste, e-waste and animal waste.

²¹ Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.

- Promoting the sustainable management of living natural resources.
- Supporting livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

The applicability of this safeguard will be established during the environmental and social assessment described in Section 2.1. Where necessary due to the biodiversity-specific risks and impacts of an intervention, the environmental and social assessment will involve the participation of specific biodiversity experts.

The environmental and social assessment will consider direct, indirect, and cumulative intervention related impacts on habitats and the biodiversity they support. This assessment will consider threats to biodiversity, for example habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, pollution, and incidental take, as well as projected climate change impacts. It will determine the significance of biodiversity or habitats based on their vulnerability and irreplaceability at national, regional, or local level and will also consider the differing values attached to biodiversity and habitats by intervention-affected parties and other interested parties.

All interventions will avoid adverse impacts on biodiversity and habitats. When avoidance of adverse impacts is not possible, PPAF and its POs will implement measures to minimise adverse impacts and restore biodiversity in accordance with the mitigation hierarchy (as elaborated in Figure 2). Where significant risks and adverse impacts on biodiversity will be identified, the PPAF and its POs will develop and implement a Biodiversity Management Plan (BMP) through engaging competent biodiversity expertise. In such case, the relevant project or operational unit will be responsible for implementation of BMP, in addition to the ESMP, while the ESM Unit will also be monitoring the implementation.

Because, in most instances, habitat²² loss, degradation or fragmentation represents the greatest threat to biodiversity, much of the focus of biodiversity conservation actions is on maintaining or restoring suitable habitats. The habitat protection will be in line with the mitigation hierarchy (as elaborated in Figure 2) and biodiversity offsets²³ will be considered as a last resort. PPAF or its POs will not implement any intervention within less than 300 meters of critical habitats²⁴ as well as legally protected and internationally recognised areas of high biodiversity value, such as World Natural Heritage Sites, biosphere reserves, Ramsar wetlands of international importance, national parks, wildlife sanctuaries, and game reserves. Similarly, no invasive alien species of flora and fauna will be introduced through any of their interventions.

2.4. Land Acquisition, Land Use, and Involuntary Resettlement

PPAF seldom implements or finances interventions which require land acquisition or involuntary resettlement, as the land allocated for PPAF supported intervention is designated by communities through consensus in the form of a resolution and the documentary evidence is obtained on legal papers. However, it is important to set in place the screening criteria and safeguard procedures to address land acquisition and/or involuntary resettlement issues just in case an intervention comes across it.

²² Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the non-living environment. Habitats vary in their significance for conserving globally, regionally and nationally important biodiversity, their sensitivity to impacts, and in the significance different stakeholders attribute to them.

²³ Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project or scheme development and persisting after appropriate avoidance, minimisation and restoration measures have been taken. Therefore, potential offsets should not be considered in determining inherent risks of the project or scheme.

²⁴ Critical habitat is defined as areas with high biodiversity importance or value, including:

- a. habitat of significant importance to Critically Endangered or Endangered species, as listed in the IUCN Red List of threatened species or equivalent national approaches.
- b. habitat of significant importance to endemic or restricted range species.
- c. habitat supporting globally or nationally significant concentrations of migratory or congregatory species.
- d. highly threatened or unique ecosystems.
- e. ecological functions or characteristics that are needed to maintain the viability of the biodiversity values described above in (a) to (d).

The land acquisition²⁵ and restrictions on land use²⁶ can have adverse impacts on communities and persons, causing physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets, or access to assets, leading to loss of income sources or other means of livelihood), or both. The impact of these situations is called involuntary resettlement when the persons or communities affected by land acquisition and/or and restrictions on land use do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

This social safeguard aims at:

- Avoiding involuntary resettlement or, when unavoidable, minimising involuntary resettlement by exploring intervention design alternatives.
- Avoiding forced eviction.
- Mitigating unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by (a) providing timely compensation for loss of assets at replacement cost, and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of intervention, whichever is higher.
- Improving living conditions of the poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.
- Conceiving and executing resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the intervention.
- Ensuring that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The applicability of this safeguard will be established during the environmental and social assessment described in Section 2.1.

In the first place, PPAF and its POs will never implement an intervention for which land acquisition or restrictions on land use is required or which results in involuntary resettlement. However, in case some intervention requires acquisition of land restrictions on land use, the impacts of such actions will be determined using the Involuntary Resettlement Screening Checklist (Annex 10). If the intervention falls under IR Category A or B, a Land Acquisition and Resettlement Plan (LARP) will be prepared for the intervention and implemented according to the national and provincial land acquisition legislation. An indicative outline of LARP is given at Annex 11.

2.5. Indigenous Peoples

Though there is no agreed upon national definition of indigenous peoples (IPs) in Pakistan, the term can be used in a generic sense to refer exclusively to a distinct social and cultural group possessing the following characteristics in varying degrees:

- Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others.
- Collective attachment to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation, as well as to the natural resources in these areas.
- Customary cultural, economic, social, religious or political institutions that are distinct or separate from those of the mainstream society or culture.

²⁵ Land acquisition refers to all methods of obtaining land for project or scheme purposes, which may include outright purchase, expropriation of property and acquisition of access rights, such as easements or rights of way. Land acquisition may also include: (a) acquisition of unoccupied or unutilised land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or inaccessible. Land includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements, and appurtenant water bodies.

²⁶ Restrictions on land use refer to limitations or prohibitions on the use of agricultural, residential, commercial or other land that are directly introduced and put into effect as part of the project or scheme. These may include restrictions on access to legally designated parks and protected areas, restrictions on access to other common property resources, and restrictions on land use within utility easements or safety zones.

- A distinct language or dialect, often different from the official language or languages of the country or region in which they reside.

So far, only the Kalash community, residing mainly in Chitral District, is considered indigenous peoples. The PPAF has developed Indigenous Peoples Planning Framework (IPPF) as well as Indigenous Peoples Plan (IPP) for them. Both documents are accessible separately.

The indigenous peoples safeguard aims at:

- Ensuring that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource- livelihoods of Indigenous Peoples.
- Avoiding adverse impacts of interventions on Indigenous Peoples, or when avoidance is not possible, minimising, mitigating and/or compensating for such impacts.
- Promoting sustainable development benefits and opportunities for Indigenous Peoples in a manner that is accessible, culturally appropriate, and inclusive.
- Improving intervention design and promoting local support by establishing and maintaining an ongoing relationship based on meaningful consultation with the Indigenous Peoples affected by an intervention throughout the project's life cycle.
- Obtaining the Free, Prior, and Informed Consent of affected Indigenous Peoples in the three circumstances described in this ESMF.
- Recognising, respecting, and preserving the culture, knowledge, and practices of Indigenous Peoples, and to provide them with an opportunity to adapt to changing conditions in a manner and in a timeframe acceptable to them.

The applicability of this safeguard will be established during the environmental and social assessment described in Section 2.1. The Indigenous Peoples Screening Checklist (Annex 12) will be used to identify presence of indigenous peoples in any intervention area. The Checklist will be validated by the relevant experts and if presence of indigenous peoples is confirmed, the indigenous peoples planning process will be initiated in the form of environmental and social assessment by the relevant Unit with technical backstopping by the ESM Unit. The ESA will ensure that IPs in the intervention area are fully consulted about, and have opportunities to actively participate in, the intervention design and the determination of intervention's implementation arrangements. The proposed measures and actions to avoid, minimise or mitigate (as the case may be) will be developed in consultation with the affected IPs and documented in a time-bound Indigenous Peoples Plan (an indicative outline of IPP is given at Annex 13). The ESM Unit will manage the process of identification and validation of IPs, development of IPP, and will monitor the implementation of IPP. The process of IPs identification, consultation, IPP development, implementation and monitoring is elaborated in Figure 4.

The applicability of this safeguard will be established during the environmental and social assessment described in Section 2.1. Where necessary due to the potential risks and impacts of an intervention, the environmental and social assessment will involve the participation of cultural heritage experts.

The risks or impacts on cultural heritage may accrue from an intervention which:

- involves excavations, demolition, movement of earth, flooding, or other changes in the physical environment;
- is located within a legally protected area or a legally defined buffer zone;
- is in, or in the vicinity of, a recognised cultural heritage site;
- contravenes the architectural scheme or materials originally used to build that heritage; or
- is specifically designed to support the conservation, management and use of cultural heritage.

Once the direct, indirect, and cumulative intervention -specific risks and impacts on cultural heritage are identified through ESA, and found significant, a Cultural Heritage Management Plan will be prepared according to mitigation hierarchy (as elaborated in Figure 2) and implemented. The chance finds procedure²⁸ will be covenanted in all third-party contracts which involve excavations, demolition, movement of earth, flooding, or other changes in the physical environment.

2.7. Stakeholder Engagement and Information Disclosure

Community participation and mobilisation, and consultation with relevant stakeholders are key elements of PPAF programme delivery process. Effective stakeholder engagement can improve the environmental and social sustainability of interventions, enhance acceptance level, and make a significant contribution to successful intervention design and implementation. This safeguard aims at:

- Establishing a systematic approach to stakeholder engagement that will help PPAF and its POs identify stakeholders and build and maintain a constructive relationship with them.
- Assessing the level of stakeholder interest and support for the intervention and to enable stakeholders' views to be considered in intervention design and environmental and social [SEP] performance.
- Promote and provide means for effective and inclusive engagement with intervention-affected parties throughout the project life cycle on issues that could potentially affect them.
- Ensuring that appropriate information on environmental and social risks and impacts of the intervention is disclosed to stakeholders in a timely, understandable, accessible, and appropriate manner and format.

The applicability of this safeguard is vital element of the environmental and social assessment described in Section 2.1. The process of meaningful consultations begins with intervention planning and continues throughout the implementation and monitoring. PPAF has its standard methodology of community mobilisation and stakeholder engagement, elaborated in PPAF Project Manual Social Mobilization²⁹ which will be adhered to.

2.7.1. ESA related Consultations

The stakeholder consultation will start early in the intervention design phase and will continue throughout the implementation. The relevant stakeholders will be provided with timely, relevant, understandable, and accessible information, and will be consulted in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination, and intimidation. The process of stakeholder engagement will entail (i) stakeholder identification and analysis; (ii) planning how the engagement with stakeholders will take place; (iii)

²⁸ A chance finds procedure is an intervention-specific procedure which will be followed if previously unknown cultural heritage is encountered during implementation of the intervention. It includes a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence-off the area of finds or sites to avoid further disturbance; to assess found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of this safeguard and national law; and to train project personnel and project workers on chance find procedures.

²⁹ PPAF. 2017. *Project Manual Social Mobilization*. Islamabad: Pakistan Poverty Alleviation Fund.

disclosure of information; (iv) consultation with stakeholders; (v) addressing and responding to grievances; and (vi) reporting to stakeholders.

The Environmental and Social Assessment report, if required, will be shared the relevant stakeholders in advance of the public hearing (the period may vary from 15 to 30 days as per regulations of the specific EPA). The same will be posted on PPAF website for wider circulation.

2.7.2. Information Disclosure

PPAF and its POs will disclose the following information to allow stakeholders to understand the risks and impacts of the intervention, and potential opportunities.

- The purpose, nature, and scale of the intervention.
- The duration of proposed intervention.
- Potential environmental and social risks and impacts of the intervention on local communities, and the proposals for mitigating these, highlighting potential risks and impacts that might disproportionately affect vulnerable and disadvantaged groups, including but not limited to destitute, women, men, elderly, orphans, boys, girls, minorities, disabled or differently abled, widows, single/divorced women and transgender, and describing the differentiated measures taken to avoid and minimise these.
- The proposed stakeholder engagement process highlighting the ways in which stakeholders can participate.
- The time and venue of any proposed public consultation/hearing meetings, and the process by which meetings will be notified, summarised, and reported.
- The process and means by which grievances can be raised and will be addressed.

This information will be disclosed within 30 days of initiating the intervention in English and Urdu, and in a manner, which is accessible and culturally appropriate.

Additionally, complete environmental and social assessment reports, and environmental and social management plans for the interventions implemented by PPAF or its POs will be publicly disclosed on PPAF website within 30 days of the approval of the final drafts of these reports.

Pursuant to the right to information legislation³⁰ at federal and provincial level, PPAF has designated its Group Head, Support Services as the Information Officer, who can be approached to seek any information about PPAF, and its programme and operations.

2.7.3. Grievance Handling

PPAF and its POs will respond to concerns and grievances of the people affected by environmental and social performance of the interventions in a timely manner through implementing a grievance mechanism to receive and facilitate resolution of such concerns and grievances.

The grievance mechanism should address the concerns promptly and effectively in a transparent manner that is culturally appropriate and readily accessible to all intervention-affected people, at no cost and without retribution. The mechanism, process or procedure will not prevent access to judicial or administrative remedies. The intervention-affected people will be informed about the grievance process and applicable laws during its community engagement activities, and a publicly available record, documenting the responses to all grievances received, will be maintained. The handling of grievances will be in a culturally appropriate manner and be discreet, objective, sensitive and responsive to the needs and concerns of the intervention-affected people. The

³⁰ *Freedom of Information Ordinance, 2002*. Government of Pakistan. Enacted 26 Oct 2002.

Balochistan Freedom of Information Act, 2005. Government of Balochistan. Enacted 6 Dec 2005.

Khyber Pakhtunkhwa Right to Information Bill, 2013. Government of Khyber Pakhtunkhwa. Enacted 5 Nov 2013.

Punjab Transparency and Right to Information Act, 2013. Government of the Punjab. Enacted 16 Dec 2013.

Sindh Transparency and Right to Information Act, 2016. Government of Sindh. Enacted 8 Apr 2017.

grievance mechanism will not prejudice complainants' right to pursue their complaint in the appropriate court of law.

PPAF has set up a grievance redressal mechanism under which complaints about non-compliance of ESMF can be sent by following the process for resolving grievance mentioned in Figure 5.. The reported complaints will be treated confidentially, assessed impartially and handled efficiently, and aggrieved parties will be informed after resolution of complaints with necessary details (actions taken, by whom and when).

The following types of complaints will not be entertained under this mechanism:

- Anonymous complaints will not be considered.
- Complaints with respect to actions that do not have any concerns, directly or indirectly, with PPAF or its funded interventions.
- After official closure of the project. However, in case of any unanticipated negative impact caused by any of PPAF intervention, the complaint can be filed within six months of the closure of the project.
- Complaints related to financial embezzlement, and procurement of goods and services.

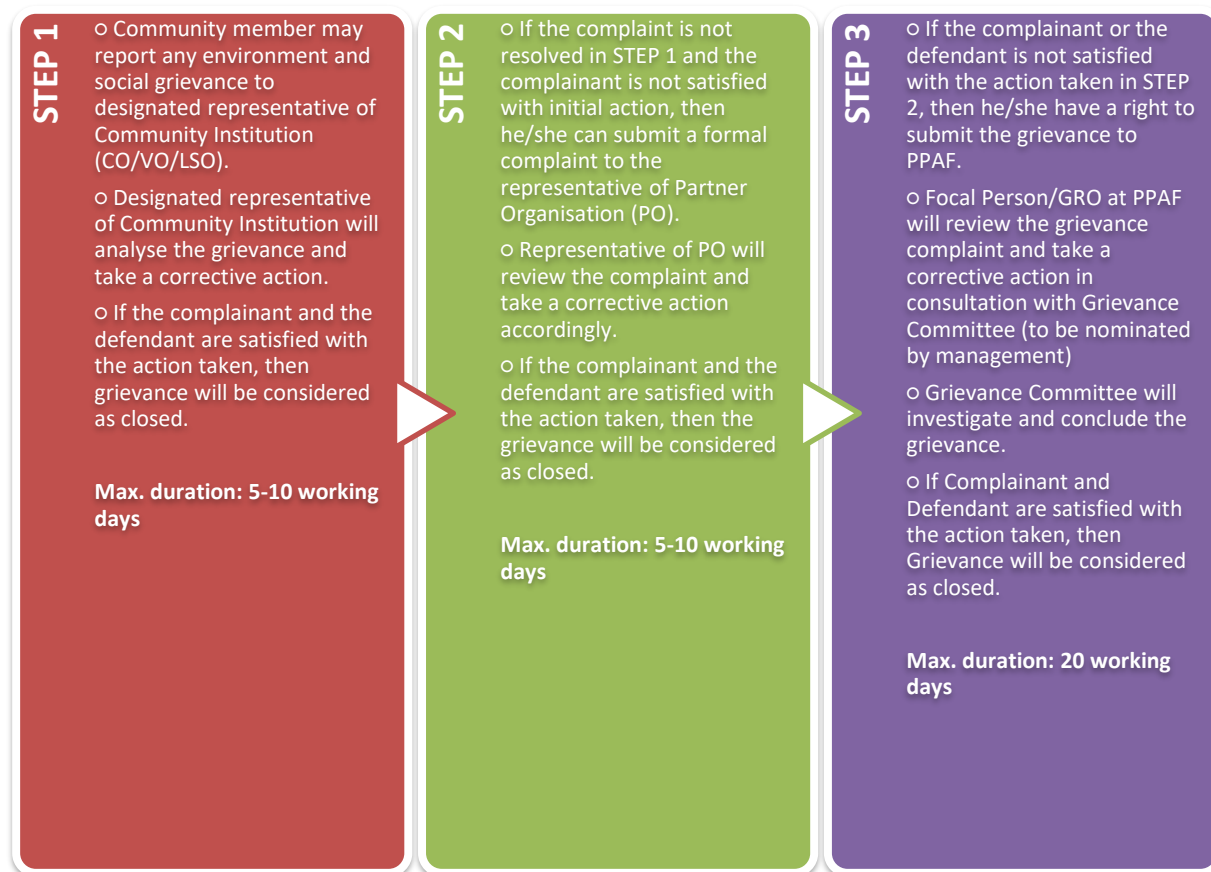
2.7.3.1 Process for Resolving Grievances at PPAF

To facilitate stakeholders during grievance redressal process, a cost-effective and practical approach shall be adopted by providing a platform at village and Union Council level through CO/VO/LSO, then at the PO level and lastly at the PPAF level. A three-step process, as shown in Figure 5, shall be applicable to address grievances within the PPAF ambit.

The following standard operating procedures (SOPs) will be employed for effective and timely redressal of complaints by PPAF:

- The grievance redressal mechanism will be handled by the Internal Audit Unit/Committee/focal person nominated by the PPAF management, which will be responsible to liaise/coordinate with internal and external stakeholders, i.e., PPAF Units, government departments, POs and complainants, as and when required.
- Anonymous complaints will not be entertained and any complainant with vague identification will be asked to provide additional details within 5-10 working days before proceeding further.
- All complaints will be recorded in the database and a reference number will be allotted.
- The complainant will be contacted and informed about complaint reference number and the contact details in PPAF through letter and/or email. Moreover, he or she will be asked to share any additional information relevant to the complaint. The complainant will be contacted by PPAF, from time to time, to get clarification on the issue raised by him or her.
- Identity of the complainant will not be disclosed to any party.
- The complaint specific procedure for verification of validity or otherwise of the complaint will be formulated within 5 days.
- If deemed necessary, the professionals with specific skill set, e.g., engineers, evaluators and other professionals will be hired or co-opted from the Operational Units, as and when required.
- The total timeframe for redressal of the complaint will be from 4 to 6 weeks.
- The Chief Executive Officer/Chief Operating Officer, PPAF will follow-up on the complaints on fortnightly basis, including status of the complaints and the progress thereon.

Figure 5: Three-step grievance redressal process at CO, PO and PPAF level



A three-member PPAF Grievance Committee, upon direction of the PPAF senior management, will be established to address the complaint in stipulated timeframe. The complaints can be forwarded to:

Chief, Internal Audit
 Pakistan Poverty Alleviation Fund
 14, Mauve Area, G-8/1, Islamabad, Pakistan
 Tel. +92 51 8439450
 Fax. +92512282262
 Email whistleblow@ppaf.org.pk

A written complaint can be sent to the above by post, email or fax with the following Information:

- Name of the complainant, address, phone number and email address. In case of representation valid proof of representative person.
- Name and location of the intervention.
- Details of the grievance or non-compliance which the implementing partner failed to comply with environmental and social safeguards.
- Supporting evidence (documentary, pictorial, audio or video)

In case the complainant is not satisfied with the redressal of the complaint, he or she may approach the provincial Environmental Protection Tribunals set up under the relevant environmental protection legislation. The appeals can be filed at the Green Benches established at the provincial High Courts and the Supreme Court of Pakistan.

2.7.3.2 Monitoring Grievance Redressal Actions and Records Maintenance

As per the grievance redressal mechanism, PPAF will ensure that:

- At CO/VO/LSO level, complaints' record must be filed in VO/LSO file with supporting documents.
- At PO level, complaints must be recorded in the Complaints Register with supporting documents and status.
- At PPAF level, record of the complaints and agreed actions shall be filed and maintained properly with due regard for confidentiality of Information.

2.7.3.3 Ensuring accessibility of the grievance system

To ensure transparency, effectiveness and accessibility of the grievance redressal process for any aggrieved party, PPAF will inform all relevant stakeholders about the ESMF compliance procedures, including the grievance redressal mechanism. All stakeholders must be trained on the grievance redressal process at early design stage of the project. Stakeholders should know the grievance redressal process, eligibility criteria for complaints and mechanism for submission of complaints and follow-ups.

The complaint submission, handling and record keeping mechanism is designed in such a way that stakeholders should have trust in the process and that a proper mechanism is placed to protect complaints from any form of disciplinary action. Upon request of the aggrieved party, his/her identity will remain confidential.

To ensure inclusion of all relevant groups, including women, indigenous peoples and vulnerable, the information shall be delivered in culturally appropriate manner and in the local language for better understanding. During consultative meetings, the information should be provided verbally as well. The GRM process will be made an integral part of the ESMF orientation workshops.

2.8. Health, Safety and Security

PPAF and its POs recognise that project activities, equipment, and infrastructure can increase exposure community and workers, especially women and children, to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to the intervention. Hence, this safeguard addresses the health, safety, and security risks and impacts on intervention-affected communities and workers, especially those who, because of their circumstances, may be vulnerable such as women, persons with disabilities, children (of working age) and migrant workers, contracted workers, community workers and primary supply workers. This safeguard aims at:

- Anticipating and avoiding adverse impacts on the health and safety of intervention-affected communities and workers during the project life cycle from both routine and non-routine circumstances.
- Promoting quality and safety, and considerations relating to climate change, in the design and construction of infrastructure.
- Avoiding or minimising exposure of community and workers to intervention-related traffic and road safety risks, diseases, and hazardous materials.
- Having in place effective measures to address emergency events, including enhance disaster preparedness of communities and workers.
- Ensuring that the safeguarding of personnel and property is carried out in a manner that avoids or minimises risks to the intervention-affected communities and workers.

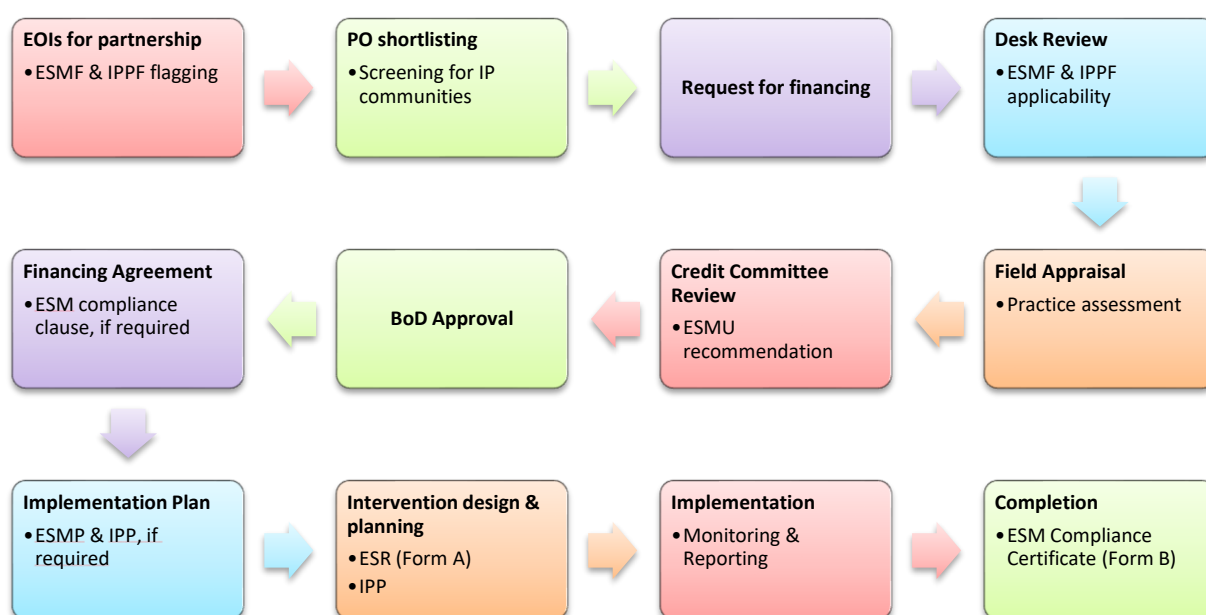
The applicability of this safeguard is vital element of the environmental and social assessment described in Section 2.1. PPAF takes care of these aspects while designing the intervention following its Community Physical Infrastructure Project Manual. The environmental and social management plans developed as part of environmental and social assessment will also propose specific measures to avoid, minimise and/or mitigate the adverse impacts on communities' and workers' health, safety, and security. The ESM Unit and ESM Focal Persons will be responsible for monitoring and reporting on compliance of the safeguard.

3. ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

To ensure effective compliance of the environmental and social safeguards by PPAF and its POs, an environmental and social management system (ESMS) has been put in place by PPAF. The implementation of ESMS is primary responsibility of PPAF’s ESM Unit, which is shared by PPAF’s Operational Units through their ESM Champions, and the POs through their ESM Focal Persons.

ESMF will be mainstreamed into PPAF operations through incorporation of an ESMF clause in all Financing Agreements and a seat for ESM Unit in the Credit Committee. In addition to this, sections on ESM compliance have also been added into the regular Back-to-Office-Report (BTORs) format that are followed by all PPAF staff on missions. The ESM checklist for all PPAF field visits has also been mainstreamed across the organisation and is being used. ESM protocols are integrated in all Operational Units’ manuals and processes, and are being followed. A flowchart showing the project implementation process and mainstreaming of ESMF is shown in Figure 6.

Figure 6: PPAF’s project cycle and ESM integration



3.1. Environmental and Social Management Unit

A fully committed and gender balanced, well-staffed, Environmental and Social Management (ESM) Unit, reporting to the General Manager, M&E, Research and ESM, serves as the custodian of ESMF within PPAF and for its POs. Ideally, the ESM Unit should be comprised of an ESM Manager, an Environmental Safeguards Officer and a Social Safeguards Officer. The Unit may be expanded keeping in view the expanding portfolio of PPAF, through project funded staff who will supplement the ESM Unit. The organogram of ESM Unit is shown at Figure 7.

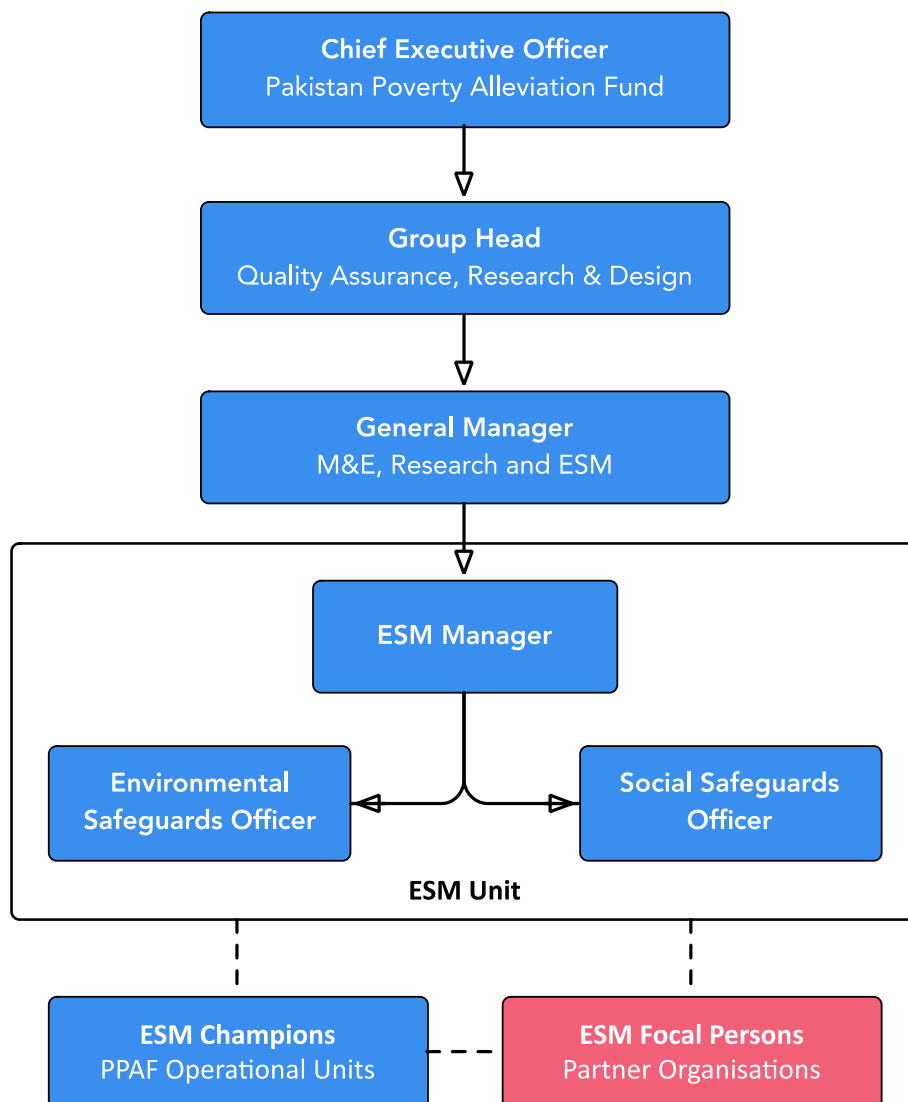
The key responsibilities of the ESM Unit include:

- Ensure ESMF dissemination, enforcement and compliance across all sectors, interventions and programmes of PPAF.
- Ensure that environmental and social assessments are carried out as required under the relevant safeguards (in Sections 2), especially for Category A and B projects, submitted to the relevant EPAs, and environmental approvals are sought. The ESM Unit may engage specialised expertise to undertake these assessments.
- Ensure that, if required as per ESMF provisions, the Environmental and Social Management Plan (ESMP), Land Acquisition and Resettlement Plan (LARP), Biodiversity Management Plan (BMP),

Indigenous Peoples Plan (IPP) or Cultural Heritage Management Plan (CHMP) are prepared, implemented, monitored and reported effectively.

- Carry out physical verification of the ESM compliance through environmental audits as and when required, and periodic third-party validation (TPV).
- Coordinate and liaise with PPAF’s ESM Champions and POs’ EMS Focal Persons for effective ESMF compliance.
- Coordinate with international and national environmental organisations and EPAs, as and when required.
- Prepare quarterly, semi-annual, annual and occasional ESM monitoring and progress reports, as needed.

Figure 7: Organogram of ESM Unit



3.2. ESMF Compliance and Reporting Mechanism

If mandated through the Financing Agreement, each PO will designate an ESM Focal Person who will ensure effective compliance of ESMF and actively liaise with PPAF’s ESM Unit for timely reporting. At the planning stage, the ESM Focal Persons will undertake Environmental and Social Review of planned interventions under Category C using ESR Checklists and Guidelines (Section 4) and document the adaptation and/or mitigation measures, if any, using the prescribed format (Form A). The same measures will be reported upon on completion of the interventions using the ESM Compliance Certificate (Annex 14), commonly known as Form B. They will also assist

the ESM Unit and/or designated consultants for undertaking EIA or IEE for the Category A and Category B interventions, respectively. During the implementation of all interventions, the ESM Focal Persons will monitor the ESMF compliance by the PO staff as well as communities and report any incompliance to the PO as well as the ESM Unit. Once completed, the Certificate will be placed in the intervention's file and a copy will be forwarded to the ESM Unit.

The ESM Focal Persons will periodically report on environmental and social screening of interventions, applicability of ESR Checklists and Guidelines for Category C interventions, and identification and implementation of adaptation and/or mitigation measures, if any. They will also report back on implementation of ESMP, LARP, BMP, IPP or CHMP, whichever is applicable and required. A report of ESMF compliance or otherwise will be submitted to the ESM Unit, using the prescribed formats and following the agreed timeframe. The ESM Focal Persons will:

- Incorporate ESMF requirements in the project proposal, and categorise the interventions using the prohibited activities list and screening checklists (Annex 6, Annex 9, Annex 10 and Annex 12).
- If mandated through the Financing Agreement, conduct ESR for Category C interventions using the prescribed format (Section 4) relevant to the specific interventions.
- Ensure that agreed environmental and social adaptation and/or mitigation measures (recorded in Form A) have been implemented.
- Conduct ESM monitoring, as stipulated in the Financing Agreement, and submit the reports to ESM Unit.
- Facilitate in conducting capacity building and awareness-raising sessions, environmental campaigns, and sharing of ESM best practices.
- Coordinate and cooperate with other POs in the network about environment and social management.
- Coordinate with the local and provincial environmental agencies and ESM Unit for effective compliance of ESMF.

Similarly, each PPAF Operational Unit will designate an ESM Champion who will actively liaise with ESM Unit and the respective POs for effective ESMF compliance and timely reporting by POs. They will help the ESM Unit in field monitoring, refresher courses and any other ESM related activities.

The ESM Unit will arrange special orientation sessions for staff of the Operational Units and POs to familiarise them with the ESMF and ensure its compliance. The ESM Champions and Focal Persons and/or other relevant staff will be trained in environmental and social assessment, use of ESR Checklists and Guidelines (if applicable), and monitoring of and reporting on the ESMF compliance. These staff will be offered refresher course every 2-3 years to keep them abreast of latest developments in environmental and social safeguards compliance.

PPAF's senior management will ensure that the ESMF is fully understood by all staff and is complied with. The ESMF compliance will be a key determinant in annual performance appraisal of the staff. An orientation of ESMF will be part of the induction programme for the new staff in PPAF.

3.3. ESMF Compliance Monitoring and Assurance

As mentioned earlier, if mandated through the Financing Agreement, the ESM Focal Persons in the POs will regularly monitor the ESMF compliance through keeping a check on implementation of the intervention and especially the adaptation and/or mitigation measures, if any proposed at ESR stage, and the management plans, if any. They will report any incompliance by the PO staff or the communities to the PO and the ESM Unit.

The Category A and B interventions which may be assessed engaging specialised expertise, may need to be monitored through specialised expertise. The ESM Unit will manage the specialised inputs for assessments, monitoring and reporting of Category A and B interventions. These monitoring reports will be submitted regularly to the relevant EPAs and/or donors, if required.

The staff of ESM Unit will make spot checks and visits to the interventions, as and when required, to verify the compliance of ESMF provisions, implementation of adaptation and/or mitigation measures identified through ESR, and follow-up on the previous visits' observations using the ESM Audit Report format (Annex 15). The corrective measures will also be shared with the ESM Champions to ensure compliance of audit observations.

At least once a year, PPAF senior management will hold a review of ESMF compliance in which the ESM Unit will make a comprehensive review of the compliance and seek guidance on any strategic issues.

PPAF will commission a third-party validation (TPV) of ESMF as per donor's requirement, if needed.. In TPV, around 5% stratified random sample of interventions will be physically visited and assessed with a special focus on effectiveness of ESMF compliance in terms of benefits to the target communities as well as the environment. The TPV will also review the level of POs' capacities to implement the ESMF and PPAF's capacity to ensure ESMF compliance. The TPV Report will be presented to the PPAF senior management, and the PPAF Board of Directors, if required, and will be disclosed at PPAF website as well.

4. ESR CHECKLISTS AND GUIDELINES

Once an intervention has been considered fundable as not falling under the Prohibited Activities List (Annex 9), and categorised using environmental and social screening checklists (Annex 6, Annex 10 and Annex 12), the Category C interventions may be subjected to Environmental and Social Review (ESR) for which checklists and guidelines were developed by PPAF in 2009 as a requirement for the World Bank funded PPAF-III and updated periodically. The last revision was made in 2014. The PPAF and its POs have implemented these checklists and guidelines for the relevant interventions, and the relevant PPAF and POs staff has already been trained adequately to use these checklists and guidelines.

However, it is important to note that since the national and provincial environmental legislation as well as the industry standards do not require use of any specific environmental assessment for the projects and intervention falling under Environmental & Social Category C, the application of PPAF's ESR Checklists and Guidelines is optional unless required otherwise by PPAF through the Financing Agreement. In such cases, PPAF will make the use of ESR Checklists and Guidelines mandatory by making it a condition precedent in the Financing Agreement with the PO for the specific project or activity.

The ESR Checklists and Guidelines are primarily related to asset transfers (Section 4.1) and community physical infrastructure (Section 4.1.8), and a few non-structural interventions (Section 4.3) under the grants operations. Although falling under ESM Category C, these interventions have multidimensional environmental and social benefits as well as risks; hence need elaborated checklists and guidelines to avoid any unintended environmental and social impacts. The microcredit operations (Section 5) are simple in nature; thus, require only to follow the Prohibited Activities List (Annex 9) and ESM Guidelines for Microcredit (Section 5.2).

To visualise the implementation of interventions and adaptation and/or mitigation measures, especially in case of community physical infrastructure (CPI) interventions, pre-intervention and post-intervention photos should also be attached to the Form A and Form B, respectively.

Some of the guidelines are universal and have been reproduced for each ESR as a reminder. These include:

- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Activities in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

In the interest of reducing the paper use, it is recommended that, where required, only the checklist, ESM Plan and the Commitment Sheet, should be printed and placed in the relevant file.

4.1. ESR for Asset Transfers

Since, in most cases, each single asset transfer costs very little and has negligible impact individually, the ESR will be at cluster level. Each of the Revenue Village will be considered a cluster unless there is a compelling reason to take a large village or a small union council as a cluster. In that case, the reasons will be recorded on the ESR Checklist (Form A). If the assets are being transferred in the same cluster at more than one instances, every time a separate ESR Checklist (Form A) will be completed. The beneficiaries in each cluster will sign a Commitment Sheet that they have read and/or been informed of the environmental and social guidelines and they will abide by these guidelines. This Commitment Sheet will remain part of the ESR Checklist (Form A).

4.1.1. Agriculture/Cropping

4.1.1.1 Environmental and Social Guidelines

- Asset transfers must not be made for crops included in Prohibited Activities List (Annex 9), such as poppy and other prohibited varieties.
- Use of synthetic chemical pesticide sprays is prohibited as it can have adverse ecological impacts. Instead, farmers should be informed about the benefits and methods of integrated pest management (IPM). Use of masks, which should be part of asset transfer, during spraying of permitted pesticides should be mandatory.
- Overuse of synthetic fertilisers can lead to soil contamination and drop in yield in the long term. Poor storage of synthetic fertilisers can lead to local level soil contamination and health hazards; hence, the beneficiaries should be educated about this aspect and best practices recommended by the Agriculture Department on application of synthetic fertilisers.
- The farmers should be made aware of expired agricultural inputs, such as permitted pesticides.
- The farmers should be educated about benefits of sustainable agricultural practices, such as using organic fertilisers, crop rotation, land fallowing, IPM, and use of only 'certified seeds' through linkages with the Agriculture Extension Department and the private sector for imparting Agriculture Management and Skills Training (AMST). These alternatives lead to reduction in the use of synthetic fertiliser and cost effectiveness.
- Outreach/training activities for agriculture should benefit both men and women.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Agricultural activities in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.1.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name	

– Designation – Date	
Mandatory at Design Stage	
Mandatory at Design Stage	Yes/No/NA
Has cultivation/ processing of crops listed in Prohibited Activities List (Annex 9) been prohibited?	
Has the use of synthetic chemical pesticide spray been prohibited?	
Has mask been provided as part of the asset transfer where permitted pesticides are being used?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.1.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.1.2. Cottage Industry/Handicrafts

4.1.2.1 Environmental and Social Guidelines

- Ensure that communities residing within or around the notified protected areas (e.g., national parks and game reserves) are not practicing illegal wood extraction for use in woodwork/furniture making, or chemically flushing/cutting trees for extraction of gum etc. (see Annex 18 for sources of technical data).
- Use of hazardous non-biodegradable packaging material such as black polythene (black plastic bags) and Styrofoam is prohibited.
- Ensure that hazardous liquid and solid waste, e.g., mercury, biomedical, heavy metals, CFLs (energy savers), tyres, oil, batteries, paint, solvents, acidic solutions, etc., is stored separately out of reach of children and is delivered to disposal sites in secure containers for safe disposal.
- Use of hazardous dyes and chemicals cause health problems such as skin allergies, cancer and other fatal diseases; hence, is prohibited.
- Improper use of tools and chemicals (polishes, paints, thinners etc.) can result in accidents and health problems. Provide protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, dyes paints and machinery as part of the asset transfer.
- Poor ventilation can result in indoor air pollution leading to health problems (respiratory diseases and irritation and inflammation of eyes etc.). Ensure installation of proper ventilation channels in workshops and when working with chemicals, paints, and polishes in confined spaces (e.g., open window, open door, exhaust fan, etc.).
- Most cottage industries and handicraft production take place in or near living areas, which gives easy access of machines, tools and chemicals to family members including children. This can result in misuse, accidents and health problems if equipment is not used and stored properly.
- Production of handicrafts such as carpets is labour intensive processes. Excessively long working hours can lead to health problems relating to eyesight, posture, exhaustion and skin etc.; hence, should be avoided.
- Since solid waste and runoff from the handicraft production and cottage industry (especially from the chemicals and dyes used in the handicraft production) may contaminate the groundwater as well as freshwater; the solid waste should be collected and dumped at a covered place while for large, uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 15 meters (see Annex 16) from potential sources of contamination emanating from handicraft centres and cottage industry. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Electrical wiring in the enterprise/workshop should be securely installed.
- Energy conservation/efficient practices such as using surface mounted devices (SMDs), switching off machinery/tools when not in use, properly turning off taps when finished using and other such practices, should be encouraged.
- Machinery, tools and chemicals when not in use should be stored properly out of reach of children.
- Machinery, wiring, and other equipment should be kept clear of walking areas.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Cottage industry/handicrafts activities in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to

do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.2.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
	Yes/No/NA
Has illegal wood extraction and chemical extraction of gum etc. been prohibited for communities residing within the premises of notified protected areas?	
Has the use of packaging material such as black polythene (black plastic bags) and Styrofoam been prohibited?	
Has proper storage and disposal of hazardous liquid and solid waste (e.g., mercury, biomedical, heavy metals, CFLs (energy savers), tyres, oil, batteries, paint, solvents, acidic solutions, etc.) been ensured?	
Has protective gear such as gloves and masks for handling chemical polishes, dyes, and paints been provided as part of asset transfer?	
Has the installation of proper ventilation channels when working with chemicals, paints and polishes in confined spaces (e.g., open window, open door, exhaust fan etc.) been ensured?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	
Has the safe distance from the water sources ensured?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.2.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.3. Fishponds

Establishment of a fish farm at commercial scale falls under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation. This ESR is only for fishponds as productive assets for livelihood improvement at domestic level.

4.1.3.1 Environmental and Social Guidelines

- Since runoff from fishponds can contaminate the groundwater as well as freshwater; proper drainage and disposal system should be developed to contain mixing of runoff with the groundwater and the freshwater.
- All freshwater sources should be located at a safe distance of at least 30 meters (see Annex 16) from potential sources of contamination emanating from fishponds. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- A major issue attached to fisheries is the introduction of exotic species (see Annex 18 for sources of technical data); this can be disastrous for the local species and should be avoided.
- All fishponds should have fence to avoid safety hazard for the local population.
- Fishponds if not properly managed serve as breeding grounds for mosquito and other insects which is a serious health hazard for the nearby community.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Fishpond near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.3.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
Has it been ensured that no exotic fish species is introduced in open water bodies such as natural lakes, ponds etc.?	Yes/No/NA
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	Yes/No/NA
Has it been ensured that the asset will not be kept within a notified archaeological site or monument?	Yes/No/NA

Has it been ensured that the asset will not be kept within a notified protected area?	
Has the safe distance from the water sources ensured?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.3.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.4. Fishing Gear

Fishing gear covered by this ESR may include small fishing nets, fishing boats and outboard engines.

4.1.4.1 Environmental and Social Guidelines

- Substandard or small mesh sized nets should not be used as these are harmful for fingerlings. Instead, gillnets should be used.
- Fishing should not be practiced during the ban imposed by the government, normally in the months of June and July.
- The disposable wrapping materials should not be thrown in the water bodies.
- The outboard engines of the fishing boats should be properly tuned so that there is no spillage of oil into the water.
- Fishing boats should be equipped with first aid box/kit.
- The fishing boats should not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9).
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Fishing in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.4.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
Has the use of substandard or small mesh sized nets been prohibited?	Yes/No/NA
Has littering and disposal of disposable wrapping materials in the water bodies been prohibited?	
Has the beneficiary been trained on maintenance of fishing gear?	
Has a basic first aid box/kit been provided as part of the asset transfer?	
Has it been ensured that the boat will not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9)?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	

Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.4.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.5. Food Processing/Production

4.1.5.1 Environmental and Social Guidelines

- Many preservatives and dyes are used for food processing and should be derived from natural sources (e.g., salt, vinegar, sugar as preservatives, and spices such as turmeric, tea, flowers, and fruits etc. as dyes).
- Under no circumstances, textile dye be used as food colouring agents.
- Use of hazardous non-biodegradable packaging material such as black polythene (black plastic bags) and Styrofoam is prohibited. Also, rusted cans and unwashed/unsterilised bottles must not be used.
- Proper hygiene practices should be practiced avoiding contamination of the processed food. Hygienic working conditions should be ensured by providing gear such as disposable gloves and clean utensils as part of asset transfer. Also provide covered bins to ensure collection and safe disposal of solid waste.
- Large amounts of pesticides are applied to the fruit crops. If not properly washed at the time of processing, the residual pesticides are left on the surface of the fruits. This negligence may lead to serious health hazards for the consumers. Raw meat, vegetables and fruits should be thoroughly washed before use in food production.
- All food products should have expiry (best before) date mentioned on the packing.
- Improper and obsolete cooking stoves and gas pipes can result in wastage and safety hazards such as accidents due to gas leakage. Hence, installation of stoves/cooking appliances must be as per approved standards.
- Lit stoves and running water, when not in use, can lead to wastage of natural resources as well as accidents.
- Poor ventilation in cooking areas can result in indoor air pollution leading to health problems (e.g., acute respiratory diseases, irritation and inflammation of eyes etc.).
- Since solid waste and runoff from the food processing and production activities may contaminate the groundwater as well as freshwater, the waste should be collected and dumped at a covered place while for large, uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 15 meters (see Annex 16) from potential sources of contamination emanating from food processing and production. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Energy conservation/efficient practices such as using SMDs, switching off stoves when not in use, properly turning off taps when finished using and other such practices, should be encouraged.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any food processing activity in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.5.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	

Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	Yes/No/NA
Has it been ensured that natural additives, preservatives, and dyes/food colour meant for food are used in the food processing?	
Has the use of packaging material such as black polythene (black plastic bags), Styrofoam, rusted cans, and unwashed/unsterilised bottles been prohibited?	
Have hygienic working conditions been ensured by providing disposable gloves, and clean utensils as part of asset transfer?	
Has the collection and safe disposal of solid waste been ensured by providing covered bins?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	
Has the safe distance from the water sources ensured?	
Has the expiry (best before) date been mentioned on the packing of all food products?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.5.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.



Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.6. Livestock Rearing

Establishment of a livestock farm at commercial scale falls under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation. This ESR is only for livestock rearing as productive assets for livelihood improvement at domestic level.

4.1.6.1 Environmental and Social Guidelines

- Since solid waste and effluent from the livestock can contaminate the groundwater as well as freshwater; the solid waste should be collected and dumped at a covered place while for large and uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 30 metres (see Annex 16) from potential sources of contamination emanating from livestock. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Animal vaccination and veterinary care should be monitored. Borrowers should be educated about better species of livestock and best health practices for the livestock through linkages and livestock management and skills training (LMST) with the Livestock Extension Department. This shall also include veterinary care and vaccination plan to control disease.
- The beneficiaries should also be educated about harmful impacts of using booster medicines (hormones, etc.) for meat growth or increased milk production in livestock and restrict its use.
- Animal feed production processes can lead to deforestation or destroying of grasslands. Overgrazing can also lead to land degradation and soil compaction. Therefore, open grazing and browsing of livestock in ‘arid and non-irrigated areas’ is only allowed if based on the principle of ‘rotational grazing’ (see Annex 18 for sources of technical data). Rotational grazing is an exercise to divide rangeland/grasslands/pastures into rotation zones based on abundance of vegetation, to restrict overuse of rangeland, grassland or pasture. Overused zone is closed for grazing for a given season to help regeneration, and the livestock is grazed in another zone in simultaneity.
- Awareness on maintenance, odour control and cleaning of livestock enclosures should be provided to the beneficiary. Include mechanism for animal waste disposal in the proposal such as promoting installation of biogas plants for fuel gas and organic fertilizer.
- Continuous supply of drinking water for livestock allowing them to drink as per their requirement leads to increased productivity. Therefore, where possible livestock should be provided with continuous supply of drinking water.
- Livestock open grazing and browsing of livestock in ‘arid and non-irrigated areas’ should only be allowed if based on the principle of rotational grazing.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Livestock rearing near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.6.2 Checklist

Name of revenue village/UC & district	
Type of asset	

Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
	Yes/No/NA
Has the vaccination of livestock against diseases that rapidly spread been ensured?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be kept within a notified archaeological site or monument?	
Has it been ensured that the asset will not be kept within a notified protected area?	
Has the safe distance from the water sources ensured?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.6.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.1.7. Microenterprises/Workshops

4.1.7.1 Environmental and Social Guidelines

- Use of hazardous non-biodegradable packaging material such as polythene (black plastic bags) and Styrofoam should be prohibited.
- Ensure that hazardous liquid and solid waste (e.g., mercury, biomedical, heavy metals, electronic waste, tyres, oil, batteries, paint, solvents, acidic solutions, etc.) is stored separately out of the reach of children and is delivered to disposal sites in secure containers for safe disposal.
- Processing and sale of all illegal drugs and addictive substances such as heroin, hashish, opium, bhang, alcohol is not allowed.
- Sale of any item, such as medicines, which required permission from authorities will be subject to the relevant permission/license.
- Sale of addictive substances such as tobacco, *gutka*, *naswar*, cigarettes, *beeri*, *hukka*, *paan parag*, *sheesha*, and any other products containing such substances to any person under the age of 18 is prohibited.
- Expiry (best before) date should be mentioned on all perishable items for sale.
- Hygienic working conditions should be ensured by providing covered bins to ensure collection and safe disposal of solid waste.
- Where assets are in the form of medical kits, sterilisation equipment and needle cutters for disposal of needles and syringes should also be provided. Healthcare waste management guidelines (Annex 17) should be followed by such beneficiaries.
- Electrical wiring in the enterprise/workshop should be securely installed.
- Machinery, tools and chemicals when not in use should be stored properly out of reach of children.
- Machinery, wiring, and other equipment should be kept clear of walking areas.
- Encourage energy conservation/efficient practices such as using SMDs, switching off tools/machinery when not in use, properly turning off taps when finished using and other such practices. When providing lighting equipment, ensure energy conservation by providing SMDs as part of the asset transfer.
- Use of hazardous dyes and chemicals must be avoided as these can cause skin allergies, cancer or other fatal diseases.
- Improper use of tools and chemicals (polishes, paints, thinners etc.) can result in accidents and health problems. Protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, dyes paints and machinery must be provided as part of the asset transfer.
- Ensure proper ventilation (e.g., open windows, open doors, exhaust fans, etc.) in the workshops and when working with chemicals, paints, and polishes in confined spaces. The workshop should have proper signage, including display of current voltage, no smoking and other related precautions.
- Workshops/machinery in confined spaces can result in accidents. Ensure safe exits (e.g., unobstructed door, window, etc.) in case of fire emergencies when working in confined spaces. Provide basic first aid box as part of the asset transfer.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any microenterprise activity in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.7.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	Yes/No/NA
Has the use of packaging material such as black polythene (black plastic bags) and Styrofoam been prohibited?	
Has the processing and sale of illegal drugs and addictive substances such as heroin, hashish, opium, bhang, alcohol been prohibited?	
Has it been ensured that no addictive substance, such as tobacco, <i>gutka</i> , <i>naswar</i> , cigarettes, <i>beeri</i> , <i>hukka</i> , <i>paan parag</i> , <i>sheesha</i> , and products containing such substances are sold to any person under the age of 18?	
Has the collection and safe disposal of solid waste been ensured by providing covered bins?	
Where lighting equipment is part of asset, has energy conservation been ensured by providing SMDs as part of the asset transfer?	
Where assets are in the form of medical kits, has sterilisation equipment and needle cutters been provided as part of asset transfer?	
Has proper storage and disposal of hazardous liquid and solid waste (e.g., mercury, biomedical, heavy metals, CFLs (energy savers), tyres, oil, batteries, paint, solvents, acidic solutions, etc.) been ensured?	
Has expiry (best before) date been mentioned on all perishable items for sale?	
Has the relevant permission/license been obtained before sale of any item, such as medicines, which required permission from authorities?	
Has energy conservation been ensured by providing SMDs as part of the asset transfer?	
Has protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, dyes, paints, and machinery been provided as part of the asset transfer?	
Has the installation of proper ventilation channels when working with chemicals, paints and polishes in confined spaces (e.g., open window, open door exhaust fan etc.) been ensured?	
Has proper signage (display of current voltage/no smoking/other precautionary signs) been displayed in the workshop?	
Have safe exits been ensured in case of fire emergencies when working in confined spaces (e.g., unobstructed door, window, etc.)?	
Has a basic first aid box been provided as part of the asset transfer?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	

Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.7.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
6.			
7.			
8.			
9.			
10.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.8. Poultry Raising

Establishment of a poultry farm at commercial scale falls under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation. This ESR is only for distribution of poultry birds as productive assets for livelihood improvement at domestic level.

4.1.8.1 Environmental and Social Guidelines

- All freshwater sources should be located at a safe distance of at least 30 metres (see Annex 16) from potential sources of contamination emanating from poultry pens/enclosures. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Poultry birds are also prone to many diseases such as “rani khet”, and there are possibilities of disease spread in the nearby communities. Asset recipients should be educated about hazards of feeding low quality chicken feed, best hygiene and sanitation practices, and birds’ diseases management and associated risk for the community in case of spread.
- Poultry pens/enclosures are known for their foul smell. Awareness on maintenance, odour control and cleaning of poultry pens/cages should be provided to the beneficiary.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Poultry raising near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.
- The beneficiary should be educated about:
 - Mechanisms for proper waste disposal.
 - Hazards of using low quality chicken feed, best hygiene and sanitation practices, and birds’ diseases management and its risk for the community in case of spread.

4.1.8.2 Checklist

Name of revenue village/UC & district	
Type of asset	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO’s name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
Has the vaccination of poultry against diseases that rapidly spread been ensured?	Yes/No/NA
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be kept within a notified archaeological site or monument?	

Has it been ensured that the asset will not be kept within a notified protected area?	
Has the safe distance from the water sources ensured?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.8.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
6.			
7.			
8.			
9.			
10.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.1.9. Tri-wheeled Vehicles

The tri-wheeled vehicles covered under this ESR may include auto-rickshaw, motorcycle cart and chingchi rickshaws. Purchase of any other vehicle is not allowed as per the Prohibited Activities List (Annex 9).

4.1.9.1 Environmental and Social Guidelines

- Awareness should be provided to the beneficiaries on repair and maintenance of the vehicle, noise and air pollution control, waste disposal, driving license, vehicle number plate, use of protective gears such as helmet, seat belt, dim lights, reflector tape/light, prohibition of installation and use of video devices, high music volume, irresponsible driving, over speeding, underage driving, vehicle parking rules, and basic road/traffic signs, etc.
- Substandard quality of compressed natural gas (CNG) or liquefied petroleum gas (LPG) kits used in tri-wheeled vehicles may cause explosions, resulting in loss of lives and asset. Awareness should be provided to the beneficiaries about the precautionary measures. For instance, passengers must be prohibited from smoking since gas leakage can ignite fire. CNG/LGP powered vehicles should undergo a regular check-up with a clearance certificate from the authority like OGRA / All Pakistan CNG Association (APCNGA) etc. The gas-kit installation and testing workshops has been set up at various CNG stations across Pakistan. As per OGRA guidelines, only one CNG/LPG cylinder should be installed in tri-wheeled vehicles.
- Substandard quality of engine and body parts can result in additional expenses, and cause noise and air pollution leading to health problems. Quality of engine and body parts of the vehicle should be ensured in asset transfer.
- The vehicles should have safety signage, such as reflective tape and/or lights.
- These vehicle's being plied for rent, should not be parked near sensitive receptors like mosques, schools, hospitals, graveyards, highways as it may affect the public and create traffic congestion.
- Excessively driving for long hours, continuous driving at night and wrong posture while driving, can lead to health problems; hence, should be avoided.
- Good driving practices, such as smooth acceleration and soft breaking reduce fuel consumption. The drivers should be educated on good driving practices.
- Periodic maintenance of vehicles, such periodic check-ups, engine tuning, prescribed tyre pressure and timely replacement of engine oil and filters, reduce the fuel consumption, enhances vehicle's durability and help controlling air pollution.
- Ensure that hazardous materials (e.g., tyres, oil, batteries, etc.) are stored separately out of the reach of children and are delivered to disposal sites in secure containers for safe disposal.
- The vehicles should not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9).
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any vehicular activity in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.1.9.2 Checklist

Name of revenue village/UC & district	
Type of asset	

Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at Design Stage	
	Yes/No/NA
Has beneficiary been educated on various aspects of safe vehicle operation as listed under the above guidelines?	
Has quality of engine, vehicle parts, tyres, lubricants, etc been ensured to avoid noise and air pollution and accidents?	
Does the beneficiary have a valid driving license?	
Has quality of CNG/LPG kit for the vehicle been ensured (if applicable)?	
Has proper storage and disposal of hazardous materials (e.g., tyres, oil, batteries, etc.) been ensured?	
Has a basic first aid box/kit been provided as part of the asset transfer?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the asset will not be used within a notified archaeological site or monument?	
Has it been ensured that the asset will not be used within a notified protected area?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that no child labour is hired?	
Has it been ensured that the vehicles will not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9)?	
Has it been ensured that the asset transfer is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there is no conflict over the asset transfer?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the asset transfer?	
Is there any group of people who will become vulnerable/ marginalized due to this asset transfer?	
If answer to any of the above stated criteria is NO, then the asset cannot be transferred.	

4.1.9.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
11.			
12.			
13.			
14.			
15.			



Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2. ESR for Community Physical Infrastructure

An intervention specific ESR will be undertaken for each of the CPI interventions.

4.2.1. Biogas Plants (for domestic use)

The biogas plants for domestic use can be financed through PPAF funds and will be subjected to ESR. The ones for commercial use will fall under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.1.1 Environmental and Social Guidelines

- Biogas plant is an environmentally friendly product. It does two functions; (a) supply clean energy at the local level, and (b) generate bio-fertilizer (slurry) as a by-product. Biogas plant operations are relatively complex as compared to other CPI interventions. If the plant is operated under prescribed manual, then they normally do not cause environmental impacts.
- Seepage from biogas well can cause groundwater contamination. Seepage control measures are incorporated in the design to mitigate this impact.
- Population safety from the emissions of the plant is normally achieved by locating plant at a safe distance from the houses.
- Hydrogen sulphide (H₂S) generation can cause serious impacts on community health. This issue is normally mitigated by fixing a suction fan on the top of the stake. Fan will suck the gas and disperse in the air.
- There should not be any conflict over distribution of biogas, and it should be distributed equitably.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- A biogas plant in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.1.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	

Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the biogas plant is located at 20 m from residences and sources of water supply if privately owned, and 200 m away in case of communal ownership?	
Has it been ensured that there is no conflict over distribution of biogas?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has closed biogas well (digester) been designed and constructed?	
Has it been ensured that sludge conveyance to the well is proper, and 100% sludge is transferred to the well?	
Have proper arrangements been made to monitor H ₂ S emissions as per design of the biogas plant?	
Has a comprehensive operating manual for the plant been prepared? Does the manual provide plant monitoring arrangements, frequency of monitoring for environmental indicators, and cover major environmental concerns such as H ₂ S emissions controls, safety measures for cleaning the well, solid waste management, and seepage controls?	
Has proper signage (no smoking/ other precautionary signs) been displayed on the plant?	
Has the community member in-charge of maintenance been formally trained by the installing company?	
Are the standard operating procedures (SOPs) available with the COs?	
Has the community been trained about the operations of the plant? Does the training include impacts of seepage to the groundwater, hazards of H ₂ S gas, and safety measures for handling H ₂ S gas emissions?	
Have appropriate measures been taken to ensure equitable distribution of biogas?	
Has it been ensured that the supply of animal waste is equitably shared amongst all beneficiaries (in case of a communal biogas plant)?	
Has it been ensured that all contributing households have equal access to the biogas?	

Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.1.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.2. Bridges/Causeways/Culverts

4.2.2.1 Environmental and Social Guidelines

- Under environmental criteria factors of disturbance to natural habitat, disruption to wildlife, and inconvenience to commuters are considered for the site selection of the bridge.
- Construction of bridges and culverts in mountain areas leads to serious land erosion and landslides. This impact is mostly mitigated by up and downstream slope stabilisation, thick vegetation, and by using lightweight rollers or other manual means of compaction.
- Under size culverts can cause local level flooding, and erosion of embankments. Therefore, appropriately sized culverts should be designed.
- In some cases, blasting is involved for clearing the right of way for the bridge or culvert. Blasting without proper arrangements and safeguards can lead to injuries and life losses. There are standard safety procedures for blasting; these standards should be adopted by the intervention.
- Bridge/causeway/culvert construction or repair might involve acquisition of land, houses, buildings and other physical infrastructure. Wherever land acquisition is involved that should be executed as per the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4), and the rightsholders should be properly compensated at market prices under the agreed rates between proponent and rightsholders.
- If land is required, it is the responsibility of the community to arrange land with signing an agreement for donated land to avoid conflict.
- In most of the cases trees are cut to clear the right of way. Simple compensation for tree cutting is that plant at least five trees for every tree cut or relocate the same tree if possible.
- Dust emission during the construction needs to be mitigated by periodic water sprinkling.
- Temporary safe alternate routes are provided to the commuters to avoid inconvenience.
- Waste, construction material, debris, and spoil heaps should be properly disposed. Generally waste construction material and debris are thrown in the rivers/streams. This is seriously a wrong practice as it can cause blockage in water body and consequently local level flooding.
- Communities in the vicinity are properly informed about the construction activity, timings, schedules, and safeguards for securing community consent and avoiding any unpleasant accident.
- Temporary safe alternate routes are provided to the commuters to avoid inconvenience.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a bridge/causeway/culvert in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.2.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	

Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has it been ensured that there are no negative impacts downstream for the flow of water such as erosion, low level flooding, etc.?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the construction of bridge will not lead to large-scale land erosion and landslides?	
Has it been ensured that ecologically sensitive and culturally important areas are no opened-up by the proposed bridge?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Does any person(s) has/have any assets/infrastructure on the donated land for the intervention? If the answer is yes, then has/have they been compensated at replacement cost/market price?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has an environmental profile of the area been prepared, that provides information about the important ecological, cultural, reserve forests, biodiversity, and other important features of the area?	
Have the communities been informed about the detailed activity plan, including alternate route during construction?	
Has community consent been secured? And has all safeguards agreed with the community been implemented?	
Have safety measures been adopted for the blasting?	

Has the cutting of trees been minimised, and five trees planted for every tree cut along the road leading to the bridge?	
Has the construction been scheduled during a dry season?	
Has the contractor been provided with and instructed about the on-site and alternate route water-sprinkling schedule?	
Have the waste construction material and spoil heaps been properly disposed of?	
Have engineering codes been adopted to design the bridge structure?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.2.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.3. Check/Delay Action Dams (up to 10-meter height)

Either of the check or delay action dams up to 10-meter height can be financed through PPAF funds and will be subjected to ESR. Any dam higher than 10 meters will fall under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.3.1 Environmental and Social Guidelines

- Delay action dams are constructed to recharge the groundwater aquifer as well as for irrigation purposes.
- The catchment area and watershed of the dam must be calculated using the local knowledge. A corresponding watershed management plan should be prepared at the design stage.
- The dam may cause erosion and landslides. For the designing of a dam, information for geology, hydrology, topography and soil erosion profile of the area must be generated and analysed. If these potential risks are within manageable limits, these can be mitigated by incorporating measures like slope stabilisation and watershed management.
- The dam should not cause inundation of cultivable land and orchards, unless required to irrigate at least five times more arable land.
- Construction of a dam might involve acquisition of land, houses, buildings and other physical infrastructure. Wherever land acquisition is involved that should be executed as per the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4), and the rightsholders should be properly compensated at market prices under the agreed rates between proponent and rightsholders.
- If land is required, it is the responsibility of the community to arrange land with signing an agreement for donated land to avoid conflict.
- Intensive community consultations are needed for the site selection. The proponent should identify more than one alternative site. Comparative analyses of the sites are presented to the community and under open discussion consensus is achieved.
- The dam may cause obstruction to the movement of commuting people and wildlife. Alternate pathways and routes should be provided in the design to mitigate such impacts.
- The dams always pose the threat of wash away under heavy floods and torrential rains, blockage due to the movement of large rocks, porous berms due to increase in mice population, poor maintenance, and fast silt accumulation. These risks should be mitigated by providing right capacity spillways, proper site selection, periodic removal of blockage essentially after torrential rains, proper maintenance of berms, and watershed management.
- Communities in the surroundings and especially downstream communities are informed about the risks attached with the breakdown of the dam and actions to be taken by the community in case of break down.
- Wherever possible use local materials to avoid the transportation of material.
- Usually, dams have specific impacts on downstream communities by changing the traditional flow pattern which affects the associated benefits of downstream communities. Water distribution management plan is developed at early stages of planning and designing. Furthermore, involvement of community at early stages is also needed to overcome the conflicts with communities at subsequent stages.
- The location of a dam needs to be carefully selected, keeping in mind habitat destruction, downstream water flows requirements, and number of check dams on the same stream. The location must also keep in consideration the demands and effects on the downstream communities. Their consent to the location is also desirable.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a check/delay action dam in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative

site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.

- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.3.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
The height of the dam does not exceed 10 meters?	
Has it been ensured that the dam will not cause large displacement of population?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Is the catchment map and watershed management plan available?	
Have the downstream impacts of the location of the dam been considered and discussed with the local communities?	
Has it been ensured that the impacts on the habitat integrity are minimal?	
Has it been ensured that by constructing the dam at the suggested location, will not hamper the downstream flows, and not harm the downstream communities in any way?	
Has it been ensured that the dam does not inundate large cultivable land, orchards, and culturally and environmentally important sites?	
Has it been ensured that no large settlement is in the immediate vicinity, especially in case of break down and higher discharges from the spillways, no downstream community will be inundated or affected?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	

Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has a geological, hydrological topography, and soil erosion profile of the area been prepared?	
Has it been confirmed that technically a safe dam can be constructed on the site, capable of handling the highest known flood, with a safety margin of 1.5?	
Have alternate site location, dam height (max 10 m permissible by PPAF), and risk management technical analysis for the intervention and report conclusions been conducted?	
Has verifiable information about the consultations conducted for the intervention been generated and incorporated? And consensus and terms and conditions raised by the community for the intervention been reported?	
Has a proper market mechanism for the compensation of displacement of people, acquisition of land, and other assets been adopted?	
Has local labour and construction material been used wherever possible?	
Has a Disaster Management Plan been prepared?	
Have the communities been informed about the risks attached to the break down and over flooding during floods and torrential rains? Have the communities been trained for the possible actions to be taken at the time of occurrence of such accident/event?	
Have slope stabilisation and watershed measures been implemented to control soil erosion and slope stabilised, as a part of the watershed management plan?	
Have appropriate warning signs been displayed conspicuously before the onset of construction work for pedestrian and vehicle traffic to know that construction machinery is in operation? And is all traffic stopped at a safe distance during any blasting operation?	
Have alternate pathways and routes been constructed for commuters and wildlife if dam and reservoir are obstructing the original pathways and routes?	
Has an effective water management plan been developed, and implementation ensured for water releases from the dam to serve the downstream communities?	
Has a maintenance manual been prepared, and communities trained accordingly for its implementation?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	

Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
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4.2.3.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.4. Community Link Roads (up to 2 km length)

Road to provide commutable link, with stone or brick soling, from human settlements or farms to the nearest roads (not more than 2 km length) enabling the beneficiary communities to enhance their productive and economic activities can be financed through PPAF funds and will be subjected to ESR. The roads lengthier than 2 km fall under Category B or A and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.4.1 Environmental and Social Guidelines

- The link roads in the mountain areas may open-up ecologically sensitive and important areas such as reserve forests, biodiversity areas etc. Access to these areas lead to exploitation of important natural resources. These resources are performing known and unknown multiple ecological functions. Hence, this aspect should be considered before planning for a link road.
- The construction of such roads may also lead to serious land erosion and landslides. This impact is mostly mitigated by up and down stream slope stabilisation, thick vegetation, and by using lightweight rollers or other manual means of compaction.
- In some cases, blasting is involved for clearing the right of way for the road. Blasting without proper arrangements and safeguards can lead to injuries and life loss. The proponent should adopt the standard safety procedures for blasting.
- Link road construction might involve land acquisition, houses, buildings and other physical infrastructure. Wherever acquisition is involved that should be executed with the consent of the stakeholders, and the stakeholders should be properly compensated at market prices under the agreed rates between proponent and stakeholders or any other arrangement agreed on consensus basis among stakeholders.
- Land maybe required and it is the responsibility of the community to arrange land with signing an agreement for donated land to avoid conflict.
- In most of the cases trees are cut to clear the right of way. Simple compensation for tree cutting is that plant five trees for every tree cut or relocate the same tree if possible.
- Link road repair or construction can lead to downstream slope destabilisation and soil erosion. This environmental impact is normally mitigated by construction in dry seasons, using prestress prefab structures. In case of on-site construction of slab, light weight rollers or manual compaction means are used, and earth works are executed for the stabilisation of downstream works.
- Dust emission during the construction needs to be mitigated by periodic water sprinkling.
- Temporary safe alternate routes are provided to the commuters to ovoid inconvenience.
- Waste construction material and debris should be properly managed. Generally waste construction material and debris are thrown on the downstream slopes. This is seriously a wrong practice which can cause inconvenience and accidents for the downstream communities along with marginal ecological losses.
- Downstream communities should be properly informed about the construction activity, timings, schedules, and safeguards for securing community consent and avoiding any unpleasant accident.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any road in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.4.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that the construction of the road will not lead to large-scale land erosion and landslides?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action.</p> <p>If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has an environmental profile of the area been prepared, that provides information about the important ecological, cultural, reserve forests, biodiversity, and other important features of the area?	
Have the communities been informed about the detailed activity plan, including alternate route during construction?	
Have safety measures for blasting been adopted?	

Has the cutting of trees been minimised, and five trees planted for every tree cut along the new road?	
Has the contractor been provided with and instructed about the on-site and alternate route water-sprinkling schedule?	
Has the waste construction material been properly disposed?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.4.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.5. Desalination Plants (for up to 100 households)

The desalination plants for up to 100 households can be financed through PPAF funds and will be subjected to ESR. The ones for commercial use will fall under Category B and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.5.1 Environmental and Social Guidelines

- If the desalination tank is properly cleaned and maintained, there is rare possibility of water contamination under desalination process. Its poor efficiency can lead to higher value for TDS, but the World Health Organization (WHO) has dropped this indicator from the drinking water indicators. If the desalination plant is used for drinking purpose, then after the completion of the intervention testing of discharge water for coliform, faecal coliform, and nitrate is advised to be checked against the NEQS.
- Extracted salt can lead to local level soil contamination. Salt should be properly buried or disposed of by other alternative ways.
- Periodic cleaning of raw water tank is required to ensure that salt deposition and bacterial growth is not happening.
- There should not be any conflict over land. It should be donated with the signing of an agreement.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a desalination plant in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.5.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	Yes/No/NA
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	Yes/No/NA
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	Yes/No/NA
Is the desalination plant located about 50 meters away from latrines and solid waste dumps?	Yes/No/NA

Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has the water testing of the discharged water been carried out and do the test results confirm that the water is not contaminated by coliform, faecal coliform, nitrate, arsenic, and fluoride? Attach test report with the design report.	
Has the operator/technician in charge of maintenance been formally trained by the installing company?	
Are the standard operating procedures (SOPs) available with the COs in Urdu?	
Have the communities been educated about the proper use, operation and maintenance of the desalination plant?	
Has the extracted salt been disposed of by burying it away from agricultural land? Alternatively, salts can be disposed of in the dumping sites if available.	
Have the manuals and schedules for the cleaning of water tank, desalination water, and storage tank been prepared? And has the community been trained on the cleaning of tanks?	
Has the land been donated, and proper agreement signed to ensure rights and accessibility?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.5.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.6. Drinking Water Supply (dug well/handpumps/springs)

The drinking water supply through dug wells, handpumps or conveyance from springs can be financed through PPAF funds and will be subjected to ESR. The large-scale drinking water supply schemes will fall under Category B or A and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.6.1 Environmental and Social Guidelines

- Before starting a water supply intervention, all the legal aspects must be cleared regarding no objection certificate (NOC) for the land used for the intervention
- At the design stage of a drinking water supply intervention, water samples from the available sources (handpump, tube well or dug well) around the selected site need to be tested for coliforms, faecal coliforms, arsenic, and nitrates as per NEQS. The test report should be placed in the intervention file.
- Some areas are known for presence of arsenic in the underground water. In such areas, special attention should be paid towards water quality testing, especially for arsenic contamination, before planning a dug well or handpump initiative.
- Water quality reports must be checked before starting a drinking water supply intervention. If there is no other source and water is not clean enough according to WHO standards filtration plant must be installed and trainings be provided for its proper maintenance to the concerned CO.
- In case of installing hand pumps, or digging one or more open wells, cumulative impact of ground water withdrawal through hand pumps in desert and dry areas needs to be calculated.
- Open (dug) wells are commonly at the risk of getting contaminated with coliforms, faecal coliforms, fluorides, arsenic and nitrate, especially with dropping of surface contaminants in the well. These contaminants cause moderate to high significance health impacts on the communities; hence special measures should be taken to protect the well from contamination.
- Most of the open wells are without a parapet wall, which is big safety hazard for the users. Hence, all wells should be provided a parapet wall.
- Spring water source must be well protected to avoid any direct contact with bacterial contamination, reptiles and animals. Animals are always in such places drinking water and with their saliva, urine and faces many diseases are transmitted to the humans.
- It is also important not to divert all the water for consumption and leave enough overflows at or near the source for the sustainability of vital ecosystem.
- Poor organisational arrangements and inequitable distribution of additional water may lead to social conflicts; hence need to be paid special attention.
- Community members need to be educated about the harmful effects of polluting natural water sources. In many cases people with livestock seasonally moves towards pastures especially where fresh water is available in abundance. Cattle grazing increases nutrient concentrations and bacteria and protozoa levels. Sediment load and turbidity are increased, as well as water temperature. Dissolved oxygen levels often decline.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- A water supply initiative constructed in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.6.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention and keeping the ease for women and children in mind?	
Has the water testing of the samples from the available sources (dug well, handpump or tube well) around the selected site been carried out and do the test results conform with NEQS?	
Has the water quality testing report been attached to the proposal?	
Does the drinking water supply initiative comply with safe distance requirements (Annex 16)?	
Have the water quality test reports (chemical and biological) been shared with the communities and that they have been explained a simplified description of the report?	
Has it been ensured the intervention will not lead to a negative change in water quality and quantity for use by the community?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
Has the method of drawing water from dug well been taken into consideration (especially for women) in the areas where water table is low?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Do the test reports of the nearest tube well for coliform, faecal coliform, fluoride, arsenic and nitrate confirm that water quality is as per NEQS?	
Is the drinking water source located at a safe distance from the latrines and solid waste dumps?	

If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action.</p> <p>If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has the water quality test report of the nearest tube well been attached with the proposal?	
Has the water source been properly protected?	
Has the open well been appropriately covered to ensure that surface contaminants will not mix with the open well water?	
Has a parapet wall been developed around the open well?	
Has it been ensured that method of drawing the water from dug well is not labour intensive?	
Have the community members been trained on the harmful effects of polluting the natural water sources?	
Has the community been trained on the O&M of the intervention?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.6.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.2.7. Farmland Levelling

4.2.7.1 Environmental and Social Guidelines

- Land levelling of agricultural farms is conducted for uniform spread of water throughout the farm. Land levelling, if not properly executed, can cause increased soil run-off that leads to loss of topsoil which causes the decrease in the crop yield.
- Land levelling in the mountainous areas along with soil run-off and topsoil loss can also lead to soil erosion due to the application of heavy equipment.
- Appropriate safety standards must be followed in case of use of heavy machinery and blasting.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any land levelling activity in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.7.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	

If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Have the farmers been educated about the relationship between topsoil loss and decrease in crop yield?	
Have the farmers been trained on effective methods of land levelling?	
Has it been ensured that the light equipment is used for land levelling along with slope stabilised measure in mountainous areas?	
Have appropriate safety standards been followed in case of use of machinery and blasting?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.7.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.2.8. Gabion/Flood Protection/Retaining Walls

4.2.8.1 Environmental and Social Guidelines

- Gabion, flood protection or retaining walls normally do not cause environmental impacts. It is suggested that wherever possible local materials should be used to avoid transportation of materials.
- It should be ensured that any such wall should not deprive any rightsholders of their share in the water resource.
- The structural design should ensure safety of the people in case of breakdown.
- Construction waste should be properly disposed after the completion.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a gabion, flood protection or retaining wall in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.8.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	

If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has it been ensured that the flood water diverted by the gabion, flood protection or retaining wall does not negatively affect other adjacent communities/villages (by design)?	
Has the waste construction material been disposed of properly?	
Has it been ensured that the preferably the local materials will be used for construction?	
Has the breakdown safety been ensured in the structural design?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.8.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.



Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.9. Health Units (up to 10 beds capacity)

The rehabilitation or upgradation of health units having ten beds capacity can be financed through PPAF funds and will be subjected to ESR. The ones with higher capacity will fall under Category B or A and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.9.1 Environmental and Social Guidelines

- Complete set of sterilisation equipment and basic incinerators should be provided to every health centre or dispensary. The management of health unit/dispensary should be trained on the scientific methods of sterilisation.
- Crushing equipment (needle cutter) to crush used needles and syringes should be provided, and the management should be instructed to essentially practice the crushing of used needles and syringes.
- Ensure adoption and training of health unit staff as per the standards outlines in “Hospital Waste Management Rules, 2005”. The word “Hospital” as per Rules stand for a clinic, laboratory, dispensary, pharmacy, nursing home, health unit, maternity centre, blood bank, autopsy centre, mortuary, research institute and veterinary institutions, including any other facility involved in healthcare and biomedical activities (see Annex 17).
- Healthcare waste generated by health unit /dispensary should be safely disposed in a disposal pit (locally made incinerator) located within the health unit /dispensary. Lined and covered pit is constructed with a capacity to accommodate six months to one-year hazardous waste. The pit should be designed in manner that it is sealed and only a small hole with a cap is available for disposing and compacting the hazardous waste. Once the pit is full to its capacity, then it is completely sealed, and a new pit is constructed within the premises (see Annex 17).
- To promote safe practices, building structure and any alterations should follow the building codes for designing as per seismic zone.
- Construction waste/debris must be disposed of by carrying to designated sites pre-identified in construction with the concerned agencies.
- Keep the construction site properly fenced and should be periodically (preferably twice a day) sprinkled with water to suppress dust emissions.
- Location should be accessible to all, especially women and old age persons.
- The land for the health unit should be clear of any claims or conflicts.
- Provision of latrines is essential in the health units. Conventional or flush latrines with P-traps should be constructed. This will substantially reduce the possibilities of spread and contact of pathogens and other pollutants. Latrines should be linked with the septic tanks to avoid dispersal of pollutants in the community. It is recommended that lined septic tanks should be constructed for latrines. Separate latrines should be provided for males and females. Availability of water should also be ensured. In case a new latrine is constructed, please refer and adhere to ESR checklist and guidelines for sanitation interventions (Section 4.2.16).
- Separate and covered bins should be provided for domestic and medical waste collection.
- Separate areas should be designated for sterilisation and crushing in health unit.
- Train the Hospital Management Committee (HMC) to ensure implementation of the “Hospital Waste Management Rules, 2005” (see Annex 17).
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- A health centre in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.9.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has a consensus been reached over the location of the health unit keeping accessibility of all in view, especially that of women and children?	
Has the building codes as per seismic zones been followed for structural design of the building?	
Has the construction site been properly fenced and sprinkled with water twice a day to keep the dust suppressed?	
Has the construction waste/debris been disposed of by carrying it to designated sites pre-identified in construction with the concerned agencies?	
In case of construction of new latrines, have relevant ESR forms been completed?	

Have latrines been linked with p-traps and septic tanks?	
Have separate latrines been provided for both men and women?	
Has complete sterilisation equipment, incinerators and crushing machine (needle cutter) for needles and sharps been provided?	
Has the adoption and training of health unit staff been ensured as per the standards outlined in “Hospital Waste Management Rules, 2005”?	
Has the HMC been trained to ensure implementation of the “Hospital Waste Management Rules, 2005”?	
Have the HMC members been made aware of their Terms of References formally?	
Is there a process in place to check for medicines expiry dates periodically, as well as process for disposal of expired drugs?	
Is regular record being maintained of meetings, out-patient department (OPD), dispensary, etc.?	
Has the HMC been registered with the local government health department (where applicable under provincial act)?	
Have separate areas been designated for sterilisation and crushing in the health unit?	
Has a safe disposal pit (locally made incinerator) for hazardous waste been constructed within the premises?	
Have separate and covered bins for domestic and medical waste collection been provided?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community organisation?	

4.2.9.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.



Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.10. Irrigation Schemes (drip/sprinkler/syphon/pipe/lift)

4.2.10.1 Environmental and Social Guidelines

- Irrigation water with high total dissolved solids (TDS) may lead to salinity of soils. Acceptable limit is 1,500 ppm ONLY for tube well based irrigation.
- Over irrigation may lead to water logging and salinity of the soils.
- In the agricultural lands (mostly in irrigated areas) there are small precincts (*katcha* areas, as per defined by the land revenue department) which are not cultivated. These precincts serve an important function of bio-pest reserves at the farm level. With the increase of water availability, there is a threat that the farmers will also start cultivation on these precincts. Cultivation of these precincts will lead to loss of an important bio-pest management function made available by the nature; hence should be avoided.
- Water is often a cause of conflict if not available to all who require it. So, it should be available to all through consultation and inclusion of all members.
- There should not be any conflict over land use, and the community must agree on the space utilised by the intervention. The community consensus should be secured through an agreement on sprinkler/drip/syphon/pipe irrigation route, point of diversion, water distribution system and cost of the intervention.
- All water pipelines must be buried underground, to ensure the safety of the equipment, and to avoid any accidents.
- Backfilling must be carefully done. Fine clay or sand cushions are recommended around the pipe during backfilling.
- The operator/ technician in charge of maintenance of the sprinkler or drip irrigation intervention or equipment should be formally trained through a dedicated session by the installing company. All SOPs should be available with the CO, in Urdu.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- An irrigation scheme in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.10.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	

Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
If the source is tube well, do the test reports of the nearest tube well for total dissolved solids (TDS) confirm that TDS are not more than 1,500 ppm?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has it been ensured that no small precinct (<i>katcha</i> area, as per defined by land revenue department) will be brought under cultivation due to increase in water supply?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has there been a formula set by the communities for sharing increased water available?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has the community been trained on irrigation efficiencies, watercourse maintenance and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	

Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Has it been ensured that the pipeline has been buried in the ground?	
Has the backfilling been done carefully?	
Have the communities been educated about the proper use and maintenance of the intervention/equipment?	
Has the operator/ technician in charge of maintenance of the sprinkler/drip irrigation scheme been formally trained by the installing company?	
Are the SOPs available with the CO, in Urdu?	

4.2.10.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.11. Jetty (for fishing boats)

Small jetties for fishing boats can be financed through PPAF funds and will be subjected to ESR. The jetties for large boats or ships will fall under Category B or A and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.11.1 Environmental and Social Guidelines

- Jetty owing to its location has the potential to disturb sanctuaries of marine life located at inland (egg laying areas of turtles) and mangroves (shrimp areas). Proponent of the jetty should be aware of such sensitive but important habitat areas of marine life while locating jetties.
- Engine powered boats generate oil pollution. This is the common sight in most of jetties in Pakistan. Most of the oil pollution is generated due to the poor tuning of the engines, and wet cleaning of the boats. Proponents of the intervention should create awareness among the fisherfolk about these issues.
- Most of the fisherfolk dispose the fisheries waste close to the jetties. This causes foul smells due to the decomposition of the waste. Proper waste disposal arrangements should be part of the proposal.
- Proper documentation should be developed to clearly define ownership, usage and accessibility to all groups' particularly poor and vulnerable fisherfolk.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a jetty near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified marine protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.11.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	Yes/No/NA
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	Yes/No/NA
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	Yes/No/NA

Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Is the jetty located 1 km away from marine life sanctuaries and habitats?	
Is the jetty accessible to all, especially poor and vulnerable fisherfolk?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory Design and Implementation Stages	
Has the solid waste management and safe disposal been made part of the proposal?	
Has the community been trained on the benefits of timely tuning of the engines and solid waste management?	
Has proper documentation been developed to ensure accessibility and benefits to all?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.11.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			



Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.12. Karez Construction

4.2.12.1 Environmental and Social Guidelines

- Karez divert water directly from upstream sources and transfer water to the users through a subsurface tunnel. During water conveyance water is exposed to natural (fluoride, arsenic etc.) and human (coliform, faecal coliform, and nitrate) contaminants. Due to these conditions, it is always safe to test the Karez water for the above stated contaminants before use for human consumption. The water testing report should be attached with the design report.
- During Karez construction and maintenance sometimes blasting is conducted to break the hard rock. Blasting with poor safety practices can lead to injuries and in some cases loss of life. It is instructed that blasting should be conducted only after applying all the safety precautions promoted for safe blasting.
- Land subsidence is a threat attached to karez. For a new Karez land subsidence issue should be handled at the design level, and for the existing one this issue should be managed through proper maintenance and reinforcement.
- Karezes need periodic maintenance and cleaning along with water testing, especially for Karezes used solely for drinking purpose. It is advised that maintenance, cleaning, and water testing schedules should be devised based on ground conditions.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a karez in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.12.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	Yes/No/NA
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	Yes/No/NA
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	Yes/No/NA

Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
If the water is to be used for drinking purposes, does the water test report for coliform, faecal coliform, fluoride, arsenic, and nitrate confirm that the water is not contaminated by any of the contaminants as per NEQS guidelines?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has it been ensured that no small precinct (<i>katcha</i> area, as per defined by land revenue department) will be brought under cultivation due to increase in water supply?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Have safety measures been adopted for blasting?	
Have schedules been prepared for maintenance, cleaning, and water testing for the operational stage, and has the community been trained for the execution of activities as per schedules?	
Has there been a formula set by the communities for sharing increased water available?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has the community been trained on irrigation efficiencies, watercourse maintenance and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	

Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.12.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.13. Micro-Hydel Plants (up to 1 MW)

The micro-hydel plants (MHPs) with a generation capacity up to one megawatt can be financed through PPAF funds and will be subjected to ESR. The MHPs with higher generation capacity fall under Category B or A and will require the relevant environmental assessment as per federal or provincial environmental legislation.

4.2.13.1 Environmental and Social Guidelines

- MHPs should only be constructed with community consultations and consensus to avoid social conflicts. Involve the community at planning stage to avoid any social conflict at subsequent stages.
- MHPs should not cause changes in the downstream flows, existing irrigation system, and should ensure that downstream users and fish life is not disturbed.
- Soil erosion mitigation measures are mostly needed for most of the slopes linked to MHPs.
- Construction waste should not be left at the site and should be properly disposed after the completion.
- Land maybe required and it is the responsibility of the community to arrange land with signing an agreement for donated land to avoid conflict.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a micro-hydel plant in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.13.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that no change will occur in the downstream water flows and uses?	
Has it been ensured that the fish life in the area will not be disturbed?	
Has it been ensured that no serious soil erosion risks are attached to the intervention?	

Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has the empirical information incorporated in the design and completion reports to confirm that the intervention will not change the downstream flows, irrigation system, and water uses will not be affected by the intervention?	
Has the soil erosion been mitigated by constructing check dams, earth retention walls, and other stabilisation measures, such as stone pitching?	
Have smooth sediment flows been ensured by design, implementation, and operations?	
Has the construction waste been safely disposed?	
Has the community been involved at planning stage to avoid any social conflict at subsequent stages?	
Has the tail water been disposed of in hydraulically safe manner?	
Has the operator/technician in charge of maintenance been formally trained by the installing company?	
Are the standard operating procedures (SOPs) available with the COs in Urdu?	
Have the communities been educated about the proper use, operation and maintenance of the MHP?	
Are the first aid guidelines against electric shock been conspicuously displayed and first aid kit made available in the powerhouse?	
Has proper signage (display of current voltage/no smoking/ other precautionary signs) been displayed in the control room?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	

Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.13.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.14. Pipeline Laying

4.2.14.1 Environmental and Social Guidelines

- All water pipelines must be buried underground to ensure the safety of the equipment, and to avoid any accidents.
- Backfilling must be carefully done. Fine clay or sand cushions are recommended around the pipes during backfilling.
- Pipes should be laid at a safe distance from the latrines and solid waste dumps.
- Cleaning of the pipes should be done periodically to ensure proper working and maintenance of the intervention.
- An O&M plan related to the intervention should be developed and shared with the local communities (in addition to the community institution) and all contributing households.
- Water is often a cause of conflict if not available to all who need it. Hence, it should be ensured that it is available to all through consultation and inclusion of all members.
- Tree cutting should be avoided, and if necessary, at least five saplings should be planted for every tree cut along the pipeline.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- A pipeline running in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.14.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	Yes/No/NA
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	Yes/No/NA
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	Yes/No/NA
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	Yes/No/NA

Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
If the water is to be used for drinking purposes, has the water been tested for coliforms, nitrates, arsenic etc. and found compliant to NEQS?	
If the water is for irrigation, do the test reports of the nearest source confirm that TDS are not more than 1,500 ppm?	
Have the water quality test reports (Chemical and Biological) been shared with the communities and that they have been explained a simplified description of the report?	
Has it been ensured the intervention will not lead to a negative change in water quality and quantity for use by the community?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has community consensus been secured on pipe lining design, route, water distribution and cost?	
Has it been ensured that the pipeline has been buried in the ground?	
Has the backfilling been done carefully?	
Has the community been trained on the O&M of the intervention?	
Has the periodic cleaning of the pipes been ensured?	
Has there been a formula set by the communities for sharing increased water available?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has the community been trained on irrigation efficiencies, maintenance and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	

Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.14.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.15. Rainwater Harvesting Ponds

4.2.15.1 Environmental and Social Guidelines

- Rainwater harvesting ponds are commonly susceptible to contamination by human pathogens, animal manure, agricultural chemicals, and algae growth. These ponds, if not properly managed, can serve as mosquitoes breeding areas. These contaminants cause moderate to highly significant health impacts on the communities. Hence, community should be trained and educated about the ways and means of ensuring that the pond remains safe from the intrusion of surface contaminants.
- Physical features are added in the design to ensure that surface contaminants shall not mix with the pond water.
- If the water is to be used for drinking purposes, three monthly water quality testing reports are needed for coliforms, faecal coliforms, arsenic and nitrates at the operational stage of the pond.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a pond in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.15.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Is the proposed rainwater harvesting pond located 50m away from the latrines and solid waste dumps, and agricultural fields and 100m away if used for drinking water?	
If the water is to be used for drinking purposes, has the water been tested for coliforms, nitrates, arsenic etc. as per NEQS guidelines?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	

Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has it been ensured that no small precinct (<i>katcha</i> area, as per defined by land revenue department) will be brought under cultivation due to increase in water supply?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has a pond management plan been prepared and has the community been trained?	
Has the pond been appropriately covered to ensure that the surface contaminants will not mix with the pond water?	
Has water agitation been ensured to avoid mosquito breeding e.g., rowing, boating etc.?	
And has a timeframe been set within which water should be used?	
Has there been a formula set by the communities for sharing increased water available?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	

4.2.15.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.16. Sanitation Interventions

4.2.16.1 Environmental and Social Guidelines

- Generally, there are two modes of safe disposal of municipal wastewater:
 1. Latrines → sanitation chamber/septic tank → covered drains/sewerage system → safe disposal
 2. Latrines → covered drains/sewerage system → oxidation pond → safe disposal
- Both arrangements, if constructed properly, provide the desired level of treatment after which the wastewater can be discharged to any natural water body, municipal and irrigation system. In case, if the water is discharged to irrigation system, then make sure that water is not applied to vegetable crops.
- Conventional latrines or flush latrines should be fitted with p-traps which substantially reduce the possibilities of spread and contact of pathogens and other pollutants with the humans at the household level. Health improvement impact of effective latrines is only realised if the community is also trained on better hygienic and sanitation practices, e.g., washing hands with soap after defecation, no open defecation in and outside the house, and daily or twice a day cleaning of latrine.
- Wastewater can be treated at the household level by installing septic tanks. In the presence of septic tanks, there is no need to construct oxidation ponds. It is important that septic tank should be lined with concrete as unlined septic tanks cause groundwater contamination. The community needs to be trained for the proper cleaning and maintenance of the septic tank.
- Open drains do not serve the purpose of safe sanitation as in the open drains the possibility of human-pollution contact remains high. Open drains only serve the purpose of conveyance, and throughout conveyance human-pollution interaction remains active. This interaction causes serious negative impacts on the community health. Whenever drains will be improved or lined then these must be converted into covered drains. During construction of drains, alternative drainage system is provided to reduce the inconvenience to the community and reducing the possibility of human-pollution interaction.
- Water should be sprinkled periodically throughout the construction for controlling dust emission.
- At the completion of the construction work, the debris of construction material should be properly disposed.
- For oxidation ponds, depth of the pond determines about the type of treatment process happening in the pond. Normally facultative ponds are 3-4 feet deep, and treatment happens through anaerobic conditions at the bottom and aerobic conditions at the surface. Anaerobic ponds are 10-15 feet deep, and treatment happens through anaerobic conditions. Anaerobic ponds function as septic tank. Lining of both types of ponds is essential to eliminate the possibilities of groundwater contamination due to seepage. Brick or concrete lining is very expensive, so 6 inches lining by puddle clay is equally effective by function and it is also very cost effective. In case facultative or anaerobic pond has been constructed then there is no need to construct septic tanks at the household level.
- All water pipelines must be buried underground, to ensure the safety of the equipment, and to avoid any accidents. Backfilling must be carefully done. Fine clay or sand cushions are recommended around the pipe during backfilling.
- Land maybe required and it is the responsibility of the community to arrange land with signing an agreement for donated land to avoid conflict.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of sanitation infrastructure in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to

do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.16.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the sanitation solution is end-to-end; means provide a complete system rather than in piecemeal?	
Has it been ensured that the intervention structures follow the safe distance guidelines (Annex 16)?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	

Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Have p-traps been installed for both conventional and flush latrines?	
Has the community been trained on better hygienic and sanitation practices?	
Have the sanitation chamber or septic tank lined with brick or concrete lining?	
Has the community been informed about the frequency of cleaning the sanitation chamber or septic tank?	
Has it been ensured that only covered drains are constructed?	
Has it been ensured that water supply pipelines are kept away from the drains?	
Has it been ensured that the water is sprinkled periodically during construction?	
Has it been ensured that alternate drains are provided during construction?	
Has the waste construction material been properly disposed of?	
Has the oxidation pond been lined with 6 inches puddle clay?	
Has the community been informed about the oxidation pond cleaning method and frequency?	
Has the community been informed, and has it been ensured that the treated wastewater will not be applied to the vegetable crops?	
Has it been ensured that the pipeline has been buried in the ground?	
Has the backfilling been done carefully?	
Have the communities been educated about the proper use and maintenance of the intervention?	

4.2.16.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.



Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.17. Schools (adoption/construction/management/renovation)

4.2.17.1 Environmental and Social Guidelines

- There should be no community differences about the location of the school or conflict over land. The land must be voluntarily donated.
- In case a new school is being constructed:
 - It should not be located along the major roads or highways.
 - Enough rooms should be provided to accommodate all grades, including a room for the teachers.
 - Proper light and ventilation should be ensured in each room.
 - Construction site should be periodically (preferably twice a day) sprinkled with water to suppress dust emissions.
 - In case of girls' school, ease of access for girls should be considered and boundary wall should be provided.
- The drinking water at the school should be tested for coliform, faecal coliform, fluoride and nitrate and the water quality should comply with NEQS. For providing drinking water to the school through dug well, handpump or spring, please refer and adhere to ESR Checklist and Guidelines for Drinking Water Supply (Section 4.2.6).
- The water tanks at the school should be cleaned every three months. In case a new water tank is constructed, please refer and adhere to ESR Checklist and Guidelines for Water Tanks (Section 4.2.23).
- Communities should be educated on the importance, and alternative methods of clean drinking water.
- Many rural schools do not have latrines and students go for open defecation. Each selected school should be provided separate latrines for boys and girls as essential part of the intervention. For constructions of latrines, please refer and adhere to ESR Checklist and Guidelines for Sanitation Interventions (Section 4.2.23).
- Health improvement impact of effective latrines is only realised if the students are also trained on better hygienic and sanitation practices, e.g., washing hands with soap after defecation, no open defecation in and outside school, and daily or twice a day cleaning of latrine. It should be ensured that such trainings/campaigns are encouraged and held frequently for the entire school management, teachers, and students. All teachers and management of the school should be neat and clean, so that students are encouraged to adopt and emulate similar behaviour. Educational material on such topics should also be encouraged to be displayed in the school.
- It is recommended that the teachers and students should be educated and trained on segregation of solid waste which would not only reduce the quantity of the waste to be disposed but will also earn the school some cash.
- At least two types of solid waste bins should be provided in the school for segregation of the waste into:
 - Dry – paper, wood and related products, metals and glass.
 - Wet – organic materials as food leftovers
- The small bins from each classroom should be emptied daily into respective large bins sited within the school boundary wall. Waste from the main bins should be collected and disposed regularly by the municipal authority. Open dumping and burning of solid waste should be avoided. Bins must be covered to prevent the access of vectors. Teachers, management of the school, and the children should be trained on good practices of solid waste management.
- Co-curricular activities and social awareness campaigns should be encouraged and used as a learning tool by teachers to educate students on environmental safeguards and ensure environmental sustainability, e.g., plantation done and cared for by teachers and students (unless there are severe water problems in the area), nature walk around the school etc.
- Women's membership in the school management committees must be ensured, especially in case of girls and coeducation schools.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.

- Construction of a school in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.17.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
In case of girls' school, has the ease of access and boundary wall been taken into consideration?	
Have separate latrines been constructed for boys and girls, and fitted with p-traps, and septic tanks?	
Has appropriate gender representation in the School Management Committee (SMC) membership been ensured?	
Has community/parents' representation in the SMC been ensured as per the Terms of References (TOR) of the SMC?	
Have the SMC members been made aware of their TOR formally? Have they been provided a copy of their TOR in Urdu?	
Has the SMC been registered with the local Government education department (where applicable under provincial act)?	
Is regular record of meetings, admissions, attendance and dropouts etc. being maintained?	
Has it been ensured that the new school is not located along the major roads or highways?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	

Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Has the school building been designed according to the building codes?	
Has the site been appropriately fenced and sprinkled with water for dust suppression during construction?	
Have enough rooms been provided to accommodate all grades, including a room for teachers?	
Has proper light and ventilation been ensured in each room?	
In case of construction of new latrines, has the relevant ESR for Sanitation Interventions (Section 4.2.23) been completed? Attach the completed Form A to this ESR.	
For providing drinking water to the school through dug well, handpump or spring, has the relevant ESR for Drinking Water Supply (Section 4.2.6) been completed? Attach the completed Form A to this ESR.	
Has it been ensured that the latrines will be cleaned at least once a day?	
Has it been ensured that the water tanks will be cleaned every three months?	
Have solid waste bins been provided as per the guidelines above?	
Is the waste from the bins collected regularly and disposed of at suitable dumping site?	
Has open dumping and burning of solid waste been avoided?	

Have the teachers and the management of the school been trained/made aware on the importance of clean drinking water?	
Have the teachers, management of the school and students been trained/made aware on good sanitation and hygiene practices?	
Have the teachers, management of the school and students been trained/made aware on solid waste management and hazards of solid waste burning?	
Have co-curricular activities/campaigns been organised by teachers to educate students on environmental safeguards and ensure environmental sustainability?	

4.2.17.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.18. Solar Energy

4.2.18.1 Environmental and Social Guidelines

- Solar energy is environmentally friendly product and as such does not cause any negative environmental impacts.
- Batteries attached to photovoltaic cells contain potentially toxic substances. Hence, the expired batteries should be sold to the recycling workshops.
- Dry-cell batteries or a better version should be used for solar powered appliances especially solar streetlights, solar water pumps, etc.
- Control room for the batteries should be designed with maximum ventilation. It should have proper signage, including display of current voltage, no smoking and other related precautions.
- The batteries should be placed on an insulated platform to avoid earthing of the batteries.
- Wiring from the control room to the appliances (in households or public utilities) must be laid keeping in mind safety of the public, especially children. Wiring should either be above 7 feet or laid underground and should be covered.
- The operator/technician in charge of maintenance of the solar powered system should be formally trained through a dedicated session by the installing company. The SOPs, in Urdu, should be available with the CO.
- The intervention proposal must have an O&M plan for the intervention, especially a procedure for maintenance and replacement of batteries. This plan should be signed by the community organisation (CO) or village organisation (VO) representatives, and the PO responsible.
- Location of solar streetlights/solar pumps should be decided with the community's consent.
- If the solar system is to be used for the drinking water supply, water samples from the available sources (handpump, tube well or dug well) around the selected site need to be tested for coliforms, faecal coliforms, arsenic and nitrates as per NEQS. The test report should be placed in the intervention file. Additionally, the ESR Checklist and Guidelines for Drinking Water Supply (Section 4.2.6) must be referred and adhered to.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Installation of solar energy system in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.18.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	

Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has the location of the solar streetlights/solar pump been decided with the consent of the community?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Have the communities been educated about the proper use and maintenance of the intervention/equipment?	

Has the operator/technician in charge of maintenance of the solar energy system been formally trained by the installing company?	
Has it been ensured that the expired batteries will be sold to the recycling workshops, and that the expired batteries should not fall into the hands of children?	
Has the control room been designed with maximum ventilation?	
Has proper signage (display of current voltage/no smoking/other precautionary signs) been displayed in the control room?	
Have the batteries been placed on an insulated platform to avoid earthing of the batteries?	
Has it been ensured that the wiring is laid either above 7 feet, underground and or covered properly?	
Has the operator/technician in charge of maintenance been formally trained by the installing company?	
Have the communities been educated about the proper use and maintenance of solar energy systems such as regular cleaning of photovoltaic cells?	
Are the SOPs, in Urdu, available with the CO?	

4.2.18.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.19. Solid Waste Management

4.2.19.1 Environmental and Social Guidelines

- Solid Waste Management interventions of PPAF are very small. In most of the cases only solid waste bins are provided to the communities.
- It is recommended that the community should be educated and trained on segregation of solid waste which would not only reduce the quantity of the waste to be disposed but will also earn some cash for the household.
- At least two types of solid waste bins should be provided for segregation of the waste at household level into:
 - Dry – paper, wood and related products, metals and glass.
 - Wet – organic materials as food leftovers
- The small bins from each household should be emptied daily into respective large bins. Waste from the main bins should be collected and disposed regularly by the municipal authority.
- Solid waste bins, if not properly located, designed, and managed, become threats to community health. Location of solid waste bins can also lead to social conflict in the community. The community must be fully involved while deciding the locations of solid waste bins.
- Odour from bins is managed by timely collection of solid waste from bins. Bins must be covered to prevent the access of vectors.
- Open dumping and burning of solid waste should be avoided. Bins must be covered to prevent the access of vectors. The community should be trained on good practices of solid waste management.
- Social awareness must be given on hygiene and cleanliness
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction or placing of solid waste bins in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.19.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	

Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Have the safe distance guidelines (Annex 16) been followed?	
Have the communities been trained on solid waste management, hazardous and non-hazardous waste, impacts of solid waste burning, methods of waste reduction, reuse and recycling?	
Have a simple solid waste pit been constructed for composting?	

4.2.19.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.20. Street Pavement/Surfacing

4.2.20.1 Environmental and Social Guidelines

- Dust emission during street pavement/surfacing is the most common environmental issue. Water spray on the construction site and alternate route for the commuters is the easiest method for controlling dust. Along with this, periodic compaction of the soil at the street under surfacing/lining and alternate route.
- Construction waste should be properly disposed after the completion.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Street pavement in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.20.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	

Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Has an alternative route been provided for commuters during street pavement/surfacing work?	
Has the contractor been instructed and provided with the schedule of water spray and compaction of both streets under pavement/surfacing and alternate route?	
Has the waste construction material been disposed properly?	

4.2.20.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.2.21. Tube Wells

4.2.21.1 Environmental and Social Guidelines

- Due to water recharge-withdrawal imbalance, tube wells are not a preferred option for providing water for drinking or irrigation purposes. This is particularly problematic in the areas known for depleted groundwater aquifers and arsenic contamination. Hence, installation of tube well requires NOC from the relevant authorities.
- At the design stage of a tube well for drinking water supply, water samples from the available sources (handpump, tube well or dug well) around the selected site need to be tested for coliforms, faecal coliforms, arsenic and nitrates as per NEQS. The test report should be placed in the intervention file. Additionally, the ESR Checklist and Guidelines for Drinking Water Supply (Section 4.2.6) must be referred and adhered to.
- The safe distance guidelines (Annex 16) should be followed strictly.
- New tube well for irrigation can cause reduction in the yield of existing tube wells in the area. This aspect can be best covered by having dataset on the sub surface hydrology of the area. In the absence of this information, it is proposed that “safe yield” information of existing tube wells located within 500-meter area should be collected to establish that enough subsurface water is available.
- Over irrigation, resulting from additional water availability through a new tube well, may lead to waterlogging and salination of the soils.
- The irrigation water with high total dissolved solids (more than 1,500 ppm) may lead to salinisation of the soils. Quality of the groundwater may also be degraded with the intrusion of saline water due to over pumping.
- Due to generalised water shortage at the tail of watercourses or distributaries in the irrigated areas, the percolation of sweet water becomes low and may lead to saline water intrusion. Hence, the number and size of tube wells to be installed in these areas need to be regularly monitored and installation of new tube wells is generally discouraged.
- Poor organisational arrangements and inequitable distribution of additional water may lead to social conflicts. Thus, a consensus on water distribution needs to be built before installation of the tube well.
- Where a tube well is installed on the donated land, a simple agreement is required to ensure that the land donor will not charge for provision of water to others and water right is provided to all.
- Land may be required for installation of tube well which should be voluntarily donated by the community.
- In case a water tank is also being constructed along with the tube well, the ESR Checklist and Guidelines for Water Tanks (Section 4.2.23) must be referred and adhered to.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Installation of a tube well in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.21.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	

ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
Have the safe distance guidelines (Annex 16) been followed?	
Do the test reports of the nearest tube well for coliform, faecal coliform, fluoride, arsenic and nitrate conform to NEQS?	
If the tube well is for irrigation, do the test reports of the nearest tube well for total dissolved solids (TDS) confirm that TDS are not more than 1,500 ppm?	
Are the trainings for community on irrigation efficiencies, water course maintenance, and proper drainage been included in the proposal?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
If the tube well brings additional area under cultivation (without increasing the canal command area), has it been ensured that the additional land is not owned by selected few in the village?	
Has it been ensured that the communities have devised an inclusive local conflict management system to deal with any potential conflicts arising from water distribution or usage?	
Has it been ensured that no small precinct (<i>katcha</i> area, as per defined by land revenue department) will be brought under cultivation due to increase in water supply?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	

If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action.
If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.

Mandatory at Design and Implementation Stages	
Has there been a formula set by the communities for sharing increased water available?	
Has the community been trained on irrigation efficiencies, watercourse maintenance and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Has the site disturbed due to the digging of bore/pit and concrete mixing been restored?	
Has all the excess construction material been removed from the site?	
Has the tube well and its pedestal been sealed so that the impurities could not be mixed with the water?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Has it been ensured the intervention will not lead to a negative change in water quality and quantity for use by the community?	
Has the water quality test report of the nearest tube well been attached with the proposal?	
Have the water quality test reports (Chemical and Biological) been shared with the communities and that they have been explained a simplified description of the report?	
Has the community been informed about the frequency of cleaning the tank?	
Have the communities been educated about the proper use and maintenance of the tube well?	
Has the operator/ technician in charge of maintenance of the tube well been formally trained by the installing company?	
Are the SOPs, in Urdu, available with the CO?	

4.2.21.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			



Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.2.22. Watercourses

4.2.22.1 Environmental and Social Guidelines

- Water course, no matter in the mountainous area or irrigated plains, may cause upstream and downstream soil erosions if not properly constructed. During construction, special care needs to be taken to avoid all the reasons of community disturbances attached to falling of debris, alternate route for existing watercourse, debris from watercourse construction or cleaning, and blasting – if involved.
- In mountainous areas, leakages from water channels during operations may lead to landslides that may cause physical damage and human loss in the downstream communities. Due to this reason polyethylene sheets are laid on the bed of the channel in loose soil areas, and a mixture of clay, earth, and grass is applied on the walls of the channel. In loose soil areas, trapezoid channels are constructed; in semi-loose soil areas, semi-circular channels are constructed, and in rocky areas rectangular channels are constructed to avoid seepage and leakage. Further to these mitigations, in loose and semi-loose soil areas a berm of 3-5 feet width is maintained, whereas, in rocky areas a berm of 2 feet width is maintained.
- Watercourses divert water from upstream main water source and distribute water to the downstream farmers along the alignment. Diversion and distribution of water is a serious issue among the farmer community. Intensive consultations are needed with the farmer communities for the selection of point and source of diversion, alignment of the channel, water distribution system along the channel, construction design and cost, etc.
- There should not be any obstruction/conflict on the route of the watercourse since it often passes through a large area and should benefit to all.
- In most of the cases trees are cut to clear the right of way. Hence, at least five saplings should be planted for every tree cut.
- During construction of the watercourse, the debris due to cutting of rocks can damage the agricultural or rangelands. Therefore, communities should determine the compensation for the affected people during construction of the watercourse and compensate accordingly.
- Watercourse can be lined to decrease the water losses and improve the availability of water at the tail. However, if lining is required for increasing the total command area of the watercourse, an NOC should be obtained from the Irrigation authorities as the command areas of watercourses are set by the irrigation authorities.
- In the agricultural lands (mostly in irrigated areas), there are small precincts (katcha areas), as defined by the Revenue Department, which are not cultivated. These precincts serve an important function of bio-pest reserves at the farm level. With the increase of water availability due to lining, there is a threat that the farmers will also start cultivation on these precincts. Cultivation of these precincts will lead to loss of an important bio-pest management function made available by the nature. Hence, cultivation of these precincts should be prohibited.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a watercourse in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.22.2 Checklist

Intervention title	
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Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has the demand for additional irrigation water in the area been determined through irrigation water availability and requirement gap?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the additional water, and has this been incorporated in the proposal?	
Has it been ensured that no small precinct (<i>katcha</i> area, as per defined by land revenue department) will be brought under cultivation due to increase in water supply?	
Is there a consensus in the community on the watercourse design, route, water distribution and cost?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If there is an increase in the total command area, has a NOC been obtained from the irrigation authorities?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action.</p> <p>If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	

Has there been a formula set by the communities for sharing increased water available?	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has the community been trained on irrigation efficiencies, watercourse maintenance and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Are the SOPs, in Urdu, available with the CO?	
Is the watercourse in the mountainous area lined with a mixture of clay, earth, and local grass?	
In case of loose soils, are the polyethylene sheets laid on the bed?	
Have the berms of 3 to 5 feet width in loose and semi-loose soils, and 2 feet width in rocky areas constructed along the watercourse?	
Has it been ensured that the affected people are compensated for any damage to their property during the construction of the water channel?	
Have proper arrangements been made for the safety of the community during the construction, from hazards such as falling of debris, alternate route for existing channel, and blasting?	
Has the safe disposal of solid waste been ensured?	
In case of cutting of trees, have at least five saplings been planted for every tree cut along the watercourse?	

4.2.22.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.



PO Field Staff (Name)

PO District Manager

4.2.23. Water Tanks (on-ground/overhead/underground)

4.2.23.1 Environmental and Social Guidelines

- Water tanks need frequent cleaning to avoid bacterial contamination of water. Mostly tanks should be cleaned on quarterly basis.
- If the water from the tank is to be used for drinking purposes, quality testing of intake water for coliform, faecal coliform, fluoride, arsenic and nitrate as per NEQS is mandatory at the planning stage.
- After the construction of the tank, regular water quality testing is recommended on quarterly basis. The test results for coliforms, faecal coliforms, fluorides, arsenic and nitrates should conform with NEQS.
- The safe distance guidelines (Annex 16) should be followed strictly.
- There should not be any conflict over the location of the tank and the water should be accessible to all those who need it.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Construction of a water tank in a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.2.23.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	Yes/No/NA
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention and ease of access for women and children has been kept in mind?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	
Have the safe distance guidelines (Annex 16) been followed?	
If the water is to be used for drinking purposes, has the intake water been tested for coliform, faecal coliform, fluoride, arsenic and nitrate as per NEQS? Attach the test report with the design report.	
Has it been ensured that there is no conflict over the source of water?	

Has an agreement been signed ensuring accessibility and water rights to all contributing households?	
Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention is not located within a notified protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Have the stakeholders agreed upon proper organisational arrangements and a formula for the equitable distribution of the water, and has this been incorporated in the proposal?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has there been a formula set by the communities for sharing the available water?	
Has the community been trained on irrigation efficiencies and proper drainage?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
If water is to be used for drinking purposes, have the water quality test reports (chemical and biological) been shared with the communities and that they have been explained a simplified description of the report?	
Have the water tanks been adequately covered, and necessary manholes provided for cleaning and maintenance?	
Has the community been informed about the frequency of cleaning the tank?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	

Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Are the SOPs, in Urdu, available with the CO?	

4.2.23.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.3. ESR for Non-Structural Interventions

Some of the PPAF supported interventions are non-structural in nature and require compliance to some guidelines.

4.3.1. Natural Resource Management

4.3.1.1 Environmental and Social Guidelines

- Natural resource management (NRM) interventions may include forestation, rangeland management, watershed management, biodiversity conservation, wildlife conservation etc. Objectives of these interventions are to improve the present status of the specific natural resources. Such interventions focus on preventing, conserving and enhancing the present status of the natural resource, and taking measures to ensure that in future the factors responsible for depletion are be mitigated and controlled for the sustainability of the natural resource.
- If holistically developed under ecological criteria, mostly these interventions do not cause negative environmental impacts, rather these are environment friendly interventions.
- Community participation is a must for success of NRM.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- NRM activities should be carefully planned and implemented in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by anthropogenic activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.3.1.2 Checklist

Intervention title	
Name of village, UC & district	
PO's name	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the intervention is in line with the needs identified by the communities in the Village Development Plan?	Yes/No/NA
Has the location of the intervention been decided with the consensus of all contributing households and the communities that may get affected by the intervention?	
Has it been ensured that the intervention qualifies the ecological requirements of the intervention area?	
Has it been ensured that proper legal requirements (agreement or affidavit on stamp paper) been signed for voluntarily donated land/access (whether public or private)? Has the documentation of the same been ensured in the intervention files of PO and the community?	

Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the proposed intervention is not located within a notified archaeological site or monument?	
Has it been ensured that the proposed intervention within a notified protected area is planned in line with the recommendations of the Management Plan for that protected area?	
Has it been ensured that the intervention does not involve any alteration, damage, or removal of any structure of religious or cultural significance?	
If the land acquisition is involved, have the Land Acquisition, Land Use, and Involuntary Resettlement safeguards (Section 2.4) been complied with?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the intervention?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this intervention?	
Has an agreement been signed amongst the communities/beneficiaries on the allocated space utilised for the intervention?	
If any indigenous people (as defined in Section 2.5) are living in the area, has it been ensured that they are protected as per the guidelines of ESMF?	
<p>If answer to the above stated environmental criterion is 'NO' then the proponent of the intervention should first qualify the criterion before any further action. If all answers are in 'YES' then ensure that the intervention proposal contains this ESR, with the completed following section.</p>	
Mandatory at Design and Implementation Stages	
Has it been ensured that the intervention does not divide/ bifurcate/ overexploit/ hinder access to any common property resources (e.g., pastures, lakes, etc.)?	
Has it been ensured that the intervention will not lead to overharvesting of natural resources?	
Has it been ensured that the intervention will not cause negative impacts on other natural resources in the intervention area?	
Has it been ensured that all contributing households have equal access to the benefits (for which the communities identified the intervention) provided from the intervention?	
Has the compliance of applicable labour laws in terms of minimum wage, fixed working hours, and occupational health and safety, been assured?	
Has it been ensured that intervention does not involve any form of forced or mandatory labour?	
Has it been ensured that no child labour is employed?	
Have the local communities (in addition to the community institution) and all contributing households been educated on the costs (total cost, community share, share per household, etc.), benefits/ accessibility /utility (communal, per household, etc.), O&M plan, and other relevant ESMF requirements related to the intervention?	
Has it been ensured that complete intervention record such as intervention proposal, design digest, and O&M plan being maintained in intervention files of the implementing community institutions?	
Are the SOPs, in Urdu, available with the CO?	

4.3.1.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

4.3.2. Trainings

4.3.2.1 Environmental and Social Guidelines

- PPAF will not fund any training on processing of addictive substances such as tobacco, *gutka*, *naswar*, cigarettes, *beeri*, *hukka*, *paan parag*, *sheesha*, *hashish*, *bhanga*, all illegal drugs and any other products containing such substances.
- The training institutes engaged for all kinds of vocational and skills trainings will be mandated to include the following as additional topics (as relevant) in the trainings:
 - Social and legal implications of using child labour.
 - Use of protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, paints and machinery.
 - Importance of safe exits in case of emergencies when working in confined spaces.
 - Safe storage and disposal of hazardous liquid and solid waste (e.g., biomedical, heavy metals, CFLs (energy savers), tyres, oil, batteries, paint, solvents, acidic solutions, etc.) where relevant.
 - Importance of using only additives, preservatives and dyes meant for food in food processing/production.
 - Importance of hygienic working conditions in food production through use of disposable gloves, clean utensils and proper washing of raw meat and vegetables etc.
 - Use of first aid box in emergencies
- The training institute itself must have a fire safety plan and fire extinguishers at the training venue.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Any training in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by training activities, other than on NRM, in or near a notified protected area. Preferably, an alternative site shall be located. If the in-situ training is necessary, proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

4.3.2.2 Checklist

Training title	
Location of the training	
ESR prepared by – Name – Designation – Date	
Mandatory at the Design Stage	
Has it been ensured that the training is in line with the needs identified by the communities in the Village Development Plan, or is planned under the Implementation Plan ?	Yes/No/NA
Has the location of the training been decided as per convenience of the participants, especially women?	Yes/No/NA
If to be conducted within a notified protected area, has it been ensured that the training qualifies the ecological requirements for the training or planned in line with the recommendations of the Management Plan for that protected area?	Yes/No/NA
Have the attendance sheet and pictures of the training (in line with social and cultural norms) been attached to this Checklist?	Yes/No/NA

Has it been ensured that the beneficiaries are made aware about complete documentation related to the intervention, and the same has been placed in the intervention files of PO and the beneficiary.	
Has it been ensured that the training is not being conducted within a notified archaeological site or monument unless it is for conservation of that site?	
Has it been ensured that no person due to gender, caste, class, religion, or tribe is excluded from the costs and benefits of the training?	
Has it been ensured that no group of people will become vulnerable/ marginalised due to this training?	
If the training involves any indigenous people (as defined in Section 2.5), has it been ensured that they are protected as per the guidelines of ESMF?	
If answer to any of the above stated criteria is NO, then the training cannot be conducted.	

4.3.2.3 ESM Plan

Adaptation/Mitigation Measures	Responsibility	Timeframe	Budget
1.			
2.			
3.			
4.			
5.			
Total Budget			

Note: Add more rows if needed.

Reasons for not proposing any adaptation and/or mitigation measures.

PO Field Staff (Name)

PO District Manager

5. ESM FOR MICROCREDIT OPERATIONS

Environmental and social safeguards requirements for microcredit operations are based on the overall objectives of the ESMF. However, these requirements are simpler as compared to those for the grants-based interventions where it is mandatory to fill, sign and file ESR Checklist (Forms A) and ESM Compliance Certificate (Form B). For microcredit interventions, safeguards compliance requirements have been prepared keeping in mind the average size of a loan, the ‘fungibility’ of money and the impact such a support has on the physical environment and the social fabric in question. All these factors and feedback from partners suggested making the safeguard requirements as part of disclosures and client protection mechanisms, where each beneficiary MUST be made aware of his/her environmental and social responsibility. This awareness, and in turn the covenant that the beneficiary signs will ensure compliance to ESMF.

The safeguard requirements for microcredit consist of the following:

1. The following **Statement on Environmental and Social Safeguards Awareness** should be added to the Client Protection Principles³¹ to be complied with by the PO.

Providers will ensure clients are made aware of all environmental and social safeguards pertaining to their loan type as well as provide corresponding awareness material.

2. **Prohibited Activities List** (Section 5.1) which describes the types of activities for which no loans can be provided under any circumstance. This list, translated into Urdu and other local languages as applicable, will be prominently disclosed in all offices, especially loan centres, of the POs.
3. **ESM Guidelines for Microcredit** (Section 5.2) which PO’s representative should convey to the microcredit clients according to usage of the microcredit.

To ensure that the proposed environmental and social safeguards encompass all microcredit activities, the following covenant will be signed by every microcredit client:

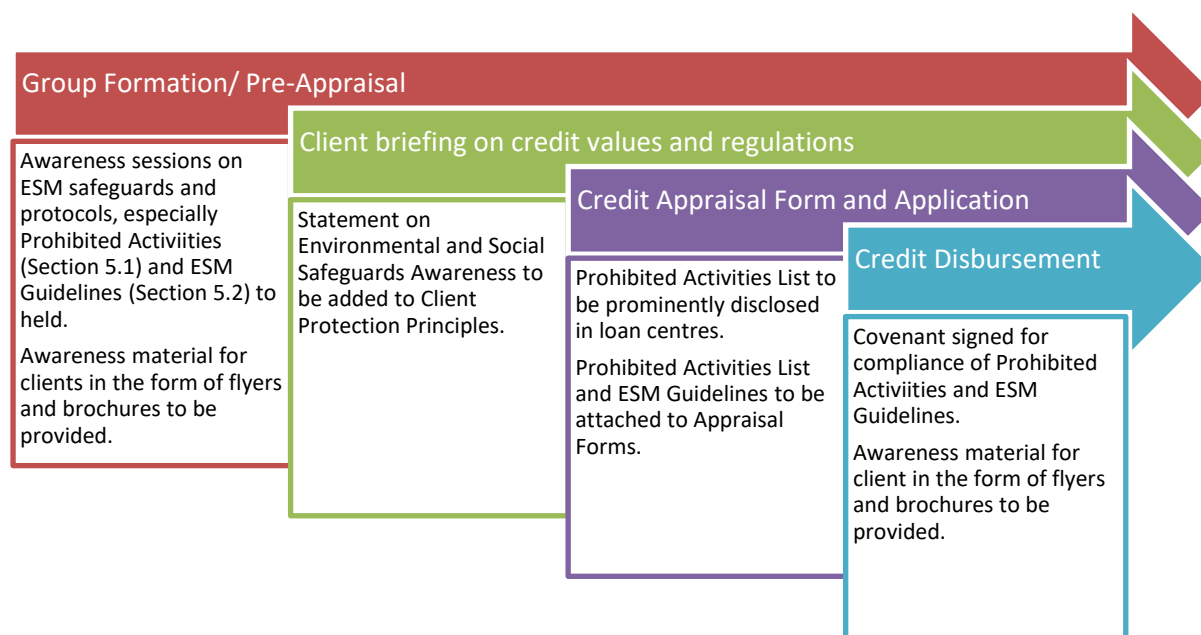
- I have read/understood the prohibited activities/items mentioned in the **Prohibited Activities List** and I will comply with the prohibition.
- I have been informed about the **ESM Guidelines for Microcredit** and I will comply with the guidelines.

Awareness material on environmental and social safeguards for PO staff, and in the form of pictorial brochures and flyers for clients/borrowers will also be disseminated during the loan cycle.

The process of integrating environmental and social safeguards into the microcredit loan cycle is shown in Figure 8.

³¹ PPAF partners follow these seven Principles as stipulated and agreed by the Pakistan Microfinance Network.

Figure 8: Environmental and social safeguards in the microcredit loan cycle



5.1. Prohibited Activities for Microcredit

Duly referenced in Annex 9, the following activities are prohibited to be undertaken using the microcredit:

- Production or activities involving harmful or exploitative forms of forced labour or child labour.
- Production of or trade in any product or activity deemed illegal under Pakistan laws or regulations or international conventions and agreements or subject to international phase-outs or bans, such as (a) pharmaceuticals, pesticides and herbicides, (b) ozone-depleting substances, (c) polychlorinated biphenyls and other hazardous chemicals, (d) wildlife or wildlife products regulated under the convention on international trade in endangered species of wild fauna and flora, and (e) transboundary trade in waste or waste products.
- Production of or trade in weapons and munitions, including paramilitary materials.
- Production of or trade in alcoholic beverages and tobacco.
- Gambling, casinos, and equivalent enterprises.
- Production of or trade in radioactive materials, including nuclear reactors and components thereof.
- Production of, trade in, or use of un-bonded asbestos fibres.
- Commercial logging operations or the purchase of logging equipment for use in ^[SEP]forests.
- Marine and coastal fishing practices, such as large-scale pelagic drift net fishing ^[SEP] and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats ^[SEP].
- Purchase of land/property, development and/or construction of any structure for personal or commercial use.
- Setting up of tanneries and/or microenterprises to produce or process officially prohibited products.
- Cultivation/ processing of poppy and/ or other prohibited varieties.
- Poaching/hunting of wildlife
- Informal cross-border trade
- Purchase and use of persistently polluting pesticides, and/or any other pesticides/insecticides banned by the government or WHO.

5.2. ESM Guidelines for Microcredit

There are some common guidelines which are applicable to all usages of microcredit; hence should be conveyed to all microcredit clients. These include:

- Each microcredit client should be made aware of the **Prohibited Activities List** (Section 5.1) and the relevant **ESM Guidelines for Microcredit** (given in this Section). Every client should sign the covenant regarding these environmental and social safeguards, which should be placed in the files of PO and the client.
- There should be no activities in or near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.

5.2.1. Agriculture/Cropping

- The microcredit must not be used for crops included in Prohibited Activities List (Annex 9), such as poppy and other prohibited varieties.
- Use of synthetic chemical pesticide sprays is prohibited as it can have adverse ecological impacts. Instead, farmers should be informed about the benefits and methods of integrated pest management (IPM). Use of masks, which should be part of asset transfer, during spraying of permitted pesticides should be mandatory.
- Overuse of synthetic fertilisers can lead to soil contamination and drop in yield in the long term. Poor storage of synthetic fertilisers can lead to local level soil contamination and health hazards; hence, the beneficiaries should be educated about this aspect and best practices recommended by the Agriculture Department on application of synthetic fertilisers.
- The farmers should be made aware of expired agricultural inputs, such as permitted pesticides.
- The farmers should be educated about benefits of sustainable agricultural practices, such as using organic fertilisers, crop rotation, land fallowing, IPM, and use of only 'certified seeds' through linkages with the Agriculture Extension Department and the private sector for imparting Agriculture Management and Skills Training (AMST). These alternatives lead to reduction in the use of synthetic fertiliser and cost effectiveness.
- Outreach/training activities for agriculture should benefit both men and women.

5.2.2. Cottage Industry/Handicrafts

- Ensure that communities residing within or around the notified protected areas (e.g., national parks and game reserves) are not practicing illegal wood extraction for use in woodwork/furniture making, or chemically flushing/cutting trees for extraction of gum etc. (see Annex 18 for sources of technical data).
- Use of hazardous non-biodegradable packaging material such as black polythene (black plastic bags) and Styrofoam is prohibited.
- Ensure that hazardous liquid and solid waste, e.g., mercury, biomedical, heavy metals, CFLs (energy savers), tyres, oil, batteries, paint, solvents, acidic solutions, etc., is stored separately out of reach of children and is delivered to disposal sites in secure containers for safe disposal.
- Use of hazardous dyes and chemicals cause health problems such as skin allergies, cancer and other fatal diseases; hence, is prohibited.

- Improper use of tools and chemicals (polishes, paints, thinners etc.) can result in accidents and health problems. Provide protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, dyes paints and machinery as part of the asset transfer.
- Poor ventilation can result in indoor air pollution leading to health problems (respiratory diseases and irritation and inflammation of eyes etc.). Ensure installation of proper ventilation channels in workshops and when working with chemicals, paints, and polishes in confined spaces (e.g., open window, open door, exhaust fan, etc.).
- Most cottage industries and handicraft production take place in or near living areas, which gives easy access of machines, tools and chemicals to family members including children. This can result in misuse, accidents and health problems if equipment is not used and stored properly.
- Production of handicrafts such as carpets is labour intensive processes. Excessively long working hours can lead to health problems relating to eyesight, posture, exhaustion and skin etc.; hence, should be avoided.
- Since solid waste and runoff from the handicraft production and cottage industry (especially from the chemicals and dyes used in the handicraft production) may contaminate the groundwater as well as freshwater; the solid waste should be collected and dumped at a covered place while for large, uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 15 meters (see Annex 16) from potential sources of contamination emanating from handicraft centres and cottage industry. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Electrical wiring in the enterprise/workshop should be securely installed.
- Energy conservation/efficient practices such as using surface mounted devices (SMDs), switching off machinery/tools when not in use, properly turning off taps when finished using and other such practices, should be encouraged.
- Machinery, tools and chemicals when not in use should be stored properly out of reach of children.
- Machinery, wiring, and other equipment should be kept clear of walking areas.

5.2.3. Fishponds

Only the fishponds as productive assets for livelihood improvement at domestic level can be financed by microcredit.

- Since runoff from fishponds can contaminate the groundwater as well as freshwater; proper drainage and disposal system should be developed to contain mixing of runoff with the groundwater and the freshwater.
- All freshwater sources should be located at a safe distance of at least 30 meters (see Annex 16) from potential sources of contamination emanating from fishponds. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- A major issue attached to fisheries is the introduction of exotic species (see Annex 18 for sources of technical data); this can be disastrous for the local species and should be avoided.
- All fishponds should have fence to avoid safety hazard for the local population.
- Fishponds if not properly managed serve as breeding grounds for mosquito and other insects which is a serious health hazard for the nearby community.

5.2.4. Fishing Gear

Fishing gear may include small fishing nets, fishing boats and outboard engines.

- Substandard or small mesh sized nets should not be used as these are harmful for fingerlings. Instead, gillnets should be used.
- Fishing should not be practiced during the ban imposed by the government, normally in the months of June and July.
- The disposable wrapping materials should not be thrown in the water bodies.

- The outboard engines of the fishing boats should be properly tuned so that there is no spillage of oil into the water.
- Fishing boats should be equipped with first aid box/kit.
- The fishing boats should not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9).

5.2.5. Food Processing/Production

- Many preservatives and dyes are used for food processing and should be derived from natural sources (e.g., salt, vinegar, sugar as preservatives, and spices such as turmeric, tea, flowers, and fruits etc. as dyes).
- Under no circumstances, textile dye be used as food colouring agents.
- Use of hazardous non-biodegradable packaging material such as black polythene (black plastic bags) and Styrofoam is prohibited. Also, rusted cans and unwashed/unsterilised bottles must not be used.
- Proper hygiene practices should be practiced avoiding contamination of the processed food. Hygienic working conditions should be ensured by providing gear such as disposable gloves and clean utensils as part of asset transfer. Also provide covered bins to ensure collection and safe disposal of solid waste.
- Large amounts of pesticides are applied to the fruit crops. If not properly washed at the time of processing, the residual pesticides are left on the surface of the fruits. This negligence may lead to serious health hazards for the consumers. Raw meat, vegetables and fruits should be thoroughly washed before use in food production.
- All food products should have expiry (best before) date mentioned on the packing.
- Improper and obsolete cooking stoves and gas pipes can result in wastage and safety hazards such as accidents due to gas leakage. Hence, installation of stoves/cooking appliances must be as per approved standards.
- Lit stoves and running water, when not in use, can lead to wastage of natural resources as well as accidents.
- Poor ventilation in cooking areas can result in indoor air pollution leading to health problems (e.g., acute respiratory diseases, irritation and inflammation of eyes etc.).
- Since solid waste and runoff from the food processing and production activities may contaminate the groundwater as well as freshwater, the waste should be collected and dumped at a covered place while for large, uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 15 meters (see Annex 16) from potential sources of contamination emanating from food processing and production. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Energy conservation/efficient practices such as using SMDs, switching off stoves when not in use, properly turning off taps when finished using and other such practices, should be encouraged.

5.2.6. Livestock Rearing

Only the livestock rearing as productive assets for livelihood improvement at domestic level can be financed through microcredit.

- Since solid waste and effluent from the livestock can contaminate the groundwater as well as freshwater; the solid waste should be collected and dumped at a covered place while for large and uncovered areas that are likely to contain organic waste, a trap for suspended particles should be constructed.
- All freshwater sources should be located at a safe distance of at least 30 metres (see Annex 16) from potential sources of contamination emanating from livestock. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Animal vaccination and veterinary care should be monitored. Borrowers should be educated about better species of livestock and best health practices for the livestock through linkages and livestock

management and skills training (LMST) with the Livestock Extension Department. This shall also include veterinary care and vaccination plan to control disease.

- The beneficiaries should also be educated about harmful impacts of using booster medicines (hormones, etc.) for meat growth or increased milk production in livestock and restrict its use.
- Animal feed production processes can lead to deforestation or destroying of grasslands. Overgrazing can also lead to land degradation and soil compaction. Therefore, open grazing and browsing of livestock in 'arid and non-irrigated areas' is only allowed if based on the principle of 'rotational grazing' (see Annex 18 for sources of technical data). Rotational grazing is an exercise to divide rangeland/grasslands/pastures into rotation zones based on abundance of vegetation, to restrict overuse of rangeland, grassland or pasture. Overused zone is closed for grazing for a given season to help regeneration, and the livestock is grazed in another zone in simultaneity.
- Awareness on maintenance, odour control and cleaning of livestock enclosures should be provided to the beneficiary. Include mechanism for animal waste disposal in the proposal such as promoting installation of biogas plants for fuel gas and organic fertilizer.
- Continuous supply of drinking water for livestock allowing them to drink as per their requirement leads to increased productivity. Therefore, where possible livestock should be provided with continuous supply of drinking water.
- Livestock open grazing and browsing of livestock in 'arid and non-irrigated areas' should only be allowed if based on the principle of rotational grazing.

5.2.7. Microenterprises/Workshops

- Use of hazardous non-biodegradable packaging material such as polythene (black plastic bags) and Styrofoam should be prohibited.
- Ensure that hazardous liquid and solid waste (e.g., mercury, biomedical, heavy metals, electronic waste, tyres, oil, batteries, paint, solvents, acidic solutions, etc.) is stored separately out of the reach of children and is delivered to disposal sites in secure containers for safe disposal.
- Processing and sale of all illegal drugs and addictive substances such as heroin, hashish, opium, bhang, alcohol is not allowed.
- Sale of any item, such as medicines, which required permission from authorities will be subject to the relevant permission/license.
- Sale of addictive substances such as tobacco, *gutka*, *naswar*, cigarettes, *beeri*, *hukka*, *paan parag*, *sheesha*, and any other products containing such substances to any person under the age of 18 is prohibited.
- Expiry (best before) date should be mentioned on all perishable items for sale.
- Hygienic working conditions should be ensured by providing covered bins to ensure collection and safe disposal of solid waste.
- Where assets are in the form of medical kits, sterilisation equipment and needle cutters for disposal of needles and syringes should also be provided. Healthcare waste management guidelines (Annex 17) should be followed by such beneficiaries.
- Electrical wiring in the enterprise/workshop should be securely installed.
- Machinery, tools and chemicals when not in use should be stored properly out of reach of children.
- Machinery, wiring, and other equipment should be kept clear of walking areas.
- Encourage energy conservation/efficient practices such as using SMDs, switching off tools/machinery when not in use, properly turning off taps when finished using and other such practices. When providing lighting equipment, ensure energy conservation by providing SMDs as part of the asset transfer.
- Use of hazardous dyes and chemicals must be avoided as these can cause skin allergies, cancer or other fatal diseases.
- Improper use of tools and chemicals (polishes, paints, thinners etc.) can result in accidents and health problems. Protective gear such as gloves, masks, goggles, helmets, welding glasses/shields for handling chemical polishes, dyes paints and machinery must be provided as part of the asset transfer.
- Ensure proper ventilation (e.g., open windows, open doors, exhaust fans, etc.) in the workshops and when working with chemicals, paints, and polishes in confined spaces. The workshop should have proper signage, including display of current voltage, no smoking and other related precautions.

- Workshops/machinery in confined spaces can result in accidents. Ensure safe exits (e.g., unobstructed door, window, etc.) in case of fire emergencies when working in confined spaces. Provide basic first aid box as part of the asset transfer.

5.2.8. Poultry Raising

Only the poultry birds as productive assets for livelihood improvement at domestic level can be financed through microcredit.

- All freshwater sources should be located at a safe distance of at least 30 metres (see Annex 16) from potential sources of contamination emanating from poultry pens/enclosures. Generally, it applies strictly in the areas where water resources are severely limited and are used for multi purposes, e.g., human and livestock consumption, and irrigation etc.
- Poultry birds are also prone to many diseases such as “rani khet”, and there are possibilities of disease spread in the nearby communities. Asset recipients should be educated about hazards of feeding low quality chicken feed, best hygiene and sanitation practices, and birds’ diseases management and associated risk for the community in case of spread.
- Poultry pens/enclosures are known for their foul smell. Awareness on maintenance, odour control and cleaning of poultry pens/cages should be provided to the beneficiary.
- Beneficiaries should be made aware about complete documentation related to the intervention, and the same should be placed in the intervention files of PO and the beneficiary.
- Applicable labour laws, especially about minimum wage, fixed working hours, and occupational health and safety, should be followed in letter and spirit.
- Poultry raising near a site that has historic, or cultural importance may offend the local population, damage the local social fabric, and generate conflict with the local community. Similarly, habitats for plants/animals of ecological, cultural and/or economic importance may be harmed/destroyed by activities in or near a notified protected area. In such cases an alternative site shall be located, or proper measures shall be taken to minimise the disturbance to the local community/habitat.
- Child labour is prohibited under the Pakistan Penal Code. Ensure that no child under the age of 18 should be hired to work in hazardous conditions; and no child under that age of 15 should be hired to do any sort of physical exertive labour; and no child under the age of 13 should be hired for ANY type of labour.
- The beneficiary should be educated about:
 - Mechanisms for proper waste disposal.
 - Hazards of using low quality chicken feed, best hygiene and sanitation practices, and birds’ diseases management and its risk for the community in case of spread.

5.2.9. Tri-wheeled Vehicles

Only the tri-wheeled vehicles including auto-rickshaw, motorcycle cart and *chingchi* rickshaws can be financed through microcredit. Purchase of any other vehicle is not allowed as per the Prohibited Activities List (Annex 9).

- Awareness should be provided to the beneficiaries on repair and maintenance of the vehicle, noise and air pollution control, waste disposal, driving license, vehicle number plate, use of protective gears such as helmet, seat belt, dim lights, reflector tape/light, prohibition of installation and use of video devices, high music volume, irresponsible driving, over speeding, underage driving, vehicle parking rules, and basic road/traffic signs, etc.
- Substandard quality of compressed natural gas (CNG) or liquefied petroleum gas (LPG) kits used in tri-wheeled vehicles may cause explosions, resulting in loss of lives and asset. Awareness should be provided to the beneficiaries about the precautionary measures. For instance, passengers must be prohibited from smoking since gas leakage can ignite fire. CNG/LGP powered vehicles should undergo a regular check-up with a clearance certificate from the authority like OGRA / All Pakistan CNG Association (APCNGA) etc. The gas-kit installation and testing workshops has been set up at various CNG stations across Pakistan. As per OGRA guidelines, only one CNG/LPG cylinder should be installed in tri-wheeled vehicles.

- Substandard quality of engine and body parts can result in additional expenses, and cause noise and air pollution leading to health problems. Quality of engine and body parts of the vehicle should be ensured in asset transfer.
- The vehicles should have safety signage, such as reflective tape and/or lights.
- These vehicle's being plied for rent, should not be parked near sensitive receptors like mosques, schools, hospitals, graveyards, highways as it may affect the public and create traffic congestion.
- Excessively driving for long hours, continuous driving at night and wrong posture while driving, can lead to health problems; hence, should be avoided.
- Good driving practices, such as smooth acceleration and soft breaking reduce fuel consumption. The drivers should be educated on good driving practices.
- Periodic maintenance of vehicles, such periodic check-ups, engine tuning, prescribed tyre pressure and timely replacement of engine oil and filters, reduce the fuel consumption, enhances vehicle's durability and help controlling air pollution.
- Ensure that hazardous materials (e.g., tyres, oil, batteries, etc.) are stored separately out of the reach of children and are delivered to disposal sites in secure containers for safe disposal.
- The vehicles should not be used to transport any proscribed items listed in the Prohibited Activities List (Annex 9).

Annex 1: PPAF Environment Policy



PPAF Environment Policy

Pakistan Poverty Alleviation Fund (PPAF) appreciates the significance of managing and mitigating the impact of its activities on the environment. PPAF is highly committed to protect environment, fulfill its compliance obligations and continual improvement of its environmental management system to enhance its environmental performance.

Protecting our communities against any potential adverse impacts of PPAF supported activities is of critical importance to us, and this includes any impact generated from the activities of PPAF as well as our partner organisations.

This policy reflects PPAF's commitment to comply with international best practices in delivering high quality environmentally sensitive projects. The policy will be implemented through the following:

- Integrating EMS requirements into organisation strategic objectives and business processes
- Complying to all applicable compliance obligations related to organisation's environmental aspects
- Creating awareness of environmental issues (*within a local and global context*) amongst our staff, partner organisations and the communities we work for
- Reducing our consumption of resources (*fuel, energy, water and office materials*)
- Minimising (*wherever feasible*) our carbon footprint by encouraging more environmentally friendly practices
- Creating a healthy work environment for our staff that fosters their wellbeing
- Implementing a strict no smoking policy inside office premises
- Adopting a strict and robust safety and security plan that equips PPAF staff to be prepared during emergencies and potential hazards (*natural and anthropogenic*)
- Reducing nuisance (*air and noise emissions in particular*) that could disturb the surrounding environment
- Preventing funding for any activity that directly or indirectly endangers and harms the environment
- PPAF's EMS Policy (*in English & Urdu*) is to be disseminated by the Communications & Media Unit within PPAF, and through partner organisations, community institutions and donors/ sponsors through multiple channels (*PPAF website, newsletter and in-print*)
- In line with our efforts for continual improvement, PPAF's Quality Assurance, Research and Design Group will monitor the performance and progress of PPAF's Environmental Management System



Qazi Azmat Isa
Chief Executive Officer



Annex 2: Indicative list of MEAs, and ESM legislation and guidelines

1. Multilateral Environmental Agreements (MEAs)

- *Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia* (as amended), Rome, 1963.
- *Agreement on the Network of Aquaculture Centres in Asia and the Pacific*, Bangkok, 1988.
- *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* (*Basel Convention*). Accessed 26 Jul 1994.
- *Convention Concerning the Protection of the World Cultural and Natural Heritage* (*World Heritage Convention*). Ratified 23 Jul 1976.
- *Convention on Biological Diversity (CBD)*. Ratified 26 Jul 1994. Followed by *Cartagena Protocol on Biosafety* (*Cartagena Protocol*). Signed 4 Jun 2001.
- *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (*CITES*). Accessed 20 Apr 1976.
- *Convention on the Conservation of Migratory Species of Wild Animals* (*CMS*). Signed 1 Dec 1987.
- *Convention on the International Maritime Organisation* (*IMO*). Signed 1958.
- *Convention on Wetlands of International Importance* (*Ramsar Convention*). Signed 23 Nov 1976. Followed by *Paris Protocol* of 1982.
- *International Plant Protection Convention*. Adhered 10 Nov 1954.
- *International Treaty on Plant Genetic Resources for Food and Agriculture* (*ITPGRFA*). Accessed 2 Sep 2003.
- *Montreal Protocol on Substances that Deplete the Ozone Layer* (*Montreal Protocol*). Accessed 18 Dec 1992.
- *Plant Protection Agreement for the South-East Asia and Pacific Region* (as amended), Rome, 1956.
- *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides International Trade* (*PIC*). Ratified 14 Jul 2005.
- *South Asia Co-operative Environment Programme* (*SACEP*). Member 1982.
- *Stockholm Convention on Persistent Organic Pollutants* (*POPs*). Signed 6 Dec 2001.
- *United Nations Convention to Combat Desertification* (*UNCCD*). Ratified 24 Feb 1997.
- *United Nations Framework Convention on Climate Change* (*UNFCCC*). Ratified 1 Jun 1994.
 - *Kyoto Protocol to the UNFCCC* (*Kyoto Protocol*). Accessed 11 Jan 2005.
- *Vienna Convention for the Protection of the Ozone Layer* (*Vienna Convention*). Accessed 18 Dec 1992.
- *Vienna Convention for the Protection of the Ozone Layer*, Vienna, 1985.

2. National and sub-national policies

- *National Climate Change Policy, 2012*. Government of Pakistan.
- *National Environment Policy, 2005*. Ministry of Environment, Government of Pakistan. Ratified 29 Jun 2005.
- *National Resettlement Policy, 2002*. Government of Pakistan.
- *National Sanitation Policy, 2006*. Ministry of Environment, Government of Pakistan. Issued Sep 2006.
- *Policy for Development of Renewable Energy for Power Generation, 2006*. Ministry of Water & Power, Government of Pakistan.

3. National and sub-national laws

- *Azad Jammu and Kashmir Wildlife (Protection, Preservation, Conservation and Management) Act, 2014*. Azad Government of the State of Jammu & Kashmir. Enacted 6 Jan 2015.
- *Azad Jammu and Kashmir Environmental Protection Act, 2000*. Law, Justice and Parliamentary Affairs Department, Azad Government of the State of Jammu & Kashmir. Enacted 11 Oct 2000.
- *Balochistan Environment Protection Act 2012*. Government of Balochistan. Enacted 9 Jan 2013.

- *Gilgit-Baltistan Environmental Protection Act, 2014*. Government of Gilgit-Baltistan. Enacted 4 Dec 2014.
- *Khyber Pakhtunkhwa Wildlife and Biodiversity (Protection, Preservation, Conservation and Management) Act, 2015*. Government of Khyber Pakhtunkhwa. Enacted 14 Jan 2015.
- *Khyber Pakhtunkhwa Environmental Protection Act, 2014*. Government of Khyber Pakhtunkhwa. Enacted 4 Dec 2014.
- *Land Acquisition Act, 1894*. Government of India. Enacted 2 Feb 1894.
- *Pakistan Climate Change Act, 2017*. Government of Pakistan. Enacted 29 Mar 2017.
- *Pakistan Environmental Protection Act 1997*. Ministry of Environment, Government of Pakistan. Enacted 6 Dec 1997.
- *Pakistan Trade Control of Wild Fauna and Flora Act, 2012*. Climate Change Division, Government of Pakistan.
- *Punjab Environmental Protection Act 1997*. Environment Protection Department, Government of the Punjab. Enacted 18 Apr 2012.
- *Punjab Prohibition on Manufacture, Sale, Use and Import of Polythene Bags (Black or any other Polythene Bag below 15 Micron Thickness) Ordinance, 2002*. Government of the Punjab. Notified 18 Feb 2002.
- *Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997*. Government of Pakistan. Enacted 16 Dec 1997.
- *Sindh Environmental Protection Act, 2014*. Government of Sindh. Enacted 19 Mar 2014.

4. National and sub-national rules and regulations

- *Azad Jammu & Kashmir Bio-Safety Rules, 2009*. Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.
- *Azad Jammu & Kashmir Environmental Protection Agency Review of Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) Regulations, 2009*. Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.
- *Balochistan Biosafety Rules, 2020*. Government of Balochistan.
- *Balochistan Environmental Pollution Charge for Industry Calculation & Collection Rules, 2020*. Government of Balochistan.
- *Balochistan Environmental Protection Administrative Penalty Rules, 2020*. Government of Balochistan.
- *Balochistan Environmental Protection BTS Regulations, 2020*. Government of Balochistan.
- *Balochistan Environmental Protection Motor Vehicles Rules, 2020*. Government of Balochistan.
- *Balochistan Environmental Quality Standards Certification of Environmental Laboratories Regulations, 2020*. Government of Balochistan.
- *Balochistan Environmental Quality Standards Self-Monitoring & Reporting by Industry Rules, 2014*. Government of Balochistan.
- *Balochistan Environmental Sample Rules, 2020*. Government of Balochistan.
- *Balochistan Environmental Tribunal Rules, 2020*. Government of Balochistan.
- *Balochistan EPA Review of IEE & EIA Regulations, 2020*. Government of Balochistan.
- *Environmental Samples Rules, 2001*. Government of Pakistan. Notified Mar 2001.
- *Environmental Tribunal Rules, 1999*. Pakistan Environmental Protection Agency, Government of Pakistan. Notified 10 Mar 2000.
- *Hospital Waste Management Rules, 2005*. Government of Pakistan. Notified 3 Aug 2005.
- *Khyber Pakhtunkhwa Environmental Assessment Rules, 2021*. Government of Khyber Pakhtunkhwa. Notified 2 Sep 2021.
- *Khyber Pakhtunkhwa Environmental Protection Tribunal Rules, 2016*. Government of Khyber Pakhtunkhwa. Notified 21 Nov 2016.
- *National Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2000*. Pakistan Environmental Protection Agency, Government of Pakistan. Notified 10 Feb 2000.
- *National Environmental Quality Standards (Self-monitoring and Reporting by Industries) Rules, 2001*. Government of Pakistan. Notified Apr 2001. Amended 2 Feb 2005.
- *Pakistan Biosafety Rules, 2005*. Pakistan Environmental Protection Agency, Government of Pakistan. Notified 21 Apr 2005.

- *Pakistan Environmental Protection Agency Ban on (Manufacturing, Import, Sales, Purchase, Storage and Usage) Polythene Bags Regulations, 2019.* Pakistan Environmental Protection Agency, Government of Pakistan. Notified 25 Jul 2019.
- *Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000.* Pakistan Environmental Protection Agency, Government of Pakistan. Notified 13 Jun 2000.
- *Pollution Charge for Industry (Calculation and Collection) Rules, 2001.* Government of Pakistan. Notified 2001.
- *Pollution Charge for Industry (Calculation and Collection) Rules, 2009.* Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.
- *Pollution Charge for Industry (Calculation and Collection) Rules, 2009.* Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.
- *Prohibition of Non-Degradable Plastic Products (manufacturing, sale and usage) Regulations, 2013.* Pakistan Environmental Protection Agency, Government of Pakistan. Notified 23 Jan 2013.
- *Provincial Sustainable Development Fund (Utilisation) Rules, 2001.* Government of Pakistan. Notified Jan 2002.
- *Provincial Sustainable Development Fund Board (Procedure) Rules, 2001.* Government of Pakistan. Notified 18 Jul 2001.
- *Punjab Biosafety Rules, 2014.* Environment Protection Department, Government of the Punjab. Notified Feb 2014.
- *Punjab Environmental Protection (Administrative Penalty) Rules 2013.* Environment Protection Department, Government of the Punjab. Notified Mar 2013.
- *Punjab Environmental Protection (BTS) Regulations, 2012.* Punjab Environmental Protection Agency, Government of the Punjab. Notified 26 Nov 2012.
- *Punjab Environmental Protection (Motor Vehicles) Rules 2013.* Environment Protection Department, Government of the Punjab. Notified 24 Dec 2013.
- *Punjab Environmental Protection (Poultry) Regulations, 2013.* Punjab Environmental Protection Agency, Government of the Punjab. Notified 28 Feb 2013.
- *Punjab Environmental Tribunal Rules, 2012.* Environment Protection Department, Government of the Punjab. Notified 30 Apr 2012.
- *Punjab Prohibition on Manufacture, Sale, Use and Import of Polythene Bags (Black or any other Polythene Bag below fifteen-micron thickness) Rules, 2004.* Notified 18 May 2004.
- *Regulation of Mines and Oil fields and Mineral Development (Government Control) Act, 1948.* Government of Pakistan. Enacted 8 Jan 1949.
- *Sindh Environmental Protection (Composition of Offences and Payment of Administrative Penalty) Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Environmental Protection Agency (Review of Initial Environmental Examination and Environmental Impact Assessment) Regulations, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Environmental Protection Tribunal Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Environmental Quality Standards (Self-Monitoring & Reporting by Industry) Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Environmental Samples Rules 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Hazardous Substances Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Hospital Waste Management Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *Sindh Prohibition of Non-Degradable Plastic Products (Manufacturing, Sale & Usage) Rules, 2014.* Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.

- *Sindh Sustainable Development Fund (Procedure & Utilisation) Rules, 2014*. Sindh Environmental Protection Agency, Government of Sindh. Notified 16 Dec 2014.
- *State Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2009*. Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.

5. Environmental quality standards

- *Balochistan Environmental Quality Standards for Ambient Air 2020*. Government of Balochistan.
- *Balochistan Environmental Quality Standards for Drinking Water 2020*. Government of Balochistan.
- *Balochistan Environmental Quality Standards for Industrial Gaseous Emission 2020*. Government of Balochistan.
- *Balochistan Environmental Quality Standards for Treatment of Liquid & Disposal of Biomedical Waste 2020*. Government of Balochistan.
- *National Environmental Quality Standards for Ambient Air, Drinking Water and Noise, 2010*. Pakistan Environmental Protection Agency, Government of Pakistan. Notified 18 Oct 2010.
- *National Environmental Quality Standards for Municipal and Liquid Industrial Effluent, Industrial Gaseous Emissions, and Motor Vehicle Exhaust and Noise, 1993*. Pakistan Environmental Protection Agency, Government of Pakistan. Notified 24 Aug 1993; amended 8 Aug 2000 and 16 May 2009.
- *National Environmental Quality Standards for Municipal and Liquid Industrial Effluents, 2009*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.
- *Sindh Environmental Industrial Wastewater, Effluent, Domestic Sewerage, Gaseous Emissions, Industrial Air Emission and Ambient Airs, Noise for Vehicles, Air Emissions for Vehicles, and Drinking Water Quality Standards, 2015*. Sindh Environmental Protection Agency, Government of Sindh. Notified 28 Jan 2016.
- *State Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2009*. Environmental Protection Secretariat, P&D Department, Government of Azad Jammu & Kashmir. Notified 11 Apr 2009.

6. Checklists and Guidelines

Most of these sectoral checklists and guidelines were developed by the Pakistan Environmental Protection Agency in 1997, and the NWFP (now Khyber Pakhtunkhwa) Environmental Protection Agency in 2004. Later, the Azad Jammu & Kashmir Environmental Protection Agency adopted these checklists and guidelines with some minor changes while rest of the EPAs kept using the same developed by Pak and NWFP EPAs. Since then, some more checklists and guidelines have been developed which are listed below.

- *Balochistan Environmental Guidelines for Dairy Farms & Slaughterhouses, 2004*. Government of Balochistan.
- *Environmental Assessment Checklists and Guidelines (Non-Regulatory): Forest Harvesting Operations, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines (Non-Regulatory): Environmentally Sound Plantation, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines (Non-Regulatory): Construction and Lining of Watercourses, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines for Environmental Reports: Major Sewerage Schemes*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines for Housing Estates and New Town Development*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.

- *Environmental Assessment Checklists and Guidelines for Major Chemical and Manufacturing Plants.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines Forest Road Construction.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Brick Kiln Units.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Brick Kiln Units, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Canal Cleaning, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Carpet Manufacturing Units, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Construction or Expansion of Bus Terminals.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Construction of Tourist Facilities in Ecologically Sensitive Areas, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Flour Mill, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Flour Mill.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Forest Harvesting Operations.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Forest Road Construction, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Forest Road Construction.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Major Roads.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Marble Units, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Marble Units.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Petrol and CNG [Compressed Natural Gas] Stations, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Petrol and LPG [Liquefied Petroleum Gas] / CNG [Compressed Natural Gas] Stations.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Poultry Farms.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Poultry Farms, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Rural School & Basic Health Units.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Rural Schools and Basic Health Units, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Sanitation Schemes.* Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Small and Medium Size Road Construction and Expansion in Urban Areas, 2004.* NWFP Environmental Protection Agency, Government of North-Western Frontier Province.

- *Environmental Assessment Checklists and Guidelines: Small Housing Schemes*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Small Housing Schemes, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Small to Medium Size Water Supply Schemes, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Stone Crushing Units*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Assessment Checklists and Guidelines: Stone Crushing Units, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Tube-well Construction for Agriculture and Irrigation Purposes, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Assessment Checklists and Guidelines: Water Reservoirs in Arid Zones, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Guidelines: Construction or Expansion of Bus Terminals, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Environmental Guidelines: Environmentally Sound Plantation*. Azad Jammu & Kashmir Environmental Protection Agency, Government of Azad Jammu & Kashmir.
- *Environmental Guidelines: Sanitation Schemes, 2004*. NWFP Environmental Protection Agency, Government of North-Western Frontier Province.
- *Guidelines for Conducting Environmental Assessments for PPP Infrastructure Projects, 2011*. Planning & Development Department, Government of Punjab.
- *Guidelines for Conducting Social Impact Assessments for PPP Infrastructural Projects, 2011*. Planning & Development Department, Government of Punjab.
- *Guidelines for Public Consultation, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Guidelines for Sensitive and Critical Areas, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Guidelines for the Preparation and Review of Environmental Reports, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *National Biosafety Guidelines, 2005*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines for Environmental Reports: Wind Power Projects, 2010*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines for Upstream Petroleum Sector – Onshore, 2004 (Volume 1 & 2)*. Pakistan Petroleum Exploration and Production Companies Association.
- *Sectoral Guidelines: Housing Estates and New Town Development, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Industrial Estates, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Major Chemical and Manufacturing Plants, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Major Roads, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Major Sewerage Schemes, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Major Thermal Power Stations, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.
- *Sectoral Guidelines: Oil and Gas Exploration, 1997*. Pakistan Environmental Protection Agency, Government of Pakistan.

- *Sub-sectoral Environmental Guidelines and Checklists on Dairy Farms and Slaughterhouses, 2004.* Balochistan Environmental Protection Agency and IUCN.

7. Operations Manuals

- *Pakistan Environmental Assessment Procedures, 1997.* Government of Pakistan.
- *Pakistan Environmental Legislation and the National Environmental Quality Standards, 1997.* Government of Pakistan.
- *Policy and procedures for the filing, review and approval of environmental assessments, 1997.* Government of Pakistan.

Annex 3: Projects requiring an EIA³²

1. Energy

- Coal power projects above 50 MW
- Coal, power generation more than 100 MW³³
- Hydroelectric power generation over 50 MW
- Hydroelectric power generation more than 100 MW³⁴ [S.E.P.]
- LPG and LNG Projects (including LNG Terminals, re-gasification units) except LPG filling stations
- Nuclear power plans [S.E.P.]
- Oil and gas extraction projects including exploration, production, gathering, generating systems, separation and storage having cost of more than 100 million³⁵
- Oil and gas transmission systems having cost more than 100 million³⁶
- Petroleum refineries
- Thermal power generation over 100 MW [S.E.P.]
- Thermal, Biomass, Solar and Wind power generation more than 200 MW³⁷
- Transmission lines (11 KV and above), grid stations [S.E.P.] and distribution projects
- Waste-to-energy generation projects
- Wind energy projects if falls under any sensitive, protected area

2. Manufacturing and processing

- Battery manufacturing plant
- Cement plants [S.E.P.]
- Ceramics and glass units with total cost more than Rs. 100 million
- Chemical processing / production projects
- Fertiliser plants [S.E.P.]
- Food processing industries including beverages, dairy milk and products, slaughterhouses and related activities with total cost more than Rs. 200 Million³⁸
- Food processing industries including ice mills, rice units, flour mills, poultry feed mills using wheat, maize etc. as raw material ghee and oil mills, beverages, milk and dairy products, with total cost more than Rs.100 million
- Industrial estates (including export processing zones / ports)
- Man-made fibres and resin projects with total cost of Rs 200M and above³⁹
- Manufacturing of apparel, spinning mills, woollen mills, weaving mills including dyeing and printing, garments and leather stitching units, cotton ginning mills, plastic materials & products, glue manufacturing, detergent, rubber products, printing with total cost more than Rs. 100 million

³² Based on the following Schedules:

- *Balochistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2020 – Schedule II.*
- *Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000 – Schedule II.* Pakistan Environmental Protection Agency, Government of Pakistan. Notified 13 Jun 2000.
- *Sindh Environmental Protection Agency (Review of Initial Environmental Examination and Environmental Impact Assessment) Regulations, 2014 – Schedule II.* Notified 16 Dec 2014.

³³ In Balochistan jurisdiction.

³⁴ In Balochistan jurisdiction.

³⁵ Improved from the federal list.

³⁶ Improved from the federal list.

³⁷ In Balochistan jurisdiction.

³⁸ In Sindh jurisdiction.

³⁹ In Sindh jurisdiction.

- Marble cutting units, stone crushers, stone grinding mills, floor tiles/ ceramic manufacturing mills, pipes manufacturing mills, fan manufacturing, sanitary fitting & other electrical appliances manufacturing mills, plaster of Paris, stone grinding units with total cost less than Rs. 100 million⁴⁰
- Pesticides (manufacture or formulation) units.
- Petrochemicals complex/production, processing units.
- Petroleum refining units, oil reclamation units cost more than Rs. 100 million
- Poultry rendering units, brick kilns and pyrolysis plants⁴¹
- Steel mills, re-rolling mills and furnaces with total cost more than Rs. 50 million⁴²
- Sugar Mills and Distilleries
- Synthetic resins, plastics and man-made fibres, paper and paper board, paper pulping, plastic products, textiles (except apparel), printing and publishing, paints and dyes, oils and fats and vegetable ghee projects, with total cost more than Rs.100 million⁴³
- Synthetic resins, plastics and man-made fibres, paper and paperboard, paper pulping, plastic products, textiles (except apparel), printing and publishing, paints and dyes, oils and fats and vegetable ghee projects, with total cost more than Rs.10 million⁴⁴
- Tanning and leather finishing projects having wet process
- Wood & cork products with total cost more than Rs. 100 million

3. Mining and mineral processing

- Mining and processing of coal, gold, copper, sulphur, precious stones and other raw minerals.
- Mining and processing of major non-ferrous metals, iron and steel rolling⁴⁵
- Smelting plants with total cost of Rs.50 million and above

4. Transport

- Airports⁴⁶
- Dry ports development
- Federal or Provincial highways or major roads (including rehabilitation or rebuilding or reconstruction of existing roads)
- Federal or Provincial highways or major roads, bridges, overheads, underpasses (except maintenance, rebuilding or reconstruction of existing roads) with total cost of Rs. 100 million and above⁴⁴
- Flyovers, underpasses and bridges having total length of more than 500m
- Ports and harbour development for ships of 500 gross tons and above⁴⁷
- Railway works

5. Water management, dams, irrigation and flood protection

- Dams and reservoirs with storage volume of 25 million cubic meters and above having surface area of 4 square kilometres and above
- Dams and reservoirs with storage volume of 25 million cubic meters and above or surface area of 4 square kilometres and above⁴⁸
- Dams and reservoirs with storage volume of 50 million cubic meters and above or having surface area of 8 square kilometres and above⁴⁵
- Flood Protection
- Irrigation and drainage projects serving 15,000 hectares and above

⁴⁰ In Balochistan jurisdiction.

⁴¹ In Balochistan jurisdiction.

⁴² Improvised from the federal list.

⁴³ In Balochistan jurisdiction.

⁴⁴ In Balochistan jurisdiction.

⁴⁵ In Balochistan jurisdiction.

6. Water supply and treatment

- Large water supply schemes, filtration plants and treatment plants with total cost of Rs. 25 million and above

7. Waste disposal and treatment

- Drainage schemes, waste disposal and/or storage of hazardous or toxic wastes (including landfill sites, incineration of hospital toxic waste) with total cost more than Rs. 25 million⁴⁶
- Waste disposal and processing facilities for municipal or industrial wastes, with annual capacity more than 10,000 tons and above
- Wastewater treatment facility for industrial or municipal effluents.

8. Urban development and tourism

- General bus and truck stands (Category A, B, & C)
- Housing schemes above 10 acres
- Land use studies and urban plans (large cities) ^[SPP]
- Large scale public facilities.
- Large-scale tourism development projects with total cost more than Rs.50 million
- Public facilities with significant off-site impacts (e.g., incinerators, autoclaves having capacity more than 40 kg for disposal of hospital wastes)⁴⁷
- Residential/commercial high-rise buildings/apartments from 15 stories and above.

9. Environmentally sensitive areas

- ^[SPP]All projects situated in environmentally sensitive areas ^[SPP]

10. Other projects

- Any other project for which filing of an EIA is required by the EPA.
- Any other project likely to cause an adverse environmental effect.

⁴⁶ Improved from the federal list.

⁴⁷ Introduced by Balochistan.

Annex 4: Projects requiring an IEE⁴⁸

1. Agriculture, livestock and fisheries

- Fruit and vegetable processing units
- Poultry, livestock, dairy, stud and fish farms with total cost more than Rs. 20 million⁴⁹
- Projects involving repacking, formulation, cold storage and warehousing of agricultural products

2. Energy

- BTS, telecom and other wireless communication towers
- Coal fired power plants with capacity less than 50 MW
- Coal power generation less than 100 MW⁵⁰
- Construction of LPG storage facilities
- Construction of LPG, CNG filling station and petrol pumps
- Hydroelectric power generation less than 100 MW⁵¹
- Hydroelectric power generation less than 50 MW^[SEP]
- Oil and gas 2D/3D seismic survey and drilling activities
- Oil and gas extraction projects including exploration, production, gathering systems, separation and storage^[SEP] outside the environmentally sensitive areas
- Oil and gas transmission systems^[SEP]
- Solar project
- Thermal power generation less than 100MW
- Thermal, biomass, solar and wind power generation less than 200 MW⁵²
- Transmission lines less than 11 KV, grid station and large distribution projects
- Waste-to-energy generation projects including biomass less than 25 MW
- Wind project

3. Manufacturing and processing

- Biogas plants, boilers
- Brick kilns
- Carpet manufacturing units
- Ceramics and glass units less than 500 million⁵³
- Ceramics and glass units with total cost less than Rs. 100 million⁵⁴
- Ceramics and glass units with total cost more than Rs.50 million
- Food processing industries including ice mills, rice units, flour mills, poultry feed mills using wheat, maize etc. as raw material, ghee and oil mills, beverages, milk & dairy products and all edible processing/producing, with total cost less than Rs.100 million

⁴⁸ Based on the following Schedules:

- *Balochistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2020 – Schedule I.*
- *Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000 – Schedule I.* Pakistan Environmental Protection Agency, Government of Pakistan. Notified 13 Jun 2000.
- *Sindh Environmental Protection Agency (Review of Initial Environmental Examination and Environmental Impact Assessment) Regulations, 2014 – Schedule I.* Notified 16 Dec 2014.

⁴⁹ Improved from the federal list.

⁵⁰ In Balochistan jurisdiction.

⁵¹ In Balochistan jurisdiction.

⁵² In Balochistan jurisdiction.

⁵³ In Sindh jurisdiction.

⁵⁴ In Balochistan jurisdiction.

- Food processing industries with total cost less than Rs. 200 million⁵⁵
- Man-made fibres and resin projects with total cost less than Rs. 200 million⁵⁶
- Man-made fibres and resin projects with total cost less than Rs.100 million^[SSEP]
- Manufacturing of apparel, spinning mills, woollen mills, weaving mills including dyeing and printing, garments and leather stitching units, cotton ginning mills, plastic materials & products, glue manufacturing, detergent, rubber products, printing with total cost less than Rs. 100 million⁵⁷
- Manufacturing of apparel, textile garments unit , including dyeing, bleaching and printing, with total cost less than Rs.50 million⁵⁸
- Manufacturing of apparel, textile garments unit, including dyeing and printing, with total cost more than Rs.25 million^[SSEP]
- Marble cutting units, stone crushers, stone grinding mills, floor tiles manufacturing mills, pipes manufacturing mills, fan manufacturing, sanitary fitting & other electrical appliances manufacturing units, plaster of Paris units with total cost less than Rs.100 million
- Petroleum refining units, oil reclamation units cost less than Rs. 100 million
- Pharmaceutical units.
- Recycling plants
- Rice mills, ghee/oil mills
- Steel mills, furnaces with total cost less than Rs. 50 million
- Steel re-rolling mills
- Stone crushing units
- Wood & cork products with total cost less than Rs.100 million⁵⁹
- Wood products with total cost more than Rs. 25 million
- Wood products with total cost more than Rs.100 million⁶⁰

4. Mining and mineral processing

- Commercial extraction of sand, gravel, limestone, clay, sulphur and other minerals not included in Schedule II with total cost less than Rs.100 million^[SSEP]
- Crushing, grinding and separation processes^[SSEP]
- Flyovers, underpasses and bridges having total length less than 500 meters
- Smelting plants with total cost less than Rs. 50 million
- Smelting plants with total cost less than Rs100 millions⁶¹

5. Transport

- Federal or Provincial highways (except maintenance, rebuilding or reconstruction of existing metalled roads) with total cost less than Rs. 50 million^[SSEP]
- Federal or Provincial highways, bridges, overheads, underpasses (except maintenance, rebuilding or reconstruction of existing metaled roads) with total cost less than Rs. 100 million⁶²
- Flyovers, underpasses and bridges having total length less than 500 meters⁶³
- Ports and harbour development for ships having less than 500 gross tons capacity per day⁶⁴

⁵⁵ In Sindh jurisdiction.

⁵⁶ In Sindh jurisdiction.

⁵⁷ In Balochistan jurisdiction.

⁵⁸ In Sindh jurisdiction.

⁵⁹ In Balochistan jurisdiction.

⁶⁰ In Sindh jurisdiction.

⁶¹ In Sindh jurisdiction.

⁶² In Balochistan jurisdiction.

⁶³ In Sindh jurisdiction.

⁶⁴ Improvised from the federal list.

6. Water management, dams, irrigation and flood protection

- Dams and reservoirs with storage volume less than 25 million cubic meters of surface area less than 4 square kilometres
- Dams and reservoirs with storage volume less than 50 million cubic meters of surface area covering less than 8 square kilometres⁶⁵
- Irrigation and drainage projects serving less than 15,000 hectares⁶⁶
- Small-scale irrigation systems and drainage system with total cost less than Rs. 100 million⁶⁶
- Small-scale irrigation systems and drainage system with total cost less than Rs. 50 million

7. Water supply, filtration and treatment

- ⁶⁷Water supply schemes, and treatment and filtration plants with total cost less than Rs. 25 million (Including projects of maintenance, up gradation, reconstruction of existing projects)
- Water supply schemes and filtration plants with total cost less than 100 million (Including projects of maintenance, up gradation, reconstruction of existing projects.)⁶⁷

8. Waste disposal⁶⁸ and treatment

- Industry specific wastewater treatment facility for industrial effluent (small scale plant)
- Solid and non-hazardous waste with annual capacity less than 10,000 tons
- Waste disposal facility for municipal or industrial wastes, with annual capacity less than 10,000 cubic meters
- Wastewater treatment for sewage treatment facility with total cost less than 200 million

9. Urban development and tourism

- Commercial buildings having area less than 02 acres and height less than 200 feet⁶⁸
- Construction of educational, academic institutions on land less than 10 acres.
- General bus & truck stands (Category D & above)
- Hospitals with capacity of less than 50 beds, health care unit/laboratories with 500 OPD [out-patient department]/day.
- Hotels / guest houses less than 50 living rooms
- Housing schemes less than 10 acres
- Marriage halls, warehouses for industrial goods and cold storage
- Multi-story buildings having residential and commercial setup on the total plot size is less than 2000 sq. yards
- Public facilities with significant off-site impacts (e.g., Incinerators, autoclaves having capacity less than 100 kg per day for disposal of hospital wastes)
- Urban development projects

10. Other projects

- ⁶⁸Any other project for which filing of an IEE is required by the EPAs

⁶⁵ In Balochistan jurisdiction.

⁶⁶ In Sindh jurisdiction.

⁶⁷ In Sindh jurisdiction.

⁶⁸ In Balochistan jurisdiction.

Annex 5: Projects requiring environmental screening⁶⁹ (through IEE Proforma⁷⁰ or Checklist⁷¹)

- Basic Health Units
- BTS towers
- Canal cleaning and de-siltation in urban areas⁷²
- Construction and lining of water courses
- Construction of roads in urban areas up to 10 km
- Construction of, offices and small commercial buildings (1-6 story), home industrial units, warehouses, marriage / banquet facilities, large scale motor vehicles workshops, restaurants / food outlets, large baking unit subject to the compliance with existing zoning laws.
- Cotton oil mill
- Establishment and operation of brick kiln units
- Establishment and operation of petrol and CNG stations
- Flour mills
- Forest harvesting operations
- Ice factories and cold storage.
- Lime kilns
- Lining of existing minor canals and /or water courses.
- On-farm dams and fish farms.
- Projects promoting energy efficiency (small scale).
- Pulses mills.
- Rain harvesting projects
- Reconstruction / rehabilitation of roads (small roads in urban area and farm to market roads more than 2 km.
- Rural schools (secondary and higher secondary) and rural and basic health units having at least ten beds capacity.
- Small to medium size water supply and sanitation schemes
- Warehouses for pesticides and pharmaceuticals

⁶⁹ Based on the following Schedules:

- *Balochistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2020 – Schedule III.*
- *Sindh Environmental Protection Agency (Review of Initial Environmental Examination and Environmental Impact Assessment) Regulations, 2014 – Schedule III. Notified 16 Dec 2014.*

⁷⁰ In Balochistan jurisdiction.

⁷¹ In Sindh jurisdiction.

⁷² Improvised from the federal list.

Annex 6: Environmental Screening Checklist

ENVIRONMENTAL IMPACT CATEGORY <input type="checkbox"/> Category A: Significant impact <input type="checkbox"/> Category B: Limited impact <input type="checkbox"/> Category C: Minimal impact	Prepared by:
	Name and Signature
	Designation:
	Date:
	Approved by:
	Name and Signature
	Designation:
	Date:

Use the following screening checklist to disqualify interventions, which may have significant environmental risks. If the answer to one of the screening questions is YES, the intervention will be excluded. In case requiring professional judgment, the ESM Unit can seek assistance from a qualified consultant.

Environmental Screening Checklist

SCREENING QUESTIONS	Yes/No
A. Intervention Siting	
Is the intervention area within the safe distance from any of the following environmentally sensitive areas? See Annex 16 for safe distances applicable to specific interventions.	
1. Cultural heritage and historic site	
2. Legally protected area (core zone or buffer zone, all 5 types of protected areas as defined by the national environmental legislation)	
3. Wetland	
4. Mangrove	
5. Estuarine	
6. Special area for protecting biodiversity	
7. Residential areas, schools and hospitals	
B. Potential environmental impacts	
1. Social and environmental conflicts or additional burden on existing infrastructure and service if large number workers from other regions are hired?	
2. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during construction and operation of intervention?	
3. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation of intervention?	
4. Use of chemicals or hazardous materials?	

Annex 7: Indicative TOR for Environmental and Social Assessment (ESA)

In case an environmental and social assessment (either EIA or IEE) must be conducted, the ESM Unit of PPAF will develop the terms of reference (TOR) for an independent consulting firm to conduct environmental and social assessment. A typical TOR will include at least the following:

1. Project Background and Description

This section should explain the project background, and may include the following information:

- Purpose of the project, key objectives associated with the project, including its expected outcomes and benefits.
- Brief description of the project, project name, nature, size, its importance to the region and the country.
- Profile of the project proponent, name and contact address with e-mail, organisational chart, project consultants etc.
- Geographical location and alignment of the project along with the relevant maps.
- Status of the preliminary approvals to initiate the projects including any litigation(s) pending against the proposed project and/or any directions or orders passed by any court of law/any statutory authority against the project.
- The environmental compliance status for the existing project in case of expansion/ modernisation of the project.
- Project design including siting, materials, equipment and technology to be used, and expected waste or effluents
- Indicative resources, manpower, timeframe, source of financing anticipated for the project implementation

2. Scope of Services

The scope of services of the consultant(s) conducting the environmental and social assessment (ESA) should cover, but not be limited to, the following activities:

- Conduct review of literature including the governing national laws and regulatory framework on environmental issues, visit the project area, hold preliminary consultations with the affected people and the relevant stakeholders, and establish baseline conditions of the project.
- Undertake the relevant qualitative and quantitative tests and analyses, including environmental cost benefit analysis, to set the baseline.
- Based on the scoping, refine the TOR for the environmental assessment in consultation with the ESM Unit in PPAF and the relevant EPA.
- Identify adverse environmental impacts on land, air, noise, water, biological, socioeconomic and health environments associated with the project in terms of their nature, magnitude, extent and location, and timing and duration during the construction and operation stages.
- Propose appropriate mitigation measures for any adverse environmental impacts based on exploring the possibility to achieve the project objectives by alternative ways, proposing changes in design, and improving monitoring and management practices (storage of construction materials, labour camps, waste disposal, disposal of construction debris, etc.).
- Prepare a comprehensive Environmental and Social Management Plan to ensure the adequacy and effectiveness of the proposed management by clearly identifying the roles and responsibilities of the contractor, supervisory consultant, and the private party.
- Suggest effective monitoring and evaluation mechanism, including reporting and development of Corrective Action Plan, during construction and operation of the project.
- Assist the relevant EPA and the ESM Unit in PPAF in holding public consultations to delineate the appropriate boundaries of the environmental and social assessment, screen potential adverse environmental impacts, and design appropriate mitigation measures.

- Document the proceedings of the consultations along with the list of participants and photographs.
- Incorporate any suggestions and feedback into the final EIA/IEE report and the ESMP aligned with the formats required by the relevant EPA; and
- Prepare summary of the EIA/IEE and ESMP for public disclosure.

3. Eligibility

The ESM Unit will determine appropriate eligibility and qualification criteria for the consultant(s) who will conduct the environmental and social assessment in consultation with the relevant EPA. The minimum qualification should be a postgraduate degree in environmental sciences and accreditation of the consultant(s) from any of the EPAs.

4. Time Schedule

The ESM Unit should determine a reasonable timeframe to conduct the environmental and social assessment according to the physical scope of the project in consultation with the relevant EPA.

5. Deliverables

Though not limited to, the deliverables of the environmental and social assessment may include:

- Inception Report
- Monthly Progress Reports
- Draft Environmental and Social Assessment Report
- Draft Environmental and Social Management Plan
- Report of the Public Consultations
- Final Environmental and Social Assessment Report
- Final Environmental and Social Management Plan

Annex 8: Indicative Outline of Environmental and Social Assessment (ESA) Report

An environmental and social impact assessment report will be required for all environment category A and B projects. Its level of detail and comprehensiveness will be commensurate with the significance of potential environmental impacts and risks identified through the assessment. A typical EIA report will contain the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental and social impact assessment reports, although not necessarily in the order shown.

1. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

2. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which Pakistan is a party.

3. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

4. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

5. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media), and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identify and estimate the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examine global, transboundary, and cumulative impacts as appropriate.

6. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation including the no-project alternative in terms of their potential environmental suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

7. Information Disclosure, Consultation, and Participation

This section describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders; summarises comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

8. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the timeframe and mechanisms for resolving complaints about environmental performance.

9. Environmental and Social Management Plan (ESMP)

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental and social impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

9.1. Mitigation

- Identifies and summarises anticipated significant adverse environmental and social impacts and risks.
- Describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
- Provides links to any other mitigation plans (for example, for involuntary resettlement, indigenous peoples, or emergency response) required for the project.

9.2. Monitoring

- Describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- Describes monitoring and reporting procedures to ensure early detection of conditions that necessitate mitigation measures and document the progress and results of mitigation.

9.3. Implementation arrangements

- Specifies the implementation schedule showing phasing and coordination with overall project implementation.
- Describes institutional or organisational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organisational changes; and
- Estimates capital and recurrent costs and describes sources of funds for implementing the environmental and social management plan.

9.4. Performance indicators

Describe the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

10. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides recommendations.

Annex 9: Prohibited Activities List

PPAF will, under no circumstances, provide grants or loans for the following activities:

- Production or activities involving harmful or exploitative forms of forced labour⁷³ or child labour.⁷⁴
- Production of or trade in any product or activity deemed illegal under Pakistan laws or regulations or international conventions and agreements or subject to international phase-outs or bans, such as (a) pharmaceuticals,⁷⁵ pesticides, and herbicides,⁷⁶ (b) ozone-depleting substances,⁷⁷ (c) polychlorinated biphenyls⁷⁸ and other hazardous chemicals,⁷⁹ (d) wildlife or wildlife products regulated under the convention on international trade in endangered species of wild fauna and flora,⁸⁰ and (e) transboundary trade in waste or waste products.⁸¹
- Production of or trade in weapons and munitions, including paramilitary materials.
- Production of or trade in alcoholic beverages and tobacco.
- Gambling, casinos, and equivalent enterprises.
- Production of or trade in radioactive materials,⁸² including nuclear reactors and components thereof.
- Production of, trade in, or use of un-bonded asbestos fibres.⁸³
- Commercial logging operations or the purchase of logging equipment for use in ^[SEP]forests.
- Marine and coastal fishing practices, such as large-scale pelagic drift net fishing ^[SEP]and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.^[SEP]
- Purchase of land/property, development and/or construction of any structure for personal or commercial use.
- Setting up of tanneries and/or microenterprises to produce or process officially prohibited products.
- Cultivation/ processing of poppy and/ or other prohibited varieties.
- Poaching/hunting of wildlife.
- Informal cross-border trade.
- Purchase and use of persistently polluting pesticides, and/or any other pesticides/insecticides banned by the government or WHO.

⁷³ Forced labour means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

⁷⁴ Child labour means the employment of children whose age is below Pakistan's statutory minimum age of employment or employment of children in contravention of International Labour Organisation Convention No. 138 "Minimum Age Convention" (www.ilo.org).

⁷⁵ A list of pharmaceutical products subject to phase-outs or bans is available at <http://www.who.int>.

⁷⁶ A list of pesticides and herbicides subject to phase-outs or bans is available at <http://www.pic.int>.

⁷⁷ A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicised ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at <http://www.unep.org/ozone/montreal.shtml>.

⁷⁸ A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

⁷⁹ A list of hazardous chemicals is available at <http://www.pic.int>.

⁸⁰ A list is available at <http://www.cites.org>.

⁸¹ As defined by the Basel Convention; see <http://www.basel.int>.

⁸² This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which the radioactive source is trivial and adequately shielded.

⁸³ This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

Annex 10: Involuntary Resettlement Screening Checklist

INVOLUNTARY RESETTLEMENT IMPACT CATEGORY <input type="checkbox"/> Category A: Significant impact ⁸⁴ <input type="checkbox"/> Category B: Limited impact <input type="checkbox"/> Category C: Minimal impact	Prepared by:	
	Name and Signature	
	Designation:	
	Date:	
	Approved by:	
	Name and Signature	
	Designation:	
	Date:	

Involuntary Resettlement Screening Checklist

Probable Involuntary Resettlement Effects (Please elaborate in the Remarks column)	Yes/No/ Not Known	Remarks
A. Involuntary acquisition of land		
1. Will there be land acquisition?		
2. Is the site for land acquisition known?		
3. Is the ownership status and current usage of land to be acquired known?		
4. Will easement be utilised within an existing right of way (ROW)?		
5. Will there be loss of shelter and residential land due to land acquisition?		
6. Will there be loss of agricultural and other productive assets due to land acquisition?		
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?		
8. Will there be loss of businesses or enterprises due to land acquisition?		
9. Will there be loss of income sources and means of livelihoods due to land acquisition?		
B. Involuntary restrictions on land use or on access to legally designated parks and protected areas		
10. Will people lose access to natural resources, communal facilities and services?		
11. If land use is changed, will it have an adverse impact on social and economic activities?		
12. Will access to land and resources owned communally or by the state be restricted?		
C. Information on displaced persons		

⁸⁴ Involuntary resettlement means physical or economic displacement because of land acquisition or involuntary restrictions on land use or on access to legally designated parks and protected areas. Involuntary resettlement is considered significant if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating).

Probable Involuntary Resettlement Effects (Please elaborate in the Remarks column)	Yes/No/ Not Known	Remarks
Any estimate of the likely number of persons that will be displaced by the Intervention?		If yes, approximately how many? _____ _____
Are any of them poor, female-heads of households, or vulnerable to poverty risks?		If yes, approximately how many? _____ _____
Are any displaced persons from indigenous or ethnic minority groups?		If yes, approximately how many? _____ _____

Annex 11: Indicative outline of Land Acquisition and Resettlement Plan

A resettlement plan is required for all interventions with involuntary resettlement impacts as identified through Involuntary Resettlement Screening Checklist (Annex 10). Its level of detail and comprehensiveness will be commensurate with the significance of potential involuntary resettlement impacts and risks. The substantive aspects of the outline will guide the preparation of the resettlement plans, although not necessarily in the order shown.

1. Executive Summary

This section provides a concise statement of Project scope, key survey findings, entitlements and recommended actions.

2. Project Description

This section provides a general description of the Project, discusses Project components that result in land acquisition, involuntary resettlement, or both and identifies the Project area. It also describes the alternatives considered to avoid or minimise resettlement. Includes a table with quantified data and provides a rationale for the final decision.

3. Scope of Land Acquisition and Resettlement

This section:

- discusses the Project's potential impacts and includes maps of the areas or zone of impact of Project components or activities.
- describes the scope of land acquisition (provide maps) and explains why it is necessary for the main investment Project.
- summarises the key effects in terms of assets acquired and displaced persons; and
- provides details of any common property resources that will be acquired.

4. Socioeconomic Information and Profile

This section outlines the results of the social impact assessment, the census survey, and other studies, with information and/or data disaggregated by gender, vulnerability, and other social groupings, including:

- definition, identification, and enumeration of the people and communities to be affected.
- description of the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account.
- discussion of the Project's impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups; and
- identification of gender and resettlement impacts, and the socioeconomic situation, impacts, needs, and priorities of women.

5. Information Disclosure, Consultation, and Participation

This section:

- identifies Project stakeholders, especially primary stakeholders.
- describes the consultation and participation mechanisms to be used during the different stages of the Project cycle.
- describes the activities undertaken to disseminate Project and resettlement information during Project design and preparation for engaging stakeholders.

- summarises the results of consultations with affected persons (including host communities) and discusses how concerns raised and recommendations made were addressed in the resettlement plan.
- confirms disclosure of the draft resettlement plan to affected persons and includes arrangements to disclose any subsequent plans; and
- describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for consultation with affected persons during Project implementation.

6. Grievance Redress Mechanisms

This section describes mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances. It explains how the procedures are accessible to affected persons and gender sensitive.

7. Legal Framework

This section:

- describes national and local laws and regulations that apply to the Project; and discuss how any gaps will be addressed.
- describes the legal and policy commitments from the executing agency for all types of displaced persons.
- outlines the principles and methodologies used for determining valuations and compensation rates at replacement cost for assets, incomes, and livelihoods; and sets out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided.
- describes the land acquisition process and prepare a schedule for meeting key procedural requirements.

8. Entitlements, Assistance and Benefits

This section:

- defines displaced persons' entitlements and eligibility and describes all resettlement assistance measures (includes an entitlement matrix).
- specifies all assistance to vulnerable groups, including women, and other special groups, and.
- outlines opportunities for affected persons to derive appropriate development benefits from the Project.

9. Relocation of Housing and Settlements

This section:

- describes options for relocating housing and other structures, including replacement housing, replacement cash compensation, and/or self-selection (ensure that gender concerns and support to vulnerable groups are identified).
- describes alternative relocation sites considered; community consultations conducted; and justification for selected sites, including details about location, environmental assessment of sites, and development needs.
- provides timetables for site preparation and transfer.
- describes the legal arrangements to regularise tenure and transfer titles to resettled persons.
- outlines measures to assist displaced persons with their transfer and establishment at new sites.
- describes plans to provide civic infrastructure; and
- explains how integration with host populations will be carried out.

10. Income Restoration and Rehabilitation

This section:

- identifies livelihood risks and prepare disaggregated tables based on demographic data and livelihood sources.
- describes income restoration programs, including multiple options for restoring all types of livelihoods (examples include Project benefit sharing, revenue sharing arrangements, joint stock for equity contributions such as land, discuss sustainability and safety nets);
- outlines measures to provide social safety net through social insurance and/or project special funds.
- describes special measures to support vulnerable groups.
- explains gender considerations; and
- describes training programs.

11. Resettlement Budget and Financing Plan

This section:

- provides an itemised budget for all resettlement activities, including for the resettlement unit, staff training, monitoring and evaluation, and preparation of resettlement plans during loan implementation.
- describes the flow of funds (the annual resettlement budget should show the budget-scheduled expenditure for key items).
- includes a justification for all assumptions made in calculating compensation rates and other cost estimates (considering both physical and cost contingencies), plus replacement costs; and
- includes information about the source of funding for the resettlement plan budget.

12. Institutional Arrangements

This section:

- describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan.
- includes institutional capacity building program, including technical assistance, if required.
- describes role of non-governmental organisations (NGOs), if involved, and organisations of affected persons in resettlement planning and management; and
- describes how women's groups will be involved in resettlement planning and management.

13. Implementation Schedule

This section includes a detailed, time bound, implementation schedule for all key resettlement and rehabilitation activities. The implementation schedule should cover all aspects of resettlement activities synchronised with the Project schedule of civil works construction and provide land acquisition process and timeline.

14. Monitoring and Reporting

This section describes the mechanisms and benchmarks appropriate to the Project for monitoring and evaluating the implementation of the resettlement plan. It specifies arrangements for participation of affected persons in the monitoring process. This section will also describe reporting procedures.

Annex 12: Indigenous Peoples Screening Checklist

INDIGENOUS PEOPLES IMPACT CATEGORY <input type="checkbox"/> Category A: Significant impact ⁸⁵ <input type="checkbox"/> Category B: Limited impact <input type="checkbox"/> Category C: Minimal impact	Prepared by	
	Name and signature	
	Designation	
	Date	
	Approved by	
	Name and signature	
	Designation	
	Date	

Indigenous Peoples Screening Checklist

Key Concerns (Please provide elaborations on the Remarks column)	Yes/No/ Not Known	Remarks
A. Indigenous Peoples Identification		
1. Are there socio-cultural groups present in or use the intervention area who may be considered as "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the intervention area?		
2. Do such groups self-identify as being part of a distinct social and cultural group?		
3. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?		
4. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?		
5. Do such groups speak a distinct language or dialect?		
6. Have such groups been historically, socially and economically marginalised, disempowered, excluded, and/or discriminated against?		
7. Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?		
B. Identification of Potential Impacts		
8. Will the Intervention directly or indirectly benefit or target Indigenous Peoples?		

⁸⁵ The significance of impacts of PPAF supported interventions on Indigenous Peoples is determined by assessing (i) the magnitude of impact in terms of (a) customary rights of use and access to land and natural resources; (b) socioeconomic status; (c) cultural and communal integrity; (d) health, education, livelihood, and social security status; and (e) the recognition of indigenous knowledge; and (ii) the level of vulnerability of the affected Indigenous Peoples community.

Key Concerns (Please provide elaborations on the Remarks column)	Yes/No/ Not Known	Remarks
9. Will the Intervention directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices?(e.g., child-rearing, health, education, arts, and governance)?		
10. Will the Intervention affect the livelihood systems of Indigenous Peoples?(e.g., food production system, natural resource management, crafts and trade, employment status)?		
11. Will the Intervention be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?		
C. Identification of Special Requirements <i>Will the intervention activities include?</i>		
12. Physical displacement from traditional or customary lands?		
13. Acquisition of lands that are traditionally owned or customarily used, occupied or claimed by Indigenous Peoples?		

Annex 13: Indicative outline of Indigenous Peoples Plan

An Indigenous Peoples plan (IPP) is required for all interventions with impacts on Indigenous Peoples as identified through Indigenous Peoples Screening Checklist (Annex 12). Its level of detail and comprehensiveness is commensurate with the significance of potential impacts on Indigenous Peoples. The substantive aspects of this outline will guide the preparation of IPPs, although not necessarily in the order shown.

1. Executive Summary of the Indigenous Peoples Plan

This section concisely describes the critical facts, significant findings, and recommended actions.

2. Description of the Intervention

This section provides a general description of the Intervention; discusses Intervention components and activities that may bring impacts on Indigenous Peoples; and identifies the Intervention area.

3. Social Impact Assessment

This section:

- Reviews the legal and institutional framework applicable to Indigenous Peoples in Intervention context.
- Provides baseline information on the demographic, social, cultural, and political characteristics of the affected Indigenous Peoples communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend.
- Identifies key Intervention stakeholders and elaborate a culturally appropriate and gender-sensitive process for meaningful consultation with Indigenous Peoples at each stage of Intervention preparation and implementation, taking the review and baseline information into account.
- Assesses, based on meaningful consultation with the affected Indigenous Peoples communities, the potential adverse and positive effects of the Intervention. Critical to the determination of potential adverse impacts is a gender-sensitive analysis of the relative vulnerability of, and risks to, the affected Indigenous Peoples communities given their circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to those available to other social groups in the communities, regions, or national societies in which they live.
- Includes a gender-sensitive assessment of the affected Indigenous Peoples' perceptions about the Intervention and its impact on their social, economic, and cultural status.
- Identifies and recommends, based on meaningful consultation with the affected Indigenous Peoples communities, the measures necessary to avoid adverse effects or, if such measures are not possible, identifies measures to minimise, mitigate, and/or compensate for such effects and to ensure that the Indigenous Peoples receive culturally appropriate benefits under the Intervention.

4. Information Disclosure, Consultation and Participation

This section:

- Describes the information disclosure, consultation and participation process with the affected Indigenous Peoples communities that was carried out during Intervention preparation.
- Summarises their comments on the results of the social impact assessment and identifies concerns raised during consultation and how these have been addressed in Intervention design.
- In the case of Intervention activities requiring broad community support, documents the process and outcome of consultations with affected Indigenous Peoples communities and any agreement resulting from such consultations for the Intervention activities and safeguard measures addressing the impacts of such activities.
- Describes consultation and participation mechanisms to be used during implementation to ensure Indigenous Peoples participation during implementation.
- Confirms disclosure of the draft and final IPP to the affected Indigenous Peoples communities.

5. Beneficial Measures

This section specifies the measures to ensure that the Indigenous Peoples receive social and economic benefits that are culturally appropriate, and gender responsive.

6. Mitigation Measures

This section specifies the measures to avoid adverse impacts on Indigenous Peoples; and where the avoidance is impossible, specifies the measures to minimise, mitigate and compensate for identified unavoidable adverse impacts for each affected Indigenous Peoples groups.

7. Capacity Building

This section provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address Indigenous Peoples issues in the Intervention area; and (b) Indigenous Peoples organisations in the Intervention area to enable them to represent the affected Indigenous Peoples more effectively.

8. Grievance Redress Mechanism

This section describes the procedures to redress grievances by affected Indigenous Peoples communities. It also explains how the procedures are accessible to Indigenous Peoples and culturally appropriate and gender sensitive.

9. Monitoring, Reporting and Evaluation

This section describes the mechanisms and benchmarks appropriate to the Intervention for monitoring and evaluating the implementation of the IPP. It also specifies arrangements for participation of affected Indigenous Peoples in the preparation and validation of monitoring, and evaluation reports.

10. Institutional Arrangement

This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the IPP. It also describes the process of including relevant local organisations and NGOs in carrying out the measures of the IPP.

11. Budget and Financing

This section provides an itemised budget for all activities described in the IPP

Annex 14: ESM Compliance Certificate

This certificate should be filled-in at the completion of each intervention and signed by the concerned PPAF or PO staff. Once completed, it should be placed in the intervention's file and a copy should be forwarded to the ESM Unit, to be countersigned by PO District Manager.

Name of revenue village/UC & district	
Type of asset/intervention	
Number of assets in the cluster	
Total cost of assets in the cluster	
PO's name	
Certificate prepared by – Name – Designation – Date	

Adaptation/Mitigation Measures	Budget	Actual Cost	Implementation Status
1.			
2.			
3.			
4.			
5.			
Total			

Note: The implementation status of the adaptation/mitigation measures should be reported in terms of Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory and Not Implemented.
Add more rows if needed.

Reasons for unsatisfactory, highly unsatisfactory or not implemented status of the planned adaptation/mitigation measures

PO Field Staff (Name)

PO District Manager

Annex 15: ESM Audit Report

1. General Information

Partner Organisation			
District		Union Councils	
ESM Auditor		Date of Audit	
Last ESM Audit conducted on?		Previous Compliance Status of PO	
ESMF document available with PO? What version is available?			
PO ESM Focal Person (Name & Designation)			
PO Regional ESM Focal Person (Name & Designation)			
Has ESM Focal Person(s) received training? If yes, date of last training.			
Did ESM Focal Person provide ESM training to PO staff? If yes, dates of trainings.			
Was ESM trainings provided to community? If yes, dates of trainings.			
What is the level of understanding about ESM-related issues?			

2. Intervention-Specific Information

Total # of interventions audited	
Summary of audit findings	

(The following tables need to be filled for **each** intervention).

Intervention name	
Intervention type & sector	
Intervention date & stage	
Location	

Type of community institution	
Type & date of ESA conducted	

2.1. ESMF Compliance

ESMF Checklist	Yes/No	Additional Comments
Was Form A prepared, signed & attached in PO intervention file?		
Was Form B prepared, signed & attached in PO intervention file?		
Was Form A prepared, signed & attached in CO/VO/LSO intervention file?		
Was Form B prepared, signed & attached in CO/VO/LSO intervention file?		

2.2. Compliance Issues (if any)

--

3. PO Level Key Observations and Agreed Actions

Observations	Agreed Action	Compliance Date	Responsible Person/ Responsibility

4. Special Environmental Achievements (if any)

5. Photos Showing ESM Compliance/Noncompliance

Annex 16: Safe Distance Guidelines

While deciding the location of a particular intervention, many factors need to be taken into consideration. Beneficiaries may like to locate the intervention at a site most convenient to them, but compliance of environmental and social safeguards requires safe distances for all such interventions which have potential negative impacts. These distances are mandatory to be maintained and should not be ignored under any circumstances.

Keeping in view the practicality of implementing interventions in environmentally and socially responsible manner, these safe distances have been determined based on the review of best practices and the expert opinions.

Intervention	Locational Context	Safe Distance
Biogas Plant	Residences and sources of water supply if the plant is for communal use	200 m
	Residences and sources of water supply if the plant is for single household use	20 m
Cottage Industry/ Handicrafts	Distance of handicraft centers and cottage industry from freshwater sources	15m
Desalination Plant	Latrines and solid waste dumps	50 m
Dug Well	Presence of other major safe drinking water source in irrigated areas	100 m
	Presence of other major safe drinking water source in desert & dry areas	250 m
	Historic, cultural, and/or ecological important sites such as protected areas	10 m
Fishponds Livestock Poultry Raising	Distance of livestock and poultry sheds, and fishponds from freshwater sources	30m
Food Processing/ Production	Distance of food processing and production activities from freshwater sources	15m
Handpump	Presence of other major safe drinking water source in irrigated areas	100 m
	Presence of other major safe drinking water source in desert and dry areas	250 m
	Latrines and solid waste dumps	50 m
	Historic, cultural, and/or ecological important sites such as protected areas	10 m
Jetty	Marine life sanctuaries and habitats	1 km
Rainwater Harvesting Pond	Latrines, solid waste dumps, and agricultural fields if water is to be used for irrigation purposes	50 m
	Latrines, solid waste dumps, and agricultural fields if water is to be used for drinking purposes	100 m
	Historic, cultural, and/or ecological important sites such as protected areas	10 m
Sanitation Interventions	Distance of septic tank from ground water well	15 m
Solid Waste Management	Distance of large bins from residential areas	100 m

Intervention	Locational Context	Safe Distance
Tube Wells	Historic, cultural and/or ecological important sites such as protected areas ⁸⁶	150 m
	Presence of other major safe drinking water source	250 m
	Latrine	30 m
	Solid waste dumps	50 m
	Distance between tube wells	100 m
Water Tank	Latrines and solid waste dumps	50 m
	Historic, cultural, and/or ecological important sites such as protected areas	30 m

⁸⁶ For list of protected areas, consult Annex 18.

Annex 17: Healthcare Waste Management Guidelines⁸⁷

1. What is healthcare waste?

Healthcare waste includes all types of waste generated by health care activities including used needles and syringes, soiled dressings, body parts, diagnostic samples, blood, chemicals, pharmaceuticals, medical devices and radioactive materials. Poor management of health care waste potentially exposes health care workers, waste handlers, patients, and the community at large to infection, toxic effects and injuries, and risks polluting the environment. It is essential that all medical waste materials are segregated at the point of generation, appropriately treated, and disposed of safely.⁸⁸ It is estimated that of all the waste generated from healthcare facilities, only 10-25% is hazardous depending upon the type of health facility.⁸⁹

The WHO categorises the healthcare waste as following:

Waste category	Description and examples
1. HAZARDOUS HEALTHCARE WASTE	
Sharps waste	Used or unused sharps, e.g., hypodermic, intravenous or other needles; auto-disable syringes; syringes with attached needles; infusion sets; scalpels; pipettes; knives; blades; broken glass
Infectious waste	Waste suspected to contain pathogens and that poses a risk of disease transmission. Waste contaminated with blood and other bodily fluids (e.g., from discarded diagnostic samples), cultures and microbiological stocks of infectious agents from laboratory work (e.g., waste from autopsies and infected animals from laboratories), or waste including excreta and other materials from patients infected with highly infectious diseases in isolation wards and equipment (e.g., swabs, bandages and disposable medical devices)
Pathological waste	Human tissues, organs or fluids; body parts; fetuses; unused blood products; and contaminated animal carcasses
Pharmaceutical waste	Pharmaceuticals that are expired or no longer needed; items contaminated by or containing pharmaceuticals, and vaccines
Cytotoxic/Genotoxic waste	Highly hazardous materials that can increase mutation, cause birth defects in the new-born, halt pregnancy, or cause cancer, such as cytotoxic drugs used in cancer treatment and their metabolites
Chemical waste	Waste containing chemical substances, (e.g., laboratory reagents; film developer; disinfectants that are expired or no longer needed; solvents used for laboratory preparations); and waste with high content of heavy metals, (e.g., batteries; broken thermometers and blood-pressure gauges)
Radioactive waste	Waste containing radioactive substances (e.g., unused liquids from radiotherapy or laboratory research; contaminated glassware, packages or absorbent paper; urine and excreta from patients treated or tested with unsealed radionuclides; sealed sources)
2. NON-HAZARDOUS WASTE	
General healthcare waste	Waste that does not pose any biological, chemical, radioactive or physical hazard

Source: Chartier, Y. et al. 2014. *Safe Management of Wastes from Health-care Activities* (2nd ed.). Malta: WHO.

⁸⁷ These guidelines were developed by the Pakistan Poverty Alleviation Fund (PPAF) in 2015, benefitting from the WHO publications (mentioned at Footnote 2 and 3), the Hospital Waste Management Rules 2005, Hazardous Substances Rules 1999, and Pakistan Biosafety Rules 2005.

⁸⁸ WHO. Health-care waste (http://www.who.int/topics/medical_waste/en/).

⁸⁹ Chartier, Y. et al. 2014. *Safe Management of Wastes from Health-care Activities* (2nd ed.). Malta: WHO.

Given limited scope of PPAF's support and the level of health facilities supported, i.e., Basic Health Units (BHUs), Community Health Centres (CHCs), Civil Dispensaries (CDs), and Family Health Clinics (FHCs), the relevant range of healthcare waste is limited to infectious waste, pathological waste, sharps, chemicals, pharmaceuticals, and non-hazardous or general waste generated from these health facilities. Hence these guidelines are restricted to such materials. For extended or bigger health facilities, WHO guidelines and/or Medical Waste Management Rules, 2005 should be followed.

Management of healthcare waste varies from facility to facility and according to the locus of the facility. For example, waste generated from the health facilities in urban areas, either in public sector or private sector, is easy to manage, as now-a-days transportation and incineration facilities are available in most of the urban centres at a modest cost. On the other hand, health facilities located in rural areas have no choice other than packing and burying the healthcare waste at a safe location.

Unfortunately, most of the community-based health facilities do not have adequate resources and guidance for adequately disposing off their waste; hence resulting in burning of the waste, that too within the premises of the health facility. This practice needs to be stopped immediately.

The following **guidelines for management of healthcare waste** will be mandatory to be followed by all health facilities supported in anyways by PPAF:

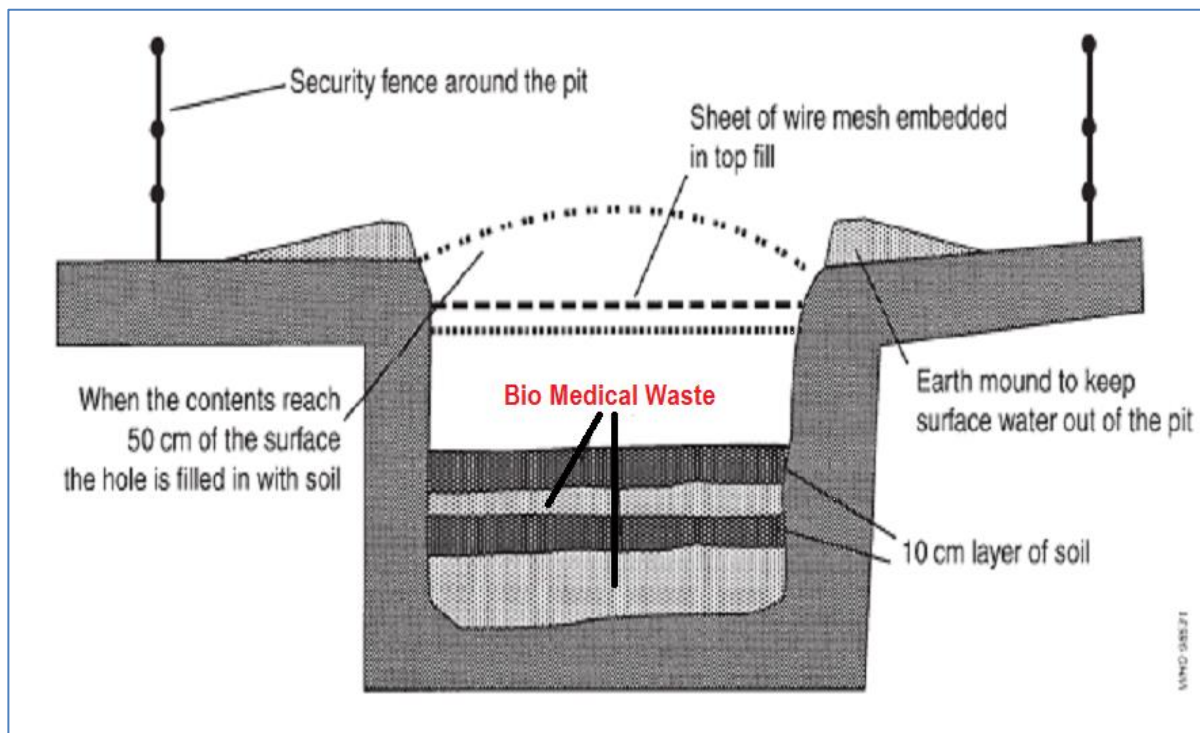
- As a minimum, all personnel dealing with health-care waste should be familiar with the main categories of health-care waste as mentioned above, and procedure for segregation, packing, and disposal of healthcare waste.
- All personnel handling the healthcare waste should use personal protective equipment (PPE), especially masks and gloves.
- All healthcare waste should be segregated into two categories and placed in the designated bins:
 - Non-hazardous waste – which can be disposed of along with the common municipal waste.
 - Hazardous waste – including infectious waste, pathological waste, sharps, chemicals, and pharmaceuticals as explained above. The guidelines below are mainly relevant to this type of waste.
- The manager responsible for healthcare facility should identify the types of waste being generated at the facility and designate separate storage bins for hazardous and non-hazardous waste with colour codes. The bins should be lined with strong plastic bags. Preferably, yellow colour should be used for hazardous waste and white colour for non-hazardous waste.
- The used sharps and syringe needles should be stored in containers made of steel or hard plastic. The needle cutters and syringe destroyers should be used, wherever available, to avoid accidental prick and reuse of syringes. These containers should either be returned to the manufacturer (if such are trade terms) or put in the plastic bags marked for hazardous waste.
- Once the plastic bags are filled up to three-fourth of the capacity, these should be sealed using self-locking plastic sealing tags (and not by staples), and labelled indicating date, and type and source of waste. These bags should be marked with biohazard symbol. The bags removed should immediately be replaced with the same type of bags.
- Large quantities of expired or non-usable pharmaceuticals and vaccines should be returned to the suppliers. Small quantities can be placed in the bags designated for hazardous waste.
- Trolleys should be used for on-site transportation of the filled and sealed bags. While off-site transportation should be undertaken through professionally managed waste transportation arrangements.
- If possible, the hazardous waste should be transported to the specialised facilities established in mega cities, such as Lahore and Karachi,⁹⁰ through specialised vehicles.
- As in most cases, such facility may not be available; hence the bags with hazardous waste should be buried in a landfill site (pit) prepared by each or group of healthcare facilities in a particular

⁹⁰ For example, two Dual Chamber Incinerators have been installed at Shalamar Hospital and United Christian Hospital (UCH) in Lahore. Four custom-made sealed collection vehicles collect biomedical waste from around 222-member health facilities (including hospitals, laboratories, clinics, dental clinics, and pharmaceutical companies in Lahore, Gujranwala and Sheikhpura), and bring the same to these incinerators. The Children Hospital, Lahore also has 2 such vehicles for collecting healthcare waste and transporting to the same to the incinerator installed in the Children Hospital, Lahore. Similar, services are provided by Aga Khan University Hospital in Karachi.

geographical area. Such burial (landfill) site should be established at a safe distance from population with minimum risk of polluting groundwater or perennial sources of freshwater. The hazardous waste should be buried under at least one-metre-deep layer of earth or non-hazardous waste, which should be compacted adequately.

- As recommended by Dr. Gunwant Joshi,⁹¹ entry of scavengers to the burial site should be prevented by using fence and covers of galvanised iron/wire mesh. After every burial in the same secured pit, a layer of 10 cm soil should be added. Burial must be performed under close and dedicated supervision. Deep burial site should be relatively impermeable and distant from habitat, wells, lakes, or rivers. The healthcare facility manager should maintain record for all the pits. Design for such pit is shown in Figure 9.

Figure 9: Design of a simple healthcare pit



Source: Dr. Gunwant Joshi (<http://www.slideshare.net/gunjio/biomedical-waste-management-16063397>)

⁹¹ A presentation on "Disposal of Hospital & Bio-Medical Wastes: Bio-Medical Waste Management", made by Dr. Gunwant Joshi, Chief Chemist, Emergency Response Centre, Madhya Pradesh Pollution Control Board. Available at <http://www.slideshare.net/gunjio/biomedical-waste-management-16063397>. Accessed 13 Dec 2015.

Annex 18: Sources of Information for Technical Data

The environmental and social management relies a lot on secondary information, such as of protected areas and biodiversity hotspots, threatened species, cultural and archaeological sites, and drought and flood prone areas. The environmental and social assessment and the mitigation hierarchy (as elaborated in Figure 2) need to use information about these elements to avoid interventions in the proximity, protect the sanctity of these areas and species, and avoid further degradation of the situation. However, this information keeps on updating because of continued scientific work on these topics. There are dedicated organisations and resources which can provide the latest information. Hence, it is strongly recommended to contact these organisations and knowledge resources. Some of these are listed below for ready reference.

1. Protected Areas

For latest information, the following organisations may be contacted.

- Directorate of Biodiversity, Ministry of Climate Change
- IUCN Red List of Ecosystems (<https://iucnrle.org/>)
- IUCN World Heritage Outlook (<https://worldheritageoutlook.iucn.org/>)
- Ministry of Climate Change (www.mocc.gov.pk)
- National Council for Conservation of Wildlife, Ministry of Climate Change
- Protected Planet (<https://www.protectedplanet.net/en>)
- Provincial Departments of Forest and Wildlife
- World Database of Key Biodiversity Areas (<http://www.keybiodiversityareas.org/>)
- WWF Pakistan (www.wwfpak.org)

2. Threatened Species

- Birdlife International (www.birdlife.org)
- IUCN Red List of Threatened Species (<http://www.iucnredlist.org>)
- Pakistan Museum of Natural History (<http://www.pmnh.gov.pk/>)

3. Arid and Non-Irrigated Areas

For latest information, the following organisations may be contacted.

- Food and Agriculture Organisation of the UN (<http://www.fao.org/pakistan/en/>)
- International Water Management Institute (<https://www.iwmi.cgiar.org/>)
- Pakistan Agricultural Research Council (<http://www.parc.gov.pk/index.php/en/>)

4. Cultural and Archaeological Sites

- Archaeology Directorate, Government of Balochistan (<https://balochistan.gov.pk/departments/culture-tourism-and-archives/>)
- Department of Antiquities, Government of Sindh (www.sindh.gov.pk/dpt/antiquities/)
- Directorate Generals of Archaeology, Government of the Punjab (<http://www.dgarch.gop.pk/>)
- Directorate of Archaeology and Museums, Government of Khyber Pakhtunkhwa (<http://www.kparchaeology.com/>)