

SAFER PAKISTAN

Sustainable Actions for Ecosystems Restoration in Pakistan

INCEPTION REPORT

October 2026
Submitted by Regional Accredited Entity: ICIMOD. Executing Entities, UNICEF & UN-Women

Acronyms

Acronym	Meaning
AKAH	Aga Khan Agency for Habitat
BoQ	Bill of Quantities
CB-EWS	Community-Based Early Warning System
CBDMC	Community-Based Disaster Management Committee
CEWRI	Climate, Energy and Water Research Institute
DRR	Disaster Risk Reduction
E&S	Environmental and Social
ESMP	Environmental and Social Management Plan
GAP	Gender Action Plan
GB	Gilgit-Baltistan
GBDMA	Gilgit-Baltistan Disaster Management Authority
GESI	Gender Equality and Social Inclusion
GLOF	Glacial Lake Outburst Flood
GRM	Grievance Redress Mechanism
ICIMOD	International Centre for Integrated Mountain Development
KP	Khyber Pakhtunkhwa
M&E	Monitoring and Evaluation
MoCC&EC	Ministry of Climate Change and Environmental Coordination
NbS	Nature-based Solutions
NDMA	National Disaster Management Authority
O&M	Operation and Maintenance
PDMA	Provincial Disaster Management Authority
PHED	Public Health Engineering Department
PMD	Pakistan Meteorological Department
PMT	Project Management Team
PSC	Project Steering Committee
PWD	Person with Disability
SOP	Standard Operating Procedure
SWC	Soil and Water Conservation
TWG	Technical Working Group
WASH	Water, Sanitation and Hygiene

Table of Contents

Acronyms 2
1. Executive Summary 4
2. Background & Inception Process 5
2.1 Project Context 5
2.2 Purpose of the Inception Phase 5
2.3 Main Activities Before the Workshop 5
2.4 Baseline findings and implications for implementation 6
3. Institutional Arrangements 7
3.1 Project Governance 7
3.2 Implementing and Executing Entity responsibilities ..... **Error! Bookmark not defined.**
3.3 Federal, provincial, district and community linkages 8
3.4 Component-specific arrangements 8
3.5 Coordination, Staffing and Focal Points 9
4. Component Implementation Priorities and Year 1 Work Plan 10
4.1 Component 1: Cryosphere Disaster Risk Reduction 10
4.2 Component 2: Springshed Revival and Management 12
4.3 Component 3: Groundwater Management and Resilient Community Water Supply 13
4.4 Component 4: Ecosystem-based Adaptation 14
4.5 Component 5: Surface Water Conservation 16
4.6 Component 6: Adaptive Capacities and Empowered Communities 17
5. Inception Refinements and Change Log 20
5.1 Site Adjustments Recorded at Inception 20
5.2 Other implementation refinements 23
6. Monitoring, Safeguards, GESI and Risk 25
6.1 Monitoring and Results 25
6.2 Environmental and Social Safeguards 26
6.3 Gender Equality and Social Inclusion 27
6.4 Risk Management and Sustainability 27
6.5 Budget and financial management 29
Annex 1. Inception Workshop Agenda and outcome synthesis 30
Annex 2. Initial Project Risk Register 39
Annex 3. ESMP Update and Safeguards Action Matrix 42
Annex 4. Approved Project Risk Log and Institutional Safeguard Reference 47
Annex 5. Summary of Inception rfinements 53
Annex 6. Baseline-informed Monitoring Matrix 55
Annex 7. Gender Action Plan 70
Annex 8: SAFER Pakistan Year 1 Work Plan for Components 1-6 87

Annexes

1. Executive Summary

SAFER Pakistan is a USD 10 million Adaptation Fund project designed to reduce climate vulnerability and strengthen adaptive capacity across Pakistan's Indus Basin. Implemented in Gilgit-Baltistan, Khyber Pakhtunkhwa and Sindh, its six components address cryosphere risks, springshed revival, groundwater and resilient water supply, ecosystem-based adaptation, surface-water conservation, and institutional and community capacity.

The inception phase translated the approved project design into practical implementation. Drawing on the baseline assessment, partner consultations, the first Project Steering Committee (PSC) meeting and the national inception workshop **held on 7–8 September 2026,** it confirmed institutional responsibilities, refined locations and established Year 1 priorities. The approved project objective, outcomes and financing remain unchanged.

The PSC, chaired by the Ministry of Climate Change and Environmental Coordination, will provide strategic oversight. ICIMOD, as the Regional Implementing Entity, will lead overall coordination, fiduciary management, safeguards compliance and reporting while executing Components 1 and 2. UNICEF will execute Components 3–5 and its assigned Component 6 activities, while UN Women will lead and execute its assigned activities under Component 6 and provide technical guidance and quality assurance on gender-responsive implementation across SAFER, in coordination with the Project Management Team. In addition to the originally proposed members, PSC now includes the National Disaster Management Authority (NDMA) and Pakistan Meteorological Department (PMD), with PMD providing technical leadership on early warning systems.

Key baseline findings highlight gaps in water-service reliability, operational capacity, community governance and inclusive participation. Under Component 2, only 46% of sampled households reported reliable year-round access to spring water, and only 9% of communities reported trained and operational O&M teams. Under Component 3, only 42% of households reported reliable year-round access to improved water sources, while fewer than 30% reported functional community-level management arrangements. Under Component 6, awareness was comparatively stronger than participation and influence: 74% of households had heard about climate change, but only 37% reported women's representation in decision-making, and 46% reported equal opportunities for women and youth to speak in climate- and water-related meetings.

Year 1 will focus on site verification, risk and resource assessments, technical designs, community and institutional management arrangements, safeguards screening and procurement readiness, before major physical works proceed.

Implementation monitoring will retain the approved SAFER Results Framework as the project accountability framework while using the completed baseline to operationalise indicators, baselines, disaggregation, means of verification and implementation. The baseline shows that the principal implementation gap is not awareness alone: across components, preparedness, operation and maintenance, inclusive governance and service reliability remain weak. The monitoring approach therefore places emphasis on whether systems and institutions are functioning, whether services are reliable and inclusive, and whether people are able to act on climate information. Relevant project indicators are also mapped, where appropriate, to the AF Revised Strategic Results Framework, without changing SAFER's approved objective, outcomes, outputs or financing. Detailed work plan, monitoring arrangements, safeguards instruments and inception refinements are provided in the annexes.

2. Background & Inception Process

2.1 Project context

Pakistan's Indus Basin is exposed to a wide range of climate stresses. In the upper basin, glacier change, glacial lakes, avalanches, slope instability and changing snow conditions affect settlements and infrastructure. In the middle and lower basin, water scarcity, groundwater depletion, degraded springs, untreated wastewater and unreliable surface-water storage affect household water security, livelihoods and public health. The project addresses these linked risks through six components implemented across Gilgit-Baltistan, Khyber Pakhtunkhwa and Sindh.

The baseline assessment confirmed that awareness of climate and disaster risk is not matched by the same level of preparedness, institutional coordination or service reliability. It also identified persistent gaps in O&M, meaningful and inclusive participation, including the representation and influence of women, youth and persons with disabilities in relevant decision-making structures and access to reliable water and warning services. These findings were used during inception to refine sequencing and to identify where more precise operational indicators are needed.

Key baseline findings highlights that 46% of sampled households reported reliable year-round spring-water access and only 9% of communities reported trained and operational O&M teams under Component 2; 42% of households reported reliable year-round access to improved water sources under Component 3; and under Component 6, 74% of households had heard about climate change, while 37% reported women's representation in decision-making bodies and 46% reported equal opportunities for women and youth to speak in climate- and water-related meetings. These findings support early emphasis on service reliability, functioning O&M and governance arrangements, and meaningful participation before major physical investments.

2.2 Purpose of the inception phase

The inception phase was used to translate the approved project into an implementable work programme. It focused on four practical questions: which sites and systems are ready; which government institutions and partners will carry specific responsibilities; what evidence and approvals are needed before procurement or construction; and how the project will maintain safeguards, inclusion and O&M throughout implementation.

This report therefore serves as record of project start-up, confirms implementation arrangements, and documents operational refinements that remain within the approved project framework. Any future change affecting approved scope, results, financing or geographic commitments will follow the established project-governance and Adaptation Fund procedures, as applicable.

2.3 Main activities before the workshop

- Completion and consolidation of the project baseline assessment.
- Project Steering Committee orientation and Technical Working Group discussions on governance, site validation, complementarity and first-year priorities.
- Review of ongoing and recently completed programmes to reduce duplication, including GLOF-II and other water and resilience initiatives.

- Preparation of component presentations and year-wise work plans based on the approved proposal and baseline evidence.
- Consultation with federal and provincial institutions on roles, data requirements, safeguards and implementation constraints.

The national inception workshop was held on 7–8 September 2026 in Islamabad, bringing together government, ICIMOD, UNICEF and UN Women representatives. The full agenda, outcomes synthesis and participant list are at Annex 1.

2.4 Baseline findings and implications for implementation

The baseline is used in this report as an implementation diagnostic. The findings in Table 1 below have direct implications for Year 1 sequencing and monitoring.

Table 1 Baseline findings

Component	Baseline finding	Implementation implication at inception
1. Cryosphere DRR	42% of sample households reported receiving early-warning messages; evacuation preparedness and formal inclusive disaster-governance arrangements remain limited.	Prioritise the complete warning-to-action chain: risk information, warning authority, last-mile dissemination, accessible evacuation planning, drills, corrective actions and O&M - not equipment installation alone.
2. Springshed revival	46% of treatment households reported year-round reliable spring-water access; only 9% of communities had trained and operational O&M teams; representation of women, youth and PWDs in springshed/water-user committees was very low.	Front-load hydrological monitoring, user/governance arrangements, O&M responsibility and inclusive co-design before physical recharge measures.
3. Groundwater and resilient water supply	42% of households reported reliable year-round access to improved water sources and fewer than 30% reported functional community-level management arrangements; no functional Groundwater User Associations were identified in the KP baseline.	Treat infrastructure and governance as one delivery package: mapping/design, service reliability, water quality, community management, O&M and institutional coordination must be tracked together.
4. NbS/WASH	Fewer than 18% of surveyed households reported access to wastewater treatment; more than 63% of communities discharged untreated wastewater to open	Site selection and wetland design must be accompanied by institutional ownership, O&M capacity, community acceptance, safeguards and monitoring of treatment functionality.

	drains/natural channels; only 19% reported organised sanitation O&M arrangements.	
5. Surface-water conservation	39% of households reported reliable year-round surface-water access and fewer than 28% of communities reported functional water-user/O&M committees.	Prioritise site verification, storage functionality, water-quality monitoring, inclusive management committees and O&M rather than rehabilitation works alone.
6. Adaptive capacity and empowerment	74% of treatment households had heard about climate change, but only 37% reported women's representation in decision-making bodies and 46% perceived equal opportunity for women and youth to speak in climate/water meetings.	Shift from awareness-only activities towards measurable leadership, participation, influence, behaviour change and institutionalised inclusive governance.

These implications do not change the approved project outcomes. They clarify the conditions under which activities will be considered operationally complete and the evidence that will be collected to assess whether implementation is producing functioning and inclusive adaptation systems.

3. Institutional arrangements

3.1 Project governance

MoCC&EC Notification No. 1(73)-MoU/CC/2021, dated 5 August 2025, constituted the Project Steering Committee and approved its Terms of Reference. The Secretary, MoCC&EC, or nominee, chairs the PSC; the Director General of ICIMOD, or nominee, serves as Vice-Chair; and the SAFER Senior Project Manager and Country Project Manager serves as the non-voting Secretariat. The notified PSC reviews and endorses annual work plans and budgets, approves key deliverables, tracks progress and risks, considers grievances and significant scope or budget changes, and facilitates coordination. It is required to meet at least twice a year, or more often if needed.

At the first PSC meeting, held on 27 July 2026, the Committee agreed to add NDMA and PMD to its membership. NDMA will guide EWS site-selection arrangements and PMD will lead equipment specifications and technical aspects. The project will also establish arrangements for PMD's continued operational custodianship of meteorological and early-warning functions. Table 2 provides an overview of Implementing and Executing Entity responsibilities.

Table 2 Implementing and Executing Entity responsibilities

Entity	Core responsibility
ICIMOD as RIE	Overall oversight, fiduciary management, quality assurance, safeguards and gender compliance, consolidation of reports, and reporting to the Adaptation Fund.
Project Management Team	Day-to-day coordination, planning, budgeting, monitoring, safeguards, GESI, finance, reporting, communication, knowledge management and risk follow-up.
ICIMOD as EE	Execution of Components 1 and 2, including technical coordination and delivery through relevant government and community partners.
UNICEF as EE	Execution of Components 3, 4 and 5 and its assigned part of Component 6; technical, operational, procurement, reporting and partner management responsibilities.
UN Women as EE	Execution of its assigned part of Component 6 in coordination with UNICEF, including technical leadership on relevant gender-responsive actions.
UNICEF & UN Women	UNICEF and UN Women will finalize the necessary UN-to-UN Agency Agreement/arrangements governing UN Women's implementation responsibilities and related financial and reporting arrangements under SAFER.
MoCC&EC and government partners	Policy coordination, technical review, provincial and district linkage, approvals, institutional ownership and sustainability support.

3.2 Federal, provincial, district and community linkages

MoCC&EC will provide national coordination and connect the project with relevant federal policies and institutions. Provincial Planning and Development Departments will support coordination and alignment with provincial priorities. Technical departments will review designs, provide quality assurance and support institutional ownership and O&M. District administrations and local governments will support site coordination, access and land arrangements, community engagement, preparedness planning and links with existing district platforms. Community organizations and management groups will participate in planning, implementation, monitoring and local O&M, while formal service and disaster-management institutions retain their statutory responsibilities.

3.3 Component-specific arrangements

- Component 1: coordination with NDMA, PMD, GBDMA, PDMA-KP, district administrations, local government, civil-society partners and Community Watch Groups. Site-specific data, warning, security, O&M and response responsibilities will be agreed before commissioning.
- Component 2: collaboration with the KP Directorate General of Soil and Water Conservation, PCRWR, CEWRI, district institutions, civil-society partners and

participating communities. Technical agencies will support verification, design review, quality assurance and certification.

- Component 3: UNICEF will work with the Public Health Engineering & Rural Development Department (PHE&RDD) in Sindh, Public Health Engineering Department (PHED) KP, Local Government & Rural Development Department (LG&RDD) KP academia partners, civil society partners and the Irrigation Department on groundwater mapping, recharge-site development and climate-resilient water-supply infrastructure. Government technical agencies and communities will validate site selection, review designs and BOQs, and take on institutional ownership of recharge facilities and community water-supply systems through documented operation and maintenance arrangements with community-based structures.
- Component 4: UNICEF will work with the Sindh Environmental Protection Agency (SEPA), PHE&RDD Sindh, PHED KP, and Local Government on evidence-based WASH interventions and constructed wetlands. Government partners will confirm target sites, participate in environmental and social screening, and assume institutional ownership of operation and maintenance arrangements once wetlands are commissioned, supported by the technical support and learning platform for service providers.
- Component 5: UNICEF will work with the Irrigation Department, PHE&RDD, Sindh EPA, district administrations on the prioritisation and restoration of natural waterways and communal ponds. Government technical agencies will support site verification, technical review and water-quality monitoring, while communal pond management committees connect local governance to district and provincial systems.
- Component 6: UNICEF and UN Women will work jointly with the Ministry of Climate Change and Environmental Coordination (MOCC&EC) and its affiliates, provincial climate change commissions, district disaster management authorities, provincial planning and development departments Government counterparts will co-lead capacity building, legislation review and data-system design, while District Youth Forums and local women's groups connect community-level engagement to district and provincial decision-making structures.

3.4 Coordination, staffing and focal points

The PMT maintains the consolidated implementation calendar, budget tracking, monitoring, safeguards, GESI and financial reporting, and coordinates communications and knowledge management across components. Each Executing Entity nominates implementation focal points. Government focal points and site-level responsibilities are recorded in component work plans, agreements and site registers (refer Table 3).

Table 3 Operational staffing and focal-point functions

Function	Responsible entity / position	Current arrangement
Project management and PSC secretariat	ICIMOD Senior Project Management Specialist, Country Project Manager / Project Management Team	Day-to-day coordination, consolidated planning and reporting, and PSC secretariat functions. Named contacts are maintained in the controlled project contact register.
Components 1 and 2 execution	ICIMOD component technical leads	Technical delivery, partner coordination, work-plan management and component reporting.
Components 3–5 and UNICEF-assigned Component 6 activities	UNICEF programme / WASH focal point	Technical and operational coordination, procurement and partner management, safeguards and reporting for assigned outputs.
Gender and GESI / UN Women-assigned Component 6 activities	UN Women focal point with PMT GESI function	Technical leadership and quality assurance for gender-responsive actions and monitoring.
Monitoring, evaluation and learning	PMT MEL function with Executing Entity M&E staff	Baseline, Results Framework, indicator verification, evaluation design and consolidated reporting.
Safeguards and finance	PMT / ICIMOD safeguards and finance functions with Executing Entity counterparts	ESMP and safeguard follow-up, budget tracking, fiduciary reporting and reconciliation.

4. Component Implementation Priorities and Year 1 Work Plan

This section presents the component approaches and key Year 1 deliverables agreed during inception. Detailed quarterly work plans are provided in Annex 8 and remain the operational delivery documents.

4.1 Component 1: Cryosphere Disaster Risk Reduction (USD 1,858,159)

Approved outcome: Reduced climate-induced cryosphere multi-hazard risk.

Approved outputs: Integrated cryosphere risk mapping through community engagement; community-based monitoring and early warning systems; and strengthened resilience to cryosphere-related risks.

Component 1 will connect scientific risk information with timely warnings, community preparedness and clearly assigned institutional responsibilities. Baseline evidence confirms that hazard awareness is not consistently matched by reliable warnings, practised evacuation arrangements or inclusive disaster governance. Implementation will therefore strengthen the complete warning-to-action chain.

- Jointly review existing government, GLOF-II, AKAH and community monitoring and warning assets before specifying new equipment.
- Use site-relevant multi-hazard information, including GLOFs, glacial floods, avalanches, landslides, glacier surges, permafrost-related instability and cascading impacts.
- Agree thresholds, trigger-action matrices, warning authorities, institutional procedures and accessible, redundant communication routes.
- Confirm land access, connectivity, power, data arrangements, equipment custody, spares, recurrent costs, operators and safeguards before procurement or installation.
- Consider an EWS ready for operational use only after technical testing, verification of the warning chain, an inclusive drill, closure of corrective actions and confirmed O&M responsibility.

During inception, the Component 1 site portfolio was reviewed against updated hazard information, recent events, existing monitoring and early warning systems, and investments already made through GLOF-II, AKAH and government programmes. The approved proposal referred to Ishkoman, Manjawa, Sher Qilla, Bagrot, Hassanabad, Shimshal, Reshun, Susoom and Kalash. Following baseline review, partner consultation and inception discussion, the proposed working portfolio comprises Kalash, Kalam, Bahrain, Rama, Birgal, Gupis, Ishkoman, Raushan and the Alchori–Shigar Fort cluster, with Bahrain, Birgal, Alchori–Shigar, Gupis and Rama identified as the initial priorities for EWS-to-early-action support. Seven of the nine proposed locations differ from the target sites named in the approved project document, and Kalam and Bahrain are in Swat, a district not covered by Component 1 in the approved design.

Through this Inception Report, ICIMOD seeks the Adaptation Fund's approval of the proposed revisions to the Component 1 target sites. The rationale and evidence supporting these changes are set out in Section 5.1. The revised locations will be treated as proposed sites pending the Fund's approval, and site-specific EWS installations or other physical works will take place at the new locations after the required Secretariat clearance or Board approval is received. Final intervention design at each site will be informed by field verification and technical assessment. Table 4 provides an overview of key year 1 deliverables under component 1.

Table 4 Key Year 1 deliverables under component 1

Key deliverable	Year 1 result
Cryosphere multi-hazard evidence base	Multi-hazard maps, site datasets and targeted field verification for selected valleys.
Vulnerability and exposure profiles	Initial profiles of exposed settlements, infrastructure, population groups and livelihood assets.
Community monitoring and preparedness	Community Watch Groups established or strengthened, with draft monitoring arrangements and initial training.
Warning-to-action and institutional response	Preliminary warning dissemination, evacuation arrangements and draft recommendations on warning, response and SOP roles.
Five-valley EWS technical readiness	Existing assets and gaps assessed; site, data, power, connectivity, custody, safeguards and O&M requirements confirmed; technical specifications and procurement documentation prepared where readiness conditions are met; phased installation or rehabilitation may begin where all requirements have been satisfied.

4.2 Component 2: Springshed revival and management (USD 998,526)

Approved outcome: Increased access to spring water in a climate-adaptive and gender-inclusive manner.

Approved outputs: A web-based information system of springsheds and springs; co-developed recharge measures; and a local governance framework with stronger institutional capacity.
Component 2 will improve the reliability, safety and equitable management of spring water by combining scientific assessment, community knowledge, appropriate recharge measures and effective local governance. The baseline found low year-round reliability, limited O&M capacity and water-quality testing, and weak representation of women, youth and persons with disabilities in water-user institutions. Implementation will therefore:

- Establish a consistent inventory covering spring identifiers, coordinates, seasonal status, discharge, water quality, users, water uses, land and water rights, existing assets and management arrangements.
- Retain perennial, seasonal and currently dry springs in the inventory and establish seasonal monitoring of rainfall, discharge and water quality.
- Use participatory hydrogeological assessment to identify spring type, aquifer, recharge area and causes of declining flow or contamination before selecting interventions.
- Confirm land ownership, water-use arrangements, access, environmental and sanitary risks, community agreements and grievance arrangements before physical works.
- Establish or strengthen inclusive Spring Water User Groups, O&M rules, monitoring responsibilities, caretakers and recurrent-cost arrangements.

Working site portfolio

The approved proposal referred broadly to Malakand and Hazara divisions, with pilot references to Nathia Gali, Shinkiari, Chakdara and Babuzai. The working portfolio now covers Barham, Gul Dheri and Jano Chamtalay in Swat; Ouch, Bandagai Talas and Timargara in Lower Dir; two separate spring points at Nathia Gali and one at Banda Jaggian in Abbottabad; and Babuzai in Mardan.
All site names, coordinates, identifiers, users, rights, outlet conditions and recharge areas will be verified before works. Mardan falls outside the Malakand and Hazara divisions named in the approved project document. Through this Inception Report, ICIMOD seeks the Adaptation Fund's approval to include Babuzai, Mardan, and any other proposed spring point not listed in Annex 6 of the approved project document, within the revised Component 2 target sites. Table 5 provides an overview of key year 1 deliverables under component 2.

Table 5 Key Year 1 deliverables under component 2

Key deliverable	Year 1 result
Verified spring evidence base and information system	Standardized inventory for the ten priority spring points, baseline site assessment, climate and hazard screening, participatory hydrogeological assessment and preliminary recharge-zone delineation.
Initial intervention and monitoring packages	Preliminary site-specific recharge and source-protection options and baseline arrangements for rainfall, discharge, water quality and relevant groundwater monitoring.
Inclusive community management arrangements	Spring Water User Groups established or strengthened at initial sites, with roles and introductory training on monitoring, O&M, water allocation and equitable benefit sharing.
Initial governance and performance framework	Draft Springshed Management Framework and local protocols, initial cost-benefit and impact-assessment framework, and review of policy, regulatory, institutional and governance gaps.

4.3 Component 3: Groundwater management and resilient community water supply (USD 2,308,000)

Approved outcome: Improved climate-resilient management of groundwater and community water-supply services in vulnerable areas.
Approved outputs: Groundwater mapping and recharge facilities in selected water-scarce locations in the middle basin, with strengthened management and O&M structures; and climate-resilient community water-supply infrastructure with adequate management, operation and maintenance capacity.

Component 3 will strengthen the resilience and reliability of community water supplies through improved understanding and management of groundwater resources, appropriate recharge measures and climate-resilient water-supply investments. Implementation will

link groundwater evidence with service-level assessment and infrastructure planning, with emphasis on technically appropriate and sustainable solutions.

The inception process reinforced the need to complete groundwater mapping, site feasibility and water-supply system assessment before major infrastructure commitments. The following priorities will guide implementation:

- Consolidate available groundwater, hydrogeological, water-supply and climate-risk information to establish a common evidence base for targeted locations.
- Undertake site-level assessment of groundwater conditions, existing water-supply systems, service reliability, climate exposure and infrastructure functionality.
- Identify and assess suitable groundwater recharge opportunities based on local hydrogeological conditions and technical feasibility.
- Prioritise climate-resilient water-supply investments based on demonstrated service gaps, technical feasibility, climate risk and potential for sustainable operation.
- Apply environmental and social screening and confirm land, access, technical and institutional requirements before physical works.
- Finalise designs and BoQs following site verification and feasibility assessment rather than relying solely on preliminary site information.
- Establish water-quality monitoring and O&M arrangements alongside infrastructure delivery, with clear institutional and community responsibilities.

Table 6 provides an overview of key year 1 deliverables under component 3.

Table 6 Key Year 1 deliverables under component 3

Key deliverable	Year 1 result
Groundwater and recharge evidence	Groundwater and recharge-zone mapping study covering six candidate sites, supported by consolidated datasets and targeted field assessment.
Six-site feasibility package	Feasibility study and technical, environmental and socio-economic assessment for six groundwater-recharge sites.
Resilient water-supply investment packages	Condition, water-quality and service-level assessment, planning documents, BOQs/designs and procurement documents for flood-affected water-supply systems in the six target districts.
Initial implementation and management readiness	Procurement and implementation packages completed for priority solar-powered water facilities and climate-resilient handpumps, with advance construction undertaken where sites are ready.

4.4 Component 4: Ecosystem-based Adaptation (USD 700,000)

Approved outcome: WASH infrastructure in targeted communities in the Middle Indus Basin is more adaptive to climate-induced shocks, with contextually appropriate nature-based solutions scaled up.
Approved outputs: Priority sites identified through integrated evidence and feasibility assessment; and constructed wetlands established with the required management and O&M capacity.
Component 4 will demonstrate ecosystem-based and nature-based approaches that improve the resilience of WASH services to climate-induced shocks. The approach will link WASH service needs with environmental and climate considerations and will prioritise solutions that are technically feasible, locally appropriate and capable of being sustained by responsible institutions.

The inception process highlighted the need to establish a clear evidence base and complete feasibility and environmental and social assessment before physical investments. The following priorities will guide implementation:

- Undertake integrated WASH, environmental and climate-risk analysis to identify priority service and ecosystem needs.
- Screen and validate potential sites against technical feasibility, environmental conditions, climate exposure, land and access requirements and institutional readiness.
- Assess the applicability of nature-based and ecosystem-based solutions in relation to local WASH service requirements.
- Develop site-specific designs and implementation packages based on feasibility findings.
- Engage responsible government institutions from the assessment and design stage to strengthen ownership and future O&M.
- Establish O&M arrangements and technical support mechanisms before facilities are commissioned.
- Document implementation experience and learning to support replication and scale-up of appropriate approaches.

Working site portfolio

The approved portfolio is retained in Charsadda, Nowshera and Swat in Khyber Pakhtunkhwa and Khairpur and Sukkur in Sindh. Eight intervention sites will be confirmed through the agreed technical, climate, environmental and social screening process. Table 7 provides an overview of key year 1 deliverables under component 4.

Table 7 Key year 1 deliverables under component 4

Key deliverable	Year 1 result
Eight-site evidence and screening package	Completed integrated WASH, environmental and climate-risk evidence base for the eight selected intervention sites, including identified service gaps, climate risks and priority intervention needs.

Key deliverable	Year 1 result
Site-specific nature-based solution designs	Completed site screening, technical feasibility, environmental and social (E&S) assessment and climate-risk assessment packages for the eight selected sites, providing the basis for final site confirmation and intervention design.
Institutional and O&M readiness	Assessment of local capacity and agreement on ownership, operating roles, recurrent costs and technical support for all eight sites.

4.5 Component 5: Surface water conservation (USD 1,080,000)

Approved outcome: Strengthened community and institutional capacity to reduce surface-water losses, increase storage for productive use and adapt to climate shocks.
Approved outputs: Government of Sindh supported to prioritize 15 waterways and communal ponds; and 15 sites restored or rehabilitated with water-quality monitoring and strengthened management and O&M structures.

Component 5 will support the restoration and improved management of selected surface-water systems, including natural waterways and communal ponds, with emphasis on reducing water losses, improving storage and strengthening local management arrangements.

The inception process emphasised the importance of site validation and feasibility assessment before major works. Implementation will therefore combine technical assessment, water-quality considerations, community management and phased restoration.

The following priorities will guide implementation:

- Ground-truth and validate the proposed portfolio of surface-water sites against technical feasibility, climate exposure, existing condition, community use and institutional responsibilities.
- Complete site-level feasibility, environmental and social screening and confirm land, access and management arrangements.
- Assess water availability, storage potential, water-quality considerations and opportunities for improving the functionality of existing natural and communal water systems.
- Prepare detailed designs and BoQs for priority interventions based on verified site conditions.
- Establish or strengthen communal management committees and link them with relevant district and provincial institutions.
- Coordinate restoration and monitoring activities with the appropriate seasonal and regulatory requirements.
- Establish practical arrangements for monitoring, maintenance and continued management of restored assets.

Working site portfolio

The approved districts—Sanghar, Tharparkar and Umerkot—are retained. Nagarparkar has been identified as the priority tehsil within Tharparkar following government review and written confirmation. Fifteen sites will be validated before rehabilitation begins. Table 8provides an overview of key year 1 deliverables under component 5.

Table 8 Key year 1 deliverables under component 5

Key deliverable	Year 1 result
Validated 15-site portfolio	Ground-truthed and prioritized natural-waterway and communal-pond sites with feasibility, technical and E&S records.
Design and implementation packages	Completed site screening, technical feasibility, environmental and social (E&S) assessment and climate-risk assessment packages for the eight selected sites, providing the basis for final site confirmation and intervention design.
O&M mechanism established & Procurement Advanced	Procurement packages advanced for approved interventions; site preparation advanced at ready sites; O&M and institutional capacity arrangements agreed.

4.6 Component 6: Adaptive capacities and empowered communities (USD 1,681,000)

Approved outcome: Improved knowledge and practices of communities and policymakers on climate adaptation and disaster-risk reduction.
Approved outputs: Stronger national and provincial capacity for human-centred and gender-transformative adaptation and water management; improved access to evidence, data and knowledge for cross-sector decisions; and strengthened youth and women's leadership and community adaptation through awareness and behaviour change.
Component 6 will strengthen institutional and community capacity to understand, plan for and respond to climate risks, while supporting inclusive participation, knowledge generation and uptake of evidence in planning and decision-making. The component will provide cross-cutting support to the other components and strengthen linkages between national, provincial, district and community-level structures. Component 6 provides the institutional, knowledge, gender and community-capacity platform that connects the technical components. Activities will use existing government, women's and youth structures where feasible and will link training and communications directly to decisions, services and investments under Components 1–5.

The following priorities will guide implementation:

- Map institutions, stakeholder roles and capacity needs and constitute a representative core group of change leaders.
- Apply common gender-review criteria and strengthen women's and young people's influence, leadership, access and benefit across the project.

- Use existing government, women's and youth structures where they are functional and provide a clear institutional home for any new mechanism established under the project.
- Develop training, knowledge-management and communication approaches linked to the practical needs of the six components.
- Support groundwater-policy and institutional-gap analysis, district water and climate data use, and a MoCC&EC-approved digital platform.
- Establish or strengthen District Youth Forums and local women's groups and connect them with component planning and monitoring.
- Document, package and disseminate SAFER evidence and lessons, including opportunities for public-private collaboration and policy uptake.

Geographic and institutional coverage

Component 6 will operate nationally and across the full Indus Basin, with targeted capacity and community activities in project districts. Following formal consultation and PSC direction, the portal originally proposed under Output 6.2 will be implemented through a digital platform approved by MoCC&EC. Table 9 provides an overview of key year 1 deliverables under component 6.

Table 9 Key year 1 deliverables under Component 6

Key deliverable	Year 1 result
Institutional and change-leader platform	Institutional and stakeholder mapping and a core group of change leaders with agreed Terms of Reference and provincial, women's and youth representation.
Capacity and gender foundations	Training needs assessment, initial capacity workshops, common gender-review criteria and situation and gender analysis.
Policy and data support	Groundwater legislation and institutional-gap analysis, district water and climate data training, and initial design of the approved digital platform and National Indus Water Atlas.
Women, youth and community leadership	District Youth Forums and local women's groups established or strengthened and linked to project planning, learning and behaviour-change activities.
Knowledge and partnership framework	Framework for documenting and disseminating SAFER evidence and lessons, supported by public-private and knowledge-partner mapping.

The six component work plans has beeen consolidated into a single Year 1 (Annex 8) implementation calendar maintained by the Project Management Team, identifying activities, quarterly sequencing, key deliverables, responsible and supporting institutions, safeguard and approval dependencies, procurement milestones and budget references. Component-level plans remain the detailed delivery documents and will be reviewed through regular implementation meetings. The team will ensure that:

- Use existing government systems, assets and community structures before creating parallel arrangements.
- Complete field verification, E&S screening and institutional agreements before committing to major physical works.
- Assign a named owner for data, infrastructure, O&M and community processes at each site.
- Front-load procurement preparation for long-lead items, while keeping final specifications dependent on site evidence and approved designs.
- Track gender equality through access, influence and benefit, not only attendance at meetings.
- Coordinate the 6 components so that site engagement, community structures, data systems and safeguards reinforce each other.

Component linkages

For Component 1, PMD will lead technical specifications and technical custodianship of meteorological and early-warning operations, with NDMA, GBDMA, relevant PDMAs, district administrations and communities connected through documented warning, authorisation, dissemination and response procedures, supporting interoperability with national systems.

For Component 2, implementation will be coordinated with the KP Directorate General of Soil and Water Conservation, PCRWR, CEWRI, district administrations, civil-society partners and Spring Water User Groups, with government technical agencies reviewing designs and connecting local management to provincial and district systems.

Components 3, 4 and 5 will generate practical evidence on groundwater and surface-water interventions, water quality, community management and climate-resilient WASH approaches. Component 6 will support the systematic documentation and dissemination of this evidence, including lessons on gender-responsive water management, nature/ecosystem-based adaptation and community participation. In the districts where Components 3–5 are implemented, Component 6 will build the capacity of government officials, women's groups, youth forums and other stakeholders to access, interpret and use the resulting data, databases and knowledge products — so that evidence from Components 1–5 informs local planning, adaptation decision-making and institutional learning beyond individual interventions.

Across the UNICEF-supported components, common approaches will be promoted for gender responsiveness, community engagement, knowledge documentation and institutional ownership, building on existing government and community structures where functional.

Across all components, the project will strengthen existing structures where functional. Any new committee, platform or data system must have a documented purpose, an institutional home and clear ownership beyond the project period. By the time of the inception workshop, the first PSC meeting and the Component 1 Technical Working Group session had already been completed, and the principal government interfaces reviewed; these will be further operationalised through focal-point nominations, component work plans and site-level agreements during Year 1.

5. Inception Refinements and Change Log

The approved project objective, six outcomes and total financing of USD 10 million remain unchanged. The inception refinements below concern the implementation start date, site portfolios, sequencing, institutional responsibilities, commissioning, safeguards and O&M. They are recorded to prevent ambiguity during implementation and reporting.

5.1 Site adjustments recorded at inception

Village names are used for clarity. Coordinates and full administrative details are maintained in the project site registers and will be verified before field works. For Component 1, the inception review distinguishes proposed adjustments to district coverage from refinements to intervention locations within existing project areas.

District-level adjustments are summarised in Table 5.1a. Site prioritisation within existing project areas is described below, with the approved and proposed locations, technical justification and decision records maintained in the site register.

This table summarises district coverage rather than site numbers. The working portfolio comprises nine sites or clusters, with Alchori–Shigar Fort counted as one cluster (ten named locations).

Component 1 sites were revisited on the advice of MoCC&EC to avoid overlap with GLOF-II installations undertaken from 2025 onwards, after the SAFER proposal was developed. At its meeting on 27 July 2026, the PSC decided that MoCC&EC would constitute a Technical Working Group to review and approve the proposed sites and EWS/AWS specifications, with site selection led by an NDMA-nominated officer and equipment specifications led by DG PMD. The working portfolio remains provisional. Proposed changes to approved target sites are submitted to the Adaptation Fund as part of this inception report. No installation, construction or procurement of works at changed target sites will commence until AF approval is completed.

Table 10 summarises the proposed adjustments by component; Table 11 identifies the proposed changes in Component 1 district coverage.

Table 10 Proposed target site changes by component

Component	Target sites in approved project document	Proposed at inception	Basis for change	Government / TWG / PSC
C1 – Cryosphere DRR	GB: Ishkoman, Manjawa, Sher Qilla, Bagrot, Hassanabad, Shimshal. Chitral: Reshun, Susoom, Kalash. Swat also named in the Component 1 work plan. (Part II.A.1; Section B.4; Annex 2)	Implementation priorities: Kalam, Bahrain, Rama, Birgal, Gupis, Raushan and the Alchori–Shigar Fort cluster. EWS-to-early-action priorities: Bahrain, Birgal, Alchori–Shigar, Gupis and Rama.	Complementarity with GLOF-II, AKAH and government EWS; updated hazard evidence and recent events; baseline review; multi-hazard coverage. Site detail in Table 5.1a.	Reviewed through inception/TWG processes; PSC oversight applies. Formal site-level decision records will accompany the post-approval request.
C2 – Springshed	**Annex 6: 10 points** — Abbottabad (4, including 2 at Nathia Gali); Lower Dir–Adenzai (2); Mansehra–Shinkiari (1); Swat–Babuzai (3).	**Implementation priorities within existing districts:** Swat: Barham, Gul Dheri, Jano Chamtalay. Lower Dir: Ouch, Bandagai Talas, Timargara. Abbottabad: Banda Jaggian. **District coverage adjustment:** Mardan–Babuzai in place of Mansehra–Shinkiari.	Spring inventory and field verification; Mansehra point dropped and Mardan added. Final site rationale and coordinates will be confirmed in the post-approval package.	KP technical counterparts to verify the final site registry and coordinates.
C3 – Groundwater and water supply	KP: Charsadda, Nowshera, Swat. Sindh: Khairpur, Mirpurkhas, Sujawal, Sukkur, Tharparkar, Umerkot.	Districts unchanged. Tehsils: Jehangira (Nowshera); Shah Bandar and Sujawal (Sujawal); Chachro and	Site and service feasibility review and government consultation.	Government review and written confirmation recorded by the PMT.

Component	Target sites in approved project document	Proposed at inception	Basis for change	Government / TWG / PSC
	Annex 6 tehsils include Nowshera and Pabbi (Nowshera); Jati and Mirpur Bathoro (Sujawal); Diplo (Tharparkar).	Nagarparkar (Tharparkar).		
C4 – Ecosystem-based adaptation	Charsadda, Nowshera, Swat (KP); Khairpur, Sukkur (Sindh)	No change	–	–
C5 – Surface water	Annex 6: Sanghar (Sinjhoro, Sanghar), Tharparkar (Chachro, Islamkot, Mithi, Deeplo), Umerkot (Umerkot)	Nagarparkar (Tharparkar) as priority tehsil	Site prioritisation and feasibility review.	Government review and written confirmation recorded by the PMT.

Table 11 Proposed adjustments to Component 1 district coverage

Proposed adjustment	District	Approved sites	Proposed sites	Justification
Not retained	Hunza	Hassanabad, Shimshal	—	Existing GLOF-II early warning and preparedness support reduces the need for additional SAFER investment in these locations.
Not retained	Gilgit	Bagrot	—	Updated review indicates comparatively limited downstream impacts; other locations with greater warning and preparedness needs are prioritised.
Not retained	Upper Chitral	Reshun	—	Kalash is retained in Lower Chitral; Reshun is not retained. TWG to confirm the district coverage decision and rationale.

Proposed adjustment	District	Approved sites	Proposed sites	Justification
District added	Astore	—	Rama	Emerging glacial lakes and potential blockage of Rama Lake pose risks to settlements and tourism areas.
District added	Shigar	—	Alchori, Shigar Fort	Flash flood and debris flow hazards expose settlements, roads and tourism assets.

Site prioritisation within existing project areas

Within retained project areas, intervention locations are prioritised using updated risk information, complementarity with existing systems and implementation feasibility. Detailed site comparisons and decisions will be maintained in the site register.

Lower Chitral: Kalash is retained as a priority location within the existing Component 1 coverage.

Ghizer area: Ishkoman is retained, with Birgal, Gupis and Raushan included in the working portfolio.

Swat: Kalam and Bahrain are proposed intervention locations within a district already named in the Component 1 work plan (Annex 2).

5.2 Other implementation refinements

Table 12 Other implementation refinements

Item	Project proposal doc	Inception refinement	Status and action
Project implementation start	The proposal contained an earlier projected calendar.	The first day of the national inception workshop, 7 September 2026, is the project start date for Adaptation Fund reporting.	Record in the endorsed inception report and controlling work plan.
Overall project design	Approved objective, six outcomes and USD 10 million total financing.	No change to the objective, outcomes or total financing.	No formal project-design change required.

Item	Project proposal doc	Inception refinement	Status and action
Component 1 existing assets	Output 1.2 provides for new and strengthened monitoring and early warning systems.	Audit and integrate functional GLOF-II, AKAH and government assets before new procurement.	Implementation refinement within the approved output.
Component 1 warning chain	The proposal assigns roles to PMD, disaster-management authorities, local government and communities.	Formalise PMD technical custodianship and the PMD-DMA-district-community warning, authorisation and dissemination chain.	Document through coordination arrangements and SOPs.
Component 1 commissioning	Output 1.2 requires functioning monitoring, warning and preparedness measures.	Treat a site as operational only after end-to-end testing, corrective actions and named, financed O&M responsibility.	Apply as the implementation and acceptance standard.
Component 1 Activity 1 supporting sub-activities	Output 1.1 covers integrated cryosphere risk mapping, exposure/vulnerability assessment and participatory risk assessment.	Within Activity 1, use SAFER evidence to inform the Government of Pakistan's Cryosphere resilience Strategy, and undertake a technical exposure/learning visit to Nepal on the 26 August 2026 incident to inform multi-hazard monitoring and preparedness.	Supporting sub-activities within Component 1, not separate outputs. Nepal visit is subject to the approved annual work plan, available budget and government agreement.
Component 2 diagnostic sequence	The proposal provides for spring inventory, hydrogeological mapping and recharge measures.	Complete the spring registry, seasonal monitoring and participatory hydrogeological diagnosis before selecting measures; resolve land, water-use, safeguards and O&M before construction.	Implementation refinement within approved outputs.
Component 3 sequencing	Approved outputs provide groundwater mapping/recharge facilities and climate-resilient community water-supply infrastructure.	Complete mapping, feasibility and service-system assessment before major infrastructure; establish O&M and water-quality arrangements alongside delivery.	Year 1 sequencing refinement within approved outputs.

Item	Project proposal doc	Inception refinement	Status and action
Component 4 sequencing	Approved outputs provide site identification and constructed wetlands with management structures.	Use Year 1 for evidence, feasibility, E&S screening and design; begin O&M capacity before facilities are commissioned.	Year 1 sequencing refinement within approved outputs.
Component 5 sequencing	Approved outputs provide prioritisation and rehabilitation of 15 waterways/ponds with monitoring and management structures.	Validate designs/BoQs before main construction; phase works around approvals and season.	Year 1 sequencing refinement within approved outputs.
Component 6 institutional and data arrangements	Component 6 supports institutional capacity, evidence, knowledge, women/youth leadership and policy uptake.	Confirm institutional homes, data ownership/interoperability and use existing women/youth structures where suitable; track influence and benefit as well as participation. Update: Clean Green Pakistan Index (CGPI) portal referenced in Output 6.2 is updated to ”MoCC&EC-approved digital platform” in agreement with MoCC&EC.	Implementation refinement within approved outputs. Following formal consultation and agreement with MoCC&EC, the reference to the Clean Green Pakistan Index (CGPI) portal under Output 6.2 has been revised to “MoCC&EC-approved digital platform.

Any future change affecting approved scope, results, financing or geographic commitments will be processed through project governance and, where required, the Adaptation Fund. The change log will be reviewed at the first quarterly implementation review and updated only when a further decision is formally recorded.

6. Monitoring, Safeguards, GESI and Risk

6.1 Monitoring and Results

The approved Results Framework and the SAFER Pakistan Baseline Assessment (February 2026), remain the basis for formal project monitoring and reporting. Baseline findings will be used to confirm operational baselines, means of verification, reporting responsibilities and appropriate disaggregation in the monitoring matrix. Operational service measures may show whether supported systems are functioning as intended, but they do not replace approved indicators or targets. The full baseline-informed Results Framework and monitoring matrix is at Annex 6.

Annex 6 now records baseline values for indicators under all six components, drawn from the SAFER Pakistan Baseline Assessment (Version 3, February 2026). The approved indicators and targets are unchanged.

The baseline assessment uses a phase-in comparison design for selected sites. Before site-level Year 1 interventions commence, the PMT/MEL function and responsible Executing Entity will verify the work plan against the agreed Batch 1/Batch 2 assignments. Any departure from the evaluation design will be documented before the midline assessment.

- Component 1: system uptime and data receipt; threshold use; warning authorisation; last-mile warning reach; drill performance; closure of corrective actions; named, financed O&M responsibility.
- Component 2: seasonal discharge; rainfall and water-quality monitoring; functioning Spring Water User Groups; land and water-use agreements; approved O&M rules; maintenance records.
- Components 3–5: functionality and water-quality performance of supported infrastructure, O&M records, service continuity and management arrangements.
- Component 6 and cross-cutting inclusion: participation, leadership, access, influence and benefit, disaggregated by sex, age and disability where relevant; institutional and data-system uptake will also be tracked.

Quarterly Executing Entity progress reports will feed consolidated technical, financial, safeguards, gender and risk reporting through the PMT. The PSC will review progress at agreed intervals.

6.2 Environmental and Social Safeguards

Environmental and social safeguards will be integrated into site selection, assessment, design, procurement, implementation, monitoring and handover. Site-specific screening, land and access requirements, water-use or community agreements, grievance arrangements and relevant ESMP measures will be completed at the appropriate stage before physical works or installation. Procurement and construction will not be used to bypass unresolved safeguard requirements.

The updated ESMP will consolidate, *as set out in the safeguards action matrix at* ***Annex 3,*** component-specific risks, mitigation measures, monitoring requirements, responsible entities and evidence of compliance. The Adaptation Fund Environmental and Social Policy (Category B) measures applying to Outputs 2.2, 3.2, 4.2 and 5.2 are summarised at Annex 4.

Sub-projects under the Category B outputs (2.2, 3.2, 4.2 and 5.2) that were not fully identified at approval, and any site changed since approval, will each be screened against the Adaptation Fund Environmental and Social Policy before implementation, in line with the Fund's requirements for unidentified sub-projects. The screening results, any required assessment and the resulting management measures will be added to the ESMP, and the status of each sub-project will be reported through annual project reporting. Other physical works, including EWS installation under Output 1.2 and recharge facilities under Output 3.1, will follow the same screening step. The Year 1 safeguards action matrix in Annex 3 sets out the applicable

activities, screening and clearances, mitigation measures, responsible entity, timing and status.

Within Components 3–5, outputs involving physical construction or rehabilitation including climate-smart water-supply infrastructure under Output 3.2, constructed wetlands under Output 4.2, and waterway/pond restoration under Output 5.2 — will be planned and implemented in accordance with UNICEF ESS framework and associated AF & national requirements. Appropriate environmental and social risk screening and assessment will identify potential risks and impacts and define the required mitigation, monitoring and stakeholder-engagement measures, with relevant requirements incorporated into design and procurement documentation and applied during construction and commissioning.

6.3 Gender Equality and Social Inclusion

The Gender Action Plan remains the controlling framework for gender-responsive implementation. Participation targets are accompanied by evidence that women, youth and people with disabilities receive information directly, influence decisions, use project services safely and share benefits; meeting times, location, mobility, care responsibilities, accessibility, safeguarding, confidential feedback and referral pathways are considered in community processes. For Component 1, this includes attention to warning dissemination, evacuation routes, shelters and drills; for Component 2, to spring monitoring, water-allocation decisions and O&M arrangements.

For Components 3–6, the Gender Action Plan, establishes activity-specific participation and leadership targets, including a minimum benchmark of 33% women's participation for a number of relevant processes, with higher targets applying to selected co-design, technical, data and women-focused activities. These numerical targets are complemented by measures of meaningful participation, leadership, influence, safety, access and benefit. Component 6 additionally establishes District Youth Forums and local women's groups, gender-disaggregated data processes, and a gender-responsive review of knowledge products across all technical components,. . Each Executing Entity and component lead remains responsible for implementing and reporting against the Gender Action Plan commitments applicable to its activities, with UN Women providing technical guidance and quality assurance in coordination with the PMT.

The full Updated Gender Action Plan, covering gender-responsive indicators, actions, targets and means of verification for all six project outcomes, is maintained as Annex 7 to this report.

6.4 Risk Management and Sustainability

The project risk register will be maintained as a living management tool and reviewed at each quarterly implementation review. Table 13 sets out the principal inception-stage risks. The approved project document's original risk log and ICIMOD's standard institutional and fiduciary risk safeguards remain in effect and are summarised in Annex 4.

Table 13 Key risks identified

Risk	Possible effect	Management response	Primary owner
Access, security or permissions	Fieldwork or construction delays.	Begin permissions early; use local partners; maintain alternative sequencing; document access and land agreements.	Relevant Executing Entity / district partner
Floods, GLOFs, drought and seasonality	Disruption or damage to field activities and assets.	Use seasonal information, safe siting, flexible work plans and contingency arrangements.	Relevant Executing Entity / technical partner
Duplication with existing investment	Poor value for money and unclear ownership.	Maintain the complementarity and asset matrix; verify functionality before procurement.	PMT / relevant Executing Entity
Weak institutional ownership	Systems or facilities are not maintained or used.	Confirm institutional home, focal points, data, O&M and handover arrangements in Year 1.	Relevant Executing Entity / government lead
Procurement before design maturity	Wrong equipment, rework or delay.	Use verified site evidence and approved specifications or BoQs before award.	Relevant Executing Entity / procurement lead
Water rights or community conflict	Delay, inequitable benefits or grievances.	Document rights and benefit-sharing; apply the GRM; secure district support before works.	District partner / relevant Executing Entity
Safeguarding or exclusion	Women, youth or vulnerable groups do not benefit or face harm.	Use safe participation, disaggregated monitoring, accessible communication, confidential feedback and referral mechanisms.	PMT / Executing Entities / partners
Insufficient recurrent finance	Assets fail after project support ends.	Identify recurrent costs, spares, technicians and the budget route before commissioning or handover.	Government owner / relevant Executing Entity
Data fragmentation or unclear custody	Warnings, monitoring and learning are not sustained.	Agree data standards, access, interoperability, custody and long-term hosting before system launch.	PMT / relevant Executing Entity / government custodian
Coherence across SAFER outcomes	Component 6 activities implemented separately from Components 1–5; different timelines or site selection limit integration.	Establish systematic planning between Component 6 and Components 1–5; align sites, sequencing and stakeholder engagement; use technical-component evidence to inform	PMT / Executing Entities

Risk	Possible effect	Management response	Primary owner
		Component 6 reviews and knowledge products.	
Access, security and NOC requirements	Restricted access to communities or sites and limitations on GIS/geospatial data collection delay fieldwork and data collection.	Conduct early access/security mapping; initiate NOC and permission processes well in advance; coordinate with relevant authorities; build flexibility into field schedules; use local partners where appropriate.	Relevant Executing Entity / district partner

6.5 Budget and financial management

The approved project financing, including the total project budget and approved component and output allocations, remains unchanged. The Year 1 financial schedule represents implementation phasing within the approved budget and does not constitute a budget reallocation.

The validated activity-level financial schedule will identify the responsible entity and link planned expenditure to the Year 1 work plan in Annex 8. Any proposed transfer between approved outputs, or revision to the disbursement schedule, will be submitted separately through the applicable Adaptation Fund procedure and will not be implemented before the required clearance or approval.

Annex 1. Inception Workshop Agenda and outcome synthesis

Agenda

Time (PKT)	Programme
09:00–09:30	Registration
09:30–10:15	Inaugural Session 1. Tilawat (Recitation) of Quran Majeed 2. Welcome Remarks: Mr. Shekhar Ghimire, Director Administration, Finance and Operations, ICIMOD 3. Welcome Remarks by Mr. Muhammad Ijaz Ghani, Senior Joint Secretary, MoCC&EC 4. Opening Remarks: Mr. Mahmood Hassan, Additional Secretary, MoCC&EC 5. Remarks: Sharmeela Rassool, Deputy Representative, UNICEF 6. Remarks: UN Women
10:15-10:30	Chief Guest Remarks: H.E. Musadik Masood Malik, Federal Minister for Climate Change & Environmental Coordination, Pakistan Vote of Thanks - Mr. Izhar Ud Din, Section Officer, MoCC&EC
10:30–11:00	Group photo and Tea/Coffee break
11:00–12:30	Project Components and expected outcomes (15 minutes each) 7. Cryosphere Hazard Risk Reduction (ICIMOD) – Dr Sher Muhammad 8. Springshed Management (ICIMOD) – Mr Madhav Dhakal 9. Groundwater Resilience and Governance (UNICEF) 10. Ecosystem-Based Adaptation and Nature-Based Solutions (UNICEF) 11. Surface Water Conservation and WASH Resilience (UNICEF) 12. Community-Led Climate Adaptation and Institutional Capacity Building (UNICEF, UN Women)
12:30–13:30	Lunch break
13:30-14:15	Presentation of Baseline Findings – Dr Sawaid Abbas
14:15–16:45 with tea break	Parallel Group Discussions Participants will work in thematic groups covering the six project components, focusing on:

	Year 1 implementation priorities, sequencing and overall way forward Coordination needs across agencies, components and partners. Minor activity or refinements for feasibility or effectiveness Existing systems, partners or local structures to retain, strengthen or integrate Materials to be provided: Risk management and ESG, 1st year work plan of the proposal document, Gender action plan
16:45–17:00	Summary of the day

Day 2 – Tuesday, 8 September, 2026

Time (PKT)	**Programme**
09:00–09:15	Recap of Day 1 and Overview of Day 2 Agenda
09:15–10:00	Group Presentations and Plenary Feedback
10:00-10:30	Tea Break
10:30-11:30	M&E, and Reporting (with gender-disaggregated indicators and inclusion metrics) – Dr Qianggong Zhang 17. First-Year Work Plan & Activity Timeline - Component 1 &2 by ICIMOD - Component 3-6 by UNICEF & UN Women
11:30-12:15	- Finalisation of Small Refinements (using a change log table) – Sher Muhammad
12:15 – 13:00	Way Forward and Closing Session
13:00-14:00	Lunch

List of participants

S.No	Name	Designation/Organization
1	Mr. Haroon Ashraf	MGPO/CSCCC
2	Mr. Muzaffar Ali Baig	Lecturer, University of Chitral
3	Mr. Syed Najam	Professor, KIU Gilgit
4	Mr. Naveed Ahmed	Associate Professor, MUET
5	Ms. Shahida Parveen	UN Women
6	Ms. Saman Ahsan	UN Women
7	Mr. Ejaz Mohsin	UN Women
8	Mr. Imran Ullah	Coordinator Watsan Cell (LCB) KPK
9	Dr. Sawaid Abbas	CGIS,Punjab University
10	Mr. Shafaq Ullah	MMPO
11	Mr. Mussawar Nazeer	XEN PHED GOS
12	Mr. Syed Hammad Ali	Glacierilogist GMAL WAPDA
13	Ms. Zahida Jamali	WASH & CEE Specialist
14	Mr. Pir Bux	WASH Officer
15	Mr. Haris Ayub	ICIMOD
16	Dr. Yusaf Zafar	Chairman PARC (R)
17	Dr. Bashir Ahmed	CEWRI NARC
18	Ms. Rubina Brohi	Chairperson, Sindh Commission on the status of women
19	Mr. Nadeem MirBahar	Asst Chair (EeCC), P&D Sindh
20	Ms. Iqra Akram	Economist, IWMI
21	Mr. Muhammad Iqbal	UN Women
22	Mr. Muhammad Anwar	SE (O/M) PHEDKarachi
23	Mr. Syed Baqar Rizvi	AD Technical LGD, Karachi
24	Mr. Hamid Sarfaraz	Managing Partner, Dev Consultant
25	Dr. Masud Alam	WASH Specialist, UNICEF
26	Mr. Rehman Ullah	WASH Officer UNICEF

S.No	Name	Designation/Organization
27	Dr. Ghulam Raza	Director Academic, University of Baltistan, Skardu
28	Mr. Junaid Jabbar	AD PCRWR Karachi
29	Dr. Muhammad Masood	WASH Specialist, UNICEF
30	Mr. Sajid Ali	Coordinator DRM, PDMA< KPK
31	Mr. Yaseen Wazir	Soil & Water Conservation, KPK
32	Dr, Musaab Habib Bangash	Deputy Director Labs, PHED, KPK
33	Ms. Raina Gul	Director DRM, PDMA KPK
34	Ms. Saiqa Imran	Director (WQ)
35	Mr. Mujahid	DM NDRMF
36	Mr. Hamza Islam	Assistant Director, SINDH EPA
37	Mr. Muhammad Sohail	Assistant Director, PDMA, KPK
38	Dr. Farman Ullah Khan	Director Soil & Water Conservation Abbotabad
39	Mr. Riaz Ahmed	Additional Chief Secretary Development, Gilgit Baltistan
40	Mr. Madhav Dhakal	ICIMOD
41	Mr. Imtiaz Ahmad	Assistant Director, GBDMA, Gilgit
42	Dr. Qianggong Zhang	ICIMOD
43	Ms. Sana Zulfiqar	Programme Manager, ADPC
44	Mr. Shehryar Khan	RA, ADPC
45	Mr. Roshan Din	Journalist
46	Dr. Hammad Gillani	Associate Professor
47	Ms. Cindy Kushner	Chief WASH & CEE, UNICEF
48	Ms. Larissa Bruun	Chief Resource Mobilisation & Partnership, UNICEF
49	Mr. Zohaib Hassan	WASH Specialist, UNICEF
50	Dr. Shafqat Munir	Deputy SD, SDPI
51	Ms. Warda Sheikh	UN Women
52	Dr. Suman Shams	Chairperson, KPESW
53	Dr. Burhan Ahmad	Deputy Director PMD

S.No	Name	Designation/Organization
54	Adnan Shafiq Rana	Deputy Director PMD
55	Mr. Siraj Ahmed Baloch	MoCCEC (WASH)
56	Mr. Zia ul Islam	MoCCEC (WASH)
57		
58	Ms. Akasha Kiran	Assistant Chief IDS, P&DD
59		
60	Ms. Mehwish Rahim	Intern MOCC
61	Ms. Angela Fatima	Intern MOCC
62	Ms. Kainat Saleem	Intern MOCC
63	Ms. Zarkash Batool	Intern MOCC
64	Dr. Sher Muhammad	ICIMOD
63	Dr. Faisal Mueen Qamar	ICIMOD
64	Mr. Shekhar Ghimire	ICIMOD
65	Dr. Rashid Rehan	Director NIUIP Peshawar, KPK
66	Dr. Naveed Ahmad	Ass Prof MUET
67	Dr. Shaukat Ali	GCISC
68		
69	Mr. Roshan Din	Env J
69	Mr. Zafar ul Islam	Secretary, LG&RDD KPK
70	Mr. Naveed Akhtar	Prog Associate MGPO
71	Dr. Naveed Iqbal	Hydrologist
72	Muhammad Aslam	ICIMOD
73	Mr. Waqas Sherazi	Consultant MOHR
74	Mr. Sami Ullah Jan	DG Soil & Water Conservation KPK
75	Mr. Imran Saeed	Civil Soil Conservation
76	Ms. Akasha Kiran	Assistant Chief P&D

Synthesis of inception workshop outcomes

1. Purpose and overall outcome

The inception workshop translated the approved SAFER Pakistan project into an operational framework for the first year. It brought together the Ministry of Climate Change and Environmental Coordination (MoCC&EC), federal and provincial institutions, ICIMOD, UNICEF Pakistan, UN Women Pakistan and technical partners to review implementation arrangements, site-level priorities, safeguards, institutional responsibilities and sequencing across the six components.

The workshop confirmed that the approved project objective, six component outcomes and total Adaptation Fund financing remain unchanged. The main refinements concern implementation sequencing, site-level planning, use of existing systems, safeguards, institutional ownership, operation and maintenance (O&M), and the evidence required before major procurement or physical works.

Across the project, participants agreed that investments should proceed only where the technical need, institutional responsibility, safeguards and O&M arrangements are sufficiently clear. Existing government systems, infrastructure and community structures should be used or strengthened where they remain functional, rather than duplicated through parallel arrangements.

2. Main component outcomes

Component 1 - Cryosphere Disaster Risk Reduction

The workshop reinforced an end-to-end approach to cryosphere risk reduction, linking hazard information and monitoring with warning decisions, dissemination, preparedness, evacuation and community response. Existing GLOF-II, AKAH and government monitoring and early warning assets will be assessed before new equipment is procured, and each operational system will require clear warning responsibilities, communication arrangements and O&M ownership.

A revised site portfolio was proposed during the inception process: Kalash, Kalam, Bahrain, Rama, Birgal, Gupis, Ishkoman, Alchori, Shigar Fort and Raushan. Bahrain, Birgal, Alchori, Gupis and Rama are the current proposed priorities for EWS-to-early-action support.

The site revision is not yet final. At the Project Steering Committee meeting held in July 2026, it was recommended that MoCC&EC constitute a technical committee comprising PMD and NDMA to review and finalise the proposed Component 1 sites. No activities will commence at newly proposed sites until the committee has completed its review and the revised portfolio has subsequently received the required Adaptation Fund approval. Until that process is completed, the locations in the approved project proposal remain the formally approved sites.

Two supporting sub-activities under Component 1 Activity 1 were also identified: use of SAFER evidence to inform the Government of Pakistan's glacier protection and cryosphere resilience strategy work, and a focused technical exposure visit to Nepal to draw lessons from the 26 August 2026 cryosphere-related incident. These are not separate project outputs and will be taken forward only within the approved work plan, budget and government coordination arrangements.

Component 2 - Springshed Revival and Management

The inception process refined the broad proposal geography into a site-level spring portfolio comprising Barham, Gul Dheri, Jano Chamtalay, Ouch, Bandagai Talas, Timargara, two separate spring points at Nathia Gali, Banda Jaggian and Babuzai. Site-specific technical details will be confirmed before physical works.
The workshop agreed that recharge works should follow a diagnostic sequence. Each spring will first be characterised in terms of location, users, discharge, seasonality, water quality, land and water rights and the likely recharge area. Baseline monitoring and participatory hydrogeological assessment will then guide the type and location of recharge and source-protection measures. Local governance, benefit-sharing and O&M arrangements will be developed alongside the technical work.

Components 3-5 - Water supply, ecosystem-based adaptation and surface water conservation

For Components 3-5, the workshop emphasised technical assessment, feasibility, safeguards, design and O&M arrangements before major physical investment. Groundwater and water-supply interventions will be guided by mapping and site feasibility; constructed wetlands will proceed through site assessment, environmental and climate-risk analysis and design; and surface-water conservation sites will be ground-truthed and supported by detailed designs, BoQs and community management arrangements before major works.

Component 6 - Adaptive Capacities and Empowered Communities

Component 6 will link technical investments with institutional strengthening, knowledge management, policy engagement and community leadership. Year 1 priorities include clarifying institutional and data arrangements, assessing capacity needs, strengthening existing women and youth structures where appropriate, and ensuring that participation is assessed in terms of access, influence and benefit as well as attendance.

3. Cross-cutting implementation requirements

- Institutional ownership: each significant physical or digital investment should have a named institutional owner, clear data and maintenance responsibilities, and an agreed continuation or handover arrangement.
- Safeguards: relevant environmental and social screening, land and access arrangements, water rights, community safety and grievance pathways should be addressed before procurement or construction.
- Gender equality and social inclusion: project processes should consider direct access to information, participation in decisions, safe use of services and benefits for women, youth, people with disabilities and other vulnerable groups.
- O&M and recurrent finance: maintenance requirements, local technical capacity, spares and recurrent costs should be identified before commissioning or handover.
- Monitoring: the approved Results Framework remains the basis for formal reporting, complemented by operational evidence showing whether warning, water and community-management systems function as intended.

4. Year 1 direction

During the first year, implementation will focus on institutional focal points, site and asset verification, baseline and monitoring arrangements, technical assessment and design, safeguards, procurement preparation, community arrangements and selected works that meet the required readiness conditions. The first quarterly implementation review should identify any issues requiring Project Steering Committee attention and confirm whether individual activities are ready to move from assessment and design into procurement or physical implementation.

Inception workshop decisions and follow-up actions

Issue discussed	Decision / implementation refinement	Responsible / timing
Project governance and coordination	Implementation will operate through the PSC, PMT, Executing Entity focal points and relevant federal, provincial and district institutions, using existing government systems where functional.	PMT and Executing Entities: confirm operational focal points and reporting arrangements during Year 1.
Cryosphere monitoring and EWS	Review and integrate existing GLOF-II, AKAH and government systems before new equipment is specified. PMD will provide technical leadership; proposed new sites remain subject to field verification and required approvals.	ICIMOD, PMD, NDMA and provincial disaster-management authorities: complete readiness and site verification before procurement or physical works.
Year 1 sequencing	Site verification, feasibility, safeguards, institutional ownership and O&M arrangements will precede major physical works.	Each Executing Entity: complete applicable prerequisites before procurement, construction or installation.

Issue discussed	Decision / implementation refinement	Responsible / timing
Monitoring and results	The approved Results Framework remains controlling. Verified baseline values and operational service measures will be used for implementation management without silently revising approved indicators or targets.	PMT/MEL and Executing Entities: verify indicator definitions and baselines before the first Project Performance Report.
Safeguards and inclusion	ESMP and Gender Action Plan requirements apply across all components, including site-specific screening and monitoring of meaningful participation, leadership, access and benefits.	ICIMOD, UNICEF and UN Women: maintain component safeguards/GESI evidence throughout implementation.

Annex 2. Initial Project Risk Register

This register identifies the principal inception-stage risks, their current validation status, management responses and accountable owners. It will be reviewed during each quarterly implementation review and updated when risks, mitigation measures or implementation conditions change. Critical new risks will be escalated through the Project Management Team and Project Steering Committee, as appropriate, and current risk status and mitigation effectiveness will be reported through the annual Project Performance Report.

Risk	Likelihood	Impact	Inherent risk	Possible effect Impacts	Mitigation measures	Residual Risks	Primary owner	Current status / validation
Access, security, NOC or other permissions	H	M	H	Fieldwork, geospatial-data collection or construction is delayed.	Map access and security constraints early; begin NOC, geospatial-data, land and other permissions in advance; use local partners; retain alternative sequencing; document agreements.	M	EE / district partner	To be validated by the responsible owner at the first quarterly implementation review.
Floods, GLOFs, drought and seasonality	H	M	H	Disruption or damage to field activities and assets.	Use seasonal information, safe siting, flexible work plans and contingency arrangements.	M	EE / technical partner	To be validated by the responsible owner at the first quarterly implementation review.

Risk	Likelihood	Impact	Inherent risk	Possible effect Impacts	Mitigation measures	Residual Risks	Primary owner	Current status / validation
Duplication with existing investment	M	M	M	Poor value for money and unclear ownership.	Maintain the complementarity and asset matrix; verify functionality before procurement.	L	PMT / EE	To be validated by the responsible owner at the first quarterly implementation review.
Weak institutional ownership	H	H	H	Systems or facilities are not maintained or used.	Confirm institutional home, focal points, data, O&M and handover arrangements in Year 1.	M	EE / government lead	To be validated by the responsible owner at the first quarterly implementation review.
Procurement before design maturity	M	M	M	Wrong equipment, rework or delay.	Use verified site evidence and approved specifications or BoQs before award.	L	EE / procurement lead	To be validated by the responsible owner at the first quarterly implementation review.
Water rights or community conflict	M	H	H	Delay, inequitable benefits or grievances.	Document rights and benefit-sharing; apply the GRM; secure district support before works.	M	District partner / EE	To be validated by the responsible owner at the first quarterly implementation review.

Risk	Likelihood	Impact	Inherent risk	Possible effect Impacts	Mitigation measures	Residual Risks	Primary owner	Current status / validation
Safeguarding or exclusion	M	H	H	Women, youth or vulnerable groups do not benefit or face harm.	Use safe participation, disaggregated monitoring, accessible communication, confidential feedback and referral mechanisms.	M	PMT / EEs / partners	To be validated by the responsible owner at the first quarterly implementation review.
Insufficient recurrent finance	H	H	H	Assets fail after project support ends.	Identify recurrent costs, spares, technicians and the budget route before commissioning or handover.	M	Government owner / EE	To be validated by the responsible owner at the first quarterly implementation review.
Data fragmentation or unclear custody	M	M	M	Warnings, monitoring and learning are not sustained.	Agree data standards, access, interoperability, custody and long-term hosting before system launch.	L	PMT / EE / government custodian	To be validated by the responsible owner at the first quarterly implementation review.

Risk	Likelihood	Impact	Inherent risk	Possible effect Impacts	Mitigation measures	Residual Risks	Primary owner	Current status / validation
Coherence across SAFER outcomes	M	M	M	Component 6 activities implemented separately from Components 1-5; different timelines or site selection limit integration.	Establish systematic planning between Component 6 and Components 1-5; align sites, sequencing and stakeholder engagement; use technical-component evidence to inform Component 6 reviews and knowledge products.	L	PMT / EEs	To be validated by the responsible owner at the first quarterly implementation review.
Evaluation-design contamination (where the phase-in comparison design is retained)	M	H	H	Intervention in Batch 2 sites before the midline could weaken the agreed evaluation design and attribution of results.	Confirm Batch 1 and Batch 2 site lists and screen the Year 1 work plan before site-level activities commence; document any approved departure from the evaluation design.	L	PMT/MEL function and Executing Entity	To be confirmed before site-level Year 1 interventions.

Corporate risk policies and generic institutional control descriptions are not repeated in this report. They remain applicable through the relevant institutional systems and agreements.

Annex 3. ESMP Update and Safeguards Action Matrix

The approved project ESMP remains the controlling safeguards instrument. Table A3.1 operationalises it for the Category B outputs and other Year 1 physical works by identifying the site/activity, screening and clearance requirements, key mitigation measures, responsible

entity, timing and status/evidence. Site-specific screening must be completed before implementation. Where screening identifies additional or changed risks, the ESMP will be updated and the applicable national and Adaptation Fund requirements will be followed. Approved ESMP reference material remains reproduced at Annex 4.3.

Table A3.1. Year 1 safeguards action matrix

Output	Year 1 sites / activities	Screening and clearances before works	Key mitigation (approved ESMP)	Responsible	Timing (Annex 8)	Status / evidence
2.2 Recharge measures	10 spring points in Swat, Lower Dir, Abbottabad and Mardan (Mardan pending AF clearance). Year 1: inventory, monitoring, hydrogeological assessment, design. No works.	ESP screening per site; KP-EPA requirement (IEE or checklist) confirmed; land and water-use agreements; site grievance arrangements	Monitor spring discharge and water quality; Manage triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 (as numbered in the approved ESMP); chance-find procedure	ICIMOD (C2 lead and safeguards focal point) with KP DG Soil and Water Conservation	Screening and safeguards documentation Q3–Q4 (C2 activity 6). Works from Year 2.	Pending / to be updated in the live safeguards register Evidence: screening forms, EPA correspondence, signed agreements
3.2 Water supply	Solar-powered water facilities	UNICEF ESS and AF ESP screening	Community training on water-quality and	UNICEF with	Screening and designs Q2–Q3 (C3 activities 4–	Pending / to be updated in the live

Output	Year 1 sites / activities	Screening and clearances before works	Key mitigation (approved ESMP)	Responsible	Timing (Annex 8)	Status / evidence
infrastructure	and climate-resilient handpumps at priority sites (refined tehsils pending AF clearance)	per site; KP-EPA IEE or Sindh EPA checklist and environmental approval; source water-quality test; land and access agreements	quantity monitoring; efficient water use; grievance mechanism; Manage triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 (as numbered in the approved ESMP); chance-find procedure	PHED and LG&RDD	5). Construction Q4 only after screening, EPA approval and, where needed, AF clearance (activity 8).	safeguards register Evidence: screening forms, EPA approvals
4.2 Constructed wetlands	8 sites in Charsadda, Nowshera, Swat, Khairpur and Sukkur (approved portfolio)	Site-specific feasibility and E&S assessment ; KP-EPA IEE or Sindh EPA checklist; land and ownership confirmation	Community-based monitoring of residual effects; O&M ownership agreed before commissioning; Manage triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 (as numbered in the approved ESMP);	UNICEF with the relevant provincial and district technical departments	Assessments Q2–Q3 (C4 activities 3–4); procurement initiated Q4 (activity 7). Construction from Year 2.	Pending / to be updated in the live safeguards register Evidence: assessment reports, EPA submissions

Output	Year 1 sites / activities	Screening and clearances before works	Key mitigation (approved ESMP)	Responsible	Timing (Annex 8)	Status / evidence
			chance-find procedure			
5.2 Waterways and ponds	15 sites in Sanghar, Tharparkar and Umerkot (Nagarparkar pending AF clearance); automatic water-quality monitoring systems	Ground-truthing and E&S screening per site; Sindh EPA checklist; community water-use agreements	Community training on water quantity and quality to protect human and livestock health; pond management committees with O&M plans; Manage triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 (as numbered in the approved ESMP); chance-find procedure	UNICEF with Government of Sindh	Screening early in Year 1 (C5 activity 1). Restoration from Q3 (activity 4) only at screened and approved or cleared sites.	Pending / to be updated in the live safeguards register Evidence: screening records, EPA checklists, committee records
Other physical works (1.2 EWS installation; 3.1 recharge facilities)	EWS at the five priority valleys (new sites pending AF clearance); recharge sites under Output 3.1	ESP screening per site; land, access, power and equipment-custody agreements	Measures from the approved ESMP applicable to each activity	ICIMOD (1.2); UNICEF (3.1)	Before installation or construction	Pending / to be updated in the live safeguards register

Annex 4. Approved Project Risk Log and Institutional Safeguard Reference

This annex reproduces reference material from the approved project document that remains in effect and complements the inception-stage risk register at Section 7.4.

A4.1 Approved Project Risk Log (from the approved project document)

Major Risks	Risk Rating	Mitigation Measures
Fragmented partnerships: Past independent practices of government partners might impede establishing collaborative relationships, delaying effective cooperation.	I: 3 O: 2	The project design ensured establishment of clear communication channels, shared goals, and cooperative strategies among government partners to overcome past independent practices. An inclusive Project Steering Committee (PSC) is designed which include key officials from Federal Government, Provincial Government, implementing entity and executing entities including UNICEF and UN Women.
Sustainability challenges: There's a risk of reverting to unsustainable practices by land users and local communities once the project concludes.	I: 4 O: 1	All five groundwork components of the project have strong community engagement, alongside capacity building at various level is ensured. Component – 6 focuses on institutional strengthening both for policy and regulation as well as mobilisation and behavioural change at community level for long-term support systems to ensure continued adoption of sustainable practices post-project. (Section II/J)
Limited awareness and preparedness: Communities and government staff may struggle to adopt new technologies and practices due to inadequate awareness and preparation.	I: 2 O: 1	A large part of activities focuses on community engagement programmes, workshops, and hands-on training for new technologies and practices to enhance awareness and readiness. Executing agencies has well established field presence and close working relationship with the government and communities
Community conflicts: Conflicts between communities over disaster risk reduction approaches, water management, planning, and land use as well as grievances over resources could emerge, impacting project objectives.	I: 2 O: 2	The project implementation will focus on fostering participatory decision- making, employing conflict resolution techniques (conflict-sensitivity and Do- No-Harm approaches), and promote shared understanding through community consultations. These notions are integrated into all capacity building activities and engagement with the government and communities.
Climate-related disruptions: Extreme weather events like	I: 3 O: 3	The project focuses on building climate-resilient structures, establish early warning systems, and have

Major Risks	Risk Rating	Mitigation Measures
floods could halt project implementation for up to six months, compounded by reduced government attention due to reprioritisation towards disaster recovery.		backup plans to mitigate the impact of extreme weather events on project timelines.
Security concerns: Political and social instability in the field jeopardise the safety of our staff, disrupting operations and hindering planned activities.	I: 3 O: 2	Implementation of strict security protocols and risk assessment measures will be ensured. Also providing security awareness, employ local security expertise, and liaise closely with authorities to ensure staff safety while maintaining operational continuity.
Terrorism threats: Both external and internal threats from terrorism activities in neighbouring Afghanistan pose security risks in Pakistan.	I: 4 O: 1	The Project Management Team will collaborate with security agencies and adopt strict security measures. In addition, conducting risk assessments, establishing emergency response plans, and coordinate with local law enforcement will mitigate and respond effectively to potential threats.

A4.2 ICIMOD Institutional and Fiduciary Risk Safeguards

Standard fiduciary and organisational risk safeguards maintained by ICIMOD as Adaptation Fund Regional Implementing Entity, as set out in the approved project document.

Major Risks	Risk Rating	Mitigation Measures
Internal control risk	I (H), O (L)	The internal control processes that have been developed for project operations and administrative functions are tight and robust. ICIMOD's internal control systems are regularly assessed and have been approved by donors. To maintain this status, we continuously monitor and upgrade our systems using the automated enterprise resource planning system (ERP) and other internal administrative processes. An internal audit function is in place for regular auditing of accounting.
Partners capacity in financial management, M&E and gender may pose risk to ICIMOD	I (H), O (L)	ICIMOD undertakes capacity gap assessments of key implementing partners and conducts various capacity building activities through technical trainings including other areas of gender mainstreaming, financial management capacity strengthening.

Major Risks	Risk Rating	Mitigation Measures
Financial management information for decision-making	I (H), O (L)	Financial information is produced for management in a monthly management report. All financial transactions are captured and recorded consistently across all programmes and projects.
Internal audit function	I (H), O (L)	Our internal auditor is an outsourced accounting firm independent of the management. The internal audit unit mainly covers the review of internal control, ensures compliance with laws and regulations in all respect, assists management in the detection of fraud and error, and coordinates with the external audit function. Internal auditors issue their report to the Director General. The findings of the internal audit are agreed and acted upon.
Fraud and corruption may hamper the institutional performance at any level	I (H), O (L)	ICIMOD has a zero-tolerance policy on fraud and corruption. The policy is reflected in all accounting procedures and reporting processes both internally and externally. All executing agencies have well established fraud mitigation measures and procurement policies.
Monitoring and evaluation processes and systems	I (H), O (L)	ICIMOD has an approved MEL Framework and Plan that describes our monitoring and evaluation policies, procedures, and guidelines. We have a trimester review process for institutional and programmatic performance. Through this process, we monitor our progress, risks, and lessons. We do both internal and external reviews of our programmes and initiatives. We do impact assessments using both qualitative and quantitative rigorous methodologies.
IT System (Financial, Operational and HR)	I (H), O (L)	ICIMOD has a robust IT system with Microsoft Dynamics Navision 2013 R2 for financial and HR systems. The systems are local with the server hosted on-site.
Financial data storage and security risks	I (H), O (L)	We use a FortiGate 200B as an antivirus firewall which secures the internal network from outside intrusions. ISCSI storage with 100TB capacity is used for data storage and backup. As a part of the Business Continuity Plan, an offsite backup site at Godavari with another 100 TB data storage device is connected to the main office via fibre optic cable and is replicated with the backup device in the main office. As part of the ISMS implementation, we are coming up with a separate IT policy as part of the Admin and Finance Policy.

Major Risks	Risk Rating	Mitigation Measures
Effective procurement systems and processes	I (H), O (L)	The effective procurement systems and processes are in place which just provide clear and efficient guidelines in execution of the procurement of goods and services for different threshold values. Any procurement with value from US$500-10,000 is carried out by obtaining at least three written competitive quotations from capable suppliers while the procurement with value more than US$10,000 -30,000 is executed through sealed bids competition from competent and qualified suppliers in the market. Any proposed procurement exceeding US$30,000 is carried forward through the Capital Expenditure Committee headed by the Director General.
Agreement instruments in dealing with partners	I (L), O (L)	The Letter of Agreement (LoA) provides the basis for the funding agreements with the implementing partners and can be tracked based on their deliverables.
Transparency commitments for financial information	I (H), O (L)	ICIMOD's annual audited financial statements are published as part of the annual report, which is publicly available for distribution and posted on ICIMOD's website.
Fraud and corruption: Malpractice on the part of internal or external actors hampers institutional performance, leading to trust issues with funding agencies.	I (H), O (L)	Given the challenges in the region, we will remain vigilant in terms of monitoring, reporting and financial management at various levels. We will also make our due diligence process more robust to detect and report well in time and even at any stage if such challenges arise.

A4.3 Adaptation Fund Environmental and Social Policy (Category B) Measures

Output-specific measures to avoid, manage or mitigate environmental and social risks, as approved under the project's Category B classification, referenced in Section 7.2.

Project Outputs under Category B	Measures to Avoid, Manage or Mitigate Risks
Overall Project	A firm commitment to compliance with local laws will be maintained, ensuring adherence to all relevant national and local environmental and social regulations, and obtaining necessary Environmental Approvals for the activities under Outputs 2.2, 3.2, 4.2 and 5.2; thus, establishing a robust legal foundation for the project. The project will develop the IEEs or checklists as required by the respective EPAs in Khyber Pakhtunkhwa and Sindh.

Project Outputs under Category B	Measures to Avoid, Manage or Mitigate Risks
	The project will make sure that the beneficiary communities are actively engaged in planning, implementation and monitoring of the activities to ensure ownership and sustainability. The project will comply with the ESP principles throughout the implementation period and will continuously monitor compliance of all but specifically the triggered ones, reporting regularly and be ready for any course correction required. An activity-specific ESIA and mitigation planning will be conducted for USPs, as elaborated in Section III/C.1. The compliance of ESP and implementation ESMP will be particularly evaluated through both Mid-Term Review and Terminal Evaluation.
Output 2.2: Recharge measures (for improved springshed practices, land use planning, and bioengineering) co-developed and implemented.	The planned recharge measures include recharge pits and trenches, absorption terraces and small ponds, and vegetative check dams and contour trenches. Though physical in nature, these activities are part of the nature-based solutions; hence do not pose any adverse environmental impact. Nevertheless, implementing ESMP, the project will pay special attention to the compliance of ESP and statutory requirement of KP-EPA. The water quantity and quality will be regularly monitored for recording success of the interventions and to avoid unwanted results. The triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 will be fully complied with and reported for compliance, and any chance find issues.
Output 3.2: Climate- smart and resilient water supply infrastructure established in selected sites, along with contextually relevant management structures with adequate capacity for operation and maintenance of the community infrastructure.	The core objective of the output is to establish a green climate-resilient community water supply infrastructure, encompassing the construction of 100 solar-powered water points and 60 lead line hand pumps across selected sites. However, these activities may pose environmental and social risks which have been pointed out in ESMP and will be mitigated accordingly. The beneficiary communities will be trained on monitoring the water quality and quantity as well as on circular approach to make efficient use of water resources. Special attention will be paid to comply with statutory requirement, the requisite IEEs will be submitted to KP-EPA, and checklists to Sindh EPA for getting Environmental Approval. The triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 will be fully complied with and reported for compliance, and any chance find issues.
Output 4.2: NbS for sewage treatment demonstrated through constructed wetlands along	The output will result in eight constructed wetlands as NbS for decentralised sewage treatment, ensuring that the upcoming project steadfastly adheres to the highest standards. There are anticipated risks

Project Outputs under Category B	Measures to Avoid, Manage or Mitigate Risks
with proper management structures and adequate capacity for operation and maintenance of wetlands.	of adverse environmental and social impacts; hence, the ESMP will be strictly implemented, regularly monitored and reported accordingly. In compliance with statutory requirements, requisite IEEs will be submitted to KP-EPA, and checklists to Sindh EPA for getting Environmental Approval. The community-based monitoring will ensure that there are no residual effects of the constructed wetlands. The triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 will be fully complied with and reported for compliance, and any chance find issues.
Output 5.2: 15 selected waterways/ponds in Sindh Province restored/rehabilitated, including installation of water quality monitoring systems and establishing and strengthening operation, maintenance, and management structures.	The primary focus is rehabilitation and restoration of 15 designated waterways and ponds in Sindh Province, accompanied by the prospective installation of automatic water quality monitoring systems. This activity may pose several environmental and social risks which will need to be mitigated; hence, the ESMP will be implemented, monitored and reported accordingly. The communities will be trained on monitoring quantity and quality of water to avoid any unwanted impacts on human and livestock health. In compliance with statutory requirements, requisite checklists will be developed and submitted to Sindh EPA for getting Environmental Approval. The triggered ESP principles 3, 4, 5, 6, 7, 12, 14 and 15 will be fully complied with and reported for compliance, and any chance find issues.

Annex 5. Summary of Inception refinements

Area	Inception refinement	Required action
Project design	No change to the approved objective, six outcomes or USD 10 million total financing.	Retain approved project document as controlling instrument.
Operational start reference	7 September 2026 is used as the Year 1 operational reference in this report.	Confirm consistency with formal Adaptation Fund project records.
Component 1 sites	Working portfolio refined to Kalash, Kalam, Bahrain, Rama, Birgal, Gupis, Ishkoman, Raushan and Alchori–Shigar Fort.	Verify sites and process any required formal clearance before physical implementation.
Component 1 EWS priorities	Bahrain, Birgal, Alchori–Shigar, Gupis and Rama identified for initial readiness and phased EWS support.	Complete technical, institutional, safeguard and procurement readiness steps.
Component 2 sites	Working portfolio defined as ten spring points in Swat, Lower Dir, Abbottabad and Mardan.	Verify registry data, rights and recharge areas; obtain any required clearance for Mardan.
Component 3 locations	Approved district portfolio retained, with tehsil-level refinement to Jehangira, Shah Bandar, Sujawal, Chachro and Nagarparkar following government review.	Complete site verification, safeguards and technical approval before works.
Component 4 sites	Approved district portfolio retained; eight intervention sites to be selected through integrated technical, climate and safeguard screening.	Confirm the eight sites and their ownership and O&M arrangements.
Component 5 locations	Approved districts retained; Nagarparkar prioritized within Tharparkar following government review.	Validate the 15 sites and complete feasibility, safeguards and design records.
Component 6 platform	The proposed portal will be implemented through a MoCC&EC-approved digital platform.	Clean Green Pakistan Index (CGPI) portal referenced in Output 6.2 is updated to"MoCC&EC-approved digital platform" in agreement with MoCC&EC.

Area	Inception refinement	Required action
EWS governance	NDMA and PMD added PSC oversight; NDMA guides site selection and PMD leads specifications and technical custodianship.	Reflect in updated PSC membership and component procedures.
Safeguards and commissioning	Procurement and operational status linked to evidence, safeguards, testing, drills, corrective actions and O&M.	Apply as a readiness gate in work plans and procurement records.
Budget	No change to approved component totals in this draft.	Complete output-level Year 1 phasing after component work-plan consolidation.

Annex 6. Baseline-informed Monitoring Matrix

This matrix reproduces the approved Results Framework (approved project document, Table 12) and records verified baseline values from the SAFER Pakistan Baseline Assessment (Version 3, February 2026) for all six components. Indicators, mid-term targets and final targets remain as approved; means of verification are specified for operational use. Baseline values describe conditions in the target communities at the time of the baseline survey. No target adjustment suggested during the baseline or inception process is adopted in this report. Where a verified baseline equals or exceeds an approved target, the responsible Executing Entity will confirm the indicator definition and whether the target is cumulative or project-attributable before the first Project Performance Report. Any formal revision will follow the applicable Adaptation Fund post-approval process.

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Impact: Reduced climate vulnerability and increased adaptive capacity of the population residing in Pakistan's Indus Basin through reduced climate-induced cryosphere multi-hazard risks, resilient land use planning, (3) increased access to groundwater, (4) climate adaptive WASH infrastructure, (5) reduced pollution levels and water-wastage, (6) improved climate adaptive policy practice & community empowerment.	Number of direct and indirect beneficiaries with improved access to safe water and climate-resilient WASH services.	HH baseline, midline and endline surveys, beneficiary database, Independent final evaluation	Direct: 105,600 (F: 36,450); Indirect: 162,300 (F: 53,600)	Direct: 181,160 (F: 59,783); Indirect: 271,740 (F: 89,674)	Direct: 452,900 (F: 149,457); Indirect: 679,350 (F: 224,186)

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Impact: Reduced climate vulnerability and increased adaptive capacity of the population residing in Pakistan's Indus Basin through reduced climate-induced cryosphere multi-hazard risks, resilient land use planning, (3) increased access to groundwater, (4) climate adaptive WASH infrastructure, (5) reduced pollution levels and water-wastage, (6) improved climate adaptive policy practice & community empowerment.	Number of early warning systems (EWS) established to benefit communities vulnerable to cryosphere hazards.	Installation complete reports, DDMA acceptance records, PMD records, field verification reports	3 informal EWS; no formalized EWS	3 EWS	8 EWS

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Impact: Reduced climate vulnerability and increased adaptive capacity of the population residing in Pakistan's Indus Basin through reduced climate-induced cryosphere multi-hazard risks, resilient land use planning, (3) increased access to groundwater, (4) climate adaptive WASH infrastructure, (5) reduced pollution levels and water-wastage, (6) improved climate adaptive policy practice & community empowerment.	Number of climate-resilient WASH assets produced, developed, enhanced, or strengthened to mitigate the impacts of climate change.	Asset registry; infrastructure completion reports, site verification report, GPS tagged infrastructure database (as available)	5 managed springsheds; 1 groundwater recharge facility; 8 solar-powered water facilities; 3 climate-resilient handpumps; 1 constructed wetland; no formalized pond / waterway quality monitoring.	4 managed springsheds; 2 recharge facilities; 40 solar-powered facilities; 25 climate-resilient handpumps; 3 wetlands; 5 restored waterways/ponds with water quality monitoring.	10 managed springsheds; 6 recharge facilities; 100 solar-powered facilities; 60 climate-resilient handpumps; 8 wetlands; 15 restored waterways/ponds with water quality monitoring.
Outcome 1: Reduced climate-induced cryosphere multi-hazard risk.	Number of people reporting reduced vulnerability to cryosphere multi-hazard risk due to forewarning (sex/age disaggregated).	HH baseline, midline & endline surveys. KAP Survey, Beneficiary perception survey	19,860 (F: 6,420)	28,200 (F: 9,305)	70,500 (F: 23,265)

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 1.1: Integrated cryosphere risk mapping through community engagement.	Number of target communities with gender responsive risk mapping/zoning documents.	Approved community risk maps, hazard zoning documents, GIS database, local government endorsement records	2	3	8
Output 1.2: Community-based monitoring and EWS established.	Number of targeted communities with established CB-MEWS monitoring systems.	Community based EWS operational records, DDMA verification reports, field monitoring reports	3	3	8
	Number of women and youth in Community Watch Groups and networks.	Project monitoring reports, committee records, attendance sheets.	Women: 9; Youth: 14	Women: 10; Youth: 10	Women: 40; Youth: 24
Output 1.3: Strengthened resilience to cryosphere-related risks	Number of community members who report strengthened resilience to cryosphere-related risks (sex/age disaggregated).	HH resilience survey, Beneficiary perception survey	18,900 (F: 6,120)	28,200 (F: 9,305)	70,500 (F: 23,265)
	Number of targeted communities with disaster response SOPs and CB-MEWS that consider gender-specific risks and procedures.	Approved SOP documents, DDMA validation records	2	3	8

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Outcome 2: Increased access to spring water in climate adaptive and gender inclusive manner.	Number of people with access to safe water from springs (sex/age disaggregated).	Baseline, midline & endline reports. Beneficiary database	18,900 (F: 6,200)	54,000 (F: 17,820)	135,000 (F: 44,550)
Output 2.1: A comprehensive web based information management system of springsheds and springs prepared for Malakand and Hazara divisions.	Comprehensive web-based database of springsheds and springs in project areas (gender & age sensitive).	Functional web platform, system usage evidence/report, database verification	No database	Database developed	One web-based information system functional.
Output 2.2: Recharge measures (for improved springshed practices, land use planning, and bioengineering) co-developed and implemented.	Percentage increase in quantity of water from identified springs.	Spring discharge measurements, hydrological monitoring records	Discharge 32–45 L/min; 28–32% decline over decade.	+15%	+40% (vs baseline).
	Percentage improvement in quality of water from identified springs.	Water-quality tests. Certified lab reports	41% safe (baseline)	30% improvement	70% of samples meeting standards.
	Number of women and youth who participated in co-development and implementation of recharge measures.	Project monitoring report.	Women: 18; Youth: 33	Women: 10; Youth: 20	Women: 30; Youth: 50

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 2.3: Local governance framework for springshed established with enhanced institutional capacity for efficient water resource management.	Number of target communities with local governance framework for springshed management.	Approved governance framework, meeting minutes, institutional documents/records	2	3	10
	Number of institutional capacity-building interventions in targeted communities that strengthened gender-transformative water management and climate change adaptation.	Training reports, pre/post assessments	1	2	5
Outcome 3: Improved climate-resilient management of groundwater and community water supply services in vulnerable areas.	Number of community institutions that have strengthened capacities for groundwater management and have at least 33% of women and youth participation. Number of people benefiting from access to safe ground water supply sources in target areas (gender and age disaggregated).	Project baseline, midline and endline reports Project M&E reports,	3 Village WASH Committees (2 effectively active) 39,400 (F: 12,800)	4–5 active VWCs 78,000 (F: 25,740)	6 active, inclusive VWCs 195,000 (F: 64,350)

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 3.1: Groundwater mapping and groundwater recharge facilities completed in selected water-scarce locations in the middle basin, including establishing/ strengthening operation, maintenance, and management structures.	Comprehensive web-based database of groundwater resource in the project areas that considers the gender and age-differentiated needs and challenges of the communities. Number of identified water recharge facilities completed. Number of community structures established/strengthened for operation and management of groundwater recharge facilities that have at least 33% of women and youth participation.	Project monitoring report	No centralized digital database 1 2 VWCs	Database developed 2 2 VWCs	One web based information system 6 6 VWCs

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 3.2: Climate-smart and resilient water supply infrastructure established in selected sites, along with contextually relevant management structures with adequate capacity for operation and maintenance of the community infrastructure.	Number of households with access to climate-resilient and sustainably managed water supply services (disaggregated by women-headed households). Number of target water facilities with functional community water management structures that have at least 33% of women and youth participation. Number of solar-powered water facilities constructed/upgraded. Number of climate-resilient handpumps installed	Project monitoring report Project baseline, midline and endline reports	8,450 HHs 31 VWCs 14 9	13,000 HHs 65 VWCs 40 25	32,500 HHs 160 VWCs 100 60
Outcome 4: WASH infrastructure in the targeted communities in the Middle Indus Basin is more adaptive to climate change-induced shocks with up scaling of the contextually appropriate NbS.	Number of people benefiting from climate resilient wash infrastructure. Percentage of wastewater treated through NbS.	Project baseline, midline and endline reports Project monitoring report	6,380 (F: 2,050) 6%	8,960 (F: 2,957) 10%	22,400 (F: 7,392) 30%

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 4.1: Targeted intervention sites identified for evidence-based, climate adaptive and focused WASH interventions.	Number of intervention sites identified and assessed. Number of women and youth participated in the assessments and analyses ensuring gender-responsive and transformative WASH interventions.	Project monitoring report	4 Women: 16; Youth: 21	3 (priority clusters for pilot) Women: 10; Youth: 10	8 Women: 24; Youth: 32
Output 4.2: NbS for sewage treatment demonstrated through constructed wetlands along with proper management structures and adequate capacity for operation and maintenance of wetlands.	Number of constructed wetlands with proper management regime for the operation and maintenance developed and maintained. Number of women participating in management of constructed wetlands (age disaggregated).	Project monitoring report Project baseline, midline and endline reports	1 wetland Women: 7; Youth: 6	3 wetlands Women: 10; Youth: 10	8 wetlands Women: 24; Youth: 32
Outcome 5: Community and institutional capacity to reduce surface water waste and increase its storage for productive use is increased, allowing communities to adapt to climate-induced shocks.	Number of surface water bodies with improved water quality parameters Number of people benefiting from reduced surface water waste and increased storage for it in target areas (gender and age disaggregated).	Project monitoring report Project baseline, midline and endline reports	2 7,800 (F: 2,600)	3 12,000 (F: 3,960)	8 30,000 (F: 9,900)

Intended Results	Indicators / Measures	Means of Verification	Baseline Values	Mid-term Targets	Final Targets
Output 5.1: Government of Sindh supported in systematically prioritising 15 natural waterways and community water ponds to address water storage and wastage issues.	Study report on natural waterways and community ponds that considers the gender- and age differentiate needs and challenges of the communities Number of women and youth participating in communal pond management committees and management and operations.	Project monitoring report	No study; 11 sites preliminarily mapped. Women: 12; Youth: 19	Study reports for 10 sites Women: 10; Youth: 10	Study reports for 15 sites Women: 30; Youth: 30
Output 5.2: 15 selected waterways/ponds in Sindh Province restored/rehabilitated, including installation of water quality monitoring systems and establishing and strengthening operation, maintenance, and management structures.	Number of fully managed climate-resilient water storage structures in the project areas. Number of community management committees established and strengthened with at least 33% of women and youth participation	Project baseline, midline and endline reports	3 semi-functional structures 5 committees	5 waterways/ponds 5 active	15 waterways/ponds 15 active

Outcome 6: Improved knowledge and practices of communities and policymakers on climate change adaptation and climate risk reduction.	Number of community members aware of climate risks (gender and age disaggregated). Number of community members equipped with knowledge on adaptative and gender-transformative management of water resources (gender and age disaggregated). Number of targeted communities where at least 33% of the beneficiaries of capacity and knowledge-building interventions were women. Number of women in coordination platforms, decision-making bodies and different structures related to community level water management.	Project baseline, midline and endline reports KAP survey report	64,200 (F: 20,800) 25,500 (F: 8,700) 4 27	90,580 (F: 29,891) 45,290 (F: 14,946) 5 20	226,450 (F: 74,729) 113,225 (F: 37,364) 20 100

Output 6.1: National and provincial capacities strengthened to apply innovative social and technological tools for establishing and enforcing human-centred and gender-transformative systems of climate change adaptation and accelerating the progress towards management of Indus water resources.	Number of relevant, local institutions that receive technical training in innovative social and technological tools for climate change adaptation. Number of people trained who report increased capacity and skills on gender-transformative approaches and adaptive capacities.	Project monitoring report	3 140(F: 46)	5 (better to increase at this stage) 200(F:65)	15 (cumulative) 500(F:165)
Output 6.2: National and provincial stakeholders have access to strengthened evidence-based data and knowledge for informed decision-making and implementation of climate adaptation and mitigation that foster collaboration across sectors.	Number of knowledge products accessed and used by policy makers, community leaders and others (guidelines, practical briefs, media articles) relating to climate change and WASH. Number people participating in spaces and platforms for sharing and exchanging of knowledge on climate adaptation practices (gender and age disaggregated, at least 50% women and youth).	Project monitoring report	6 2150	5(new) 3000	20(cumulative) 10000

Output 6.3: Youth and women's leadership as well as community-led adaptation solutions strengthened in climate action through awareness raising and behavioural change campaigns.	Number of community members participating in awareness building and behaviour change campaigns to promote the uptake of new adaptation solutions (gender and age disaggregated, at least 50% women and youth). Number of stakeholders reached through the campaigns and activities that foster social cohesion and understanding of the climate change and its gendered and human security implications.	Project baseline, midline and endline reports Project monitoring reports	420 31	500 20(per year/event series)	1640 50 (cumulative)

Project Alignment with the Results Framework of the Adaptation Fund (Update alignment in line with AF's Revised SRF)

Alignment of Project Results with the Fund Outcomes

Project Objectives/ Outcome	Project Objective Indicator(s)	Adaptation Fund Outcome	Adaptation Fund Outcome Indicator	Grant Amount (US$)
Impact: Reduced climate vulnerability and increased adaptive capacity of the population residing in Pakistan's Indus Basin to the impacts of climate change.	Number of direct and indirect beneficiaries with improved access to safe water and climate-resilient WASH services.	**Impact:** Increased resiliency and reduced vulnerability at the community, national and regional levels to climate variability and change.	**Core Indicator:** People supported to strengthen their climate resilience (number of beneficiaries, disaggregated by direct/indirect, sex and vulnerable groups).	10,000,000
Outcome 1: Reduced climate-induced cryosphere multi-hazard risk.	Number of people reporting reduced vulnerability to cryosphere multi-hazard risk due to forewarning.	**Outcome 1:** Reduced exposure to climate-related hazards and threats.	**Indicator 1:** People using climate-related threat and hazard information.	1,858,159
Outcome 2: Increased access to spring water in a climate-adaptive and gender-inclusive manner.	Number of people with access to safe water from springs.	**Outcome 4:** Increased adaptive capacity within sector services and infrastructure assets.	**Core Indicator 4:** Physical assets improved or constructed to withstand climate variability and change. *(The project should also report against Output Indicator 4.1: Development sector services strengthened to respond to climate variability and change.)*	998,526
Outcome 3: Improved climate-resilient management of groundwater and	Number of people benefiting from access to safe groundwater supply sources.	**Outcome 4:** Increased adaptive capacity within sector services and infrastructure assets.	**Indicator 4.1:** Development sector services strengthened to respond to climate variability and change.	2,308,000

community water supply services.			*(Core Indicator 4 on resilient physical assets is also applicable.)*	
Outcome 6: Improved knowledge and practices of communities and policymakers on climate change adaptation.	Number of community members equipped with knowledge on adaptive and gender-transformative management of water resources.	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction.	**Indicator 3A:** People with strengthened awareness of climate change risks and how to better address them. *(If we measure actual behaviour change or adoption of adaptation practices, Indicator 3B: People implementing new or improved adaptation actions would also be appropriate.)*	1,681,000

Alignment of Project Results with the Fund Outputs

Project Outcome(s) / SAFER Outputs	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (US$)**
Output 1.1: Integrated cryosphere risk mapping through community engagement.	1. Number of target communities with gender responsive risk mapping and zoning documents. (Baseline: 2. Final Target: 8)	Output 1.1: Risk and vulnerability assessments conducted and updated.	1.1. Number of climate risk and vulnerability assessments (CRVAs) conducted or updated.	432,926
Output 1.2: Community-based monitoring and early warning systems established.	1. Number of targeted communities with established CB-MEWS monitoring systems. (Baseline: 3. Final Target: 8)	Output 1.2: Targeted population groups covered by adequate risk reduction systems.	Core Indicator 1.2: Early warning systems established or improved.	1,000,233
Output 4.2: NbS for sewage treatment demonstrated through constructed wetlands.	1. Number of constructed wetlands with proper management regime for O&M. (Baseline: 1. Final Target: 8)	Output 5.1: Vulnerable ecosystem services and natural resource assets strengthened in	5.1.1. Number of natural resource assets created, maintained or improved to withstand conditions	650,000

		response to climate change impacts.	resulting from climate variability and change.	
Output 5.2: 15 selected waterways/ponds restored/rehabilitated.	1. Number of fully managed climate-resilient water storage structures in the project areas. (Baseline: 3 semi-functional. Final Target: 15)	Output 4.1: Vulnerable development sector services and infrastructure assets strengthened.	4.1.2. Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change.	1,043,000
Output 6.1: National and provincial capacities strengthened to apply innovative social and technological tools for CC adaptation.	1. Number of relevant, local institutions that receive technical training in innovative tools for climate change adaptation. (Baseline: 3. Final Target: 15)	Output 2.1: Institutions supported to strengthen capacity to understand and address climate risks and resilience.	2.1. Number of institutions supported to strengthen capacity to understand and address climate risks (by type of institution).	350,000
Output 6.3: Youth and women's leadership strengthened through awareness-raising and behavioural change campaigns.	1. Number of community members participating in awareness and behaviour-change campaigns. (Baseline: 420. Final Target: 1,640)	Output 3.1: Targeted population groups participating in adaptation and risk reduction awareness activities.	3.1. Number of people participating in activities to improve awareness of climate risks and how to address them (sex-disaggregated).	

Annex 7. Gender Action Plan

The matrix below consolidates component-level gender and inclusion actions. It remains subject to final validation of detailed targets, responsibilities, means of verification and budget links. For Components 3-6, the Gender Action Plan applies a consistent target of at least 33% women's participation in assessments, feasibility studies, training and community management structures, alongside specific commitments to gender-responsive site selection, water-allocation decisions and infrastructure design. Component 6 additionally establishes District Youth Forums and local women's groups, gender-disaggregated data processes, and a gender-responsive review of knowledge products across all technical components, with UN Women providing technical gender guidance and quality assurance. For Component 2, the approved Gender Action Plan contains both 33% and 50% participation provisions. This report does not change either provision; where an activity is explicitly assigned the higher target in the approved plan, that higher activity-specific target will be applied. Reporting will also record leadership, influence and access to benefits, not participation headcounts alone.

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications

Reduced climate-induced cryosphere multi-hazard risk.	1.1. Integrated cryosphere risk mapping through community engagement.	Percentage of target communities with officially endorsed climate risk mapping and zoning documents that include gender analysis of differentiated risks, capacities and adaptation priorities.	Conduct gender analysis as a part of all cryosphere risk assessment and participatory risk mapping and zoning. Ensure participation (at least 33%) of women in the risk mapping; Community Watch groups and networks; co-design of the CB-MEWS; and regular forums with local governments, NGOs, businesses and communities as well as community-level activities. Establish a dedicated channel for gathering feedback and ensure that the needs and solutions of women and other marginalized groups feed into and are reflected in the vulnerability and exposure data collection; community monitoring plan. Adopt and apply gender-responsive approach for community-level projects and campaigns that enable	Community-level risk assessment identifies gendered risks, capacities and adaptation priorities and is guided by the knowledge of local women in the target communities.	Final risk assessment reports, gender analysis report Assessment methodology

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
			meaningful participation and leadership of women in CB-MEWS, women led Community Watch groups and promoting their perspectives and voices related to cryosphere risks and reduction efforts. Conduct as part of the training initiatives.		

1. Reduced climate-induced cryosphere multi-hazard risk.	1.2. Community-based monitoring and accessible early warning systems established.	Percentage of targeted communities with functional CB-MEWS that include gender responsive communication protocols and dissemination mechanisms. Percentage of women and members of vulnerable groups reporting that they received early warning information in time and understood the actions required	Conduct gender analysis as a part of all cryosphere risk assessment and participatory risk mapping and zoning. Ensure participation (at least 33%) of women in the risk mapping; Community Watch groups and networks; co-design of the CB-MEWS; and regular forums with local governments, NGOs, businesses and communities as well as community-level activities. Establish a dedicated channel for gathering feedback and ensure that the needs and solutions of women and other marginalized groups feed into and are reflected in the vulnerability and exposure data collection; community monitoring plan. Adopt and apply gender-responsive approach for community-level projects and campaigns that enable	Community monitoring plan; evacuation plan; and CB-CWS are gender responsive addressing the differentiated needs of the target populations as well as allow meaningful participation of women.	Final Plans, Participation lists of community capacity building workshops and communication channels

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
			meaningful participation and leadership of women in CB-MEWS, women led Community Watch groups and promoting their perspectives and voices related to cryosphere risks and reduction efforts. Conduct as part of the training initiatives.		

1. Reduced climate-induced cryosphere multi-hazard risk.	1.3. Strengthened resilience to cryosphere-related risks.	Percentage of targeted communities with disaster response SOPs and CB-MEWS that integrate gender-specific risks, safeguarding measures, women's participation in response mechanism	Conduct gender analysis as a part of all cryosphere risk assessment and participatory risk mapping and zoning. Ensure participation (at least 33%) of women in the risk mapping; Community Watch groups and networks; co-design of the CB-MEWS; and regular forums with local governments, NGOs, businesses and communities as well as community-level activities. Establish a dedicated channel for gathering feedback and ensure that the needs and solutions of women and other marginalized groups feed into and are reflected in the vulnerability and exposure data collection; community monitoring plan. Adopt and apply gender-responsive approach for community-level projects and campaigns that enable	Recommendations on disaster response standards are gender responsive.	Operating procedures of local disaster responses

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
			meaningful participation and leadership of women in CB-MEWS, women led Community Watch groups and promoting their perspectives and voices related to cryosphere risks and reduction efforts. Conduct as part of the training initiatives.		

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
2. Increased access to spring water in climate adaptive and gender inclusive manner.	2.1. A comprehensive web-based information management system of springsheds and springs prepared for Malakand and Hazara divisions.	Functional web-based springshed database established that includes gender disaggregated data and gender analysis for all targeted springsheds	Ensure (at least 33%) participation of women in the research studies co-design of the recharge solutions; monitoring trainings and Spring users groups. Establish a dedicated channel for gathering feedback and ensure that the needs, challenges and solutions of women and other marginalized groups feed into and are reflected in the Springs inventory and gender assessment. Ensure (at least 50%) participation of women in the co-design of the recharge solutions; data monitoring systems; Spring users groups.	Springs inventory and assessment are gender responsive with differentiated needs, knowledge that inform local level water plans and budgets.	Final assessment, gender analysis report

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
2. Increased access to spring water in climate adaptive and gender inclusive manner.	2.2. Recharge measures (for improved springshed practices, land use planning, and bioengineering) co-developed and implemented.	Percentage increase in year-round water availability from rehabilitated springs (compared with baseline, benefitting women, men and vulnerable groups)	Ensure (at least 33%) participation of women in the research studies co-design of the recharge solutions; monitoring trainings and Spring users groups. Establish a dedicated channel for gathering feedback and ensure that the needs, challenges and solutions of women and other marginalized groups feed into and are reflected in the Springs inventory and gender assessment. Ensure (at least 50%) participation of women in the co-design of the recharge solutions; data monitoring systems; Spring users groups.	Number of women participated in the co-design exercise	List of participants of the co-design exercise

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
	2.3. Local governance framework for springshed established with enhanced institutional capacity for equitable and efficient water resource management.	Percentage of target communities with approved local springshed governance framework that includes women's representation, leadership, and gender responsive provisions. Number of institutional capacity building interventions completed on gender responsive water governance.	Adopt and apply gender-responsive approach to the cost-benefit analysis and impact assessment; and development of guidelines and protocols for building women's leadership in local level management and governance of spring water resources including gender- transformative capacity building sessions.	Local institutional capacity on gender- transformative approaches increased	Pre-and-post assessments of trainings, surveys, evaluations

3. Improved climate-resilient management of groundwater and community water supply services in vulnerable areas.	Outputs 3.1–3.2 Output 3.1. Groundwater mapping and groundwater recharge facilities completed in selected water-scarce locations in the middle basin, including establishing/ strengthening operation, maintenance, and management structures. Output 3.2. Climate-smart and resilient water supply infrastructure established in selected sites, along with contextually relevant management structures with adequate capacity for operation and maintenance of the community infrastructure.	Comprehensive web-based database of groundwater resource in the project areas. •Percentage of identified water recharge facilities completed. •Number of community structures established/strengthened for operation and management of groundwater recharge facilities. Number of households with access to climate-resilient and sustainably managed water supply services (disaggregated by women-headed households). •Percentage of target water facilities with functional community water management structures. •Percentage of women participating in community-based groundwater management structures in the target	Ensure participation (at least 33%) of women in groundwater study and mapping; water-supply assessment, feasibility study and community-based structures including women in the WASH Committees. Adopt gender-responsive approach to development of the technical training course and the infrastructure design (solarisation, lead hand-pumps etc.) Ensure that women community members and women-led households benefit from the solar-powered facilitates and hand-pumps.	Groundwater study, feasibility study, and water supply system assessment are gender-responsive. Community-based structures include women members. %. of women/women-led households using/benefitting from solar powered facilitates and handpumps	Final study and mapping and assessments. Community-based structures reports Pre- and post-assessments of the technical training courses. Monitoring reports Final programme reports

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
		communities (age disaggregated).			
4.. WASH infrastructure in the targeted communities in the Middle Indus Basin is more adaptive to climate change-induced shocks with up scaling of the contextually appropriate NbS.	4.1. Targeted intervention sites identified for evidence-based, climate adaptive and focused WASH interventions. 4.2. NbS for sewage treatment demonstrated through constructed wetlands along with proper management structures and adequate capacity for operation and maintenance of wetlands.	• Number of intervention sites identified and assessed. • Number of constructed wetlands with proper management regime for the operation and maintenance developed and maintained. • Percentage of women participating in management of constructed wetlands (age disaggregated).	Adopt gender-transformative approach in secondary WASH analysis, climate change data analysis and environmental and feasibility assessments including ensuring that women perspectives and needs guide the findings. Ensure participation of women (at least 33%) in environmental and feasibility assessments and community structures that operate and maintain wetlands. Ensure that women community members and women-headed households co-benefit from wetlands and Sewage treatment plans, increased water availability. Apply gender-transformative approach to the learning platforms and trainings.	• WASH analysis, studies and assessments are gender-responsive. • No. of women participating in feasibility assessment • % of women/women-led households using or benefitting from sewage treatment plans and have increased water availability.	• Monitoring reports • Final programme reports

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
5. Community and institutional capacity to reduce surface water waste and increase its storage for productive use is increased, allowing communities to adapt to climate-induced shocks.	5.1. Government of Sindh supported in systematically prioritising 15 natural waterways and community water ponds to address water storage and wastage issues. 5.2. 15 selected waterways/ponds in Sindh Province restored/rehabilitated, including installation of water quality monitoring systems and establishing and strengthening operation, maintenance, and management structures.	• Study report on natural waterways and community ponds • Number of fully managed climate-resilient water storage structures in the project areas. • Number of community management committees established and strengthened.	Apply gender-responsive approach in ground-truthing of catchment feasibility study. Ensure that the developed local designs integrate the perceptions of local women. Ensure participation (33%) of women in communal pond management committees and management and operations. Ensure co-benefit of women in natural waterways and automatic water quality monitoring systems as well as in communal ponds construction and upgrade.	• Ground-truthing study is gender-responsive including local designs for natural waterways and water ponds that respond to the needs of the local women. • % of women participating in water quality monitoring systems and communal pond management committees. • No of women benefitting from restored communal ponds.	Monitoring reports Final programme report Communal management committees meeting minutes

6.3. Youth and women's leadership as well as community-led adaptation solutions strengthened in climate action through awareness raising and behavioural change campaigns.	6.1. National and provincial capacities strengthened to apply innovative social and technological tools for establishing and enforcing human-centred and gender-transformative systems of climate change adaptation and accelerating the progress towards management of Indus water resources. 6.2. National and provincial stakeholders have access to strengthened evidence-based data and knowledge for informed decision-making and implementation of climate adaptation and mitigation that foster collaboration across sectors. 6.3. Youth and women's leadership as well as community-led adaptation solutions	• Number of relevant, local institutions that receive technical training in innovative social and technological tools for climate change adaptation. • Percentage of people trained who report increased capacity and skills on gender-transformative approaches and adaptive capacities (Gender and age disaggregated). • Number of knowledge products being accessed and used by policy makers, community leaders and others (guidelines, practical briefs,	Adopt gender-responsive approach in gap analysis of groundwater policies, review of adaptation measures as well as water management adaptation plans so that the analyses integrate the perspectives and needs of women but also allows participation of women in the process. Ensure women's meaningful participation (at least 33%) in co-development and testing of new social technologies to implementation of groundwater policies and regulations and water management adaptation plans as well as in workshops and forums that enhance coordination and collaboration at all levels. Apply gender-responsive approach and methodologies to consultations, co-development processes, and capacity building workshops for authorities that strengthen the gender-transformative capacities	• Gap analysis and water management adaptation plan are gender-responsive. • % of women participating and leading the co-development and testing of new approaches in the implementation activities. • No. of local and national level authorities who report on increased understanding on the gendered impacts of climate change and strengthened capacities on gender-responsive approaches in climate mitigation and adaptation. • No. of gender-responsive indicators. • % of women participating in data collection/analysis/ dissemination platforms.	Final gap analysis Monitoring and final reports Water management adaptation plans Capacity building workshop reports. Interviews and pre-and post-test of capacity building activities. Data collection mechanisms and indicators Qualitative data List of participants of data collection workshops and platforms. Monitoring and programme report on community level activities and public campaigns Knowledge products, success stories and other published communication products and studies.

	strengthened in climate action through awareness raising and behavioural change campaigns.	media articles) relating to climate change and WASH (gender disaggregated). • Number people participating in spaces and platforms for sharing and exchanging of knowledge on climate adaptation practices (gender and age disaggregated). • Number of community members participating in awareness building and behaviour change campaigns to promote the uptake of new adaptation solutions (gender and age disaggregated). • Number of partners	and knowledge of the partners. Develop gender-responsive indicators and collect gender data that feed into the data and knowledge platforms including CGPI and ccGAP. Ensure that the processes of identification of gender gaps and indicators as well as development and monitoring of gender disaggregated data are women-led (at least 60% are women). Mobilize women community members, particularly young women to participate and take lead in District Forums and awareness raising campaigns at community level (50% women-led). Ensure that at least 50% of the knowledge products and case studies / success stories l as well as awareness raising campaigns are gender-responsive including increasing the awareness of the local impacts of climate change its	• % of women, particularly young women participating and leading community level activities including awareness raising and policy advocacy actions. • % of knowledge products and case studies that are gender-responsive • No of public awareness raising campaigns that are gender-responsive. • No of women who have participated in targeted capacity building activities.	Public awareness campaign materials Interviews and pre-and post-test of capacity building activities

Project Outcomes	Outputs	Gender-responsive Indicators	Gender Action	Target Gender Achievement	Means of Verifications
		reached through the campaigns and activities that foster social cohesion and understanding of the climate change and its gendered and human security implications.	gendered impact on human security. Provide targeted capacity building and mentorship to women in co-development of success stories and awareness raising campaigns that enhance the women's leadership capacities.		

Annex 8: SAFER Pakistan Year 1 Work Plan for Components 1-6

Purpose. This document presents a common activity-based quarterly format for all six component work plans. It is based on the approved proposal and the sequencing agreed during inception. A tick indicates the quarter in which an activity is planned or continues; detailed implementation schedules and financial phasing remain controlled project records.

Implementation dependencies. Activities involving procurement of physical works, installation or construction will proceed only after completion of the applicable site verification, feasibility and technical assessment, environmental and social screening, land and water-access arrangements, statutory approvals, institutional agreements and operation and maintenance arrangements. The timing shown in the work plan is therefore indicative and subject to completion of these prerequisites. Where a planned location is not included in the approved project document, physical implementation also depends on the required Adaptation Fund clearance or approval.

Component 1: Cryosphere Disaster Risk Reduction (USD 1,858,159)

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
1	Formalise implementation arrangements with PMD, NDMA, GBDMA, PDMA-KP, district administrations and community partners, including technical focal points, coordination and data-sharing procedures.	✓				Confirmed focal points, coordination arrangements, institutional roles and data-sharing procedures.
2	Compile available satellite, historical hazard, glacier, glacial-lake and exposure datasets and agree the assessment and field-verification methodology.	✓	✓			Consolidated baseline datasets, agreed methodology and field-verification plan.

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
3	Prepare and progressively refine cryosphere multi-hazard maps for the selected valleys using Earth observation, GIS, historical evidence and targeted field verification.	✓	✓	✓	✓	Year 1 multi-hazard maps and supporting datasets, with documented limitations and remaining information gaps.
4	Assess the vulnerability and exposure of settlements, infrastructure, population groups and livelihood assets in the selected sites.	✓	✓	✓	✓	Initial vulnerability and exposure profiles and verified site-level records.
5	Review existing government, GLOF-II, AKAH and community monitoring and warning assets and identify functional, institutional and coverage gaps.	✓	✓			Inventory and functionality review of existing monitoring, warning and preparedness arrangements, with a documented gap assessment.
6	Complete technical and feasibility assessments for the five priority EWS valleys, covering site access, power, connectivity, land, safeguards, data, equipment custody, recurrent costs and O&M.		✓	✓	✓	Technical and institutional readiness records for Bahrain, Birgal, Alchori-Shigar, Gupis and Rama.
7	Undertake participatory community risk assessments in selected valleys and document local risk knowledge, exposed groups, safe locations and preparedness gaps.			✓	✓	Participatory risk-assessment records and initial community risk profiles.

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
8	Establish or strengthen Community Watch Groups and prepare participatory monitoring and preparedness arrangements, including initial training.			✓	✓	Community Watch Groups with documented membership and roles, draft monitoring plans and training records.
9	Prepare preliminary evacuation plans, routes, safe locations, shelters and accessible warning-dissemination arrangements linked to responsible institutions.			✓	✓	Draft evacuation and warning-to-action packages for initial sites.
10	Prepare PMD-led technical specifications and procurement documentation and, where readiness requirements are met, initiate phased installation or rehabilitation of EWS equipment.			✓	✓	Approved specifications and procurement packages; installation or rehabilitation initiated at technically and institutionally ready sites.
11	Agree draft warning and response SOP recommendations, trigger-action arrangements, O&M plans and risk-informed local planning actions.			✓	✓	Draft SOP, trigger-action, O&M and institutional-response recommendations supported by consultation records.

Component 2: Springshed Revival and Management (USD 998,526)

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
1	Formalise implementation arrangements with SWC, PCRWR, CEWRI, district institutions and participating communities, including district-level coordination arrangements in Swat, Lower Dir, Abbottabad and Mardan.	✓				Letters/agreements and functioning district-level coordination arrangements.
2	Map springs in the four districts with support from community resource persons and compile standardised georeferenced records.	✓	✓	✓		Spring inventory with georeferenced locations, core attributes, district maps and district-level database records.
3	Establish baseline information for the ten selected spring points, including discharge, water quality, users and uses, land tenure, institutional arrangements, conflicts, inclusion and relevant socioeconomic and land-cover information.	✓	✓			Baseline dataset and site profiles covering hydrological, socioeconomic, governance, tenure and inclusion information.
4	Establish the monitoring system for rainfall, spring discharge and water quality; train community resource persons; and establish or strengthen Spring Water User Groups.	✓	✓	✓	✓	Routine rainfall, spring-flow and seasonal water-quality records; trained community resource persons; user records; committee records; and monitoring metadata.

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
5	Undertake participatory hydrogeological assessment and delineate recharge areas for selected springs.		✓	✓		Hydrogeological assessment reports and preliminary recharge-area delineation.
6	Estimate site water budgets and complete climate/hazard screening, grievance arrangements and relevant ESMP measures.			✓	✓	Water-budget assessments; climate and hazard screening; safeguards documentation; and site grievance arrangements.
7	Co-design site-specific intervention packages and prepare detailed technical and cost documentation based on the diagnostic, safeguard and monitoring evidence.				✓	Site-specific technical intervention packages, indicative costs and implementation recommendations.
8	Complete required technical review, quality assurance, site verification and implementation approvals before physical works.				✓	Documented technical review and approvals for implementation-ready intervention packages.

Component 3: Groundwater Management and Resilient Water Supply (USD 2,308,000)

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
1	Launch the groundwater study and mapping exercise in Swat district and begin assessment of flood-affected community water-supply systems in the nine target districts.	✓				Groundwater study and mapping methodology established; available baseline datasets consolidated
2	Confirm government partners (PHED, LG&RDD, academia, Irrigation Department) and data-sharing arrangements.	✓				government coordination and data-sharing arrangements confirmed; field assessment of flood-affected water-supply systems commenced with agreed assessment framework and initial findings documented.
3	Continue and complete the planned field assessment of flood-affected water-supply systems, including condition, water-quality and service-level assessment; advance groundwater mapping and analysis		✓			Groundwater mapping advanced with interim technical findings documented; condition, water-quality and service-level assessment completed for the identified flood-affected systems
4	identify priority gaps and recharge opportunities; prepare planning documents, designs/BoQs and procurement documentation; undertake initial community engagement.		✓	✓		priority service and infrastructure needs documented; preliminary planning/design and BoQ/procurement documentation prepared; initial community engagement and management considerations documented.
5	Finalise groundwater mapping and recharge-site assessment; refine technical planning and designs/BoQs based on verified site conditions			✓		Groundwater mapping and recharge-site assessment completed; technical planning, designs/BoQs and procurement documentation finalised for priority interventions

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
6	advance procurement preparations for solar-powered water facilities and climate-resilient handpumps; continue community water-management engagement			✓	✓	procurement packages advanced to the required approval/procurement stage; community water-management arrangements further defined.
7	Finalise recharge-site selection and feasibility study. Establish community-based O&M structures for recharge facilities and begin technical training and backstopping.			✓	✓	Six groundwater-recharge sites confirmed through completed feasibility and site-selection process; community-based O&M arrangements established for relevant interventions
8	Advance construction of solar-powered facilities, handpumps and community water-management arrangements.				✓	technical training/backstopping package delivered; Year 1 procurement and implementation arrangements advanced for priority water-supply interventions.

Component 4: Ecosystem-based Adaptation (USD 700,000)

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
1	Establish the process for analysing WASH, environmental and climate data.	✓				WASH, environmental and climate evidence base consolidated to the available
2	consolidate available evidence; undertake initial site screening and establish the approach for feasibility and environmental assessments.	✓	✓			site-screening and feasibility assessment methodology agreed; initial screening of proposed intervention sites completed.
3	Complete the WASH, environmental and climate-risk analysis; undertake site-specific feasibility, environmental and social assessments for the eight selected sites		✓			WASH, environmental and climate-risk analysis completed for the selected intervention portfolio
4	develop preliminary technical concepts and costing based on verified site conditions.		✓	✓		site-specific feasibility and E&S assessment findings documented for the eight selected sites; preliminary technical requirements and costing prepared.
5	Complete outstanding site-specific assessments; confirm priority sites; finalise preliminary designs and costing; assess O&M and institutional ownership requirements; establish technical support and learning arrangements.			✓	✓	Preliminary design/ costing eight selected sites of constructed wetlands available

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
6	Initiate O&M capacity assessment for government and community structures and begin establishing the technical support and learning platform for service providers.				✓	Procurement packages advanced for approved interventions;
7	Procurement process for constructed wetland initiated.				✓	site preparation advanced at ready sites; O&M and institutional capacity arrangements agreed.

Component 5: Surface Water Conservation (USD 1,080,000)

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
1	Undertake ground-truthing and feasibility assessments, including site verification, E&S screening and catchment feasibility studies. Validate and endorse the 15 priority sites.	✓	✓			Ground-truthing and feasibility assessment records completed; E&S and catchment screening completed; 15 priority natural-waterway and communal-pond sites validated and endorsed..
2	Prepare detailed designs, site plans and BOQs for the 15 communal pond sites		✓			Detailed designs, site plans and BOQs under preparation for the 15 communal pond sites
3	. Begin community mobilisation and stakeholder mapping for pond management committees.		✓	✓		community mobilisation and stakeholder mapping initiated for pond management committees.
4	Complete detailed designs and BOQs. Begin restoration/rehabilitation of priority natural waterways in Sujawal, Umerkot, Sanghar and Tharparkar			✓	✓	Approved detailed designs, site plans and BOQs for the 15 communal pond sites; restoration/rehabilitation of priority natural waterways under way in Sujawal, Umerkot, Sanghar and Tharparkar
5	Begin installing automatic water-quality monitoring systems and begin construction/upgrading of communal ponds.			✓	✓	installation of automatic water-quality monitoring systems initiated; construction/upgrading of communal ponds under way.
6	Continue restoration of waterways, installation of water-quality monitoring systems and construction/upgrading of communal ponds.				✓	Procurement packages completed; 15 communal pond management committees established with O&M plans and community water-management arrangements.

S.No.	Key activities	Months 1-3	Months 4-6	Months 7-9	Months 10-12	Key deliverables
7	Continue establishing communal pond management committees and O&M rules. Prepare the Year 2 continuation package.				✓	

SAFER Pakistan Inception Workshop

7-8 September 2026



Photo 1. *Opening session of the SAFER Pakistan inception workshop.*



Photo 2. *Participants during the inception workshop plenary and group-work sessions.*



Photo 3. *Participants at the SAFER Pakistan inception workshop.*



Photo 4. *Group discussion on cryosphere risk reduction and early warning system priorities.*



Photo 5. *Group discussion on springshed revival, site verification and*