



IFRAP
Integrated
Flood Resilience &
Adaptation Project



Ministry of Planning
Development &
Special Initiatives



INTEGRATED FLOOD RESILIENCE & ADAPTATION PROJECT

**Annual Progress Report (FY 2025-26) &
Quarterly Progress Report - Q4 (April to June 2026)
COMPONENT-2**

MONITORING & EVALUATION (M&E) CONSULTANT

World Bank Project ID	P180323
M&E Consulting Firm	EASE Pak JV (Joint Venture)
Disclaimer	This M&E Quarterly Progress Report has been independently prepared by the M&E Consultant based on field monitoring, review of project records, consultations with relevant stakeholders, and information available during the reporting period. The findings, observations, assessments, and recommendations presented in this report represent the independent professional assessment of the M&E Consultant.
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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AWP	Annual Work Plan	MoD	Ministry of Defense
AWS	Automatic Weather Station	MoPD&SI	Ministry of Planning, Development & Special Initiatives
CDPC	Climate Data Processing Centre	MoU	Memorandum of Understanding
DPD	Deputy Project Director	MPR	Monthly Progress Report
DQA	Data Quality Assessment	NOC	No Objection Certificate
EAD	Economic Affairs Division	NOL	No Objection Letter
E&S	Environmental and Social	PAD	Project Appraisal Document
ESCP	Environmental and Social Commitment Plan	PC-1	Planning Commission Form 1
ESMF	Environmental and Social Management Framework	PDMA	Provincial Disaster Management Authority
ESMP	Environmental and Social Management Plan	PDO	Project Development Objective
EWS	Early Warning System	PIU	Project Implementation Unit
FAT	Factory Acceptance Test	PMD	Pakistan Meteorological Department
FGD	Focus Group Discussion	PMIS	Project Monitoring Information System
FPMU	Federal Project Management Unit	PPSD	Project Procurement Strategy for Development
GoP	Government of Pakistan	PSC	Project Steering Committee
GRM	Grievance Redress Mechanism	PSDP	Public Sector Development Programme
HPC	High Performance Computing	QPR	Quarterly Progress Report
IFRAP	Integrated Flood Resilience and Adaptation Project	RBMEF	Results-Based Monitoring and Evaluation Framework
IMG	Institute of Meteorology and Geophysics	RMC	Regional Meteorological Centre
IRI	Intermediate Results Indicator	SEP	Stakeholder Engagement Plan
KII	Key Informant Interview	SI	System Integrator
LMP	Labour Management Plan	WB	The World Bank
M&E	Monitoring and Evaluation	WMO	World Meteorological Organization
MHSP	Modernization of Hydromet Services of PMD in Pakistan	WSR	Weather Surveillance Radar
MIS	Management Information System		

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1. EXECUTIVE SUMMARY

This Annual Report presents an independent Monitoring and Evaluation (M&E) assessment of implementation progress under Component II of the Integrated Flood Resilience and Adaptation Project (IFRAP). The review covers the full fiscal year FY 2025-26 and focuses on **process monitoring, implementation readiness, institutional strengthening, safeguard compliance, procurement preparedness, and risk management**.

This Report consolidates the four Quarterly Progress Reports prepared by the M&E Consultants during FY 2025-26 (Q1: Jun–September 2025; Q2: October–December 2025; Q3: January–March 2026; Q4: April–June 2026), together with PIU-II monthly and quarterly submissions, the Annual Work Plan 2025-26 and evidence generated through 30 field and coordination meetings/field monitoring visits, workshops, FGDs and KIs. It provides progress against the Results Framework of the revised Project Appraisal Document and the Additional Financing and Restructuring Paper (2025), and identifies the corrective actions required in FY 2026-27.

FY 2026-27 represents a critical transition year for Component-II and success will depend on timely completion of site readiness activities, , acceleration of procurement processes, strengthening of institutional capacity, and effective implementation of corrective actions. Achieving these priorities will enable the project to move from a prolonged preparatory phase into active installation and operationalization of hydromet infrastructure, laying the foundation for achievement of PDO and Intermediate Results targets in subsequent years.

1.1 Project Development Objective

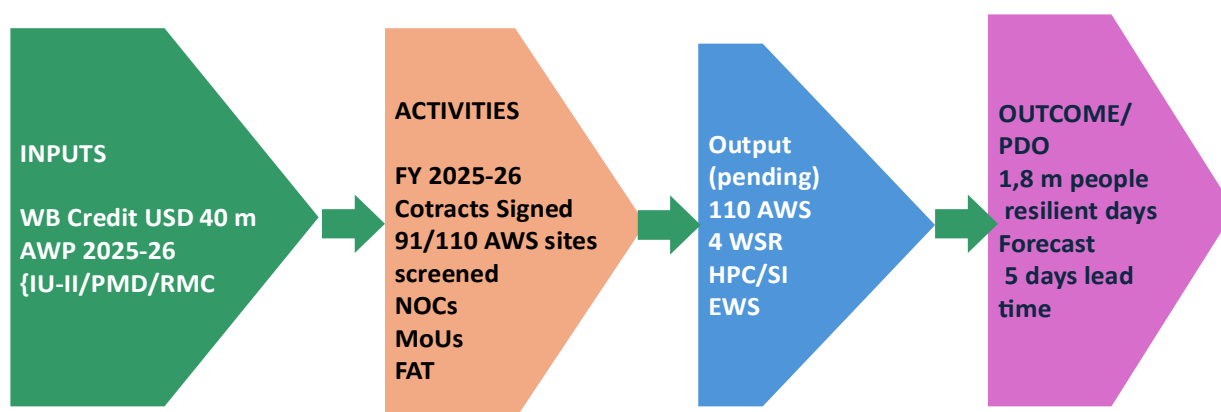
The Project Development Objective of IFRAP is to support the recovery of flood-affected households and communities and to strengthen the Government's capacity for disaster-resilient reconstruction and climate adaptation. Component-II contributes to this objective through a single, more specific objective:

“To improve the capability of the Pakistan Meteorological Department to generate and utilise hydrometeorological information for decision-making and climate services.”

Component-II is expected to expand observational coverage — particularly in the under-served western regions and Balochistan — through 110 Automatic Weather Stations (AWS), four Weather Surveillance Radars (WSR), a High-Performance Computing (HPC) and System Integrator (SI) platform, and a hydrological-modelling-based early warning system for hill torrents in Balochistan. Two PDO indicators (PDO-2 and PDO-4) and four Intermediate Results Indicators (IRI-7, IRI-10, IRI-11 and IRI-12) are attributed to the component.

The following Flow Chart (Figure 1) illustrates project progress for FY 2025-26, showing stages from Inputs (World Bank Credit USD 40 m, AWP 2025-26); Activities (contracts signed, sites screened), Output (pending approvals) and Outcomes (1,8 million people resilient with days)

Figure 1: Component-II results chain and status at end FY 2025-26



FY 2025-26 achieved : inputs and activities. Outputs and Outcomes remain end loaded
(IRI-10: 0.4; IRI -11: 0/110)

Source: M&E Consultants, based on the revised PAD and Additional Financing & Restructuring Paper (2025).

1.2 Key Achievements against Annual Targets

FY 2025-26 was, in substance, a procurement- and readiness-year. The component moved from bid evaluation at the start of the year to signed supply contracts, an advanced site-screening and initiation of the Factory Acceptance Test by year end. No installation-level result was achieved. As at 30 June 2026 none of 110 AWS and none of four radars were installed and operationalized, and outcome-level PDO indicators therefore remain not yet measurable.

Table 1: Achievements against FY 2025-26 annual targets — summary scorecard

Result area	Annual target	Achieved	Status ¹	M&E comment
AWS sites screened and validated against WMO standards	110	91 (83%)	PARTIAL	Incomplete in Punjab (14 pending) and KP (5 pending, law-and-order)
AWS supply contracts signed and effective	2 lots	2 lots	ACHIEVED	Signed 18 Dec 2025 against an AWP milestone of July 2025 (six-month slippage)
Mobilisation advance paid to suppliers	Jun 2025	Mar 2026	DELAYED	Nine-month slippage; import documentation complexity
NOCs obtained from AWS host institutions other than PMD/RMC	54	2 received; 28 in process	OFF TRACK	Critical path constraint for MoUs and administrative takeover
MoUs signed for site takeover	110	13 (12%)	OFF TRACK	Activity not reflected in AWP 2025-26

¹ Achieved: >=100% Partial: 70-99% In Progress: On track for time elapsed Delayed: 1-3 months behind schedule
Off Track: >3 months behind or <50% achievement at 75% time elapsed.

Result area	Annual target	Achieved	Status ¹	M&E comment
Factory Acceptance Test completed	Prior to supply	Initiated	IN PROGRESS	Protocols under finalisation with PMD technical team and contractors
AWS supplied (Phase-I lots)	Dec 2025	Nil	OFF TRACK	12 months+ slippage; contingent on FAT and site readiness
AWS installed and operationalised (IRI-11)	Cumulative 110 by 2028	0	NOT STARTED	Civil works and fencing not commenced at any site
Weather radars installed and operationalised (IRI-10)	Cumulative 4 by 2028	0	NOT STARTED	USD 18.0 m reallocated; procurement shifted to GoP/PSDP route
Civil Works Design & Supervision Consultancy	Firm engaged and performing	100%	ACHIEVED	On board since March 2025; bidding documents prepared
ESMP for radar sites	Completed	100%	ACHIEVED	Completed May 2026; to be submitted to World Bank for NOL when radar activity starts
Deputy Project Director in post	Filled	Filled May 2026	ACHIEVED	Post vacant from 14 Oct 2025 to 12 May 2026 (seven months)
Grievances resolved (IRI-7)	100%	n/a — nil received	N/A	GRM operational; no grievance registered as field works have not begun

Source: M&E Consultants, compiled from QPR Q1–Q4 FY 2025-26, AWP 2025-26 and PIU-II monthly progress reports.

1.3 Key Challenges and Bottlenecks

- **Cumulative slippage of 6 to 12+ months** against AWP 2025-26 on every major activity of the observation-infrastructure sub-component, driven principally by multi-layered World Bank clearance and No Objection Letter cycles, complex international procurement and import formalities, and a seven-month vacancy in the Deputy Project Director post.
- **Site-readiness prerequisites were omitted from the AWP.** Screening and WMO validation, NOCs, MoUs, Factory Acceptance Test and site fencing — all prerequisites for supply and installation — do not appear in AWP 2025-26. They therefore had no baseline, no target dates and no budget line, and could not be tracked as planned activities.
- **Reallocation of USD 18.0 million for radars.** Following the 10th Project Steering Committee decision of 22 January 2026, radar financing was shifted to the Government's own PSDP resources; USD 6.6 million was reallocated to Youth Skill Development under IFRAP and the disposition of the remaining USD 11.4 million was still undecided at year end. IRI-10 is consequently at risk in its present form and the PAD may require adjustment.
- **No Management Information System at PIU-II.** Component-II remains the only major component without an MIS. Live integration with the PMIS could not be effected in any quarter of the year, and milestone data continued to be assembled manually.
- **No dedicated M&E staff at PIU-II** and monthly progress reports that are not structured against AWP activities, do not state the basis of reported percentages, and omit several live activities entirely.
- **Financing gap.** PC-1 was approved at USD 50 million against World Bank financing of USD 40 million, and the AWS scope was already truncated from 300 to 110 units. A revised PC-1 (World Bank USD 33.5 million plus PSDP USD 30 million, total USD 63.5 million) was tabled at the 11th

PSC on 22 June 2026 and remained pending at year end. PIU-II's own estimate, recorded in the Q4 M&E summary, is that a further USD 11.5 million from the World Bank — over and above the existing USD 22 million — would be required to restore the original scope of 300 AWS.

1.4 Key Recommendations for FY 2026-27

Table 2: Priority actions recommended for the start of first quarter onwards of FY 2026-27

#	Recommendation	Responsible	Verifiable output / indicator
1	Issue a realistic, FY-specific AWP 2026-27 in the first fortnight of July 2026, restricted to activities falling within the financial year and including all AWS prerequisites (screening, NOC, MoU, FAT, fencing) with dates and budget lines	PIU-II with FPMU	Approved AWP with quarterly milestones mapped to PDO/IRI
2	Complete screening and WMO validation of the remaining 19 sites (Punjab 14, KP 5) and maintain a 5–10 per cent reserve of alternate sites	PIU-II with PMD/RMC	110 of 110 sites screened; reserve list documented
3	Clear the NOC and MoU backlog through a province-wise reconciliation sheet, clubbing NOC and MoU processing at each site	PIU-II with host institutions	54 NOCs and 110 MoUs reconciled; monthly tracker
4	Complete the Factory Acceptance Test and confirm the lot-wise supply schedule	PIU-II / PMD / suppliers	FAT completion note; dated supply schedule
5	Establish a Component-II MIS or, as an interim measure, a structured milestone tracker compatible with the PMIS	PIU-II with FPMU and M&E Consultants	Live tracker; ≥90% of milestones updated monthly
6	Create a dedicated M&E Specialist position at PIU-II, mirroring the arrangement in Component-III, and fill the five vacant technical posts	PMD / MoD / FPMU	Positions notified and filled
7	Obtain a decision on the revised PC-1 and on the residual USD 11.4 million, and reflect the consequences for IRI-10 in the Results Framework	FPMU / PSC / EAD	PSC decision recorded; RF amendment proposed
8	Adopt the standard MPR/QPR structure recommended by the M&E Consultants (Annex E) so that reported progress is traceable to AWP activities and Results Framework indicators	PIU-II	First MPR in new format by August 2026
9	Start the process of hiring SI and the process of HPC	PIU-II	Monthly Progress reports of PIU_II

2. PROJECT OVERVIEW

2.1 Project and Components

This report covers Component-II only; the other components are reported separately by their respective PIUs.

Table 3: IFRAP components and Component-II sub-components

Component / sub-component	Scope
Component-II (this report)	Strengthening Hydromet and Climate Services (MHSP) — improving PMD capability to generate and use hydromet information for decision-making
Package-I — Modernization of Observation Infrastructure, Data Management and Forecasting	110 AWS (including 24 agromet sensors); 4 Weather Surveillance Radars; High Performance Computing; System Integrator; flood-forecasting software and hydrological modelling; enhancement of PMD service delivery; procurement of vehicles
Package-II — Technical Assistance, Institutional Strengthening and Capacity Building	Civil works design and supervision consultancy; civil works (IMG Karachi, Met Workshop Karachi, CDPC/RCDPC, Met observatories); capacity building and training; electrical and mechanical workshop equipment; IT equipment and furniture; PMD Act revision and data policy; support to Meteo-Pak; 58 positions for sustainability

Two scope decisions taken before and during the reporting year affect the Results Framework. First, under the Additional Financing and Restructuring Paper (2025) the AWS target was rationalized from 300 to 110 units and the former ‘flood risk’ indicator was retitled ‘people with enhanced resilience to climate risks’, disaggregated by youth and women. Second, the 10th Project Steering Committee decided on 22 January 2026 that the four radars would be financed from Government PSDP resources rather than the credit.

2.2 Implementation Arrangements

Table 4: Implementation and M&E arrangements — roles and responsibilities

Entity	Role in implementation	Role in M&E
FPMU, MoPD&SI	Federal oversight, coordination across the four components, custodian of the Annual Work Plan and the Project Steering Committee secretariat	Receives and clears M&E deliverables; owns the PMIS; issues AWP as the reporting benchmark
PIU-II, PMD (under Ministry of Defence)	Day-to-day implementation of Component-II: procurement, contract management, site selection, safeguards	Prepares monthly and quarterly progress reports; provides primary data; hosts the GRM complaint box
PMD and Regional Meteorological Centres	Technical ownership of AWS sites; joint screening teams; future operation and maintenance	Provide site-level verification and WMO-standard validation
M&E Consultants (EASE PAK JV)	Independent third-party monitoring and evaluation for IFRAP	Verification and validation of reported progress; coordination meetings, field visits, FGDs and KIIs; PMIS development and operation; GRM monitoring; quarterly and annual reporting

Entity	Role in implementation	Role in M&E
Host institutions (universities, irrigation, agriculture, health, home departments, local administration)	Provide land and access for AWS sites; sign NOCs and MoUs	Counterparts in FGDs/KIIs; sources of site-level evidence
Project Steering Committee	Strategic decisions on scope, financing and PC-1	Decisions recorded as evidence for risk and variance analysis

A structural weakness persisted throughout the year: PIU-II has no dedicated M&E position, unlike Component-I and Component-III where M&E Specialists positions are in place. Evidence flow to the M&E Consultants therefore depended on the availability of procurement and planning staff, and was interrupted during the seven months in which the Deputy Project Director post was vacant (14 October 2025 to 12 May 2026).

2.3 M&E System and Results Framework

The IFRAP M&E Framework was first submitted in June 2025 and it was revised following a meeting with the FPMU M&E Specialist on 21 November 2025, and resubmitted on 8 December 2025 to align with the revised PAD and the 2025 Additional Financing and Restructuring Paper. The revised framework introduced sub-indicator definitions, revised targets (notably the reduction of the AWS target from 300 to 110) and standardized monitoring tools across components. The Results-Based Monitoring and Evaluation approach adopted classifies progress as Completed, Ongoing or Pending, and applies a three-tier analytical lens of readiness, implementation efficiency and compliance behaviour.

Because Component-II outputs are end-loaded — no asset was installed during the year — the M&E Consultants adopted a two-tier reporting structure for FY 2025-26: (i) formal PDO and Intermediate Results Indicators as defined in the revised Results Framework; and (ii) enabling-milestone indicators that explain why formal results are not yet measurable and evidence the progress made towards making them measurable. This avoids overstating outcome results while providing management with an early-warning view of whether preparatory progress can be converted into measurable results in FY 2026-27.

3. M&E SYSTEM PERFORMANCE

3.1 Data Collection Mechanisms

In the absence of a Component-II MIS, data collection during FY 2025-26 combined documentary review, coordination meetings, structured field verification and stakeholder consultation. Every data point reported in this report is traceable to at least one of the instruments below and triangulated where was it possible.

Table 5: Data collection instruments used during FY 2025-26

Instrument	Description	Frequency	Coverage in FY 2025-26
Documentary review	AWP 2025-26; PIU-II fortnightly, monthly and quarterly progress reports; PSC minutes; contract and procurement records; revised PC-1	Continuous	12 monthly / fortnightly reports; 4 PIU-II quarterly reports; 10th and 11th PSC
Coordination meetings with PIU-II	Structured verification and validation of reported progress; agreement on follow-up actions; minutes prepared and endorsed	Monthly / as required	30 Meetings minutes/reports
Field visits and site screening observation	Joint observation with PIU-II, PMD and RMC teams of AWS site screening and WMO-standard validation using KoBo digital tools	Need based/Coordinated	KP (Charsadda, Kohat, Peshawar, Mardan, Mansehra, Shinkari, Balakot, Swabi); Punjab (Lahore); Sindh (Karachi); Balochistan (RMC); radar sites (Mardan, Islamabad)
FGDs and KIIs	Host institutions (Hazara University, Agriculture University Peshawar, Bacha Khan University, NTHRI Shinkari), RMC Peshawar, PDMA KP	Need based/Coordinated	9 Field monitoring /spot visits during Q3–Q4
District-level hydromet survey	Android-based digital instrument covering site coordinates, equipment condition, data collection and data flow	One round (October 2025)	Quetta, Lasbela, Gwadar, Sibi, Mardan
Hydromet Station Functionality Form	Standardised instrument developed by the M&E Consultants for periodic operational metrics, feeding longitudinal analysis in the PMIS	Designed; deployment pending installation	Instrument approved; not yet applied (no operational project assets)
GRM monitoring	Complaint box /Banner at PIU-II, dedicated SIM and WhatsApp (0325-5373330), e-mail (complaint@ifrap.org.pk), third-party channel	Continuous	Monitored by resident GRM Associate appointed by M&E Consultants throughout the year

3.2 MIS and PMIS Status

The Project Monitoring Information System was developed by the M&E Consultants, submitted on 23 June 2025 and made live during Q1. Access was extended to FPMU and authorised users on 22 July 2025. It comprises five modules: Results Framework, Field Monitoring, GRM, Safeguards and Dashboard Visualisation, all tested with dummy datasets.

Live integration of Component-II data into the PMIS did not occur in any quarter of FY 2025-26 because PIU-II has no MIS of its own and, according to PIU-II, the project document has no provision for developing its own MIS. As an interim measure the M&E Consultants built an Excel-to-web bridge — a structured worksheet covering every major Component-II activity with planned commencement, planned completion, actual completion and status, feeding the IFRAP dashboard quarter by quarter. PIU-II provided this worksheet only partially; actual completion dates were largely absent, which is the single most consequential data gap in this report.

M&E Interpretation: the PMIS is functioning as a reporting repository rather than a management tool for Component-II. Unless a Component-II milestone tracker is established in Q1 FY 2026-27, the same limitation will recur during the installation phase, when the volume and time-sensitivity of milestone data will be far greater than during the procurement phase.

3.3 Data Quality Assessment

A data quality assessment was carried out against the World Bank data-quality dimensions of validity, reliability, timeliness, precision and integrity. The assessment relates to the data available for Component-II reporting, not to the performance of PIU-II staff, who cooperated consistently with the M&E Consultants throughout the year.

Table 6: Data Quality Assessment — Component-II, FY 2025-26

Dimension	Finding	Rating	Action required
Validity	Indicator definitions are sound following the December 2025 revision of the M&E Framework; enabling milestones are logically linked to IRI-10 and IRI-11	Satisfactory	Maintain the two-tier reporting structure until assets are operational
Reliability	Reported physical-progress percentages have no stated basis. Inconsistencies were detected — System Integrator reported at 20% in Q3 and 15% in Q4; AWS reported at 45% in the Q3 M&E report and 40% in the PIU-II May 2026 report	Unsatisfactory	Publish the calculation basis for every percentage; prohibit downward revision without explanation
Timeliness	Monthly reports were generally submitted, but Q1–Q3 actual utilisation was never disaggregated and actual completion dates were not supplied despite repeated formal requests	Moderately unsatisfactory	Mandatory actual-date fields in the revised MPR format
Precision	Site-screening counts differ between sources: the M&E Consultants validated 91 of 110 sites, while PIU-II's Q4 report records 121 sites screenings on KoBo	Moderately unsatisfactory	Maintain a single site register distinguishing candidate screenings from validated final sites

Dimension	Finding	Rating	Action required
	(Balochistan 53, KP 14, Punjab 25, Sindh 29) against 28 confirmed final sites		
Integrity	Several live activities were omitted from the June 2026 monthly report — PMD Act, draft data policy, 58-positions case, tax exemption, additional financing status	Moderately unsatisfactory	Adopt a fixed activity list in the MPR with an explicit 'no change' entry where applicable
Completeness of the benchmark	AWP 2025-26 includes activities from 2024 to 2028 and omits AWS prerequisites (screening/WMO validation, NOCs, MoUs, FAT, fencing)	Unsatisfactory	Issue an FY-specific AWP 2026-27 covering all prerequisites

The M&E figure of 91 counts sites screened and validated against WMO standards and mapped to the 110-site network plan. This report uses the M&E figure of 91 of 110 (83 per cent) as the headline, and recommends that PIU-II maintain a single site register in which each record carries a status flag (candidate screened / WMO *validated / finally selected / NOC obtained / MoU signed / ready for installation).

3.4 Annual Reporting Timelines and Compliance

Table 7: Reporting compliance and timeliness, FY 2025-26

Deliverable	Responsible	Due	Status	Remarks
Inception Report	M&E Consultants	Jun 2025	Submitted 16 Jun 2025	Cleared
M&E Framework (draft / revised)	M&E Consultants	Jun / Dec 2025	20 Jun 2025; revised 8 Dec 2025	Aligned to revised PAD and AF/Restructuring Paper
PMIS Development Report and go-live	M&E Consultants	Jun–Jul 2025	23 Jun 2025; access 22 Jul 2025	Five modules live; Component-II integration pending
GRM Implementation Plan	M&E Consultants	Aug 2025	7 Aug 2025; endorsed 22 Sep 2025	Aligned to PMD and World Bank GRM guidance
QPR-1 to QPR-4	M&E Consultants	Quarterly	All four submitted	Debriefing workshops on QPR-2 (6 May 2026) and QPR-3 (25 May 2026)
Monthly / fortnightly progress reports	PIU-II	Monthly	Submitted	Format not aligned to AWP; analytical content limited
Actual commencement / completion dates	PIU-II	With each MPR	Largely not provided	Requested formally in Jan 2026 and repeatedly thereafter
AWP 2025-26	FPMU	Jul 2025	Received 31 Dec 2025	Received at the end of Q2, six months into the year
PSC minutes (10th, 11th)	FPMU	After each meeting	Made available	Limited ability to verify decisions independently

The late issue of the AWP is a systemic finding rather than a procedural one. Because the benchmark against which Q1 and Q2 were to be assessed did not exist until 31 December 2025, the first half of the year could only be reported descriptively. This should not be allowed to recur in FY 2026-27.

4. PROGRESS AGAINST THE RESULTS FRAMEWORK

Progress is reported against the Results Framework of the revised PAD and the 2025 Additional Financing and Restructuring Paper. Component-II carries two PDO indicators and four Intermediate Results Indicators. All targets are end-of-project targets to be achieved by project closing on 28 December 2028; the FY 2025-26 annual increment for the installation indicators was zero by design in the original phasing but has been compounded by the slippage described in Section 4.4.

4.1 PDO-level Indicators

Table 8: PDO-level indicators — status as at 30 June 2026

Indicator	Unit	End target	Baseline	FY 25-26 achieved	M&E assessment
PDO-2: People with enhanced resilience to climate risks	Number	1,800,000	0	Not yet measurable	Beneficiary coverage cannot be computed before AWS/WSR are operational and linked to early-warning dissemination. A beneficiary-coverage methodology should be agreed with the Bank in FY 2026-27 so that counting can begin at first operationalisation
PDO-2a: of which youth	Number	540,000	0	Not yet measurable	To be derived from covered population using agreed demographic assumptions
PDO-2b: of which women	Number	900,000	0	Not yet measurable	To be derived from verified female share of the served geography
PDO-4: Increase in weather forecast lead time of PMD	Days	5	0	No project-attributable change	Lead-time gain depends on the combination of observation density, HPC/SI and revised forecasting workflows; none was operational during the year

Source: revised PAD Results Framework; QPR Q1–Q4 FY 2025-26. 'Not yet measurable' denotes an indicator whose measurement is contingent on project assets that are not yet in service; it is distinct from a nil achievement against an activity that was due.

4.2 Intermediate Results Indicators

Table 9: Intermediate Results Indicators — status as at 30 June 2026

Indicator	Unit	End target	FY 25-26 achieved	Management attention	Evidence and binding constraint
IRI-7: Registered grievances satisfactorily resolved in line with the GRM	%	100	n/a (nil registered)	Routine	GRM operational all year: complaint box at PIU-II Saidpur, dedicated SIM and WhatsApp, e-mail, third-party channel. A resolution rate cannot be computed on a zero base. Constraint: none; the zero base reflects the absence of field works
IRI-10: Weather radars installed and operationalized	Number	4	0	High	Technical specifications revised and submitted 15 Dec 2025; World Bank NOL not issued; 10th PSC shifted procurement to GoP/PSDP; USD

Indicator	Unit	End target	FY 25-26 achieved	Management attention	Evidence and binding constraint
					18.0 m reallocated; revised PC-1 presented at the 11th PSC on 22 Jun 2026. Constraint: financing through PC-1 approval
IRI-11: Automatic Weather Stations installed and operationalised	Number	110	0	Substantial	Supply contracts with two overseas suppliers in force; mobilisation advance paid Mar 2026; 91 of 110 sites screened and WMO-validated; FAT initiated. Constraint: NOCs (2 of 54), MoUs (13 of 110), FAT completion and site fencing
IRI-12: Hydrological-modelling-based early warning system established for hill torrents in Balochistan	Yes/No	Yes	No	High	Pre-assessment of potential hill torrents including hazard and exposure analysis prepared; PIU-II participated in an international consultative workshop on hill torrents (Koh-e-Suleman). Constraint: dependent on telemetry AWS, HPC/SI, modelling software and alert-dissemination protocols

4.3 Enabling Milestones and Disaggregation

Because all four Intermediate Results Indicators stand at zero or ‘not applicable’, the M&E Consultants tracked a parallel set of enabling milestones through the year. These are not substitutes for Results Framework indicators; they are leading indicators of whether the formal indicators can be achieved on the revised schedule.

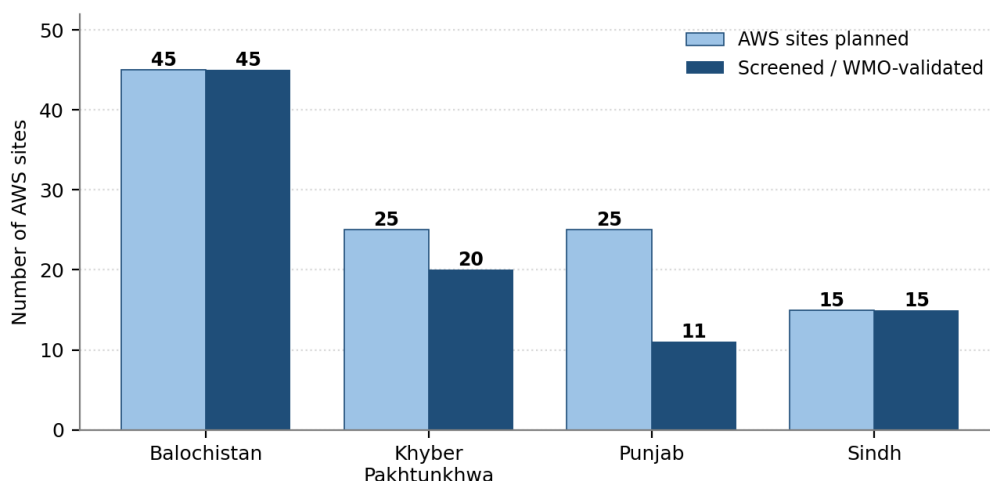
Table 10: Enabling-milestone indicators tracked by the M&E Consultants

Enabling milestone	Q1	Q2	Q3	Q4	Links to
AWS supply contracts in force	LoA issued	Signed 18 Dec 25	In force	In force	IRI-11
Mobilisation advance paid	—	—	Paid Mar 26	Done	IRI-11
AWS sites screened / WMO validated (of 110)	0	0	4	91	IRI-11
NOCs received (of 54 required)	0	0	0	2	IRI-11
MoUs signed (of 110 sites)	0	0	0	13	IRI-11
Factory Acceptance Test	—	—	—	Initiated	IRI-11
Sites ready for installation (fencing / takeover)	0	0	0	28*	IRI-11
Radar financing route settled	WB route	WB route	PSDP (10th PSC)	PC-1 at 11th PSC	IRI-10
HPC / System Integrator route settled	Specs pending	Bidding annulled	WMO approached	WMO proposals under review	PDO-4, IRI-12
Component-II MIS / PMIS integration	Not operational	Not operational	Not operational	Not operational	M&E system

* 28 sites on PMD premises require no NOC and are therefore administratively ready; physical fencing and civil works have not commenced at any of the 110 sites.

Disaggregation. Gender and youth disaggregation of PDO-2 cannot begin until beneficiary coverage exists. Geographic disaggregation is, however, already meaningful and is reported throughout this document: the 110-site network is distributed Balochistan 45 (41%), Khyber Pakhtunkhwa 25 (23%), Punjab 25 (23%) and Sindh 15 (13%), which is consistent with the project's stated priority of correcting the observational deficit in the western regions. Beneficiary-type disaggregation is available only from PIU-II's cumulative FY 2025-26 engagement figures: 130 PMD professionals trained in digital survey handling, 907 vulnerable individuals and 847 farmers interviewed during the digital survey exercise, and 117 PMD observatories assessed for capacity. These are outputs of preparatory engagement and are not counted against PDO-2.

Figure 2: AWS sites planned versus screened and WMO-validated, by province



Source: M&E Consultants, QPR-4 FY 2025-26 (position at 30 June 2026).

4.4 Annual Variance Analysis

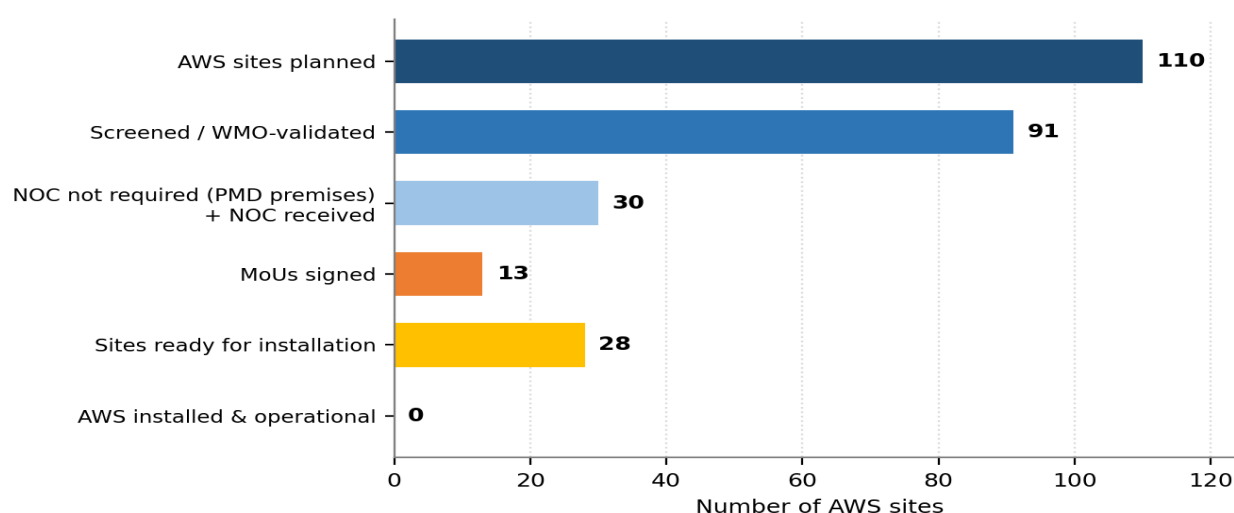
Every indicator target for the year was either missed or not yet measurable. The variance is explained by five distinct causes, which have different owners and therefore different remedies.

Table 11: Variance analysis — reasons for non-achievement of annual targets

Cause	Explanation and evidence	Indicators affected	Remedy and Responsibility
1. Clearance and NOL cycles	Multi-layered World Bank review of specifications, bidding documents and evaluation reports. The AWS Contract Evaluation Report was returned on 27 May 2025 owing to restructuring, resubmitted 10 July 2025 and cleared 13 July 2025; two standstill-period complaints were then resolved. Radar specifications submitted 15 December 2025 never received an NOL	IRI-10, IRI-11	Flag any clearance whose lead time exceeds 30 days for escalation to the Bank; maintain a live clearance register. Responsibility: PIU-II/PMD and FPMU
2. Omission of prerequisites from the AWP	Screening and WMO validation, NOCs, MoUs, FAT and fencing are absent from AWP 2025-26, so they were neither scheduled nor resourced; they nevertheless determine the supply date	IRI-11	FY-specific AWP 2026-27 incorporating all prerequisites with dates and budget. Responsibility : PIU-II and FPMU
3. Financing and scope instability	PC-1 approved at USD 50 m against Bank financing of USD 40 m; AWS	IRI-10, IRI-12, PDO-4	Obtain a PSC decision on the revised PC-1 and residual funds;

Cause	Explanation and evidence	Indicators affected	Remedy and Responsibility
	scope truncated from 300 to 110; USD 18.0 m radar allocation reallocated (USD 6.6 m to Youth Skill Development, USD 11.4 m undecided); revised PC-1 of USD 63.5 m pending		propose a Results Framework amendment for IRI-10 if the radar scope changes. Responsibility : FPMU / PSC / EAD/PMD/ MoPD&SI
4. Institutional capacity gaps	Deputy Project Director post vacant 14 October 2025 to 12 May 2026; five technical posts vacant; the 58-positions sustainability case unresolved; no M&E or MIS staff at PIU-II	All	Complete recruitment; create an M&E Specialist post mirroring Component-III. Responsibility : PMD / MoD / FPMU
5. Absence of milestone tracking	No Component-II MIS; manual consolidation; actual completion dates not recorded; percentages without a stated basis and in one case revised downward without explanation	All	Establish an interim milestone tracker compatible with the PMIS. Responsibility: PIU-II with the M&E Consultants

Figure 3: AWS site-readiness as at 30 June 2026



Source: M&E Consultants. The funnel narrows sharply at the NOC and MoU stages, which are the binding constraints on IRI-11.

4.5 Annual (Quarter-on-Quarter) M&E Performance Trend

Every Results Framework indicator stood at zero or 'not yet measurable' throughout FY 2025-26, which makes the indicator tables silent on the question : was the underlying activity portfolio getting better or worse as the year went on. The four Quarterly Progress Reports each carried an activity-level performance rating against the AWP 2025-26 milestone schedule, and consolidating those four assessments produces a trend that the Results Framework cannot show.

Table 12 sets the quarterly M&E ratings side by side for each activity cluster. Three findings emerge that are not visible in any single quarterly report. First, only one cluster — AWS site selection and screening — improved consistently across all four quarters, and it is the one cluster for which the AWP contains no baseline at all. Second, two clusters regressed in reported terms: the System

Integrator fell from 20 to 15 per cent and the radar design and supervision consultancy from 15 per cent to nil between Q3 and Q4. A reported decline in physical progress is not a schedule slippage; it is either a reporting error or a write-off of work previously claimed, and PIU-II has supplied no basis for either reading. Third, the largest cluster by value — radars — did not slip so much as change financing regime, moving out of the Bank-financed portfolio entirely between Q1 and Q4.

Table 12: Quarter-on-quarter M&E performance rating by activities, FY 2025-26

Activity (AWP reference)	Q1 Jun–Sep 25	Q2 Oct–Dec 25	Q3 Jan–Mar 26	Q4 Apr–Jun 26	M&E interpretation
Package-I — Modernization of observation infrastructure, data management and forecasting					
AWS site selection and screening (A.1 b; screening not in AWP)	Initiated; benchmark absent from AWP	Screening and WMO validation pending	4 KP sites screened and WMO-validated	109 potential sites screened; 28 final sites selected in Punjab and Sindh	Improving — the only cluster with sustained positive movement across the year
Award of contract for AWS supply (A.1 c)	Technical and financial evaluation in process	Contract signed 18 Dec 2025	Complete	Complete	Resolved, five to six months late
Mobilisation advance to AWS suppliers (A.1 d)	Not yet due under AWP	Pending	Pending	Disbursed 30 Apr 2026; USD 431,394 to the two suppliers	Resolved very late — the only cash movement of the year on the supply contract
Supply of AWS, Phases I to III (A.1 e–g)	Not started	Not started	Not started	Not started; deliveries pushed into FY 2026-27	Static — Factory Acceptance Test still outstanding at year end
Weather Surveillance Radars (A.4 a; 1.2 n–p)	Cancelled on STEP	Delayed 4+ months; specifications resubmitted 15 Dec 2025	10th PSC (22 Jan 2026) moved USD 18 million to PSDP	Revised PC-1 tabled at the 11th PSC, 22 June 2026	Re-routed — no longer a Bank-financed activity line; IRI-10 at risk in its present form
Radar design and supervision consultants (A.3 b–o; 1.3 k–q)	Cancelled on STEP	On hold awaiting Bank NOL	On hold; 15% reported	Reported physical progress nil	Regressing — reported progress fell between Q3 and Q4
High Performance Computing	Delayed 6+ months; NOL pending	Earlier proposals annulled; WMO approached	WMO support formally requested	WMO technical and financial proposals under review	Static — substitution of the procurement route has not yet produced a contract
System Integrator	Prior proposals rejected as substandard	Bidding annulled; WMO requested to submit proposals	Pending; 20% reported	Reported physical progress 15%	Regressing — reported progress fell between Q3 and Q4

Activity (AWP reference)	Q1 Jun–Sep 25	Q2 Oct–Dec 25	Q3 Jan–Mar 26	Q4 Apr–Jun 26	M&E interpretation
Enhancement of PMD service delivery (A.2 a and related)	Not started	Held pending DG PMD position on the revised PMD Act	RFQ for the Meteo-Pak platform returned by the Bank without stated reason	Delayed 12 months; draft under technical review	Static — the binding constraint is legislative, not procedural
Package-II — Technical assistance, institutional strengthening and capacity building					
Civil works procurement (2.2 e–h; B.1 a–d)	Procurement plan failed STEP compliance	Re-bidding started; Bank response awaited	Consultant on board, no cleared procurement plan	Sole bidder disqualified; NOL returned without stated reason	Static — frozen pending a redesigned unified procurement plan
IT equipment, furniture and data repositories (B.3 a–c)	Not reported	Not reported	Not started; disconnected from the AWP	Not started; severe inconsistency recorded	Untracked — activity lines do not correspond to AWP milestones
Capacity building and training (2.3 c; B.2 k–l)	Delayed 12+ months	Delayed 12+ months	Continuous variance against AWP timelines	Delivery limited to technical sessions	Static — no formal training programme mobilised in the year

Source: M&E Consultants, compiled from the quarterly M&E performance and variance summaries for Q1–Q4 FY 2025-26 ,AWP 2025-26. Percentages are as reported by PIU-II in its monthly progress reports; the M&E Consultants were not given the basis of calculation. The details underlying this table is at Annex G.1.

M&E Interpretation. A performance picture assembled quarter by quarter is more useful to management than the annual snapshot, because it distinguishes activities that are late from activities that are stationary and from activities that have been abandoned in place. Of the twelve clusters tracked, one improved, two regressed, one was re-routed and eight were static for the entire year. The M&E Consultants recommend that this quarter-on-quarter format be adopted as the standard presentation in PIU-II's own quarterly reporting for FY 2026-27, in place of the single-point percentage figures currently used.

5. REVIEW OF ANNUAL PROCESS MONITORING

5.1 Overview

Annual Process Monitoring of Component-II focused on assessing the effectiveness, efficiency, and timeliness of implementation processes supporting the modernization of hydromet and climate services under IFRAP. As physical installation and operationalization of major infrastructure investments, including Automatic Weather Stations (AWS), Weather Surveillance Radars (WSR), High Performance Computing (HPC), and System Integrator (SI) systems, had not commenced during FY 2025-26, the review primarily examined procurement readiness, institutional preparedness, site readiness, coordination mechanisms, safeguards compliance, monitoring systems, and implementation bottlenecks rather than physical outputs or outcome achievements. The assessment was based on review of monthly and quarterly progress reports, coordination meetings, FGDs/KIIs, field validation visits, AWS site screening exercises, and consultations with PIU-II, PMD, RMCs, universities, PDMA and other stakeholders.

5.2 Key Process Monitoring Findings

Following are the key findings from annual process monitoring:

➤ **Strong Progress in Procurement and Site Readiness Processes**

The most notable achievement during FY 2025-26 was the advancement of procurement readiness processes and the initiation of extensive AWS site screening activities. Contracts for procurement of 110 AWS remained active, mobilization advances were paid, and preparatory arrangements for Factory Acceptance Testing (FAT) were initiated. Simultaneously, joint teams comprising PIU-II, PMD, and Regional Meteorological Centers conducted screening and validation of 91 out of 110 AWS sites across Balochistan, Khyber Pakhtunkhwa, Sindh, and Punjab using WMO-compliant standards and structured assessment tools.

Site screening emerged as the most advanced implementation activity during the year and created a solid foundation for future installation and operationalization of AWS infrastructure. However, progress remained concentrated within preparatory processes, while installation-related milestones remained pending.

➤ **Significant Gaps Between AWP and Actual Implementation Requirements**

Process monitoring revealed a major disconnect between the Annual Work Plan (AWP 2025-26) and actual implementation requirements. Critical enabling activities such as AWS site screening, WMO validation, obtaining NOCs, signing MoUs, site administrative takeover, and Factory Acceptance Testing were either not reflected or inadequately represented in the approved AWP. Consequently, substantial implementation effort undertaken during the year could not be effectively tracked against planned benchmarks.

This limitation reduced the management utility of the AWP and constrained timely identification of emerging delays, contributing to weak alignment between planning, monitoring, and reporting systems.

➤ **Delays in Administrative Readiness Processes**

Although substantial site screening progress was achieved, implementation readiness remained constrained by delays in securing NOCs and signing MoUs with collaborating institutions. By the end of FY 2025-26, only 13 MoUs had been signed despite 110 planned AWS installations, while only two NOCs had been formally received against a requirement of 54. Process monitoring identified recurring

issues related to equipment security, overlapping site locations, communication infrastructure, and institutional approvals as key contributors to these delays.

The review concluded that delays in administrative takeover processes represent one of the most significant risks to timely commencement of AWS installation activities during FY 2026-27.

➤ **Weak Monitoring Systems and MIS Integration**

A critical process weakness identified throughout the reporting year was the absence of a dedicated MIS and milestone-tracking mechanism within PIU-II. Progress data continued to be maintained through fragmented spreadsheets and manual reporting systems, limiting visibility of implementation status, contract milestones, procurement progress, and readiness indicators.

The absence of integrated MIS functionality also affected linkage with the PMIS developed by M&E Consultants, thereby restricting real-time monitoring, dashboard reporting, variance analysis, and evidence-based management decision-making. Process monitoring consistently flagged this issue as a high-priority institutional risk requiring immediate corrective action.

➤ **Coordination and Stakeholder Engagement Processes Functioned Effectively**

The review found that stakeholder coordination processes remained active and productive throughout the year. M&E Consultants conducted approximately thirty coordination meetings, workshops, FGDs, KIIs, debriefing sessions, and field validation visits involving PIU-II, PMD, RMCs, universities, PDMA, and other stakeholders. These engagements facilitated validation of field findings, resolution of technical issues, site screening assessments, progress verification, and identification of implementation bottlenecks.

Field visits to Hazara University, NTHRI Shinkiari, Balakot Observatory, Agriculture University Peshawar, Bacha Khan University, and PDMA KP further strengthened stakeholder ownership and generated valuable feedback regarding site suitability, data utilization, operational sustainability, and institutional collaboration.

➤ **Procurement and Approval Processes Remained the Principal Source of Delays**

Annual process monitoring identified procurement procedures, multiple review layers, approval requirements, and World Bank No Objection Letter (NOL) clearances as major causes of implementation delays. Several critical activities, including AWS supply, radar procurement, HPC procurement, IMG upgradation, and service delivery enhancement initiatives, experienced delays ranging from six to twelve months.

The procurement uncertainty surrounding Weather Surveillance Radars was particularly significant, following the decision to shift radar financing from the World Bank allocation to PSDP financing mechanisms, requiring revision of PC-I and additional approvals.

5.3 Overall Assessment

Based on the annual review, Component-II successfully progressed from planning and procurement preparation toward implementation readiness; however, it remained largely within a preparatory phase throughout FY 2025-26. Significant achievements were observed in AWS site screening, procurement mobilization, safeguards preparation, coordination, and institutional engagement. Nonetheless, delays in NOCs, MoUs, FAT completion, MIS establishment, procurement approvals, and radar financing prevented transition to physical implementation and operational results.

Consequently, the overall annual implementation status of Component-II reflecting strong progress in preparatory and readiness activities, but insufficient advancement toward installation, commissioning, and operational achievement of PDO and Intermediate Results Indicators.

5.4 Key Recommendations from Annual Process Monitoring

- Establish a dedicated Component-II MIS integrated with PMIS for real-time monitoring and milestone tracking.
- Complete all pending AWS site screening, NOCs, and MoUs before commencement of installation activities.
- Expedite Factory Acceptance Testing and supply readiness processes to avoid further schedule slippages.
- Prepare a realistic AWP 2026-27 incorporating all enabling milestones and Results Framework linkages.
- Introduce a structured milestone-tracking and early warning mechanism covering procurement, contracts, site readiness, safeguards, and implementation progress.
- Strengthen institutional capacity through recruitment of MIS, M&E, procurement, and technical specialists to improve implementation oversight and reporting quality.

5.5 Recommendations for FY 2026-27

The Annual Process Monitoring Review of Component-II concludes that FY 2025-26 was primarily a year of procurement preparation, institutional coordination, and implementation readiness rather than physical execution. Significant progress was achieved in AWS site screening, contract mobilization, stakeholder engagement, safeguards compliance, and preparatory planning; however, delays in NOCs, MoUs, Factory Acceptance Testing (FAT), procurement approvals, MIS establishment, and radar financing prevented transition to installation and operational deployment of project investments. Consequently, the focus of FY 2026-27 must shift decisively from preparation to implementation, ensuring that readiness milestones are converted into measurable physical progress and results.

➤ **Complete all AWS site-readiness requirements**

The highest priority for the coming year is to complete all AWS site-readiness requirements, including screening of remaining sites, resolution of pending NOCs, execution of MoUs, administrative takeover of locations, and completion of site preparation activities. These actions are critical prerequisites for installation of the planned 110 Automatic Weather Stations and achievement of Intermediate Results Indicator (IRI-11). Simultaneously, PIU-II should expedite the Factory Acceptance Test (FAT) process and closely monitor vendor performance to ensure timely supply, installation, and commissioning of AWS equipment.

➤ **Strengthening project management and monitoring systems**

A second strategic priority is strengthening project management and monitoring systems. The absence of a dedicated Management Information System (MIS) and milestone-tracking mechanism has been identified as a major implementation risk. During FY 2026-27, PIU-II should establish a fully functional MIS integrated with the PMIS developed under IFRAP, enabling real-time monitoring of procurement, contracts, safeguards, site readiness, and implementation progress. Improved monitoring systems will enhance management oversight, facilitate timely corrective actions, and provide early warning of emerging risks.

➤ **Preparation and implementation of a realistic Annual Work Plan**

The review further recommends preparation and implementation of a realistic Annual Work Plan (AWP) 2026-27 that fully captures all enabling milestones omitted from the previous AWP, including site screening, NOCs, MoUs, FAT, civil works, installation schedules, and operational readiness activities. The revised AWP should be directly linked with PDOs, Intermediate Results Indicators,

quarterly targets, and reporting requirements to strengthen accountability and improve project performance management.

➤ **Strengthen procurement and contract management practices**

To address implementation delays, PIU-II should strengthen procurement and contract management practices, accelerate reviews and approvals related to HPC, System Integrator, forecasting software, and radar procurement, and establish milestone-based contract monitoring systems. Particular attention should be given to approval of the revised PC-I and resolution of financing arrangements for Weather Surveillance Radars, as these investments are critical for achieving Component-II development objectives and future hydromet service improvements.

➤ **Institutional capacity enhancement**

Institutional capacity enhancement should remain a management priority. Filling key vacant positions, including procurement, contract management, IT, safeguards, and M&E specialists, will improve implementation oversight, reporting quality, and coordination among stakeholders. Adoption of a standardized results-based reporting framework for monthly and quarterly progress reports is also recommended to strengthen evidence-based decision-making and improve alignment between achievements, risks, delays, and corrective actions.

In summary, FY 2026-27 represents a critical transition year for Component-II. Success will depend on timely completion of site readiness activities, operationalization of monitoring systems, acceleration of procurement processes, strengthening of institutional capacity, and effective implementation of corrective actions. Achieving these priorities will enable the project to move from a prolonged preparatory phase into active installation and operationalization of hydromet infrastructure, laying the foundation for achievement of PDO and Intermediate Results targets in subsequent years.

5.6 Key Annual Process Monitoring Conclusion

Without an integrated MIS, project management remains largely reactive, identifying risks only after delays have occurred. With MIS integration, risk management becomes proactive by providing real-time visibility, automatic alerts, milestone tracking, accountability mechanisms, and management dashboards that support timely intervention and informed decision-making. This is particularly important for Component-II as it transitions from procurement readiness to large-scale installation and operationalization of AWS, WSR, HPC, and climate service infrastructure during FY 2026-27.

6. REVIEW OF COMPONENT- WISE PROGRESS

This section reports what was actually done during the year, sub-component by sub-component. Detailed activity-level records are placed at Annex A and Annex C to avoid duplication.

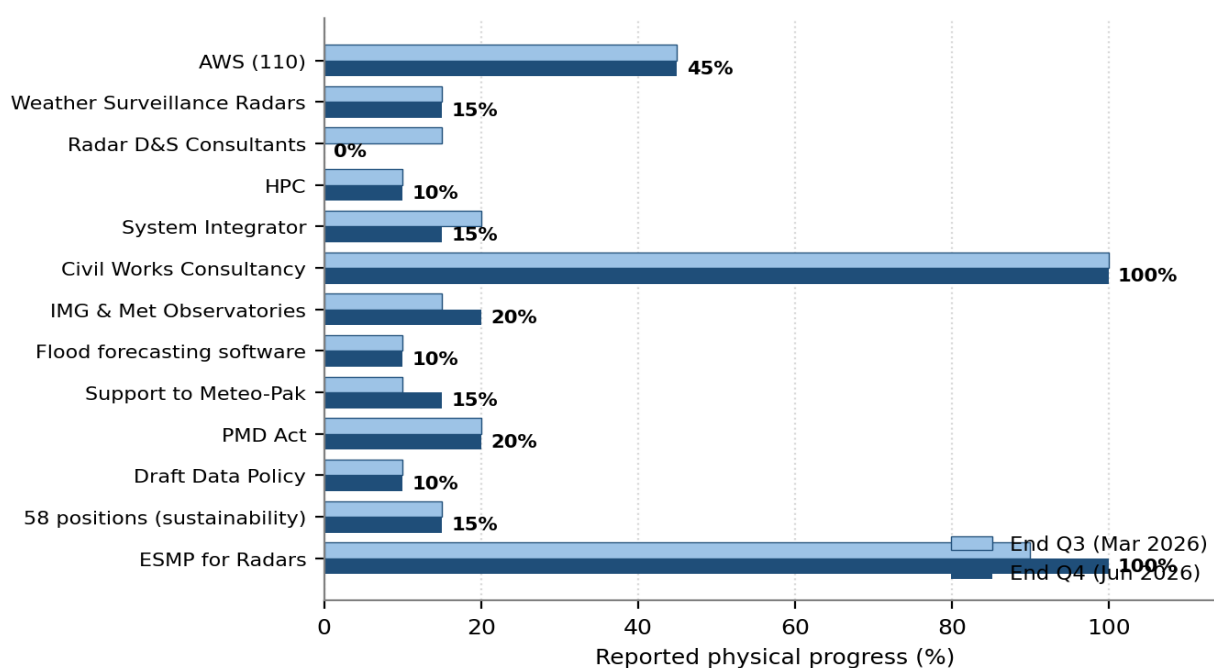
6.1 Progress by Sub-component, Quarter by Quarter

Table 13: Sub-component progress, Q1 to Q4 FY 2025-26

Sub-component	Q1 (Jun–Sep 25)	Q2 (Oct–Dec 25)	Q3 (Jan–Mar 26)	Q4 (Apr–Jun 26)
110 AWS (incl. 24 agromet sensors)	Letter of acceptance issued; bank guarantee under verification; NOL for the AWS contract issued by the Bank on 13 Jul 2025; two standstill complaints resolved; initial site identification by PMD/RMC	Contract negotiations completed and supply contracts signed 18 Dec 2025 with two overseas suppliers; final meetings with suppliers and National Bank of Pakistan on import documentation	Joint PIU-II/PMD/RMC screening teams formed for all four provinces and trained; screening began in KP and Balochistan; M&E field validation at four KP sites; mobilisation advance paid Mar 2026	Screening completed for 91 of 110 sites (Balochistan 45, KP 20, Sindh 15, Punjab 11); 13 MoUs signed; NOC processing continued; FAT preparatory tasks initiated; supply not commenced
4 Weather Surveillance Radars	Specifications and draft bidding documents submitted for Bank review	Bank review awaited; item placed on the PSC agenda pending Bank approval	10th PSC (22 Jan 2026) decided radars would be financed by GoP through PSDP (USD 18 m)	11th PSC (22 Jun 2026) considered a revised PC-1 financing WSR through PSDP; revised PC-1 proposes WB USD 33.5 m plus PSDP USD 30 m
Radar Design & Supervision Consultants	Processing linked to WSR; technical evaluation discussed	Linked to the WSR procurement decision	Start contingent on radar procurement	Cancelled on STEP following the diversion of radar funds; to be financed through PSDP if revived
HPC, System Integrator and flood-forecasting software	Specifications to be developed by a relevant expert; SI financial proposals opened 4 Jul 2025	SI bidding process annulled — Bank concurrence 2 Oct 2025	WMO requested to provide HPC, SI and soft components; online meeting sought to finalise the WMO proposal	ToRs for an international consultant prepared for Bank NOL; WMO technical and financial proposals received and under PIU-II review
Civil Works Design & Supervision Consultancy	Firm (Umar Munshi Associates) on board since Mar 2025	BoQs and bidding documents under preparation	Work continued on agreed assignments	Firm on board; bidding documents prepared; Bank NOL awaited. Only sub-component at 100%
IMG building, Met Workshop Karachi and Met Observatories	ESMP for IMG reviewed with the Bank team; bids received for both lots; evaluation in progress	Comments addressed and ESMP cleared by the Bank E&S team; NOL pending	Combined bidding document prepared; NOL awaited. RFB advertised and technical bids opened, then cancelled — only two bids received, one incomplete	Work plan finalised and shared with the Bank for review

Sub-component	Q1 (Jun–Sep 25)	Q2 (Oct–Dec 25)	Q3 (Jan–Mar 26)	Q4 (Apr–Jun 26)
Support to Meteo-Pak (PMD)	Meteo-Pak Commercial Services Wing established in PMD	Workshop on aviation meteorology under process; Bank NOL pending	RFQ prepared for upgradation of digital platforms for media cells	Work plan finalised and shared with the Bank for review
ESMP for radar sites	Not reported	Draft report completed	Completed for Bank NOL	E&S screening completed; ESMP completed May 2026
PMD Act revision and draft data policy	Work initiated on both	Reviewed with the Legal Adviser; case pending with the Bank	Draft revised in line with the Legal Adviser's advice	Draft under revision by technical experts; no update in the June 2026 MPR
58 positions for sustainability	Not reported	Case submitted to MoD through PMD	Revised case in process for MS (Wing) study	Positions incorporated in the PSDP share of the revised PC-1; recruitment to follow PC-1 approval
Appointment of Deputy Project Director	Recruitment process initiated	ToRs approved by the Bank and MoD	Interviews conducted by MoD for shortlisted candidates	Selection finalised; new DPD assumed charge 12 May 2026
Capacity building and training	Need assessment and training plan stage	Training design and contents	Technical field mission with on-site training of PIU-MHSP personnel on WMO-compliant AWS standards	Technical session on WMO-compliant standards, site selection criteria, sensor installation and configuration, data quality assurance and operational best practice

Figure 4: Reported physical progress by sub-component, end Q3 versus end Q4



Source: PIU-II monthly progress reports, Note the reported decline for System Integrator (20% to 15%) and Radar D&S Consultants (15% to nil following cancellation on STEP); the former is a data-reliability issue flagged in Table 6.

6.2 AWS Site Readiness

The 110-site network is distributed across four provinces. Of the 110 sites, 28 are located on PMD premises and require no NOC; the remaining 82 sit are located on land or premises controlled by universities, irrigation, agriculture, health and home departments, local administration and airport authorities, and require an NOC before an MoU can be signed and administrative takeover effected.

Table 14: AWS site readiness by province as at 30 June 2026

Province	Sites planned	Screened / WMO validated	PMD premises (no NOC)	NOCs required	NOCs in process	NOCs received	MoUs signed
Balochistan	45	45	12	14	19	0	0
Khyber Pakhtunkhwa	25	20	5	20	0	2	2
Punjab	25	11	8	11	6	0	11
Sindh	15	15	3	9	3	0	0
Total	110	91 (83%)	28	54	28	2	13

source: M&E Consultants, QPR-4. Screening incomplete for 14 sites in Punjab and 5 in KP (law-and-order and security constraints). MoUs pending: 41 of the 54 sites requiring one. Site-level records at Annex C.

Three recurrent obstacles emerged from NOC negotiations and were confirmed at every field visit: responsibility for the physical security of equipment at remote and unstaffed sites; overlap with existing donor-funded or departmental installations, which risks duplication; and the reliability of internet or telemetry links required for continuous data transmission. The first of these was unresolved at Agriculture University Peshawar at year end and is likely to recur at the remote Balochistan sites.

Table 16: Status of major procurement packages as at 30 June 2026

Package	Status	Position at the end of the year 2025-26	Critical path
Supply and installation of 110 AWS (2 lots, 2 overseas suppliers)	Contract in force	Signed 18 Dec 2025 against an AWP milestone of Jul 2025; mobilisation advance paid Mar 2026 against a planned Jun 2025; FAT preparatory tasks initiated; supply not commenced	FAT completion → shipment and customs clearance → NOC/MoU/fencing at destination sites → installation and commissioning
4 Weather Surveillance Radars	Revised PC-1	Bank NOL not issued on revised specifications; financing shifted to GoP/PSDP by the 10th PSC; revised PC-1 tabled at the 11th PSC on 22 Jun 2026	PC-1 approval → PSDP allocation → fresh procurement cycle → design, manufacture, shipment, installation
High Performance Computing and System Integrator	Under review	Open competitive SI bidding annulled with Bank concurrence 2 Oct 2025; WMO technical and financial proposals received and under PIU-II review; ToRs for an international consultant prepared	Decision on the WMO proposals → Bank NOL → contract → installation and integration
Civil works design and supervision consultancy	Performing	Firm on board since Mar 2025; bidding documents and BoQs prepared; Bank NOL awaited	NOL → civil works procurement → site works

Package	Status	Position at the end of the year 2025-26	Critical path
Civil works contractor (IMG Karachi, Met Workshop, observatories)	Re-tender	First RFB cancelled — only two bids received, one incomplete; earlier technical evaluation disqualified the bidder; work plan finalised and shared with the Bank	Revised procurement plan and Bank NOL → re-advertisement → award

6.3 Service Delivery and Institutional Strengthening

Six activities included under the enhancement of PMD service delivery: creation of a National Framework for Climate Services (planned 1 July 2025 – 3 June 2026); creation of the NFCS for decision-support services (same window); development of a business model (15 March 2025 – 30 June 2028); awareness workshops (15 March 2025 – 30 June 2028); impact-based forecasting (10 March 2025 – 30 June 2028); and establishment of weather video studios (1 July 2026 – 30 June 2027). None of these started as on 30 June 2026. The M&E Consultants pointed out in QPR-2 and again in QPR-4 that these activities are held at initial stage and in QPR-3 that the World Bank returned the request for quotations prepared for the 'Meteo-Pak PMD' digital platform and media-cell upgrade without a recorded justification. Only the weather video studios are not yet formally in delay, because they fall due in FY 2026-27.

The upgradation packages for IMG Karachi, the CDPC and RCDPC, the Met Workshop Karachi and the meteorological observatories were planned for completion by 30 June 2026. By the end of the year, the sole bidder had been disqualified at technical evaluation, and the Bank had returned NoL without assigning a reason. Procurement of IT equipment, furniture and data repositories (B.3 a–c) had not started and these activities do not correspond to AWP milestones. As hi-lighted in Q3 the approval of the 58 institutional positions required for long-term sustainability was at a standstill, and that recruitment of the IT / Software Specialist included in the revised PC-1 depends on its approval. The activity-wise detail is given at Annex G.1.

7. ANNUAL FIELD MONITORING AND SUPERVISION

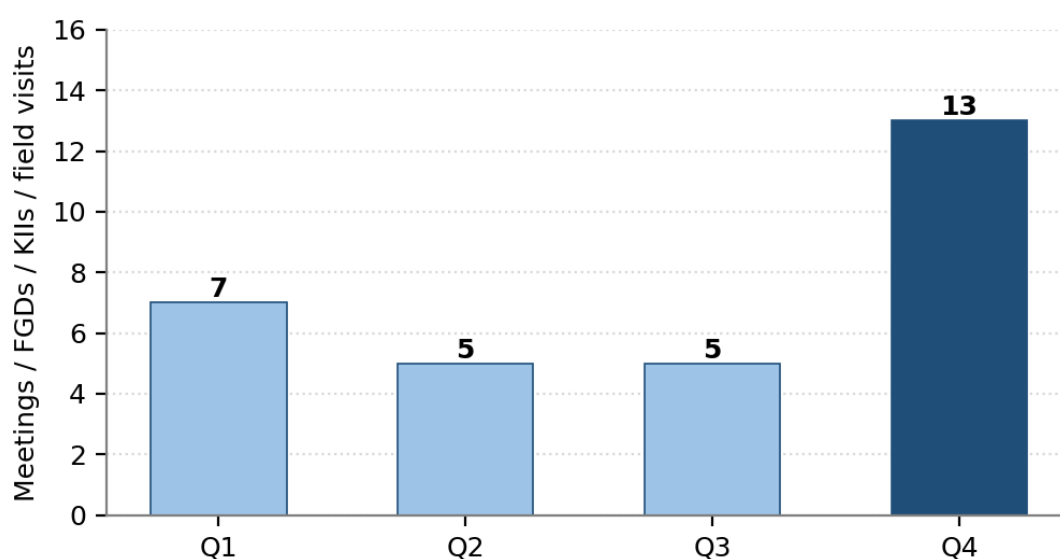
7.1 Monitoring Events Conducted

The M&E Consultants conducted 30 coordination meetings, workshops, FGDs, KIIs and field or spot visits during FY 2025-26. The field reports/minutes are included at Annex B. Activity intensified sharply in Q4 as screening of 110 AWS were expedited in all the four provinces.

Table 17: M&E field monitoring and supervision events, FY 2025-26

Quarter	Meetings Reference	Number of meetings	Number of Field visits	Major focus
Q1 Jul–Sep 25	1–7	7	—	Inception and institutional alignment; M&E Framework; PMIS design and implementation; GRM Implementation Plan; data flows and reporting formats
Q2 Oct–Dec 25	8–12	5	5	Procurement and import documentation; district-level hydromet survey (Quetta, Lasbela, Gwadar, Sibi, Mardan); visits to Mardan, Lahore, Islamabad, Quetta and Karachi including radar stations
Q3 Jan–Mar 26	13–17	5	4	Formation and training of joint screening teams; first field validation of AWS site screening at Charsadda, Kohat, Peshawar and Mardan; AWP-based reporting format shared with PIU-II
Q4 Apr–Jun 26	18–30	13	8	Site screening in KP (Hazara University, NTHRI Shinkari, Balakot observatory, Agriculture University Peshawar, Bacha Khan University); KII with DG PDMA KP; RMC Peshawar; QPR-2 and QPR-3 debriefing workshops; technical workshop 'Designing Resilience at Scale'
Total	1–30	30	17	

Figure 6: Quarter-wise M&E meetings, field visits, FGDs, KIIs during FY 2025-26



7.2 Key Findings from the Field

- **Screening quality is sound.** Joint teams applied a structured KoBo instrument capturing GPS coordinates, timestamps, site photographs and risk ratings, validated against WMO siting standards. The M&E Consultants observed screening directly at eight sites and found the process consistent with the protocol.
- **Host institutions are willing partners.** Hazara University's V C provided consent, identified a site on the south-east of the campus and nominated a focal person. Bacha Khan University assured full cooperation and proposed to use AWS data for research — a reciprocal arrangement that strengthens the sustainability



The site marked 'Selected Site' during joint screening at Hazara University, Mansehra, Khyber Pakhtunkhwa, 14 April 2026, shown beside the existing meteorological installation on the campus.

Source: M&E Consultants (IFRAP), record of the 19th meeting and field visit, QPR-4 FY 2025-26.

- **Duplication risk.** At the National Tea and High Value Crops Research Institute, Shinkiari, an existing donor-funded AWS was found functional. The M&E Consultants advised against a second installation and recommended an alternate site plus a data-sharing arrangement with PMD/RMC. A systematic overlap check should be applied to the remaining sites. The station in question is shown in Photo 2



Photo 2: Joint PMD, RMC, PIU-II and M&E team at the existing donor-funded automatic weather station found operational in the tea plantation of the National Tea and High Value Crops Research Institute, Shinkiari, 15 April 2026.

Source: M&E Consultants (IFRAP), record of the 20th meeting and field visit, QPR-4 FY 2025-26. © M&E Consultants (IFRAP) / Pakistan Meteorological Department. Further permission required for reuse.

- **Legacy assets are under-maintained.** The Meteorological Observatory at Balakot, operational since 1955 on 24-hour shifts with hourly transmission to PMD, has been waiting for the return of an AWS sent for repair in 2016. This is a maintenance relevant warning for the 110 new stations and reinforces the case for the 58-positions sustainability proposal. Photo 3 shows the Stevenson screen at that observatory.



Photo 3: M&E Consultants and observatory staff inspecting the Stevenson screen at the Meteorological Observatory, Balakot — in continuous operation since 1955 — during the site visit of 16 April 2026.

Source: M&E Consultants (IFRAP), record of the 21st meeting and site visit, QPR-4 FY 2025-26. © M&E Consultants (IFRAP) / Pakistan Meteorological Department. Further permission required for reuse.

- **Users want telemetry, not just stations.** The Director General of PDMA Khyber Pakhtunkhwa recommended prioritising AWS in high-altitude, remote and geographically volatile areas and integrating AWS data into PDMA and RMC early-warning systems in real time. Without that integration the network will improve observation without improving warning — which is what PDO-4 and IRI-12 actually measure. The interview at which that request was made is shown at Photo 4.



Photo 4: Key informant interview with the Director General, Provincial Disaster Management Authority Khyber Pakhtunkhwa, Peshawar, 22 June 2026, at which the request for real-time AWS telemetry integration with the Provincial Emergency Operation Centre was recorded.

Source: M&E Consultants (IFRAP), key informant interview record, QPR-4 FY 2025-26. © M&E Consultants (IFRAP) / PDMA Khyber Pakhtunkhwa. Further permission required for reuse.

- **District-level baseline.** The October 2025 survey of five districts found existing equipment operational and data being shared with other agencies, but about half of the staff requiring training or skills updating, and maintenance and calibration support remains in high demand. In Quetta, met stations are under the Irrigation Department and PMD has no access to their data — an institutional data gap relevant to the hill-torrent early warning system.

7.3 Case Study: Bacha Khan University, Charsadda

Situation. Charsadda lies in one of the most flood-exposed districts of Khyber Pakhtunkhwa. An AWS site on the Bacha Khan University campus was identified during the Q3 screening round and revisited by M&E Consultants on 23 June 2026.

Response. The university assured full cooperation, an MoU was signed with PMD/RMC, and the university proposed to use the AWS data stream for its own research and teaching. Final site fixing was made contingent on obtaining the NOC from the relevant stakeholders.

Why it matters. This is the model the component should replicate at the 54 (or at the most) non-PMD sites. The host institution obtains a research asset and assumes de facto custodianship, which addresses the security concern that is blocking NOCs elsewhere; PMD obtains a site at no land cost with a resident counterpart. The M&E Consultants recommend that the reciprocal data-use clause used at Bacha Khan University be adopted as a standard MoU template, and that NOC and MoU processing be clubbed into a single visit to save time and cost. The executed instrument is reproduced at Photo 5.

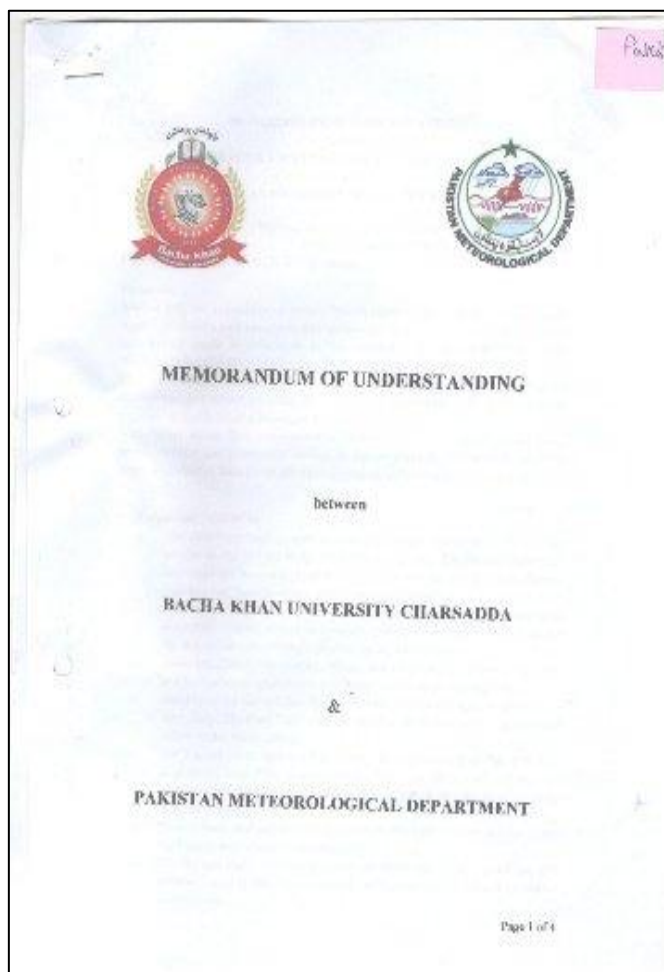


Photo 5: First page of the Memorandum of Understanding signed between Bacha Khan University, Charsadda and the Pakistan Meteorological Department for the AWS site on the university campus.

Source: M&E Consultants (IFRAP), key informant interview record, Bacha Khan University Charsadda, QPR-4 FY 2025-26.

8. GRIEVANCE REDRESS MECHANISM

8.1 Complaints Received, Resolved and Pending

The GRM Implementation Plan was submitted on 7 August 2025 and endorsed by PIU-II on 22 September 2025, aligned with PMD's approved GRM and World Bank guidance.

The mechanism has been operational and monitored throughout the year by a GRM Associate deployed by the M&E Consultants based in M&E Camp office Islamabad. The banner and complaint box installed at the PIU-II office are shown at Photo 6.

No grievance was registered at any point during FY 2025-26. The M&E Consultants assess this as consistent with the implementation process. There were no civil works, no land acquisition, no resettlement and no contractor workforce in the field at any time during the year, and consequently no complaint was raised with the project-related grievance.

Table 18: Grievance Redress Mechanism — annual summary

Item	Q1	Q2	Q3	Q4
Grievances registered	0	0	0	0
Grievances resolved	0	0	0	0
Grievances pending at quarter end	0	0	0	0
Average turnaround time	n/a	n/a	n/a	n/a
IRI-7 resolution rate (target 100%)	Not computable on a zero base			
GRM in operation				
Complaint box at PIU-II Saidpur; dedicated SIM and WhatsApp (0325-5373330); e-mail complaint@ifrap.org.pk; GRM banner and staff at PIU-PMD; third-party project-level GRM. Toll-free number still to be provided by PIU-II.				



Photo 6: Grievance Redress Mechanism awareness banner and the locked transparent complaint box installed at the PIU-II office, Saidpur, Islamabad.

Source: M&E Consultants (IFRAP), GRM implementation record, QPR-1 and QPR-3 FY 2025-26. © M&E Consultants (IFRAP).

Two forward-looking observations follow. First, complaint-logging integration with the PMIS is designed but cannot be activated until PIU-II has an MIS and field activities begin; this should be sequenced with the milestone tracker recommended in Section 3.2. Second, the visibility campaign should be launched at the point of AWS sites, once the fencing and civil works start at 110 dispersed AWS sites. Several locations are adjacent to mosques, hospitals, universities, a heritage site at Shandoor Polo Ground and the Kartarpur Corridor — the grievance profile will change abruptly. The toll-free number should be in service before the AWS sites are made operational.

9. SAFEGUARDS AND CROSS-CUTTING THEMES

9.1 Environmental and Social Performance

PIU-II has completed the Environmental and Social Management Framework, the Stakeholder Engagement Plan, the Labour Management Plan and the Environmental and Social Commitment Plan. The ESMP for radar sites was completed in May 2026 and is to be submitted for Bank NOL when the radar activity is initiated; social screening of radar sites was completed in Q3 with an initial draft report.

The principal safeguards achievement of the year was the AWS site-screening exercise. Screening applied a 13-criterion environmental and social risk checklist digitised on KoBo Toolbox, capturing GPS-tagged coordinates, timestamps, photographs and Low / Moderate / Substantial / High risk ratings at each candidate site, alongside WMO-CIMO meteorological suitability and network-coverage criteria. Because no civil works, fencing or site preparation commenced at any site during the year, therefore there emerged no construction-related environmental impact, occupational health and safety incident, land acquisition or resettlement effect.

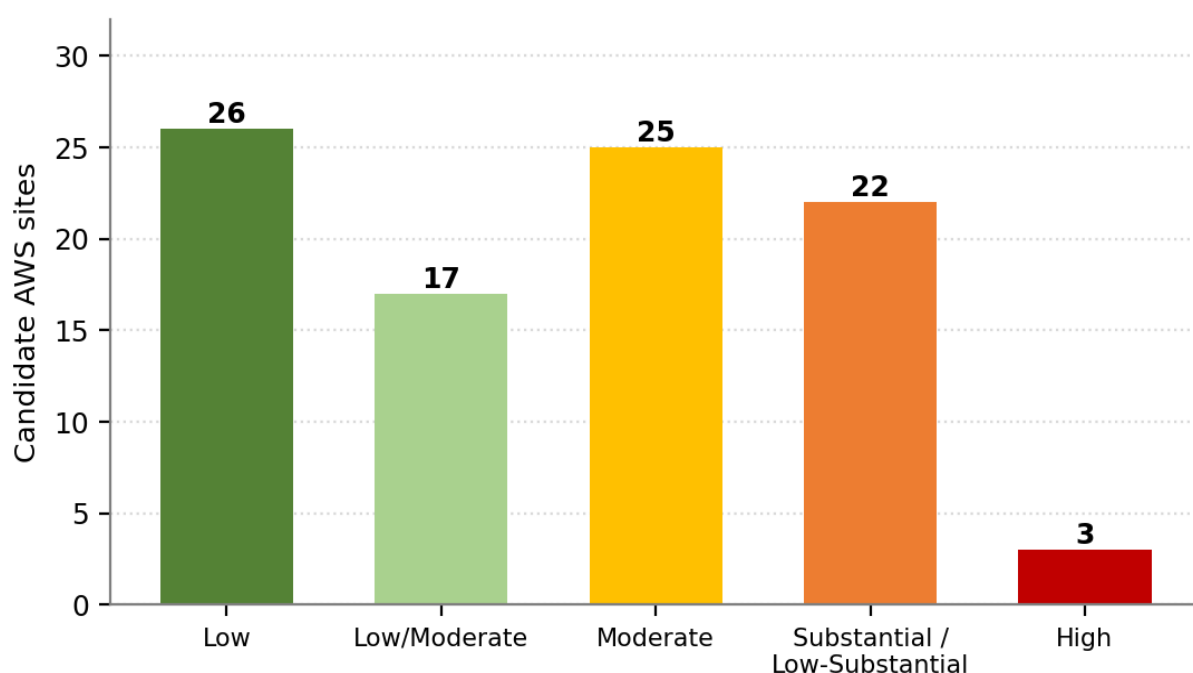
Table 19: Environmental and social screening outcomes by province, Q4 FY 2025-26

Province	Screening period	Potential AWS sites screened	Final sites selected	Major Environmental and Social Findings
Balochistan	13–23 Apr + 21 May 2026	53	Under process	Province-wide seismic risk — all foundations to earthquake building codes; coastal sites (Gwadar, Pasni, Ormara, Turbat) face compound cyclone, tsunami, heatwave and corrosion hazards requiring marine-grade equipment; flood-prone low-lying sites (Jaffarabad, Sohbatpur, Jhal Magsi, Nari Headworks, Naseerabad) require elevated platforms; worker and equipment security at remote sites (Dera Bugti, Musakhail, Washuk) requires contractor insurance and law-enforcement liaison; CAA/PAA clearance at Quetta and Turbat airports; construction blackout during the five daily prayer times at sites adjacent to mosques
Khyber Pakhtunkhwa	13–27 Apr 2026	14	Under process	High-altitude access, wind-loading and snowfall challenges at Shandoor (3,667 m), Malam Jabba (2,442 m), Gabbin Jabba (2,564 m) and Kalam (2,028 m); wildlife present at several sites — brief fauna surveys recommended; CAA/PAF approval at Saidu Sharif airport; written agreements required for private and institutional land at Malam Jabba and Gabbin Jabba; Shandoor Polo Ground is a heritage site of national importance requiring highest-level authorisation; river flood risk at SBBU Shringal requires elevated platforms

Province	Screening period	Potential AWS sites screened	Final sites selected	Major Environmental and Social Findings
Punjab	7–11 May + 4 Jun 2026	7 (25 cumulative)	13	Two sites rated High risk — Gurudwara Janam Asthan, Nankana Sahib and the Kartarpur Corridor, Narowal — both religious and heritage sites of international significance requiring specific institutional clearance and culturally sensitive construction protocols
Sindh	10–19 Jun 2026	29	15	Predominantly Low and Moderate risk; twelve sites on Sindh Irrigation Department premises; airport protocol applies at Mohenjo-daro
Total	Apr–Jun 2026	103 (121 cumulative)	28 confirmed	MoUs with all selected host institutions to be finalised before construction mobilisation

Source: PIU-II Quarterly Progress Report Q4 2025-26, environmental and social safeguards section. Potential screenings exceed the 110-site network because a larger pool was deliberately screened to permit composite final selection; see the reconciliation note in Section 3.3. Site-level registers at Annex C.

Figure 7: Environmental and social risk profile of screened candidate sites



Source: M&E Consultants, from PIU-II KoBo screening records (Balochistan, Punjab and Sindh registers).

9.2 Gender, Climate and Social Inclusion

Gender. PDO-2b sets a target of 900,000 women beneficiaries — half of the total PDO-2 target — and PDO-2a a target of 540,000 youth. Neither can be measured before services are operational. The M&E Consultants are of the view that no gender-disaggregated methodology has yet been agreed for deriving beneficiary counts from AWS coverage areas, and that no gender-disaggregated data were collected on the 130 PMD professionals trained during the year. Both should be corrected

in FY 2026-27: the methodology through agreement with FPMU/WB, and the training data through a simple disaggregation field in the training outcome.

Climate. The component is climate-adaptation infrastructure by design. Two features of the year's work strengthen the climate rationale: the deliberate concentration of 41 per cent of the network in Balochistan, correcting a long-standing observational deficit in the most climate-exposed province; and the explicit incorporation of climate hazard into site screening — seismic, cyclone, tsunami, heatwave, snowfall and riverine flood exposure were each assessed and translated into design requirements. The hill-torrent early warning system (IRI-12) remains the component's most direct adaptation output and has not progressed beyond pre-assessment.

Social inclusion and citizen engagement. As per PIU-II reports, 26 or more community engagement events across the four provinces during the year, alongside the survey work noted above: 907 vulnerable individuals and 847 farmers interviewed, and 117 PMD observatories assessed. Screening at sites of religious and cultural significance — Nankana Sahib, the Kartarpur Corridor, Shandoor Polo Ground, and sites adjacent to mosques — was handled with explicit protocols. The M&E Consultants recommend that these engagement figures be brought into the Results Framework reporting chain as documented outputs with a stated methodology, rather than remaining descriptive text in the PIU narrative.

10. CHALLENGES, LESSONS LEARNED AND MITIGATION MEASURES

10.1 Implementation Challenges and Delay Analysis

M&E Consultants observe process and operational constraints rather than by technical capacity. Measured against AWP 2025-26, slippage on the major activities accumulated to between six and twelve months and more.

Figure 8: Slippage of major activities against AWP 2025-26

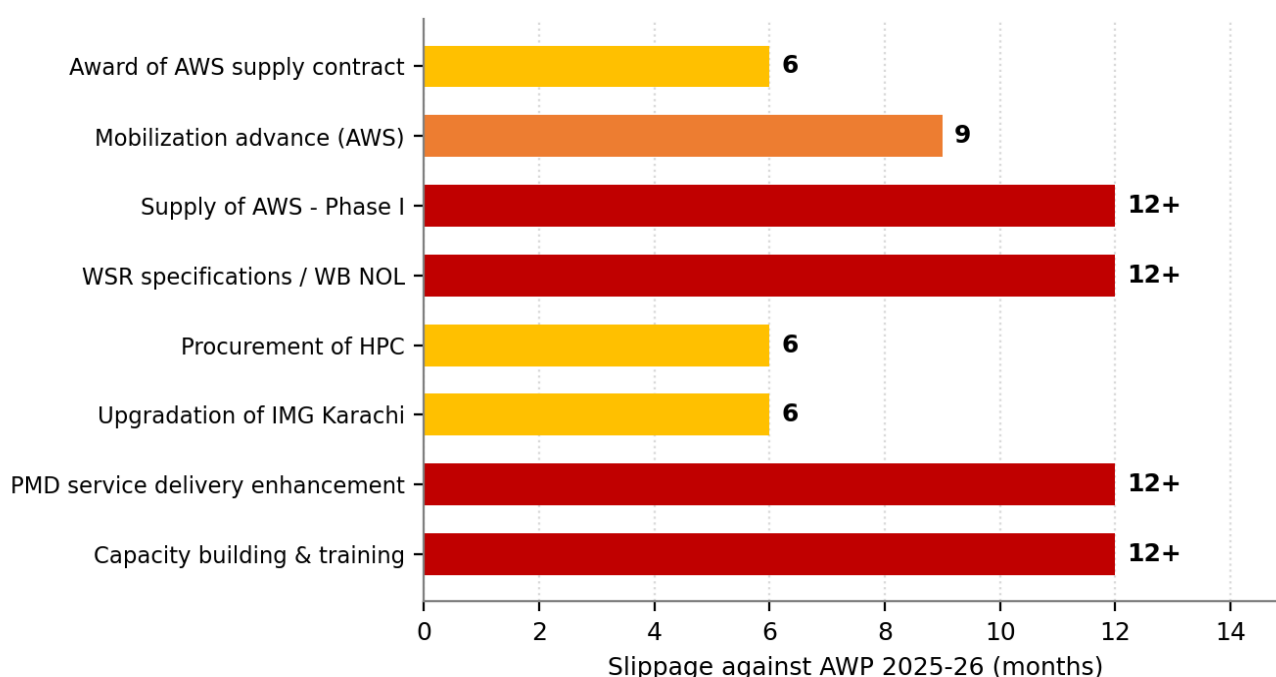


Table 20: Delay analysis of major activities against AWP 2025-26

Activity	AWP 2025-26 completion	Slippage	Contributing factors — M&E interpretation
Award and signing of contract for supply of AWS and agromet sensors	July 2025	6 months	Extended technical and financial review; multiple layers of Bank clearance for NOL; contract evaluation report returned in May 2025 owing to restructuring; absence of direction during the five-month DPD selection process. Contracts signed 18 December 2025
Mobilisation advance to suppliers	June 2025	9 months	Complex import documentation and banking formalities coordinated with National Bank of Pakistan. Paid March 2026
Supply of AWS, Phase-I (Lots I and II)	December 2025	12 months +	Not commenced. Prerequisite activities absent from the AWP: site screening and WMO validation, MoUs for administrative takeover, and the Factory Acceptance Test
Weather Surveillance Radars — specifications, ToRs and Bank NOL	November 2024 – June 2025	12 months +	Revised specifications submitted 15 December 2025 following EAD and Bank requirements; NOL approval prolonged and uncertain; the 10th PSC redirected procurement to GoP PSDP funding, which requires a fresh PC-1 approval and execution cycle

Activity	AWP 2025-26 completion	Slippage	Contributing factors — M&E interpretation
Procurement of HPC (bidding documents)	January 2024 – December 2025	6 months +	Earlier bidding annulled with Bank concurrence; WMO technical and financial proposals under review as an alternative route
Enhancement of PMD service delivery (NFCS for DSS; business model)	Within FY 2025-26	12 months +	Consolidated plan prepared and under Bank review as at June 2026
Upgradation of IMG Karachi	30 June 2026	6 months +	Work plan finalised and shared with the Bank for review; first civil works RFB cancelled for insufficient responsive bids
Capacity building and training programme	Within FY 2025-26	12 months +	Need assessment, training plan, design and contents stages not completed as programmed; delivery limited to technical sessions on WMO-compliant AWS standards

Annex H provides Milestone Execution & Variance Evaluation of the activities undertaken during 205-26 under component-1 and component-II of PIU-II

10.2 M&E-specific Challenges

- **No Component-II MIS and no PMIS integration in any quarter.** As per PIU-II, the project document contains no provision for developing its MIS. The interim Excel-to-web was developed and implemented by PIU-II with the assistance of M&E Consultants in collaboration with FPMU.
- **No dedicated M&E or MIS staff at PIU-II.** Under Component-I and Component-III of IFRAP, dedicated positions of M&E Specialists are in place whereas Component-II does not have this positions. Under the directions of DPD, Environment and Social Safeguard (ESS) Specialist was given the additional responsibility as a Focal person for M&E Consultant. BY the year end, ESS Specialist resigned and the position remains vacant.
- **AWP as a defective benchmark.** AWP 2025-26 spans 2024 to 2028, includes activities already completed before the year began (for example the hiring of the Independent Panel of Experts, completed July 2024, and AWS site identification as reported by PIU-II, completed in February 2024), and omits the AWS prerequisites like screening of sites and WMO validation that are important and critical activities in the preparedness of sites. Besides, AWP was also issued during last week of December 2025.
- **Monthly progress reports not aligned to the AWP.** Activities in the MPRs do not correspond to AWP activities; no criteria are given for the physical-progress percentages; percentages have been revised downward without explanation; and several live activities are omitted altogether.
- **Actual completion dates not supplied** despite a format shared with PIU-II in Q2, Q3, a formal request in the first week of January 2026 and repeated reminders. Without actual dates, delay analysis can only be reconstructed retrospectively from correspondence.
- **Steering Committee minutes are made available** to the M&E Consultants, on formal request. Availability of minutes as routine to M&E Consultants will help facilitate independent verification /follow up of decisions on scope of the project relevant to the Results Framework.

However, despite these systemic constraints, PIU-II officials were consistently responsive and facilitated the M&E Consultants' coordination meetings, field visits, FGDs and validation work throughout the year.

10.3 Consolidated Risk Matrix

Table 21: Consolidated risk matrix as at 30 June 2026

#	Risk category	Description and root cause	Rating*	Mitigation action and responsibility
1	Implementation delays	Complex World Bank's procedural requirements for NOL issuance restrict PIU-II's ability to proceed; limited analysis by the procurement section of the causes of delay Existing Procurement Specialist resigned	High	Prioritise the activities on the critical path; maintain vigilance and due follow up on critical activities , float time analysis. Complete fast track selection process for the vacant position of Procurement Specialist Responsibility: PIU-II with FPMU
2	Data integration failure	No MIS for Component-II and no API for PMIS integration	High	Establish a Component-II MIS; in the interim replace the ad-hoc worksheet with a structured milestone tracker compatible with the PMIS. Complete fast track selection process for the proposed position of IT Specialist Responsibility: PIU-II
3	AWS site readiness and execution of MoUs	Prerequisite activities not reflected in the AWP: NOCs, MoUs, administrative takeover, WMO validation and fencing	Substantial	Site-readiness checklist and early verification ; complete WMO validation at all 110 sites; club NOC and MoU processing. Responsibility: PMD/RMC with PIU-II
4	Execution of AWS supply contracts	Delayed scheduled payments and incomplete Factory Acceptance Test	Substantial	Complete the FAT and confirm the lot-wise supply schedule in Q1 FY 2026-27. Responsibility: PMD, FPMU, PIU-II and suppliers
5	Financing and scope instability	USD 18.0 m radar allocation reallocated; residual USD 11.4 m undecided; revised PC-1 of USD 63.5 m pending; PC-1 approved at USD 50 m against Bank financing of USD 40 m	High	Obtain a PSC decision on the revised PC-1 and residual funds; propose a Results Framework amendment for IRI-10 if the radar scope changes. Responsibility: FPMU, PSC, EAD
6	Institutional capacity	Deputy Project Director post vacant for seven months; five technical posts vacant; 58-positions sustainability case unresolved	Moderate	Accelerate recruitment and approvals; expedite the revised PC-1. Responsibility: PMD, MoD, FPMU, PIU-II
7	Contractual dependencies	Multi-layered Bank clearances for contracts	Substantial	Maintain a dependency map; flag lead-time variance above 30 days for Bank action.

#	Risk category	Description and root cause	Rating*	Mitigation action and responsibility
		affect schedule alignment across interdependent packages (HPC/Sl depends on the radar decision; civil works depend on consultancy NOL)		Responsibility: PIU-II with the M&E Consultants
8	Sustainability of installed assets	Legacy maintenance failures observed in the field (Balakot AWS awaiting repair since 2016); half of surveyed district staff require training; maintenance and calibration support in high demand	Substantial	Resolve the 58-positions case; embed an operation and maintenance regime and a calibration schedule in the MoU template. Responsibility: PMD with PIU-II

* Risk rating scale: Low / Moderate / Substantial / High, in accordance with World Bank operational guidelines.

10.4 Lessons Learned

- 1. An annual work plan that is not annual cannot serve as a benchmark.** The main M&E finding of the year is that AWP 2025-26 could not perform its function. It covered four years, omitted the activities that actually determined the critical path, and arrived six months late.
- 2. Procurement completion is not implementation readiness.** The component treated contract signature as the milestone that mattered, while the binding constraints on the supply date turned out to be NOCs, MoUs, FAT and fencing — none of which were planned or budgeted. Future work plans should treat site readiness as a package in its own right, sequenced ahead of shipment.
- 3. Reciprocity secures sites faster .** Where host institutions were offered access to AWS data for their own research — Bacha Khan University, Hazara University — consent followed quickly. Similar positive response/outcome observed by M&E Consultants in case of Hazara University Mansehra. Where the benefit was one-sided, NOCs stalled on the question of who bears responsibility for equipment safety and security.
- 4. Screening a larger pool than required is good practice.** Over-sampling of potential sites improved final selection quality. The practice should continue.
- 5. M&E function without a counterpart at PIU.** Likewise, Component-III, which has an M&E Specialist in place, it will help facilitate M&E Consultants the availability of actual dates, the consistency of reported percentages and relevant parameters.
- 6. Observation without dissemination will not deliver the PDO.** PDMA Khyber Pakhtunkhwa's request for real-time telemetry integration is a reminder that PDO-2 and PDO-4 measure early warning capability. Therefore, Integration protocols with PDMA and RMCs should be designed now, in parallel with installation of AWS.

11. M&E WORK PLAN FOR FY 2026-27

11.1 Annual M&E Work Plan and Timeline

Table 22: M&E annual work plan and indicative timeline, FY 2026-27

M&E activity	Purpose / output	Q1 Jul– Sep	Q2 Oct– Dec	Q3 Jan– Mar	Q4 Apr– Jun
Debriefing meeting/workshop on Q-4 of PIU-II in consultation with and approval FPMU	Revision/finalization of Q-4 in the light of comments /discussion/feedback of the participants	•			
AWP 2026-27 against the Results Framework	AWP milestones mapped to PDO/IRI	•			
Establish the Component-II milestone tracker and integrate it with the PMIS subject to IT Specialist C-TT on board	Live tracker; ≥90% of milestones updated monthly	•	•		
Verification of AWS site readiness — screening, NOC, MoU, fencing	Verified 110-site readiness register	•	•		
Verification of the Factory Acceptance Test and supply consignments	FAT completion ; consignment verification reports	•	•		
Installation and commissioning verification (sample-based)	Physical verification of installed AWS against contract specification		•	•	•
Deployment of the Hydromet Station Functionality Form	Longitudinal operational metrics in the PMIS		•	•	•
Collection of Monthly Progress Reports prepared by PIU-II	Necessary data/information collected for validation/ review and monitoring	•	•	•	•
Quarterly Progress Reports QPR-5 to QPR-8 and debriefing workshops	Four QPRs; submission to FPMU followed by debriefing/workshop	•	•	•	•
Coordination meetings, field monitoring visits, FGDs and KIIs with PIU-II, PMD, RMC, PDMA and host institutions	Prepared and finalized Minutes / reports (target ≥30 events)	•	•	•	•
GRM monitoring, visibility campaign and PMIS complaint-logging integration	Functioning GRM at mobilised sites; IRI-7 computable		•	•	•
Safeguards monitoring of civil works and fencing	ESMF/ESMP compliance reports;		•	•	•
Data Quality Assessment (second round)	DQA report against the five World Bank dimensions			•	
M&E Annual Progress Report FY 2026-27	Annual report in World Bank format/guidelines				•

11.2 Surveys and Evaluations Planned

Table 23: Surveys and evaluations planned for FY 2026-27

Study	Purpose and scope	Timing	Use
Beneficiary coverage methodology note	Agree with the PIU-II and FPMU the method for deriving PDO-2, PDO-2a and PDO-2b beneficiary counts from AWS/WSR coverage areas, including the demographic and female-share assumptions to be applied	Q1–Q2 2026-27	Enables PDO-2 reporting from first operationalization
District-level hydromet survey, round 2	Extend the October 2025 instrument to project districts of Balochistan hosting AWS sites as per scope of M&E Consultants; establish a pre-installation baseline of equipment condition, staffing, training needs and data-sharing practice	Q2 2026-27	Baseline for PDO-4 attribution and for the sustainability case
AWS site readiness verification survey	Independent verification of screening, NOC, MoU, fencing and takeover status at all 110 sites	Q1–Q2 2026-27	Evidence base for IRI-11 reporting
Forecast lead-time baseline study	Establish the current verified PMD forecast lead time and the measurement protocol, so that the 5-day target under PDO-4 has an attributable baseline	Q2 2026-27	Baseline for PDO-4
Hill-torrent early warning needs assessment (validation)	Independent validation of the PIU-II pre-assessment of hill torrents in Koh-e-Suleman, including hazard and exposure analysis	Q3 2026-27	Design input and baseline for IRI-12
Data Quality Assessment, round 2	Repeat assessment against validity, reliability, timeliness, precision and integrity following establishment of the milestone tracker	Q3 2026-27	M&E system performance rating

11.3 Budget for M&E Activities

M&E for IFRAP is financed under Component-IV (project management, technical assistance and institutional strengthening) through the M&E consultancy contract, and is therefore not a charge on the Component-II allocation. The table below sets out the indicative distribution of M&E effort for Component-II in FY 2026-27, expressed in effort terms because the consultancy is a lump-sum contract; the associated PIU-II-side costs that require budgeting in AWP 2026-27 are shown separately.

Table 24: Indicative M&E effort and PIU-II budget requirements, FY 2026-27

Activity	Indicative share of M&E effort	Financed by	PIU-II budget line required in AWP 2026-27
Field verification of site readiness, FAT and installation	35%	Component-IV M&E consultancy	Travel and logistics support for joint teams
Milestone tracker and PMIS integration support	15%	Component-IV M&E consultancy	Component-II MIS development and hosting; MIS staff
Quarterly and annual reporting and debriefing workshops	20%	Component-IV M&E consultancy	Workshop and meeting costs at PIU-II

Activity	Indicative share of M&E effort	Financed by	PIU-II budget line required in AWP 2026-27
Surveys, evaluations and Data Quality Assessment	15%	Component-IV M&E consultancy	Enumerator and data-collection support where required
GRM monitoring, safeguards monitoring and citizen engagement	10%	Component-IV M&E consultancy	Toll-free number; GRM visibility material at 110 sites
Coordination and institutional support	5%	Component-IV M&E consultancy	M&E Specialist position at PIU-II (new); five vacant technical posts

Note: the capacity-building and training head under Package-II carries a life-of-project allocation of PKR 87.02 million, and the PIU operating-expenses head PKR 496.97 million; the M&E-related PIU-II costs above should be provided for within these heads or through the revised PC-1.

ANNEXES

The annexes present the detailed records supporting the analysis in the main report.

Annex A: Results Framework — Full Data, FY 2025-26

Level	Indicator	Unit	Baseline	End target (2028)	Q1	Q2	Q3	Q4 / annual
PDO	PDO-2: People with enhanced resilience to climate risks	Number	0	1,800,000	n.m.	n.m.	n.m.	Not yet measurable
PDO	PDO-2a: of which youth	Number	0	540,000	n.m.	n.m.	n.m.	Not yet measurable
PDO	PDO-2b: of which women	Number	0	900,000	n.m.	n.m.	n.m.	Not yet measurable
PDO	PDO-4: Increase in weather forecast lead time of PMD	Days	0	5	0	0	0	0 — no project-attributable change
IRI	IRI-7: Registered grievances satisfactorily resolved	%	n/a	100	nil reg.	nil reg.	nil reg.	Nil registered; rate not computable
IRI	IRI-10: Weather radars installed and operationalised	Number	0	4	0	0	0	0
IRI	IRI-11: AWS installed and operationalised	Number	0	110	0	0	0	0
IRI	IRI-12: Hydrological-modelling-based EWS for hill torrents in Balochistan	Yes/No	No	Yes	No	No	No	No
Enabling	AWS sites screened / WMO validated	Number	0	110	0	0	4	91
Enabling	NOCs received	Number	0	54	0	0	0	2
Enabling	MoUs signed	Number	0	110	0	0	0	13
Enabling	Sites administratively ready for installation	Number	0	110	0	0	0	28
Enabling	Component-II MIS integrated with PMIS	Yes/No	No	Yes	No	No	No	No

n.m. = not yet measurable. Source: revised PAD Results Framework; Additional Financing and Restructuring Paper (2025); QPR Q1–Q4 FY 2025-26.

Annex B: Minutes of Meetings, Workshops, FGDs/KIIs /Field Visits, FY 2025-26

Thirty Coordination Meetings, Workshops, FGDs/KIIs /Field Visits were conducted and minuted during the year. Detailed Minutes and photographic records are held on file by the M&E Consultants and were annexed to the respective Quarterly Progress Reports. Quarter-wise Summary of the meetings are given below:

B.1 Quarter 1 and Quarter 2 (meetings 1–12)

No.	Date	Venue / counterpart	Purpose and major outcome
1	2 Jun 2025	PIU-II Office, Saidpur Islamabad	M&E inception with PIU-II. M&E Framework for Component-II to be developed on Results and logframe indicators; PIU-II to share project documents; GRM operational mechanism to be included in M&E tracking
2	27 Jun 2025	PIU-II Office, Saidpur Islamabad e	Follow-up. Three radar sites finalised (Quetta, D.I. Khan, Cherat), two under consideration (Gwadar, Lahore); radar supervision consultancy RFP sent to the Bank; AWS procurement in final evaluation; Institutional Development Plan and pre-baseline ToT completed
3–7	Jul–Sep 2025	PIU-II / FPMU, Islamabad	M&E Framework revision; PMIS deployment (23 Jun 2025) and access to FPMU (22 Jul 2025); GRM Implementation Plan submitted 7 Aug 2025 and endorsed by PIU-II 22 Sep 2025; agreement on PMIS metadata standards and data flows
8	23 Oct 2025	PIU-II Office, Saidpur Islamabad	Coordination on procurement status of AWS and radars; import documentation; identification of review-related bottlenecks
9–12	Oct–Dec 2025	Mardan, Lahore, Islamabad, Quetta, Karachi (5 field visits)	District-level hydromet survey conducted by M&E Consultants (Quetta, Lasbela, Gwadar, Sibi, Mardan) via android instrument; visits to existing observatories and radar stations; verification of site finalisation and procurement readiness; PMIS Excel-to-web bridge agreed

B.2 Quarter 3 (meetings 13–17)

No.	Date	Venue / counterpart	Purpose and major outcome
13–16	Jan–Mar 2026	PIU-II Office, Saidpur, Islamabad	Validation of Q3 activities; list of AWP activities for Q3 shared with PIU-II; formation of joint screening teams for all four provinces; short training and orientation for teams on benchmark site parameters ahead of field visits; PIU-II to share the joint-team field visit schedule
17	Q3 2026	Khyber Pakhtunkhwa — Charsadda, Kohat, Peshawar, Mardan	First field validation round. Four AWS sites screened and validated against WMO standards using KoBo tools with joint PIU-II/PMD/RMC teams; M&E Consultants observed the process and endorsed the findings

B.3 Quarter 4 (meetings 18–30)

No.	Date	Venue / counterpart	Type	Key points, findings and follow-up actions
18	4 Apr 2026	PIU-II Office, Saidpur, Islamabad	Coordination meeting	Verification and validation of data for QPR-3; AWP-based reporting format shared with PIU-II; DPD assured provision of actual commencement and completion dates; joint field visit schedule to be shared
19	14 Apr 2026	Hazara University, Mansehra	Meeting and site screening	Vice-Chancellor in-principle provided consent and assured full support; suitable site identified on the south-east of the campus; focal person nominated; MoU to be signed with PMD

No.	Date	Venue / counterpart	Type	Key points, findings and follow-up actions
20	14 Apr 2026	National Tea and High Value Crops Research Institute, Shinkhari	Meeting and field visit	Existing donor-funded AWS found functional; a second AWS not advisable — duplication risk; alternate site to be finalised and data-sharing collaboration with PMD/RMC recommended
21	16 Apr 2026	Meteorological Observatory, Balakot	Site visit	Observatory operational since 1955 on 24-hour shifts with hourly transmission to PMD; AWS sent for repair in 2016 not yet returned; PMD land at Banphora identified as a possible AWS site
22	17 Apr 2026	P-Block Auditorium, Pak Secretariat, Islamabad	Technical workshop (60+ participants)	'Designing Resilience at Scale' — basin planning, flood modelling, dam safety and infrastructure feasibility under IFRAP. Findings of four feasibility studies found relevant to Component-II; copies to be formally requested from FPMU for M&E use
23	27 Apr 2026	PIU-II Office, Saidpur, Islamabad	Coordination meeting	Debriefing on three KP site-screening visits; field visit reports for Hazara University, NTHRI Shinkhari and Balakot Observatory endorsed by PIU-II; QPR-2 debriefing date to be communicated
24	6 May 2026	PIU-II Office, Saidpur, Islamabad	Debriefing workshop	QPR-2 (Oct–Dec 2025) agreed with minor changes; minutes and revised QPR-2 to be issued addressing the comments raised
25	25 May 2026	PIU-II Office, Saidpur, Islamabad	Debriefing workshop	QPR-3 (Jan–Mar 2026) to be revised to address participants' observations; minutes with the revised QPR-3 to be forwarded to FPMU
26	22 Jun 2026	Regional Meteorological Centre, Khyber Road, Peshawar	Coordination meeting	Site selection and screening, NOCs and MoUs, WMO-standard validation in KP; RMC arranged joint field visits to Agriculture University Peshawar and Bacha Khan University and the meeting with DG PDMA KP
27	22 Jun 2026	ORIC, Agriculture University, Peshawar	FGD/KII and site screening	Two sites under consideration by the joint team; responsibility for equipment security unresolved and under negotiation; NOC for the location still pending
28	22 Jun 2026	Office of the Director General, PDMA KP, Peshawar	KII and debriefing	PDMA recommended prioritising AWS in high-altitude, remote and geographically volatile areas, and real-time telemetry integration of AWS data into PDMA and RMC early warning systems
29	23 Jun 2026	Bacha Khan University, Charsadda	FGD/KII and site screening	University assured full cooperation; site to be finalised after obtaining the NOC; university to use AWS data for research — reciprocal arrangement
30	30 Jun 2026	PIU-II Office, Saidpur, Islamabad	Coordination meeting	Validation of information for QPR-4; QPR-4 to follow the established FPMU procedure and approved M&E Framework; June MPR and PIU-II quarterly report to be provided to the M&E Consultants

Annex C: AWS Site Screening Registers by Province, Q4 FY 2025-26

The table/log below reproduces the potential -site screening records maintained by PIU-II on KoBo Toolbox, with GPS coordinates and environmental and social risk ratings. Risk codes: L = Low, M = Moderate, S = Substantial, H = High. 'OK' denotes an environmental and social clearance recommendation; an asterisk denotes clearance subject to stated conditions.

C.1 Balochistan — 53 candidate sites screened, 13–23 April and 21 May 2026

#	Site	Coordinates	E&S risk
1	RMC Quetta	30.1885°N 66.9497°E	Moderate
2	Quetta International Airport	30.2503°N 66.9472°E	Substantial
3	RAMC Sariab, Quetta	30.1142°N 66.9795°E	Moderate
4	MO Sibi (Site 1)	30.1885°N 66.9497°E	Substantial
5	Tehsil Office Mirpur, Jhal Magsi	28.5278°N 67.7339°E	Moderate
6	DC Office Ziarat	30.3825°N 67.7246°E	Low
7	DHQ Hospital Mach, Kachi	29.8672°N 67.3213°E	Substantial
8	Agriculture Farm Nasai, Killa Saifullah	30.8166°N 68.0707°E	Moderate
9	Shinkai Irrigation Rest House	30.7544°N 68.9153°E	Moderate
10	PBO Kalat	29.0251°N 66.5962°E	Low
11	Naib Tehsildar Office Nag, Washuk	27.4127°N 65.1290°E	Low
12	Irrigation Office Surab	28.4938°N 66.2628°E	Low
13	Irrigation Rest House Sabakzai Dam, Zhob	30.9508°N 69.3533°E	Moderate
14	MO Sibi (Site 2)	29.5375°N 67.8726°E	Substantial
15	P.B.O Punjgur	26.9693°N 64.1023°E	Low
16	Nari Headworks, Kachi	29.2639°N 67.8178°E	Moderate
17	Irrigation Colony Lehri, Sibi	29.1782°N 68.2094°E	Moderate
18	Hammer Head Koh-e-Batil, Gwadar	25.1177°N 62.3141°E	Low/Substantial
19	Irrigation Office, Mir Hassan, Naseerabad	28.6447°N 68.4074°E	Substantial
20	Coconut Farm Pasni	25.3991°N 63.4493°E	Low/Substantial
21	Irrigation Office Ormara	25.2198°N 64.6218°E	Low/Substantial
22	BHU Nautal, Naseerabad	28.7502°N 68.0785°E	Substantial
23	Levies Thana Manikhwa, Sherani	31.4026°N 69.8080°E	Moderate
24	UC Office Zam Muhammad Zai, Musakhail	31.1851°N 69.9285°E	Moderate
25	Levies Thana Toisar, Musakhail	31.1048°N 69.8956°E	Low
26	Irrigation Colony Jhal Magsi	28.2834°N 67.4703°E	Substantial
27	Irrigation Office Jaffarabad	28.3788°N 68.3483°E	High
28	Agriculture Research Farm Wayro, Lasbela	26.0454°N 66.5175°E	Low/Moderate
29	Agriculture Extension Sohbatpur	28.5223°N 68.5415°E	Substantial
30	DC Guest House Kingri, Musakhail	30.4435°N 69.8119°E	Low
31	Agriculture Research Farm Nall, Khuzdar	27.6664°N 66.1724°E	Low
32	AC Office Wadh	27.3475°N 66.3711°E	Low/Moderate
33	Livestock Office Dera Bugti	29.0342°N 69.1619°E	Substantial
34	Agriculture Research Baghbana, Khuzdar	27.9899°N 66.5158°E	Low/Moderate
35	PBO Barkhan	29.8975°N 69.5219°E	Low/Moderate
36	Police Station Sparargha, Ziarat	30.5427°N 67.6558°E	Low
37	AC Office Kardigap, Mastung	29.7285°N 66.4640°E	Substantial
38	DPO Office Ziarat	30.3826°N 67.7331°E	Low/Substantial

#	Site	Coordinates	E&S risk
39	Levies Thana Choteer, Ziarat	30.3106°N 68.1186°E	Low/Moderate
40	DHQ Hospital Sinjavi, Ziarat (Site 1)	30.3106°N 68.1182°E	Low
41	DHQ Hospital Sinjavi, Ziarat (Site 2)	30.2653°N 68.3190°E	Low
42	Levies Thana Dosarki, Loralai	30.4058°N 68.8329°E	Low
43	Agriculture Office Musakhail	30.8580°N 69.8210°E	Moderate
44	Municipal Committee Office Dureji, Hub	25.8830°N 67.2998°E	Low/Moderate
45	Aeromet Turbat	25.9889°N 63.0300°E	Low
46	PBO Zhob	31.3388°N 69.4516°E	Moderate
47	Police Station Naag (Site 1)	27.4127°N 65.1291°E	Low
48	Police Station Naag (Site 2)	27.4127°N 65.1290°E	Low
49	Irrigation Office Patt Feeder, Naseerabad (Rain Gauge)	28.6447°N 68.4074°E	Substantial
50	ARMC Quetta Sariab (Site 2)	30.1129°N 66.9796°E	Low
51	Agriculture Research Wayro, Lasbela (Site 2)	26.0454°N 66.5175°E	Low/Moderate
52	Irrigation Rest House Sabakzai Zhob (Site 2)	30.9508°N 69.3533°E	Moderate
53	Agriculture Ext Office Rakhni, Barkhan	30.4437°N 69.8119°E	Low/Moderate

Final selection under process pending spatial coverage analysis and meteorological viability assessment. Institutional permissions and MoUs to be pursued once final sites are confirmed.

C.2 Khyber Pakhtunkhwa — 14 potential sites screened, 13–27 April 2026

#	Site	Coordinates	E&S risk
1	Govt Degree College Nathiagali	34.0683°N 73.3926°E	Low
2	Khushal Khan Khattak University, Karak	33.1210°N 71.1420°E	Low/Moderate
3	Hazara University Mansehra	34.4185°N 73.2520°E	Low
4	Tea Research Center Shinkari	34.4620°N 73.2689°E	Low
5	PMD Observatory, D.I. Khan	31.8362°N 70.9158°E	Low
6	GDC Allai	34.8318°N 73.0638°E	Low
7	Saidu Sharif Airport, Swat	34.8103°N 72.3514°E	Moderate
8	Malam Jabba	34.8040°N 72.5684°E	Low/Moderate
9	Gabbin Jabba, Swat	35.1722°N 72.3744°E	Low/Moderate
10	SBBU Shringal (Site 1)	35.2703°N 72.0050°E	Low/Moderate
11	SBBU Shringal (Site 2)	35.2754°N 72.0065°E	Moderate/Substantial
12	Shandoor Polo Ground, Chitral	36.0852°N 72.5465°E	Low/Moderate
13	Kalam Observatory, Swat	35.4798°N 72.5761°E	Low
14	KVDA Camp, Kalash, Chitral	35.6961°N 71.6821°E	Low/Moderate

Final selection under process. Several sites require institutional permissions which are in process.

C.3 Punjab — 13 final sites selected

#	Site	Coordinates	E&S risk	E&S status
1	AD Agriculture, Mankera	31.3935°N 71.4487°E	L	OK
2	Hillfruit Farm, Sunny Bank, Murree	33.9162°N 73.3957°E	L	OK*
3	Govt Seed Farm, 8ML Piplian, Mianwali	32.2838°N 71.4313°E	L	OK
4	SDO Rest House, Sherowala, Jaranwala	31.3557°N 73.4169°E	L	OK*
5	Govt Seed Farm, Chak 357, Gojra	31.1850°N 72.5985°E	L	OK
6	PMD Observatory, Farooqabad	31.7590°N 73.7979°E	L	OK
7	Naushahra Horticulture Farm, Khushab	32.5648°N 72.1408°E	M	OK*

#	Site	Coordinates	E&S risk	E&S status
8	Gurudwara Janam Asthan, Nankana Sahib	31.4453°N 73.6967°E	H	OK*
9	Agriculture Extension, Attock	33.7811°N 72.3575°E	L	OK*
10	PMD Headquarters, Islamabad	33.6839°N 73.0641°E	L	OK*
11	Lalamusa Punjab LGA, Gujrat	32.7181°N 73.9417°E	M	OK*
12	Kartarpur Corridor, Narowal	32.0859°N 75.0173°E	H	OK*
13	DC Complex, Hafizabad	32.0703°N 73.7178°E	M	OK*

MoUs for all Punjab final sites to be finalised before construction mobilisation.

C.4 Sindh — 29 potential sites screened 10–19 June 2026; 15 final sites selected

#	Site	Coordinates	E&S risk	E&S status
1	Cadet College Petaro, Jamshoro	25.5359°N 68.3246°E	L	OK
2	Nai Gaaj Irrigation Office, Dadu	26.8714°N 67.3305°E	M	OK
3	Irrigation Office, Ghotki	27.9972°N 69.3087°E	L	OK
4	Public School & College, Shikarpur	27.9522°N 68.6551°E	M	OK*
5	Irrigation Dept, Kashmore	28.4378°N 69.6099°E	L	OK
6	SCARP Office, Naushahro Feroze	26.8479°N 68.1289°E	L	OK
7	Irrigation Office, Hala, Matiari	25.8191°N 68.4190°E	M	OK*
8	AC Office, Islamkot, Tharparkar	24.6930°N 70.1835°E	M	OK
9	SDEO Office, Tando Muhammad Khan	25.1248°N 68.5472°E	M	OK*
10	NIO, Clifton, Karachi	24.8140°N 66.9941°E	M	OK
11	SDEO Irrigation Office, Naukot	24.8951°N 69.4401°E	L	OK
12	XEN Irrigation Office, Sujawal	24.6053°N 68.0684°E	L	OK*
13	Irrigation Office, Sann, Jamshoro	26.0375°N 68.1351°E	L	OK
14	Nagarparkar, Tharparkar	24.3648°N 70.7478°E	M	OK*
15	Town Committee, SalehPat, Sukkur	27.5199°N 69.0410°E	L	OK

Annex D: Grievance Redress Mechanism Log, FY 2025-26

Complaint ref.	Applicant details	Received by / level	Date received	Action taken	Time taken	Status
NIL — no grievance was registered through any channel during FY 2025-26 (1 July 2025 to 30 June 2026)						

D.1 GRM channels and monitoring arrangements

Channel	Detail	Status at 30 June 2026
Complaint box	Placed at the PIU-II office, Saidpur, Islamabad, with GRM banner displayed	Operational
Dedicated mobile and WhatsApp	0325-5373330	Operational
E-mail	complaint@ifrap.org.pk	Operational
Third-party GRM	Established at project level in addition to the internal GRM	Operational
Toll-free number	To be provided by PIU-II	Not yet provided
PMIS complaint-logging integration	Designed within the PMIS GRM module	Pending — awaits PIU-II MIS and commencement of field activities
Monitoring	Resident GRM Associate deployed by the M&E Consultants, based in Islamabad	Continuous throughout the year

Milestone dates: GRM Implementation Plan submitted 7 August 2025; endorsed by PIU-II on 22 September 2025 in line with PMD's approved GRM and World Bank GRM guidance.

Annex E: Capacity Building, Training and Recommended Reporting Structure

E.1 Capacity-building and training events, FY 2025-26

Period	Event	Participants	Number	Status / M&E remark
Q1	Pre-baseline training of trainers	PIU-II and PMD staff	Not disaggregated by gender	Completed; reported under the Institutional Development Plan
Q1–Q4	Digital survey handling	PMD professionals	130	Reported by PIU-II as a cumulative FY 2025-26 figure; not disaggregated by gender
Q3	Technical field mission with on-site training on WMO-compliant AWS standards	PIU-MHSP personnel	Not disaggregated	Conducted at an operational AWS; observed by the M&E Consultants
Q3–Q4	Technical session on site selection criteria, sensor installation and configuration, data quality assurance and control protocols, and operational best practice	Joint screening teams (PIU-II, PMD, RMC)	4 provincial teams	Preceded the field screening rounds; the M&E Consultants regard this as the year's most effective capacity intervention
Q4	'Designing Resilience at Scale' technical workshop	IFRAP stakeholders	60+	17 April 2026, Pak Secretariat; four feasibility studies presented
Q4	International consultative workshop on hill torrents (Koh-e-Suleman)	PIU-II team	Not disaggregated	Input to IRI-12 design
Formal training programme under Package-II (need assessment, training plan, design, contents, commencement)			12 months + slippage	Planned under AWP head 2.4 (PKR 87.02 million life-of-project); not delivered as planned

Gender disaggregation of training participants was not recorded during FY 2025-26. The M&E Consultants recommend a mandatory disaggregation field in the training briefs/reports from Q1 FY 2026-27.

E.2 Recommended structure for PIU-II monthly and quarterly progress reports

The existing MPR format does not track progress against AWP activities, states no basis for reported percentages, and omits several live activities. The M&E Consultants recommend the following seven-section structure, aligned with World Bank guidance, for adoption from Q1 FY 2026-27.

S#	Section	Required content
1	Executive summary	Reporting period; overall implementation status (On Track / Needs Attention / Delayed); three to five major achievements or milestones attained during the period
2	Financial management and disbursements	Total allocation, period expenditure and cumulative spending by head; disbursement rate against the projected timeline; status of major contracts, bidding processes and site readiness
3	Project implementation status	Sub-component-by-sub-component progress against the AWP, each activity showing planned commencement, planned completion, actual commencement, actual completion and the stated basis of any percentage; quantifiable outputs delivered (NOCs, MoUs, site takeovers, persons trained)
4	Environmental and social safeguards	ESMF and ESMP implementation status; WMO-standard compliance; safeguards staffing; incidents; grievances received through the GRM
5	Risks and challenges	Bottlenecks — delays, capacity issues, external factors — each with its root cause; mitigation measures under way with responsibility and date
6	Results Framework and enabling milestone update	PDO and IRI status; enabling milestone progress; data quality issues; variance from the AWP with explanation; corrective actions
7	Work plan for the next period	Top three to five priorities and deliverables; any proposed milestone adjustments with justification

E.3 Corrective action tracker carried forward into FY 2026-27

Issue	Responsible entity	Corrective action	Timeline
No MIS for Component-II	PIU-II with FPMU	Establish a tracking module or structured milestone tracker compatible with the PMIS	Q1 FY 2026-27
No design and procurement milestone mechanism	PIU-II	Establish and maintain milestone tracking covering design, procurement and mobilisation	Q1 FY 2026-27
Site screening incomplete in KP and Punjab	PIU-II with line departments and academia	Site-readiness checklist and verification prior to procurement and mobilisation; complete WMO validation at all 110 sites	Q1 FY 2026-27
Slow progress in signing MoUs	PMD/RMC and PIU-II	Expedite finalisation and signature; club NOC and MoU processing at each site; adopt a standard MoU template incorporating reciprocal data use and an O&M regime	Early Q1 FY 2026-27
Deficient Annual Work Plan	PIU-II with FPMU	Issue a realistic, FY-specific AWP 2026-27 at the start of the fiscal year, incorporating all AWS prerequisites	July 2026
No dedicated M&E staff at PIU-II	PIU-II with FPMU and PMD	Create an M&E Specialist position mirroring Component-III; adopt the reporting format at E.2; nominate a focal person for the M&E Consultants	FY 2026-27
Vacant technical positions	PMD / MoD	Complete recruitment for Senior Agromet Associate, Contract Management Specialist, IT Expert (Software Engineer), Procurement Specialist and Social & Safeguards Specialist; process the revised PC-1 including the Communication Specialist and Senior Programme Officer posts	FY 2026-27

Annex F: Photographic Evidence of Coordination Meetings, Field Monitoring /Spot Visits, Kils and FGDs, FY 2025-26

Photos 7 to 20 below is the selected visual record of the thirty coordination meetings, workshops, focus group discussions, key informant interviews and field or spot visits listed at Annex B. Photos 1 to 6, which evidence specific findings, are placed in the main text at sections 6.2, 6.3 and 7.1. Placement follows the World Bank Group Publications Editorial Style Guide (2020): photographs are numbered separately from figures and tables, each carries a source line, and each is mentioned in the text. Minutes/Reports and the complete photographic records are available with M&E Consultants.



Photo 7: Inception meeting of the M&E Consultants with PIU-II, Component-II office, Saidpur, Islamabad, 2 June 2025 (meeting 1).

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 8: 3rd coordination meeting with PIU-II on clarifications regarding AWS and Component-II progress, PIU-II office, Saidpur, 22 July 2025 (meeting 3).

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 9: Review of the data collection tools and questionnaires designed for the baseline survey, PMD Head Office, H-8, Islamabad, 28 July 2025 (meeting 4).

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 10: Sixth coordination meeting of the M&E Consultants with PIU-II, PIU-II office, Saidpur, Islamabad, 22 August 2025 (meeting 6).

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 11: Seventh coordination meeting of the M&E Consultants with PIU-II, PMD Headquarters, H-8, Islamabad, 17 September 2025 (meeting 7).

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 12: Grievance Redress Mechanism awareness banner displayed at PIU-II, carrying the dedicated complaint line, WhatsApp number and e-mail address.

Source: M&E Consultants (IFRAP), QPR-1 FY 2025-26.



Photo 13: Coordination meeting on the district-based field survey and GRM deployment, Regional Meteorological Centre, Quetta, 6 October 2025.

Source: M&E Consultants (IFRAP), QPR-2 FY 2025-26.



Photo 14: X-band Weather Surveillance Radar at the Flood Forecasting and Warning System, Fazal Abad, Mardan, observed during the field visit and focus group discussion with FFWS staff on 24 October 2025.

Source: M&E Consultants (IFRAP), QPR-2 FY 2025-26.



Photo 15: Meteorological sensors at the Pakistan Meteorological Observing Station(Karachi), inspected during the field visit of 27 October 2025.

Source: M&E Consultants (IFRAP), QPR-2 FY 2025-26.



Photo 16: Sixteenth coordination meeting of the M&E Consultants with PIU-II on capacity building and the KoBo screening instrument, PMD Headquarters and PIU-II Saidpur, 27 February 2026.

Source: M&E Consultants (IFRAP), QPR-3 FY 2025-26.



Photo 17: Participants of the IFRAP feasibility studies workshop, P-Block Auditorium, Pak Secretariat, Islamabad, 17 April 2026, opened by the Federal Minister for Planning, Development and Special Initiatives.

Source: M&E Consultants (IFRAP), QPR-4 FY 2025-26.



Photo 18: Key informant interview at the Regional Meteorological Centre, Peshawar, on AWS site selection and screening, NOCs and MoUs, and validation against WMO standards, June 2026.

Source: M&E Consultants (IFRAP), QPR-4 FY 2025-26.



Photo 19: Potential AWS site identified by the joint screening team at The University of Agriculture, Peshawar, assessed against WMO exposure and obstruction criteria, June 2026.

Source: M&E Consultants (IFRAP), QPR-4 FY 2025-26.



Photo 20: Twenty-fifth meeting of the M&E Consultants with PIU-II in conference room, PIU-II office, Saidpur, Islamabad, 25 May 2026.

Source: M&E Consultants (IFRAP), QPR-4 FY 2025-26.

Source: M&E Consultants (IFRAP), photographic records annexed to the Quarterly Progress Reports Q1–Q4 FY 2025-26.

Annex G: Consolidated AWP Milestone and Variance Analysis, FY 2025-26

Annex G consolidates, the activity-level assessments made in the four Quarterly Progress Reports. Section 4.4 explains why the annual targets were not achieved; Annex G provides summary of milestone by milestone, what was planned, what happened. It is intended as the working baseline against which FY 2026-27 performance can be measured, and as the source /reference for the milestone tracker recommended at section 3.2.

G.1 Activity-level milestone and variance analysis against AWP 2025-26

AWP ref.	Milestone / activity	AWP planned dates	Status at 30 June 2026	M&E rating and variance
A.1 (b)	Selection of 110 sites for AWS installation	3 Oct 23 – 29 Sep 24	110-site network defined; 109 potential sites screened across four provinces; 28 final sites selected in Punjab and Sindh	Delayed; screening and WMO validation were missing from AWP 2025-26
—	Hiring of AWS consultant	11 Jul 24 – 10 Jul 25	Completed	Completed
Not in AWP	Screening of AWS sites and validation against WMO standards	No baseline	Joint tripartite teams (PMD, RMC, PIU-II) formed; 4 KP sites validated by end Q3; 109 potential sites screened by end Q4	On track once initiated — but no AWP benchmark exists against which to assess it
A.1 (c)	Award of contract for supply of AWS	14 Jun 25 – 15 Jun 25	Contract signed 18 December 2025	Delayed 5–6 months; prolonged by multi-layered World Bank compliance review
A.1 (d)	Mobilisation advance disbursement to contractors	16 Jun 25 – 30 Jun 25	Disbursed 30 April 2026; USD 431,394 paid to both suppliers	Completed late (9–10 months). PIU-II monthly reporting places the same payment in March 2026 — discrepancy unresolved
A.1 (e)	Supply of AWS under Phase-I (Lots I and II)	1 Jul 25 – 31 Dec 25	Not started; Factory Acceptance Test preparatory activities initiated	Delayed 12+ months; FAT protocols missing from the baseline AWP
A.1 (f)	Supply of AWS under Phase-II (Lots I and II)	1 Jul 25 – 1 Apr 26	Not started	Delayed 12+ months, in tandem with Phase-I slippage
A.1 (g)	Supply of AWS under Phase-III	1 Jul 25 – 1 Jul 26	Not started; deliveries officially pushed into FY 2026-27	Delayed 12+ months; contingent on Phase-I and Phase-II clear-out
A.4 (a)	Opening and evaluation of technical proposals (radars)	27 Jun 25 – 18 Jul 25	Activity cancelled; technical specifications revised 15 December 2025	Cancelled on STEP; the World Bank cancelled the tracking line
1.2 (n–p)	Submission and opening of bids; technical evaluation; Bank NOL	3 Jun 25 – 4 Oct 25	Not started	Cancelled / superseded; tendering congestion risk flagged in Q1
—	Evaluation of technical bids through notification of award	3 Aug 25 – 10 Dec 25	Bidding process could not be initiated; specifications with the Bank, NOL awaited. Four radar sites identified — D.I. Khan, Lahore, Gwadar and Quetta — validation and screening pending	Delayed 4+ months, subsequently superseded by the financing shift

AWP ref.	Milestone / activity	AWP planned dates	Status at 30 June 2026	M&E rating and variance
—	Performance guarantee, contract signature, mobilisation advance, commencement of works	11 Dec 25 – 22 Feb 26	Pending; not started	Structural funding shift — the 10th PSC of 22 January 2026 moved USD 18 million of radar cost from Bank credit to the PSDP
Not in AWP	Revised PC-1 including radar procurement through PSDP	No baseline	Presented before the 11th PSC held on 22 June 2026; radar cost estimate escalated to USD 30 million. PIU-II states that a further USD 11.5 million is required from the Bank, over the existing USD 22 million, to restore the original 300-AWS scope	Pending approval at year end; IRI-10 achievement is not possible until radars are installed and operationalised
A.3 (b–o)	Radar design and supervision consultants — bidding, evaluation and award	3 Jun 25 – 24 May 27	Technical specifications submitted on 15 December 2025 with revisions required by EAD and the Bank; on hold awaiting Bank approval	Reported physical progress fell from 15 per cent at end Q3 to nil at end Q4
1.3 (k–q)	Technical evaluation approval through Bank NOL (supervision)	19 Jul 25 – 4 Oct 25	Not started	Cancelled on STEP
4.a	Preparation of draft bidding documents (HPC)	23 Jun 25 – 14 Jul 25	Not started	Delayed 6+ months; Bank NOL pending
5.e	Review of bidding documents and recommendations by SI consultants	29 Sep 25 – 13 Nov 25	Not started	Delayed 6+ months; Bank NOL pending
—	Finalisation of bidding documents, Bank NOL, issuance of IFB, submission and opening of bids (HPC)	14 Nov 25 – 19 Jan 26	Earlier proposals annulled as substandard; PIU-II approached WMO and received technical and financial proposals	Delayed 6+ months
—	Bank NOL, standstill, notification of award, guarantees, contract signature and mobilisation advance (HPC)	26 Mar 26 – 27 Jun 26	WMO technical and financial proposals under review at the close of the year	Delayed 6+ months; tied directly to the stalled radar procurement track
5.a	System Integrator — evaluation of financial proposals through mobilisation advance	17 Jul 25 – 17 Oct 25	Earlier proposals rejected as substandard; open competitive bidding annulled with Bank concurrence; WMO requested to submit proposals	Delayed 6+ months; reported physical progress fell from 20 to 15 per cent between Q3 and Q4
—	System Integrator — implementation period	18 Oct 25 – 30 Nov 28	Not commenced	Contingent on award

AWP ref.	Milestone / activity	AWP planned dates	Status at 30 June 2026	M&E rating and variance
A.2 (a)	Creation of the National Framework for Climate Services	1 Jul 25 – 3 Jun 26	Not started; draft under technical review	Delayed 12 months; pivoted to a broader structural review under the PMD Act revision
—	Creation of NFCS for decision-support services	1 Jul 25 – 3 Jun 26	Not started	Held at initial stage pending the Director General PMD's position on the revised PMD Act
—	Development of business model	15 Mar 25 – 30 Jun 28	Not started	Held at initial stage pending the revised PMD Act
—	Awareness workshops	15 Mar 25 – 30 Jun 28	Not started	Held at initial stage pending the revised PMD Act
—	Impact-based forecasting	10 Mar 25 – 30 Jun 28	Not started	Held at initial stage pending the revised PMD Act
—	Establishment of weather video studios	1 Jul 26 – 30 Jun 27	Not started; falls due in FY 2026-27	Not yet in delay, but dependent on the same policy decision
Not in AWP	Meteo-Pak PMD digital platform and media-cell upgrade	No baseline	Request for quotations returned by the World Bank without a recorded justification	Unexplained rejection — recorded by the M&E Consultants in QPR-3
2.2 (e–h)	Civil works — submission and opening of bids, evaluation, approval of the bid evaluation report, Bank NOL	10 Jun 25 – 25 Sep 25	Bidding packages returned by the World Bank	Delayed 12+ months; the procurement plan failed STEP compliance parameters
B.1 (a–d)	Civil works — opening and evaluation of financial bids, combined scoring	19 Feb 26 – 10 Mar 26	Civil works consultant on board but with no cleared procurement plan	Delayed 12+ months
—	Upgradation of IMG Karachi, CDPC and RCDPC, Met Workshop Karachi and meteorological observatories	1 Jan 26 – 30 Jun 26	Sole remaining bidder disqualified at technical evaluation; the World Bank returned the NOL without assigning a reason	Frozen; requires a redesigned unified procurement plan under STEP
—	Defect notification period and closing of contracts	1 Jul 26 – 27 Jan 27	Not reached	Contingent on award
B.2 (k, l)	Capacity building — evaluation of financial bids and combined scoring	22 Feb 26 – 10 Mar 26	Formulation running continuous variances against AWP timelines	Target lag
2.3 (c)	Training commencement and implementation	3 Apr 25 – 30 Jun 28	Not commenced as programmed; delivery limited to technical sessions	Delayed 12+ months
B.3 (a, b, c)	Procurement of IT equipment, furniture and data repositories	1 Jan 24 – 31 Dec 26	Not started; the activity lines are disconnected from the AWP	Severe inconsistency — PIU-II activities do not line up with AWP milestones

Source: M&E Consultants, compiled from the quarterly M&E performance and variance summaries for Q1–Q4 FY 2025-26 against AWP 2025-26 and the consolidated Q1–Q4 summary.. Dashes in the reference column denote milestones that PIU-II reported without an AWP activity code.

G.2 Status of M&E recommendations issued during FY 2025-26

Quarter	M&E recommendation as issued	Status at 30 June 2026
Q1	Deploy a phased data bridge — a lightweight Excel-to-web interface to bypass the absence of a functional MIS — and assign dedicated data custodians within PIU-II to establish accountability for indicator reporting accuracy.	Not implemented. No Component-II MIS and no designated data custodian at year end; the interim Excel tracker remained the only substitute.
Q1	Launch a site-readiness tracker for each of the 110 AWS and four radar locations, mapping planned commencement and completion against actual timelines.	Partially implemented through the M&E Consultants' own enabling-milestone tracker (Table 10); not adopted by PIU-II.
Q1	Initiate field visibility for the GRM — local awareness campaigns, structural signage, complaint boxes and banners at project sites once identified and screened.	Not implemented at field level as no site was established during the year. Channels remain confined to the PIU-II office.
Q2	Resolve the policy block on service-delivery enhancements (NFCS, business models, impact-based forecasting). The revised PMD Act pending with DG, PMD.	Outstanding. All five service-delivery activity lines remained at initial stage.
Q3	Deploy tripartite field teams to complete standardised KoBo screening and secure signed land MoUs for the remaining sites in early Q4.	Substantially implemented for screening — 109 potential sites screened. MoUs remain the binding constraint: 41 of 54 pending at year end.
Q3	Fast-track approval of the 58 institutional positions required for long-term project sustainability, and recruitment of the IT / Software Specialist included in the revised PC-1.	Outstanding. The revised PC-1 was still pending approval at year end.
Q3	Follow up the decision of the 10th PSC and review and finalise the contract with WMO for HPC and System Integrator procurement.	In progress. WMO technical and financial proposals were under evaluation at year end.
Q4	Institutionalise missing operational steps — field-validated screening phases and Factory Assessment Tests — directly into future Annual Work Plans.	Carried forward into the FY 2026-27 corrective action tracker at Annex E.3.
Q4	Mandate the new Project Deputy Director to submit a redesigned, unified procurement plan to the World Bank to unlock the frozen civil works lines at IMG Karachi and the local observatories.	Under negotiation with the World Bank at year end.
Q4	Update the Environmental and Social Management Plan with final design parameters once local PSDP funding and the revised PC-1 are approved.	Outstanding, and contingent on PC-1 approval.

Source: M&E Consultants, from the recommendation sections of the quarterly M&E summaries Q1–Q4 FY 2025-26. Recommendations still outstanding at 30 June 2026 are carried into the corrective action tracker at Annex E.3.

MONITORING & EVALUATION CONSULTANTS : ANNUAL PROGRESS REVIEW (FY 2025-26)

1. Component-II : Quarter 1 ,2,3,4 Progress Review (2025-26)

Milestone Execution & Variance Evaluation

Activity	Target Start Date	Planned End Date	Status	M&E Performance Rating & Variance ²	
A PACKAGE – I					
Modernization of the Observation Infrastructure, Data Management and Forecasting System					
A.1 Procurement and Installation of AWS					
(a) Hiring of AWS Consultant	11 Jul 24	10 Jul 25	Completed		
(b) Selection / Screening of 110 Sites for installation of Automatic Weather Stations (AWS)	3 Oct 23	29 Sep 24	In -progress Completed Screening of 91 sites out of 110 sites including : 45 Balochistan ; 20 KP;15 Sindh and 11 in Punjab)	● Delay (12+ months) - Joint teams comprising: PMD, RMC and PIU-II conducted Screening of AWS sites and obtained 54 NOCs and prepared/ signed 11 MOUs. The Screening process is missing in AWP 2025-26 - A training session has been conducted for staff on site screening, and the validation	
(c) Award of Contract for supply of AWS	14-Jun-25	12-Oct-25	Contract signed on 18-Dec-25	● Delay (2 months) Longer time taken in multiple layers review to comply with World Bank requirements.	
(d) Mobilization advance	16-Jun-25	10-Nov-25	Completed 30-Apr-26	■ Delay (5 months) Mobilization advance amounting to USD 431,394 has been paid to both the contractors	
(e) Supply of AWS under Phase1 Plan (Lots I &II)	1-Jul-25	31- Dec-25	Not yet started	Phase- I Supply Expected during 2026-27	● Delay (12+ months) Initiated preparatory activities to undertake Factory Assessment Test (FAT) which is missing in AWP (2025-26)
(f) Supply of AWS under Phase-II Plan (Lot-I & Lot-II)	01-Jul-25	01-Apr-26	Not yet started	Phase-II supply Expected during 2026-27	
(g) Supply of AWS under Phase-III Plan (Lot-I & Lot-II)	01-Jul-25	01-Jul-26	Not yet started	Phase-III supply Expected during 2026-27	
A.2 Enhancement of PMD Service Delivery					
(a) Creation of NFCS for DSS	1-Jul-25	3-Jun-26	Not yet started	PMD Act Revision - Draft finalized and it is under technical review by relevant experts in the light of the meeting held with DG, PMD during May, 2026 - Most of these activities are at initial stage`	
(b) Development of Business Model	15-Mar-25	30-Jun-28	Not yet started		
(c) Awareness Workshops	15-Mar-25	30-Jun-28	Not yet started		
(d) Impact Based Forecasting	10-Mar-25	30-Jun-28	Not yet started		
(e) Establishment of Weather Video Studios	1-Jul-26	30-Jun-27	Not yet started		
(f) Baseline Survey	1-Jan-25	31-Mar-25	Pre-baseline completed in July 2025		
A.3 Procurement and Installation of Weather Surveillance Radars (WSR)					

Annex H Milestone Execution & Variance Analysis M&E recommendations issued during FY 2025-26

MONITORING & EVALUATION CONSULTANTS : ANNUAL PROGRESS REVIEW (FY 2025-26)

1. Component-II : Quarter 1 ,2,3,4 Progress Review (2025-26)

Milestone Execution & Variance Evaluation

Phase-III Execution & Variance Evaluation				
Activity	Target Start Date	Planned End Date	Status	M&E Performance Rating & Variance ²
(a) Submission / Opening of Bids	03-Jun-25	02-Aug-25	4 sites identified for Radars at these locations : D.I. Khan; Lahore; Gwadar and Quetta Validation/screening pending. - As per 10th Project Steering Committee Meeting, held on 22January, 2026 ,GoP will fund the cost of Radars i.e. USD 18 million through Public Sector Development Program (PSDP) from local resources - The 11th PSC meeting was held on 22nd of June 2026 in which the revised PC-I was presented which includes Weather Surveillance Radar (WSR) component to be financed through the Public Sector Development Program (PSDP) with an estimated cost of USD 30 million <u>Environmental and Social Management Plan (ESMP)</u> : Initial draft report prepared. Design parameters will be incorporated once procurement of Radars is finalized through PSDP - In view of above most of the activities listed here under WSR are pending.	
(b) Submission / Opening of Bids	03-Jun-25	02-Aug-25		
(c) Evaluation of Technical Bids	03-Aug-25	12-Sept-25		
(d) NOL from WB	13-Sept-25	04-Oct-25		
(e) Notification of Technical Bids	05-Oct-25	06-Oct-25		
(f) Opening of Financial Bids	07-Oct-25	21-Oct-25		
(g) Evaluation of Financial Bids & Combined Scoring	22-Oct-25	01-Nov-25		
(h) NOL from WB	02-Nov-25	16-Nov-25		
(i) Standstill Period	17-Nov-25	02-Dec-25		
(j) Notification Award of Bid	03-Dec-25	10-Dec-25		
(k) Submission of Performance Guarantee and advance payment guarantee	11-Dec-25	08-Jan-26		
(l) Signing of Contract Agreement	09-Jan-26	16-Jan-26		
(m) Mobilization Advance Payment and ongoing payments	17-Jan-26	14-Feb-26		
(n) Commencement of Works	15-Feb-26	22-Feb-26		
(o) Design and Manufacturing of Radars	23-Feb-26	24-May-27		
A. 4 Design and Supervision Consultants for Radar				
(a) Opening & Evaluation of Technical Proposals	27-Jun-25	18-Jul-25	Delay (12+ months) - Technical Specifications submitted on 15th December 2025 with necessary revisions as required by EAD and WB. - Approval of NOL prolonged with uncertainty From WB. The Project Steering Committee (PSC) in its 10th meeting decided to procure Radars from GoP funding which will undergo the process of approval of revised PC-1.	
(b) Approval of Technical Evaluation	19-Jul-25	2-Aug-25		
(c) NOL from WB on Technical Evaluation	3-Aug-25	17-Aug-25		
(d) Notification of Technical Qualified Firms	18-Aug-25	19-Aug-25		
(e) Opening of Financial Proposals	20-Aug-25	4-Sept-25		
(f) Evaluation of Financial Proposals	5-Sept-25	15-Sept-25		
(g) Approval of Overall Ranking	16-Sept-25	23-Sept-25		
(h) NOL from WB	24-Sept-25	4-Oct-25		

² **M&E Performance Rating :** ■ On Track / ● At Risk ● Delayed

Annex H Milestone Execution & Variance Analysis M&E recommendations issued during FY 2025-26

MONITORING & EVALUATION CONSULTANTS : ANNUAL PROGRESS REVIEW (FY 2025-26)

1. Component-II : Quarter 1 ,2,3,4 Progress Review (2025-26)

Milestone Execution & Variance Evaluation

Activity	Target Start Date	Planned End Date	Status	M&E Performance Rating & Variance ²
(i) Notification of Overall Ranking	5-Oct-25	6-Oct-25	Due to diversion of Radars funds, D&S activities have been cancelled on STEP by World Bank	STEP (Systematic Tracking of Exchanges in Procurement) is an online platform and tracking system used by the World Bank and borrowers to plan, record, and monitor procurement activities under Investment Project Financing (IPF) projects
(j) Standstill Period	7-Oct-25	22-Oct-25		
(k) Negotiations & Award of Contract	23-Oct-25	30-Oct-25		
(l) Signing of Contract Agreement	31-Oct-25	7-Nov-25		
(m) Mobilization Advance and ongoing payments	8-Nov-25	29-Nov-25		
(n) Implementation Period	30-Nov-25	29-Nov-28		
A.5 Procurement of High Performance Computing (HPC)				
(a) Preparation of Bidding documents	23-Jun-25	14-Jul-25	Delay (6 + months) - Linked with the process of Radars procurement - After having been cancelled the earlier Proposals for procurement of HPC, which were found not up to the mark, PIU-II followed up with World Metrological Organization (WMO) and accordingly, received Technical and Financial Proposals from WMO - Technical /financial proposals of WMO Were under review by the end of the year 2025-26 - The procurement of forecasting software/packages are also included in technical proposal of WMO - The flood hydrological modelling, proposal for software packages is under discussion - In view of above most of the activities listed here as per AWP 2025-26 under procurement of HPC are not yet started. These are linked with the procurement and installation process of Radars	
(b) Review of Bidding Documents and Recommendations by SI Consultants*	29-Sept-25	13-Nov-25		
(c) Finalization of Bidding Documents	14-Nov-25	27-Nov-25		
(d) NOL from WB on draft bidding Documents	28-Nov-25	04-Dec-25		
(e) Issuance of IFB	05-Dec-25	05-Dec-25		
(f) Submission / Opening of Bids	06-Dec-25	19-Jan-26		
(g) Evaluation of Technical Bid	20-Jan-26	08-Feb-26		
(h) NOL from WB on TBER	09-Feb-26	18-Feb-26		
(i) Notification of Technical Bids	19-Feb-26	21-Feb-26		
(j) Opening of Financial Bids	22-Feb-26	10-Mar-26		
(k) Evaluation of Financial Bids & Combined Scoring	11-Mar-26	25-Mar-26		
(l) NOL from WB	26-Mar-26	01-Apr-26		
(m) Stand Still Period	02-Apr-26	18-Apr-26		
(n) Notification Award of Bids	19-Apr-26	25-Apr-26		
(o) Submission of Performance Guarantee & Adv Payment Guarantee	26-Apr-26	30-May-26		
(p) Signing of Contract Agreement	31-May-26	06-Jun-26		

Annex H Milestone Execution & Variance Analysis				M&E recommendations issued during FY 2025-26		
MONITORING & EVALUATION CONSULTANTS : ANNUAL PROGRESS REVIEW (FY 2025-26)						
1. Component-II : Quarter 1 ,2,3,4 Progress Review (2025-26)						
Milestone Execution & Variance Evaluation						
Activity		Target Start Date	Planned End Date	Status	M&E Performance Rating & Variance ²	
(q)	Mobilization Advance Payment and ongoing payments	07-Jun-26	27-Jun-26			
A.6 Procurement of System Integrator (SI)						
(a)	Evaluation of Financial Proposals	17-Jul-25	27-Jul-25	After having been cancelled the earlier proposals, PIU-II requested WMO to provide Technical and Financial Proposals for System Integrator	- Linked with Radaes procurement - Most of the activities listed here under procurement of System Integrator are pending	Delay (6 + months) Technical /financial proposals of WMO under review
(b)	Approval of Overall Ranking	28-Jul-25	4-Aug-25			
(c)	NOL from WB	5-Aug-25	15-Aug-25			
(d)	Notification of Overall Ranking	16-Aug-25	17-Aug-25			
(e)	Standstill Period	18-Aug-25	2-Sept-25			
(f)	Negotiations & Award of Contract	3-Sept-25	10-Sept-25			
(g)	Signing of Contract Agreement	11-Sept-25	18-Sept-25			
(h)	Mobilization Advance and ongoing payments	19-Sept-25	17-Oct-25			
(i)	Implementation Period	18-Oct-25	30-Nov-28			
B PACKAGE II						
Provision of Technical Assistance, Institutional Strengthening, and Capacity Building						
B.1 Civil Work Consultancy and Procurement of civil works contractor						
(a)	Submission & Opening of Bids	10-Jun-25	10-Jul-25		Delay (12 + months) - Civil Works Consultancy Firm working on agreed assignmen - Procurement plan was returned by WB on STEP. In May 2026. - The matter was pursued further with WB by new Deputy Project Director - Accordingly, a revised procurement plan is under consideration and WB has assured to extend necessary support	
(b)	Evaluation of Bids	10-Jul-25	14-Aug-25			
(c)	Approval of Bids Evaluation Report	14-Aug-25	25-Sept-25			
(d)	NOL from WB	25-Sept-25	2-Oct-25			
(e)	Notification of Evaluation	2-Oct-25	16-Oct-25			
(f)	Stand Still Period	16-Oct-25	30-Oct-25			
(g)	Notification of Award	30-Oct-25	6-Nov-25			
(h)	Performance Guarantee	6-Nov-25	4-Dec-25			
(i)	Signing of Contract Agreement	4-Dec-25	11-Dec-25			
(j)	Mobilization Advance Payment and ongoing payments	11-Dec-25	1-Jan-26			
Implementation Works						
(a)	Upgradation of IMG Karachi	1-Jan-26	30-Jun-26	- Combined bidding documents were returned by WB on STEP - The WB is in discussions with new DPD on revised procurement plan - Support to Meteo-Pak PMD RFQ prepared for upgradation of digital platforms and procurement of equipment for		
(b)	Upgradation of CDPC & RCDPC	1-Jan-26	30-Jun-26			
(c)	Upgradation of Met Workshop Karachi	1-Jan-26	30-Jun-26			
(d)	Upgradation of Met Observatories	1-Jan-26	30-Jun-26			

Annex H Milestone Execution & Variance Analysis

M&E recommendations issued during FY 2025-26

MONITORING & EVALUATION CONSULTANTS : ANNUAL PROGRESS REVIEW (FY 2025-26)

1. Component-II : Quarter 1 ,2,3,4 Progress Review (2025-26)

Milestone Execution & Variance Evaluation				
Activity	Target Start Date	Planned End Date	Status	M&E Performance Rating & Variance ²
			media cells. Bank also returned the RFQ without assigning any reason	
B.2 : Capacity Building, Trainings				
(k) Need Assessment	1-Feb-25	1-Mar-25		Preparation of Training plan, training design/contents and training schedule under process
(l) Training plan, Design / Contents	2-Mar-25	2-Apr-25		
(m) Training Commencement/ Implementation	3-Apr-25	30-Jun-28		
B.3 Supply of Electrical and Mechanical Workshop Equipment Lot 1: Mechanical Equipment, Lot 2: Electrical Equipment				
(a) Procurement of IT Equipment	1-Jan-24	1-Jun-26	Not yet started	During the year 2025-26, the activities undertaken by PIU-II have not been consistent with and trackable to the AWP timeframe stipulated in activities under sub-components.
(b) Procurement of Furniture & Fixture	1-May-24	1-Jun-26	Not yet started	
(c) CDPC/RCDPCs Lot-1: Centralized Data Repository	1-Feb-25	31-Dec-26	Not yet started	