



FEDERAL PROJECT MANAGEMENT UNIT
FEDERAL WATER MANAGEMENT CELL
MINISTRY OF NATIONAL
FOOD SECURITY & RESEARCH
ISLAMABAD - PAKISTAN

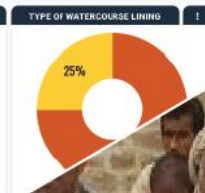
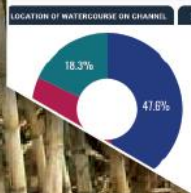
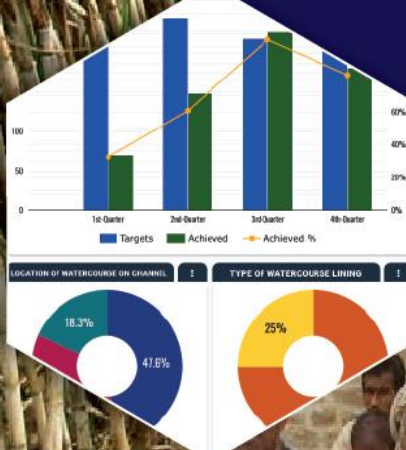
NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION AND IMPACT EVALUATION CONSULTANTS



QUARTERLY MONITORING & EVALUATION REPORT

JUL TO SEP 2024



A Joint Venture of
G3 Engineering & Consultants (Pvt.) Ltd.



In Association with S&S Associates



Federal Project Management Unit (FPMU)
Ministry of National Food Security & Research, Islamabad
Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants
For
National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)
QUARTERLY MONITORING AND EVALUATION REPORT
JULY – SEPTEMBER 2024

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ACRONYMS

| | |
|--------|---|
| ADA | Assistant Director Agriculture |
| AES | Agriculture Extension Services |
| AF | Acre-Feet |
| AJK | Azad Jammu & Kashmir |
| AWPB | Annual Work Plan and Budget |
| AWPs | Annual Work Plans |
| BCR | Benefit Cost Ratio |
| CFT | Cubic Feet |
| CMS | Content Management System |
| CSRD | Center for Social Research and Development |
| DAES | Director Agriculture Extension Services |
| DDA | Deputy Director Agriculture |
| DGA | Director General Agriculture |
| DTL | Deputy Team Leader |
| EAs | Executing Agencies |
| EIRR | Economic Internal Rate of Return |
| FCR | Financial Completion Report |
| FCRs | Final Completion Reports |
| FMFSR | Framework for Federal Financial Management System |
| FOs | Farmers Organizations |
| FPMU | Federal Project Management Unit |
| FWMC | Federal Water Management Cell |
| GAP | Gender Action Plan |
| GB | Gilgit Baltistan |
| G3EC | G3 Engineering Consultants |
| GIS | Geographic Information System |
| HEIS | High Efficiency Irrigation System |
| IAS | Implementing Agencies |
| ICR | Interim Completion Report |
| ICT | Islamabad Capital Territory |
| IRR | Internal Rate of Return |
| ICT | Information & Communication Technology |
| JV | Joint Venture |
| KP | Khyber Pakhtunkhwa |
| LLL | Laser Land Leveler |
| LPS | Liter Per Second |
| M&E | Monitoring and Evaluation |
| MAF | Million Acre Feet |
| ME&IE | Monitoring, Evaluation and Impact Evaluation |
| MIS | Management Information System |
| MNFSR | Ministry of National Food Security and Research |
| MMR | Monthly Monitoring Report |
| MT | Monitoring Template |
| MTE | Mid-Term Evaluation |
| NESPAK | National Engineering Services Pakistan |
| NPC | National Project Coordinator |
| NPIWC | National Program for Improvement of Watercourses |
| NPV | Net Present Value |
| NWMC | National Water Management Consultants |
| OFWM | On Farm Water Management |
| PC-1 | Planning Commission-(Form-One) |
| PDO | Project Development Objectives |
| PIC | Project Implementation Committee |
| PIES | Project Impact Evaluation Study |

| | |
|-------|--|
| PQC | Pre-Qualification Committee |
| QM&ER | Quarterly Monitoring and Evaluation Report |
| RBM | Results-Based Management |
| RFT | Running Feet |
| RWD | Responsive Web Design |
| SFT | Square Feet |
| SOPs | Standardized Operating Procedures |
| SPSS | Statistical Package for Social Sciences (Software) |
| SSCs | Supply and Service Companies |
| TABs | Tablets |
| TL | Team Leader |
| TOR | Terms of Reference |
| TPV | Third Party Validation |
| TWRD | Tail-Water Recovery Ditch |
| WG | Women Group |
| WST | Water Storage Tank |
| WUAs | Water Users Associations |

EXECUTIVE SUMMARY

The report in hand, “Quarterly Monitoring and Evaluation Report for the period of 1st July 2024 to 30th September 2024 is comprised of five chapters.

Chapter-1 describes the detailed introduction and description of the project. The Government of Pakistan is implementing the project “National Program for Improvement of Watercourses in Pakistan Phase-II” (NPIWC-II) at a total cost of PKR 154,542.355 million (Umbrella PC-I including Sindh) over a period of 05 years. This project will cover Punjab, Khyber Pakhtunkhwa (KP), Balochistan, Gilgit Baltistan (GB), Azad Jammu & Kashmir (AJ&K) as well as Islamabad Capital Territory (ICT). The proposed project’s Phase-II is beneficial for the country.

The NPIWC-II comprises of four components to be implemented in Punjab, KP, Balochistan, GB, AJK, and ICT:

- i. C1: Organization of Water Users Associations
- ii. C2: Watercourse Improvements: 47,278 Nos.
- iii. C3: Construction of Water Storage Tanks: 14,932 Nos.
- iv. C4: Provision of Laser Land Leveling Units: 11,610 Nos.

Chapter-2 elaborates the objectives and Scope of Work of the ME&IE Consultants for the project. Since the ME&IE Consultants are going to monitor implementation of all criteria set, procedures defined and timeline agreed for implementation of various components, all these are reproduced in this report as ready reference to devise / design M&E strategy, methodology, procedures for monitoring and impact assessments of the project’s interventions.

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in the Table-2.1. The strategy aims to be finalized and implemented in close coordination with the client and active participation of the beneficiaries as well as the project stakeholders.

Chapter -3 of this report covers the detail of ME&IE Consultants’ activities initiating during the reporting period (1st July 2024 to 30th September 2024) as listed below:

- Project Closure Activities
- Post Field Activities
- ICT Assignment
- Coordination
- Deliverables

Chapter 3 also summarizes the compliance status of tentative four month Work Plan.

Chapter-4 of this report describes the activities completed during the reporting period as summarized below:

- Downsizing of ME&IE Consultants’ staff & sought approval of retained Staff;
- Post field activities: including Data Validation Process;
- Data Cleaning and Preparation of baseline and endline surveys;
- Data analysis and preparation of Final Tables for the Baseline & Endline survey Reports
- Quality Assurance and Final Review of Baseline and Endline survey Reports
- Monitoring of online data collection and Data entry;
- Data collection of interventions in MIS/GIS database;
- Submitted the MMRs for June 2024, July 2024, August 2024;
- Submitted the QM&ER Apr-Jun 2024; and
- Meetings of ME&IE Consultants with the respective Stakeholders about Project Progress / Issues in hand and its prospects.

Chapter-5: highlights the problems faced by the consultants during the ME&IE activities. Due to non-availability of data from NWMC (NESPAK) & respective Directorates, and resources from Client, ME&IE Consultants have been facing constraints for timely completion of activities of the assignment.

Table-ES-1: Compliance Status of Four Month Tentative Work Plan, 1st July 2024 to 31st October 2024

| No. | Activities Planned for the Four Months (Jul-Oct 2024) | | Status | |
|-----|---|--|--|--|
| 1 | Project Closure Activities (Administrative) | | | |
| | 1.1 | Downsizing of ME&IE Consultants staff & sought approval of retained Staff | Accomplished | |
| | 1.2 | Preparing Remuneration & Reimbursable invoices | Accomplished | |
| | 1.3 | Handing over the project assets to the client | Will be handed over at the stipulated time | |
| 2 | Post field activities | | | |
| | 2.1 | Data Validation Process | Accomplished | |
| | 2.2 | Data Cleaning and Preparation | Accomplished | |
| | 2.3 | Data Analysis | Accomplished | |
| | 2.4 | Creating Final Tables for the Report | Accomplished | |
| 3 | ICT Assignment: | | | |
| | 3.1 | Improvement/Updation of website of NPIWC-II | Accomplished | |
| | 3.2 | Monitoring online data collection and data entry | In Progress | |
| | 3.3 | Monitoring Android-based Mobile Application under implementation by field staff. | In Progress | |
| | 3.4 | Data collection of interventions in MIS/GIS database | In Progress | |
| | 3.5 | Capacity Building Trainings / Refresher of Departments | In Progress | |
| | 3.6 | Data entry, Data cleaning, Data processing & data analysis. | In Progress | |
| 4 | Coordination | | | |
| | 4.1 | Meetings of TL, ME&IE Consultants with NPC regarding Project Progress / Issues | Meetings conducted regularly | |
| | 4.2 | Meeting of DTLs with respective DTL of NWMC | Meetings conducted regularly | |
| | 4.3 | Internal Meetings of ME&IE Consultants | Weekly meetings conducted on a regular basis | |
| 5 | Deliverables: | | | |
| | 5.1 | Monthly Monitoring Reports (MMRs) | 43 rd MMR (July 2024) | Submitted |
| | | | 44 th MMR (August 2024) | Submitted |
| | 5.2 | Quarterly Monitoring & Evaluation Report (QM&ER) | 45 th MMR (Sep 2024) | Submitted |
| | | | QM&ER Jul-Sep 2024 | Report in hand |
| | 5.3 | Baseline Survey Report | Baseline Survey Report Consolidated | Under preparation |
| | 5.4 | Endline Survey Report | Endline Survey Report | Under preparation |
| | 5.5 | Special Reports | | Under preparation |
| | 5.6 | Draft Assignment Completion Report | Draft Assignment Completion Report | Will be submitted on the stipulated time |

CHAPTER-1: INTRODUCTION

1.1 PROJECT PROFILE

| | |
|----------------------------|---|
| Project Name | National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II) |
| Project Areas | Punjab, KP, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir, and Islamabad Capital Territory (ICT) |
| Sponsoring Agency | Ministry of National Food Security & Research |
| Executing Agencies (EAs) | Following are different EAs: <ul style="list-style-type: none"> i. Federal Project Management Unit (FPMU), ii. DGA OFWM Punjab iii. DGA OFWM KP iv. DGA OFWM Balochistan v. Director Irrigation and Small Dams, AJK vi. Director WM, GB vii. Director Agriculture Extension Services (AES) ICT |
| Project Period | 5 Year (2019-2024) |
| Total Project Cost | 154,542.355 million (Umbrella PC-1, including Sindh) |
| ME&IE Consultancy Period | 4 year |
| ME&IE Consultant: | JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering Services (Pvt.) Ltd., Centre for Social Research and Development (CSR) and ADA Consultants Inc. Canada |
| ME&IE Consultant Mobilized | November 07, 2020 |

1.2 PROJECT DESCRIPTION

1.2.1 PROJECT DEVELOPMENT OBJECTIVES

The Project Development Objectives (PDO) is to improve irrigation water management at tertiary and field levels in Pakistan.

1.2.2 PROJECT OBJECTIVES – GENERAL & QUANTITATIVE

1) General Objectives:

The Project aims to replicate the success achieved during the NPIWC Phase-I and further improve the findings of the Project Impact Evaluation Study (PIES). The broad objectives of the project are as under:

- i. Social mobilization through capacity building of WUAs/ FOs,
- ii. Minimization of conveyance and field application losses,
- iii. Reduction in Water Logging and salinity,
- iv. Equity in water distribution,
- v. Reduction in water disputes/thefts/litigation,
- vi. Motivation/participation of farmers,
- vii. Poverty reduction through employment generation, and
- viii. Increase in crops yield/sufficiency in food.

2) Quantitative Objectives:

The quantitative objectives of the Project are as under:

Project outputs

- i. Mobilization through capacity building of Water Users Associations/Farmers Organizations in improved water management techniques and their registration under On-Farm Water Management and Water User Associations Ordinance [Act] 1981 and organization of 47,278 WUAs.
- ii. Reconstruction/renovation and remodeling of 47,278 watercourses, involving complete earthen renovation, partial lining of critical reaches (50% of the total watercourse length as decided in the high-level meeting), and installation of water control structures. It is expected to save around 5.82 MAF per annum (approx. saving of 123 acre-feet (AF) per watercourse per annum).
- iii. Construction of 14,932 water storage tanks with 60% subsidy arrangements.
- iv. Provision of 11,610 Laser Land Levelers at 50% cost sharing arrangements, with the expectation to save about 50% irrigation water for wheat and about 68% of irrigation water for paddy.

Project Impacts

- i. Reduction in Water Logging and salinity in project areas to the extent of 10%.
- ii. Cropping intensity is expected to increase by 5-20%.
- iii. Crop's yield is estimated to increase by 10-15%.
- iv. Equity in water distribution increased by about 30%.

- v. Reduction in water disputes/thefts and litigation amongst the Farmers over water distribution by about 80%.
- vi. Help poverty reduction through generation of employment.
- vii. Self-sufficiency in food through utilization of water saved for edible oil seed production.

Project indirect benefits to industry/economic activities

- i. Cement industry, bricks Killen, Precast Structures Industry and other related industries' production will pick up.

Awareness support to farmers

- i. Motivating farmers through an awareness campaign for watercourse improvement.
- ii. Providing technical material to farmers for optimal utilization of water resources in the shape of technical manual and operational guidelines.

1.3 PROJECT BENEFICIARIES

Majority of the direct project beneficiaries constitute the number of farmers (owners as well as tenants) growing crops and orchards on the watercourses improved under NPIWC-II. Assuming 35 farmers on each watercourse, the total number of the farmers benefiting from the activity comes to 1.655 million. The same number will benefit due to Water Users' Associations (WUAs) in terms of cooperative management of irrigation water. Moreover, 14,932 will directly benefit from Water Storage Tanks and 11,620 as recipients of Laser Land Leveling Units. Thus, total gross direct beneficiaries are expected to be around 3.336 million households. However, net beneficiaries are expected to be 1.668 million.

Taking family size at five, total net population benefitting is expected to be 8.34 million people.

1.4 PROJECT COMPONENTS

The NPIWC-II comprises of four components:

C1: ORGANIZATION OF WATER USERS ASSOCIATIONS:

Establishment/ reactivation of Water Users Associations (WUAs) through community driven implementation approach.

- i. Provide right of way for constructing watercourse,
- ii. Arrange skilled and unskilled labour required for reconstruction / maintenance of earthen water channel, installation of water control structures, and lining of critical reaches,

- iii. Procure construction materials for carrying out civil works.
- iv. Settle matters of disputes amongst the water users in respect of channel alignment, fixation of Naccas, distribution of work, etc.
- v. Make alternate arrangements for conveyance of water during execution of improvement works.
- vi. Carryout civil works in accordance with standards and specifications under the supervision of OFWM field staff,
- vii. Regularly undertake O&M of improved watercourses after its construction.

C2: WATERCOURSE IMPROVEMENTS:

47,278 Watercourses are planned to be improved / reconstructed and lined.

- i. New watercourses that are not yet improved under earlier programs / projects,
- ii. Reconstruction of more than 20 years old watercourses that outlived their economic / useful life,
- iii. Additional lining up to 50% of already improved watercourses.

C3: CONSTRUCTION OF WATER STORAGE TANKS:

Construction of 14,932 Water Storage Tanks (WSTs).

- i. Store water during the rainy season and times of no use in the commands of perennial / non-perennial canals for subsequent irrigations at the critical crop growth stages,
- ii. Provide flexibility for storage of plentiful canal and rainfall runoff water for its more expedient use subsequently,
- iii. Collect, store and filter water from:
- iv. Small Dams, springs, Streams, Nallas etc.
- v. Rainfall runoff over agricultural catchment during rainy season
- vi. Tube Wells and dug wells of low flows
- vii. Tail-waters from agricultural fields.
- viii. Regulate the flows so that it can be used efficiently when needed in large flow rates.

C4: PROVISION OF LASER LAND LEVELING UNITS:

Provision of 11,610 Laser Land Leveling units to the farmers. The component will strengthen LASER land leveling services in the country through provision of Laser Land Leveling Units to the farmers/ service providers on 50% subsidized rates arrangements.

1.4.1 PROJECT TARGETS

The works are being undertaken in the Province of Punjab, Khyber Pakhtunkhwa (KP), and Balochistan excluding Sindh. It also covers Gilgit Baltistan (GB), Azad Jammu & Kashmir (AJK) and Islamabad Capital

Territory (ICT). The location maps with total targets are shown in **Figure-1.1**. Project aims at achieving the targets for 5 years starting from the year 2019-

20 to 2023-24, presented in **Figure-1.2**. The targets for each Province / Zone (excluding Sindh) are presented in **Figure-1.3**.

Project Targets

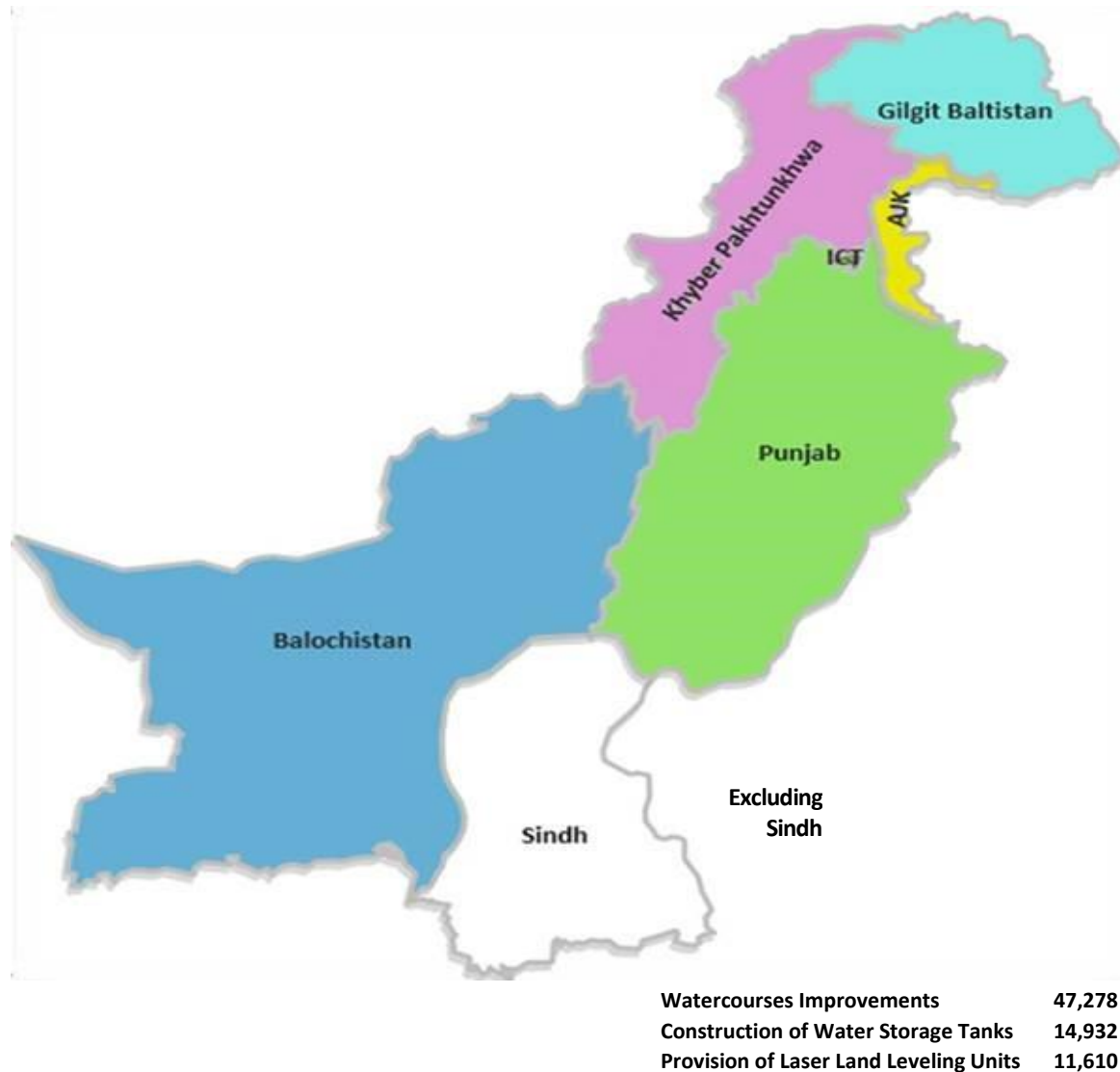


Figure 1.1: Location Map & Pakistan Targets

Table 1.1: Project Targets (in numbers)

| SR. NO. | INTERVENTION | PUNJAB | KP | BALUCHISTAN | GB | AJK | ICT | TOTAL |
|---------|--|--------|--------|-------------|-------|-------|-----|--------|
| 1 | Reconstruction of Watercourses (more than 20 years old/Additional lining 50 %) | 7,500 | 3,000 | 3,589 | - | - | - | 14,089 |
| | New Watercourses (Unimproved) | 2,500 | 10,000 | 16,800 | 2,500 | 1,165 | 224 | 33,189 |
| | Total Watercourses | 10,000 | 13,000 | 20,389 | 2,500 | 1,165 | 224 | 47,278 |
| 2 | Water Storage Tanks | 3,000 | 5,000 | 5,507 | 825 | 600 | - | 14,932 |
| 3 | Laser Land Leveling Units | 9,500 | 600 | 1,500 | 5 | 5 | - | 11,610 |

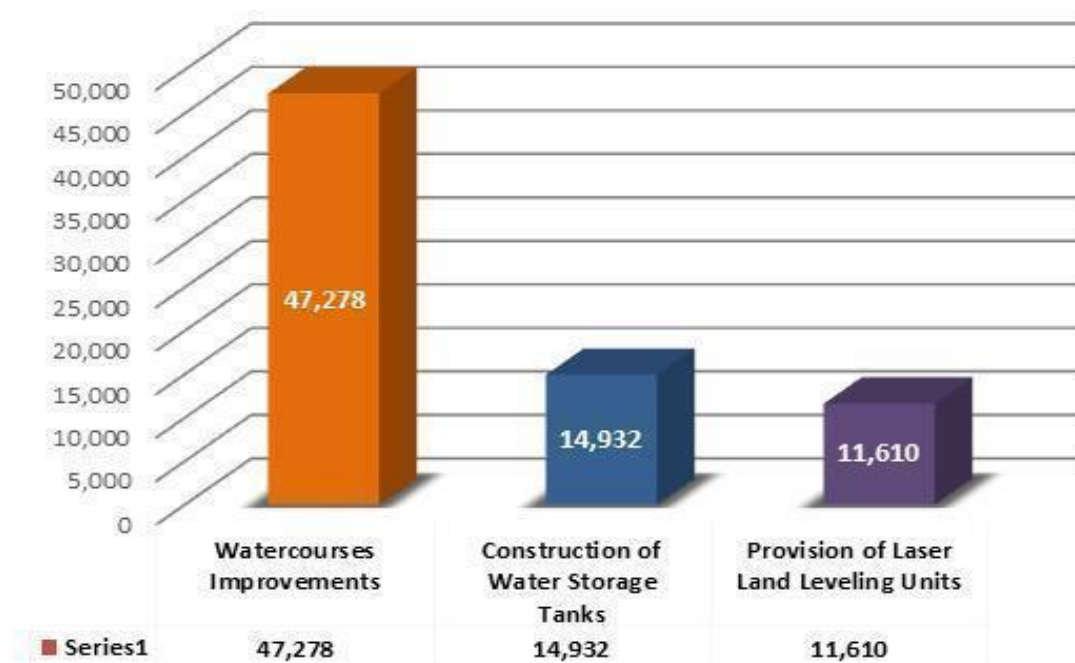


Figure 1.2: National Level Targets

Table 1.2: Province-wise year-wise Watercourses targets

| Sr. No. | Province / Unit | Watercourses (Numbers) | | | | | |
|---------|--------------------|------------------------|--------|--------|--------|--------|--------|
| | | Year-1 | Year-2 | Year-3 | Year-4 | Year-5 | Total |
| 1 | Punjab | 1,000 | 1,100 | 2,700 | 2,800 | 2,400 | 10,000 |
| 2 | Khyber Pakhtunkhwa | 1,600 | 3,200 | 3,200 | 3,200 | 1,800 | 13,000 |
| 3 | Balochistan | 2,020 | 5,250 | 5,530 | 4,800 | 2,789 | 20,389 |
| 4 | Gilgit Baltistan | 496 | 496 | 500 | 504 | 502 | 2,500 |
| 5 | AJK | 190 | 227 | 244 | 278 | 226 | 1,165 |
| 6 | ICT | 24 | 45 | 47 | 57 | 51 | 224 |
| Total | | 5,330 | 10,320 | 12,221 | 11,639 | 7,768 | 47,278 |

Table 1.3: Province-wise year-wise Water Storage Tanks targets

| Sr. No | Province / Unit | Water Storage Tanks (Numbers) | | | | | |
|--------|--------------------|-------------------------------|--------|--------|--------|--------|--------|
| | | Year-1 | Year-2 | Year-3 | Year-4 | Year-5 | Total |
| 1 | Punjab | 400 | 400 | 800 | 700 | 700 | 3,000 |
| 2 | Khyber Pakhtunkhwa | 550 | 1,300 | 1,300 | 1,300 | 550 | 5,000 |
| 3 | Balochistan | 360 | 1,000 | 1,510 | 1,500 | 1,137 | 5,507 |
| 4 | Gilgit Baltistan | 163 | 164 | 165 | 165 | 168 | 825 |
| 5 | AJK | 120 | 120 | 120 | 120 | 120 | 600 |
| 6 | ICT | - | - | - | - | - | - |
| Total | | 1,593 | 2,984 | 3,895 | 3,785 | 2,675 | 14,932 |

Table 1.4: Province-wise year-wise Laser Land Leveling Unit targets

| Sr. No. | Province / Unit | Laser Land Leveling (Numbers) | | | | | |
|---------|--------------------|-------------------------------|--------|--------|--------|--------|--------|
| | | Year-1 | Year-2 | Year-3 | Year-4 | Year-5 | Total |
| 1 | Punjab | 1,700 | 2,200 | 2,200 | 2,000 | 1,400 | 9,500 |
| 2 | Khyber Pakhtunkhwa | - | 200 | 200 | 200 | - | 600 |
| 3 | Balochistan | 200 | 350 | 400 | 400 | 150 | 1,500 |
| 4 | Gilgit Baltistan | - | 2 | 3 | - | - | 5 |
| 5 | AJK | - | 2 | 3 | - | - | 5 |
| 6 | ICT | - | - | - | - | - | - |
| Total | | 1,900 | 2,754 | 2,806 | 2,600 | 1,550 | 11,610 |

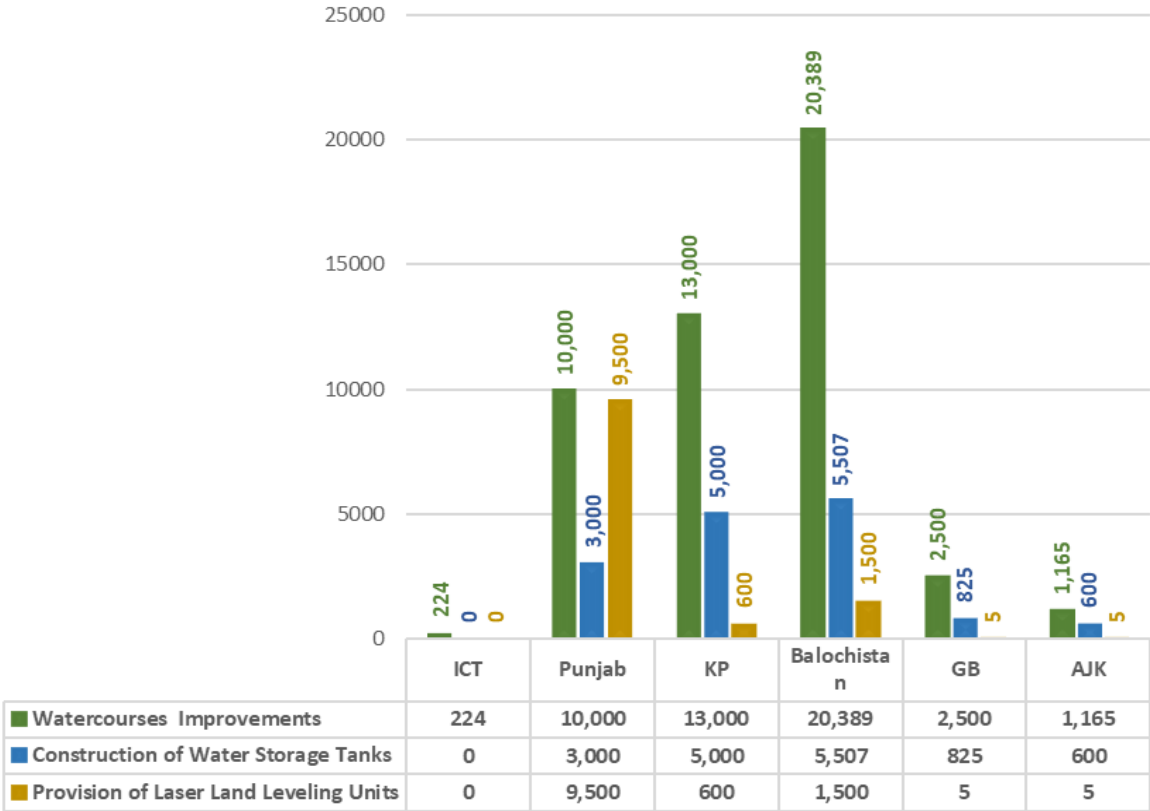


Figure 1.3: Zonal/Unit Level Targets

CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS

The ME&IE Consultants services are planned to be provided through a multi-disciplinary team of qualified professionals. All firms in the joint venture have rich experience in the field of monitoring and evaluations. The team deputed for this task in the project comprises highly qualified professionals having long practical experience of such projects earlier launched in Pakistan. The consultant will develop a State-of-the-Art Management Information System (MIS) with GIS focuses for NPIWC-II to monitor progress on project interventions and to carry out effective monitoring process. The MIS will help decision makers to make informed decisions.

2.1 OBJECTIVES

The objective of ME&IE Consultants' services is to carry out monitoring and evaluation of project impacts to ensure achievement of project development objectives.

2.2 SCOPE OF THE SERVICES

The ME&IE Consultants will be responsible for monitoring, evaluation and impact evaluation, and in this context will carry out the following activities:

- i) Undertake baseline, midline and end line surveys for the project activities / interventions in all the project areas,
- ii) Develop monitoring strategy, framework and Result-Based Monitoring (RBM) indicators,
- iii) Preparation of monthly, quarterly and annual monitoring, evaluation and validation reports of the project activities,
- iv) Assessing the water saving per annum on watercourses, water storage tanks and field levels as well as aggregate due to the project interventions,
- v) Assessing the improvement in water availability due to the provision of conveyance system,
- vi) Assessing the economic benefits to the agriculture in terms of changes in yields, irrigated area, cropping pattern, cropping intensity, farm income and employment in command area of watercourses and water storage tanks,
- vii) Assessing the extent of community mobilization, financial and administrative sustainability of water users' associations and ensuring the maintenance of watercourses, water storage tanks and laser land Levelers,
- viii) Economic impact of project interventions,
- ix) Carry out the impact evaluation of the project

- x) intervention on the economy and stakeholders, Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks and laser Levelers database, etc. (while the project staff will maintain the website),
- xi) Provide technical support for the development of a custom-designed mobile application (Android Based) to capture on-site project progress and geo-tagged photos. It should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management. The said requirement is based on the following functional features:

- Development of a GIS database with all spatial layers related to activities being undertaken under the project
- Give technical assistance for up-dation/up-gradation of water management GIS database.
- Development of web-based GIS application as a dashboard interface for comprehensive representation of all spatial and tabular information: custom designed web GIS application be developed for large LED screens, should be self-operative and represent project data on multiple layouts of application interface.
- Development of a MIS application as an integral part of web GIS to maintain information on facilities and services, applications, procedures, watercourses database, etc.
- Development of a custom-designed mobile application (Android) to capture on-site project progress, geo-tagged photos; should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management.
- Application should generate custom-designed reports and analysis as per user-defined requirements.
- Application should generate alerts (SMS, email, web-notifications) to the user on the non-conformance of project's key indicators; the application should have the provision to custom define alerts levels and desired notifications.

2.3 MONITORING STRATEGY

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in the following Table-2.1. However, detailed methodology and procedures to carry out the Monitoring,

Evaluations and Impact Evaluations of the project interventions were explained in Chapter 6 of Inception Report. The strategy aims to be finalized

and implemented in close coordination with the client and active participation of the beneficiaries as well as the project stakeholders.

Table 2.1: Monitoring Strategy for ME&IE Activities

| Sr. No. | Monitoring Activity | ME&IE Team Responsible | Monitoring Strategy |
|---------|---------------------------------------|---|---|
| 1 | Baseline, midline and endline surveys | Team Leader, Socio-Economic Expert, Agricultural Economist and Deputy Team Leader of respective province/unit. | <ul style="list-style-type: none"> Baseline and impact surveys will be carried out on a sample basis. Data will be collected by field teams on pre-designed data collection tools through an android application on TABs. Baseline and impact surveys will be carried out in phases as target watercourses are not preselected. Baseline will be carried out before the intervention and the impact one year (two crop seasons) after the completion of the intervention. The midterm study will review the project progress at middle of the project implementation The endline study will assess the impact of the project interventions. |
| 2 | Reporting | All core team members | <p>Following periodic reports will be prepared and submitted:</p> <ul style="list-style-type: none"> Draft Inception Report 45 days after the agreement, Final Inception Report one week after the issuance of comments by the client on the draft, Monthly Monitoring Report on 10th of following month, Quarterly Monitoring Report on 10th of the first month of the following quarter, Annual Monitoring and Evaluation Report during first month of the following year, Baseline Survey Reports (in three phases), First Phase Baseline Survey report will be submitted within the four months after the start of the assignment i.e., Submission of final inception report/Beginning of field activities. Impact Survey Reports (in phases) - two months after the data collection completion for the impact phase, Midline report in the middle of the assignment, Endline Report at the end of endline Survey, Draft Assignment Completion Report at completion of the physical works, Final Assignment Completion Report at completion of works and financial transactions. It will also include the full economic benefit of the project (NPIWC-II) on agriculture sector as well as on the GDP of Pakistan, Special Reports, as and when asked by the client. |
| 3 | Water saving assessment | Irrigation Agronomist, Field Team/Engineers | <p>Water Saving on Watercourses:</p> <ul style="list-style-type: none"> Water flow will be measured on sample watercourses selected for the baseline and impact surveys The flow will be measured at four points of the selected watercourses: close to water outlet, head reach, middle reach and tail reach. The measurements will be done through current meters. Based on water savings on sample watercourses, total water savings will be estimated for all project watercourses. The |

| Sr. No. | Monitoring Activity | ME&IE Team Responsible | Monitoring Strategy |
|---------|--|--|---|
| | | | <p>savings will be reported per watercourse, per annum and aggregate for the project in LPS and Acre feet.</p> <p>Water Savings on WSTs</p> <ul style="list-style-type: none"> Since WSTs will be filled and emptied on a continuous basis, the water savings will be assessed on the basis of water pumped from the tank to irrigate the fields. The assessment will be done either by readings on the pump gauge or periodic interviewing the farmer. Based on water savings on sample WSTs, total water savings will be estimated for all project WSTs. The savings will be reported per WST, per annum and aggregate for the project in LPS and in Acre feet. <p>Water savings due to Laser Land Leveling</p> <ul style="list-style-type: none"> Water savings at field level will be assessed through farmers' interviews. The impact survey form will include questions to be asked from the farmers who got their land levelled: <ul style="list-style-type: none"> In how much time an acre was irrigated before watercourse improvement and land leveling In how much time an acre is irrigated after watercourse improvement with land leveling <p>The difference will be water saving due to laser land leveling</p> <p>Based on water savings on sample LLL units, total water savings will be estimated for all project LLL units. The savings will be reported per LLL unit, per annum and aggregate for the project in LPS and in Acre feet.</p> |
| 4 | Community mobilization | Social and Gender Specialist and Socio-Economic Expert | <p>The extent of community mobilization will be assessed by investigating whether:</p> <ul style="list-style-type: none"> WUAs is functional Holds regular meetings and keep record of them Makes decisions democratically The participation in the organization is voluntary It is financially and administratively sustainable Takes steps and ensures maintenance of watercourses, WSTs and laser land leveler |
| 5 | Economic benefits assessment for agriculture | Team Leader, Socio- Economist and Agricultural Economist | <ul style="list-style-type: none"> As indicated at serial No. 1, Agriculture data will be collected before (baseline) and after (impact) the watercourse improvement and WSTs construction. In both the surveys same forms will be used and same sampled farmers will be interviewed Data on variables such as crop yields, irrigated area, cropping pattern, cropping intensity, farm income and employment will be collected and analyzed The difference between before and after situations minus natural growth will be assumed as economic benefits to the agriculture |
| 6 | Impact evaluation-on the economy | Team Leader, Agricultural Economist and | <ul style="list-style-type: none"> The results of the baseline and impact surveys will be used to quantify impact on the economy Additional food produced due to the project will be estimated. It is benefit towards food security |

| Sr. No. | Monitoring Activity | ME&IE Team Responsible | Monitoring Strategy |
|---------|---|--|---|
| | | Socio-Economic Expert | <ul style="list-style-type: none"> Project costs and benefits will be compared in economic and financial terms to carry out economic and financial analysis. Parameters like IRR, NPV and BCR will be estimated. |
| 7 | Impact evaluation-on the stakeholders | Team Leader, Agricultural Economist & Socio-Economic Expert | <ul style="list-style-type: none"> Analysis as in serial 6 will be carried out with reference to various stakeholders, like community, government, farmers, etc. |
| 8 | Spot checking | Team Leader, Deputy Team Leaders & Field teams/Engineers. | During the field visits for WUAs baselines impacts of Watercourses, WSTs and laser leveling units, the interventions will be spot checked for quality of construction, material, functioning and beneficiaries' satisfaction, etc. |
| 9 | Process monitoring | Field Teams of Agriculture Deptt., Project Consultants, ME&IE Consultants & ICT/Technology Specialist | <ul style="list-style-type: none"> The processed data for all the interventions will be fed to the MIS/GIS database. Client's field staff and field teams of consultants will furnish data of their activities. The ME&IE will assist in developing mobile application for this purpose From this data, reports will be generated for process monitoring All interventions will be fully (100%) covered. |
| 10 | Project website and MIS/GIS dashboard development | ICT / Technology Specialist (Including all other core team staff will also coordinate in completing data for the MIS/GIS | <ul style="list-style-type: none"> The State-of-the-art MIS / Progress Monitoring Model will be developed for NPIWC-II. Customized forms will be developed to collect data from the implementing teams on-site for progress monitoring These forms will be made available to the teams on smart phones through an android application The teams will be adequately trained to use the application Data on physical and financial stages with dates will be fed to the system for process monitoring GIS coordinates for watercourses, WSTs, laser units (if available) and WUAs offices will be uploaded to the system and could be viewed / reached by the management online The system will be maintained on GOOGLE server so that it is accessible by the management from anywhere in Pakistan and abroad Custom reports will be possible as the user demands / desires The results could be displayed on small as well as large screens. |
| 11 | Development of Android based application | ICT / Technology Specialist | All the data collection forms / tools will be executed through customized developed Android based applications accessible with smart phones / TABs. |

2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS

The framework and Results-Based Monitoring (RBM) Indicators are identified in Table-2.2 of Inception Report. The indicators will be further enhanced and refined in consultation with the client as well as stakeholders.

They will also get improved as the project implementation progresses as in the light of real and on the ground situations.

CHAPTER 3: WORK PLAN OF THE CONSULTANTS FOR FOUR MONTHS

3.1 COMPLIANCE STATUS OF WORK PLAN OF FOUR MONTHS JULY-OCTOBER 2024

The ME&IE Consultants' activities initiating during the first four months of the financial year, 2024-2025 (1st July 2024 to 31th October 2024) are outlined below. For a detailed breakdown of the time frame, please refer to the tentative Work Plan for four months (1st July 2024 to 31th October 2024) provided in **Annex-A**.

3.1.1 Project Clouser Activities (Administrative)

- Downsizing of ME&IE Consultants staff & approval sought of the retained Staff
- Preparing Remuneration & Reimbursable invoices
- Handing over the project assets to the client

3.1.2 Post Field Activities

- Data Validation Process
- Data Cleaning and Preparation
- Data Analysis
- Creating Final Tables for the Report

3.1.3 ICT Assignment

- Improvement/Updation of website of NPIWC-II
- Monitoring online data collection and data entry
- Monitoring Android based Mobile Application under implementation by field staff.
- Data collection of interventions in MIS/GIS database
- Capacity Building Trainings / Refresher of Departments
- Data entry, Data cleaning, Data processing & data analysis.

3.1.4 Coordination

- Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues
- Meeting of DTLs with respective DTL of P C & concerned OFWM Departments
- ME&IE Consultants Internal Meetings

3.1.5 Deliverables

- Monthly Monitoring Reports
- Quarterly Monitoring & Evaluation Report (QM&ER)

- Baseline Survey Report
- Endline Survey Report
- Special Reports
- Draft Assignment Completion Report

The detail of deliverables of ME&IE Consultants with the timelines is as under:

| Document | Status |
|--|-----------|
| Draft Inception Report | Submitted |
| Final Inception Report | Submitted |
| Monthly Monitoring Report-First (DEC 2020-JAN 2021) | Submitted |
| Monthly Monitoring Report-Second (FEB 2021) | Submitted |
| Monthly Monitoring Report-Third (MAR 2021) | Submitted |
| Quarterly Monitoring & Evaluation Report (JAN-MAR 2021) | Submitted |
| Monthly Monitoring Report-Fourth (APR 2021) | Submitted |
| Monthly Monitoring Report-Fifth (MAY 2021) | Submitted |
| Monthly Monitoring Report-Sixth (JUNE 2021) | Submitted |
| Quarterly Monitoring & Evaluation Report (APR-JUN 2021) | Submitted |
| Annual Monitoring & Evaluation Report (1 st) | Submitted |
| Monthly Monitoring Report-Seventh (JULY 2021) | Submitted |
| Monthly Monitoring Report-Eighth (AUG 2021) | Submitted |
| Baseline Survey Report-I | Submitted |
| Monthly Monitoring Report-Ninth (SEPTEMBER 2021) | Submitted |
| Quarterly Monitoring & Evaluation Report (JULY - SEPTEMBER 2021) | Submitted |
| Monthly Monitoring Report-Tenth (OCTOBER 2021) | Submitted |
| Monthly Monitoring Report-Eleventh (NOVEMBER 2021) | Submitted |
| Monthly Monitoring Report-Twelfth (DECEMBER 2021) | Submitted |
| Quarterly Monitoring & Evaluation Report year 2021 (OCTOBER – DECEMBER 2021) | Submitted |
| Monthly Monitoring Report-Thirteenth (JANUARY 2022) | Submitted |
| Monthly Monitoring Report-Fourteenth (FEBRUARY 2022) | Submitted |

| Document | Status |
|---|-----------|
| Monthly Monitoring Report-Fifteen (MARCH 2022) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2022 (JANUARY – MARCH 2022) | Submitted |
| Monthly Monitoring Report-Sixteen (APRIL 2022) | Submitted |
| Monthly Monitoring Report-Seventeenth (MAY 2022) | Submitted |
| Monthly Monitoring Report-Eighteenth (JUNE 2022) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2022 (APRIL – JUNE 2022) | Submitted |
| Annual Monitoring & Evaluation Report (2 nd) Jul 2021-June 2022 | Submitted |
| Monthly Monitoring Report-Nineteenth (JULY 2022) | Submitted |
| Monthly Monitoring Report-Twentieth (AUGUST 2022) | Submitted |
| Monthly Monitoring Report-Twenty First (SEPTEMBER 2022) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2022 (JUL – SEP 2022) | Submitted |
| Monthly Monitoring Report-Twenty Second (OCTOBER 2022) | Submitted |
| Monthly Monitoring Report-Twenty Third (NOVEMBER 2022) | Submitted |
| Monthly Monitoring Report-Twenty Fourth (DECEMBER 2022) | Submitted |
| Monthly Monitoring Report-Twenty Fifth (JANUARY 2023) | Submitted |
| Monthly Monitoring Report-Twenty Sixth (FEBRUARY 2023) | Submitted |
| Monthly Monitoring Report-Twenty Seventh (March 2023) | Submitted |
| Monthly Monitoring Report-Twenty-eighth (April 2023) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2023 (JAN – MAR 2023) | Submitted |
| Monthly Monitoring Report-Twenty-Ninth (May 2023) | Submitted |
| Monthly Monitoring Report-Thirtieth (June 2023) | Submitted |
| Monthly Monitoring Report-Thirty First (July 2023) | Submitted |
| Monthly Monitoring Report-Thirty Second (August 2023) | Submitted |
| Monthly Monitoring Report-Thirty Third (September 2023) | Submitted |

| Document | Status |
|--|----------------|
| Quarterly Monitoring & Evaluation Report-1 st Quarter year 2023 (Jul – Sep 2023) | Submitted |
| Monthly Monitoring Report-Thirty Fourth (October 2023) | Submitted |
| Monthly Monitoring Report-Thirty Fifth (November 2023) | Submitted |
| Monthly Monitoring Report-Thirty Sixth (December 2023) | Submitted |
| Quarterly Monitoring & Evaluation Report-2 nd Quarter year 2023-24 (Oct – Dec 2023) | Submitted |
| Monthly Monitoring Report-Thirty Seventh (January 2024) | Submitted |
| Monthly Monitoring Report-Thirty Eighth (February 2024) | Submitted |
| Monthly Monitoring Report-Thirty Ninth (March 2024) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2023-24 (Jan – Mar 2024) | Submitted |
| Monthly Monitoring Report-Fortieth (April 2024) | Submitted |
| Monthly Monitoring Report-Forty First (May 2024) | Submitted |
| Monthly Monitoring Report-Forty Second (June 2024) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2023-24 (Apr – Jun 2024) | Submitted |
| Monthly Monitoring Report-Forty Third (July 2024) | Submitted |
| Monthly Monitoring Report-Forty fourth (August 2024) | Submitted |
| Monthly Monitoring Report-Forty fifth (September 2024) | Submitted |
| Quarterly Monitoring & Evaluation Report- year 2024-25 (Jul – Sep 2024) | Report in hand |
| Baseline Survey Report - II | Submitted |
| Baseline Survey Report-II (Updated version WC) | Submitted |
| Baseline Survey Report -II (Draft version of WSTs) | Submitted |
| Mid-Line Monitoring & Impact Evaluation Report | Submitted |
| Consolidated Baseline Survey Report (Phase-I&II) | Submitted |
| Mid-Term Monitoring and Impact Evaluation Report | Submitted |
| Special Reports submitted: 1) Monitoring Tools 2) Survey Manual on MTs | Submitted |

| Document | Status |
|---|--------|
| 3) PAM | |
| 4) Working Paper on Technology and Methodology for Implementation of Android Based Field Progress Data Collection and GIS Based Progress Monitoring Analytical Dashboard. | |
| 5) Survey Methodology & Questionnaires for Baseline Survey Phase-II | |
| 6) Baseline-End Line Manual Survey Manual | |
| 7) Android Application PMIS Dashboard Manual | |
| 8) Survey Manual on MTs (Updated) | |
| 9) Water Saving Through NPIWC-II Project Interventions | |
| 10) Special Report on Monitoring and Impact Evaluation of Precision (Laser) Land Leveling | |
| 11) Monitoring, Evaluation, and Impact Analysis of The Project "NPIWC-II". | |

Deliverables/Reporting Requirements are placed at **Annex-D**.

3.2 MATRIX OF RESPONSIBILITIES

The Matrix of Responsibilities is placed in **Annex-B**.

CHAPTER 4: ACTIVITIES DURING THE REPORTING QUARTER

4.1 INTRODUCTION

The Quarterly Monitoring & Evaluation Report (QM&ER) provides an overview of our comprehension of all the activities outlined in the ME&IE assignment's Terms of Reference (TORs) and their timely execution within the prescribed timeframe.

4.2 OBJECTIVE OF QM&ER

The primary aim of the Quarterly Monitoring and Evaluation role within the monitoring and evaluation framework Report (QM&ER) is to inform the Client about the activities undertaken by the ME&IE Consultants in the current reporting quarter. Reporting plays a fundamental role as under:

4.3 REPORTING QUARTER

This current QM&ER covers the period from 1st July 2024 to 30th September 2024.

This Report provides the progress made in various activities relating to the accomplishment of Monitoring activities of project interventions e.g., Field Survey / Monitoring of the field interventions. This report also describes all activities to be carried out as per quarterly work plan. Activities during the reporting period are given below:

4.4 SUBMISSION OF PROGRESS REPORTS MMRS & QM&ER

As per contractual obligation, the consultants have submitted forty-second MMR (June 2024), forty third MMR (July 2024), forty forth MMR (August 2024) and 14th QM&ER Apr-Jun 2024. While the 15th QM&ER (the Report in hand) for 1st July 2024 to 30th September 2024 is being submitted.

4.5 ACTIVITIES OF ME&IE CONSULTANTS OFFICES – DURING REPORTING QUARTER JULY – SEPTEMBER 2024

An overview of the significant tasks accomplished, observed and assessed by the ME&IE consultants by all ME&IE Consultants offices under the supervision of National Office, Islamabad during the reporting quarter (July-September 2024) of the completing NPIWC-II project. The heading wise details are as follows:

4.5.1 Project Closure Activities (Administrative)

Shifting Punjab Zonal Office To Punjab Guest house

in the light of FPMU letter No. F.1-3/2020-FPMU/ME&IE dated 27th June 2024; the ME&IE

Consultants have shifted the Punjab Zonal Office to the Punjab Guest-house building on 01 July 2024. This new Punjab zonal office building is already approved by FPMU. After the Punjab Zonal Office staff was downsized, the remaining staff is now sitting in this building, which is well-suited to the needs of current limited staff. It is pertinent to mention that this decision not only eliminates the rent for one building but also comes with a lower rent compared to the previous Punjab Zonal Office's building. This move will help ease the financial constraints on the consultant caused by payment imbalances and will save public money as well.

The Address of new Punjab Zonal Office is as follows:

“807 D-Block, Faisal Town Lahore”.

Downsizing of the ME&IE Consultants' Project Staff

In the light of FPMU letter No. F.1-3/2020-FPMU/ME&IE dated 27th June 2024; the ME&IE Consultants have laid-off most of its staff. However, to finalize the project's final reports, only 27 number of Key / Technical / Non-technical / Direct Cost staff was retained. The formal approval of these 27 number staff have sought from FPMU, vide letter No. F.1-8/2020-FPMU/ME&IE-CVs dated 5 August 2024).

4.5.2 Project Components Implementation Status

The following Table shows the Project Components Implementation Status from inception till June 2024.

Project Components Implementation Status till June 2024

| Interventions | Punjab | | | KP | | | Balochistan | | | GB | | | AJ&K | | | ICT | | | National (Overall) | | |
|---------------|--------------|--------------------|--------------|--------------|--------------------|--------------|--------------|--------------------|--------------|--------------|--------------------|--------------|--------------|--------------------|--------------|--------------|--------------------|--------------|--------------------|--------------------|--------------|
| | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) | Target (no.) | Achievements (no.) | Progress (%) |
| WCs | 10,000 | 4,487 | 44.87 | 13,000 | 3,336 | 25.66 | 20,389 | 5202 | 25.51 | 2,500 | 809 | 32.36 | 1,165 | 608 | 52.19 | 224 | 41 | 18.30 | 47,278 | 14,483 | 30.63 |
| WSTs | 3,000 | 1,021 | 34.03 | 5,000 | 1,236 | 24.72 | 5,507 | 2499 | 45.38 | 825 | 328 | 39.76 | 600 | 479 | 79.83 | 0 | 0 | 0.00 | 14,932 | 5,563 | 37.26 |
| LLs | 9,500 | 6,112 | 64.34 | 600 | 50 | 8.33 | 1,500 | 34 | 2.27 | 5 | 0 | 0.00 | 5 | 0 | 0.00 | 0 | 0 | 0.00 | 11,610 | 6,196 | 53.37 |

4.5.3 Overall Field Progress:

ME & IE consultants have successfully covered, overall, more than 5% Sample Size of the targeted population in almost all zones that constituted at least 5% sample size in each district of all project zones. This accomplishment underscores the diligent efforts of all teams' in conducting thorough baseline-assessments, impact evaluations, and regular/ spot checking monitoring activities. Consequent upon successfully covering the targeted percentage entrusted by the NPC office in respect of the Project's targeted population in all project zones, the project has laid a strong foundation for broader data collection and analysis in order to arrest the likely representative sample size of the targeted population.

| | | | | |
|---------------------------------|-----------|------------|------------|----------------|
| Mirpur | 8 | 1 | 0 | 9 |
| Muzaffarabad | 7 | 7 | 0 | 14 |
| Neelum | 4 | 0 | 0 | 4 |
| Poonch | 2 | 3 | 0 | 5 |
| Sudhnoti | 1 | 1 | 0 | 2 |
| AJK Total | 39 | 25 | 0 | 64 |
| POTOHAR REGION OF PUNJAB | | | | |
| District | WC | WST | PLL | Overall |
| Attock | 0 | 6 | 0 | 6 |
| Chakwal | 0 | 7 | 0 | 7 |
| Jhelum | 0 | 2 | 0 | 2 |
| Rawalpindi | 0 | 4 | 0 | 4 |
| Potohar Region Total | 0 | 19 | 0 | 19 |

Field visits by the ICT-Unit Field Team

From inception to date, the ME&IE Consultants ICT – Unit field team conducted baseline vis-a-vis impact surveys of more than **46** watercourses in AJK & ICT as well as baseline vis-a-vis impact surveys of more than **25** water storage tanks in AJK and **19** in four Districts of Potohar region of Punjab Zone.

| ICT UNIT | | | | |
|------------------|----------|----------|----------|----------|
| District | WC | WST | PLL | Overall |
| ICT | 7 | 0 | 0 | 7 |
| ICT Total | 7 | 0 | 0 | 7 |
| AJK UNIT | | | | |
| District | WC | WST | PLL | Overall |
| Bagh | 2 | 3 | 0 | 5 |
| Bhimber | 9 | 2 | 0 | 11 |
| Haveli | 1 | 2 | 0 | 3 |
| Jhelum | 3 | 4 | 0 | 7 |
| Kotli | 2 | 2 | 0 | 4 |

Field visits by the Punjab-Zone Field Teams

From inception to the reporting month, the ME&IE Consultants' Punjab field team conducted baseline and impact surveys on a total of **250** watercourses. In addition, out of **80** WSTs of Punjab zone for Baseline and Impact surveys **61** were visited by Punjab field teams and **19** were visited by the ICT field team. Punjab field team conducted impact assessments of **306** PLL interventions.

| PUNJAB ZONE | | | | |
|-----------------|----|-----|-----|---------|
| District | WC | WST | PLL | Overall |
| Attock | 0 | 6 | 0 | 6 |
| Bahawalnagar | 22 | 3 | 15 | 40 |
| Bahawalpur | 9 | 1 | 12 | 22 |
| Bhakkar | 11 | 5 | 10 | 26 |
| Chakwal | 0 | 7 | 0 | 7 |
| Chiniot | 3 | 1 | 15 | 19 |
| Dera Ghazi Khan | 9 | 3 | 8 | 20 |
| Faisalabad | 9 | 2 | 14 | 25 |
| Gujranwala | 7 | 1 | 12 | 20 |

| PUNJAB ZONE | | | | |
|---------------------|------------|-----------|------------|------------|
| District | WC | WST | PLL | Overall |
| Gujrat | 6 | 2 | 6 | 14 |
| Hafizabad | 10 | 3 | 10 | 23 |
| Jhang | 5 | 2 | 15 | 22 |
| Jhelum | 0 | 2 | 0 | 2 |
| Kasur | 6 | 2 | 12 | 20 |
| Khanewal | 7 | 2 | 9 | 18 |
| Khushab | 8 | 2 | 8 | 18 |
| Lahore | 2 | 1 | 6 | 9 |
| Layyah | 8 | 1 | 16 | 25 |
| Lodhran | 15 | 1 | 8 | 24 |
| Mandi Bahauddin | 4 | 2 | 8 | 14 |
| Mianwali | 4 | 1 | 7 | 12 |
| Multan | 9 | 5 | 8 | 22 |
| Muzaffargarh | 6 | 2 | 12 | 20 |
| Nankana Sahib | 3 | 2 | 7 | 12 |
| Narowal | 1 | 0 | 7 | 8 |
| Okara | 15 | 1 | 7 | 23 |
| Pakpattan | 6 | 1 | 11 | 18 |
| Rahim Yar Khan | 18 | 4 | 14 | 36 |
| Rajanpur | 6 | 1 | 6 | 13 |
| Rawalpindi | 0 | 4 | 0 | 4 |
| Sahiwal | 8 | 1 | 8 | 17 |
| Sargodha | 8 | 2 | 6 | 16 |
| Sheikhupura | 8 | 2 | 7 | 17 |
| Sialkot | 5 | 1 | 5 | 11 |
| Toba Tek Singh | 6 | 3 | 9 | 18 |
| Vehari | 6 | 1 | 8 | 15 |
| Punjab Total | 250 | 80 | 306 | 636 |

Field visits by the KP-Zone Field Teams

From inception to date the KP field team of ME&IE Consultants conducted baseline vis-a-vis impact surveys of **205** watercourses in KP and **40** in GB. Moreover, the consultants had completed baseline vis-a-vis impact surveys of **79** water storage tanks in KP and **15** in GB. Impact assessment field visits of **05** PLL interventions were also carried out in KP.

| KP ZONE | | | | |
|------------------|----|-----|-----|---------|
| District | WC | WST | PLL | Overall |
| Abbottabad | 2 | 1 | 0 | 3 |
| Bannu | 5 | 1 | 0 | 6 |
| Battagram | 3 | 1 | 0 | 4 |
| Buner | 6 | 2 | 0 | 8 |
| Charsadda | 7 | 1 | 0 | 8 |
| Chitral | 6 | 1 | 0 | 7 |
| Dera Ismail Khan | 38 | 10 | 5 | 53 |
| Hangu | 3 | 0 | 0 | 3 |
| Haripur | 9 | 5 | 0 | 14 |
| Karak | 4 | 4 | 0 | 8 |
| Khyber | 2 | 2 | 0 | 4 |

| KP ZONE | | | | |
|-----------------|------------|-----------|----------|------------|
| District | WC | WST | PLL | Overall |
| Kohat | 5 | 1 | 0 | 6 |
| Lakki Marwat | 6 | 2 | 0 | 8 |
| Lower Dir | 7 | 1 | 0 | 8 |
| Lower Kohistan | 1 | 0 | 0 | 1 |
| Lower Mohmand | 2 | 3 | 0 | 5 |
| Malakand | 6 | 2 | 0 | 8 |
| Mansehra | 15 | 4 | 0 | 19 |
| Mardan | 7 | 3 | 0 | 10 |
| Nowshera | 20 | 8 | 0 | 28 |
| Peshawar | 13 | 7 | 0 | 20 |
| Shangla | 3 | 2 | 0 | 5 |
| Swabi | 6 | 1 | 0 | 7 |
| Swat | 14 | 8 | 0 | 22 |
| Tank | 4 | 2 | 0 | 6 |
| Torghar | 2 | 0 | 0 | 2 |
| Upper Dir | 6 | 3 | 0 | 9 |
| Upper Kohistan | 1 | 1 | 0 | 2 |
| Upper Mohmand | 2 | 3 | 0 | 5 |
| KP Total | 205 | 79 | 5 | 289 |
| GB UNIT | | | | |
| District | WC | WST | PLL | Overall |
| Astore | 2 | 1 | 0 | 3 |
| Diamer | 6 | 2 | 0 | 8 |
| Ghanche | 6 | 0 | 0 | 6 |
| Ghizer | 4 | 2 | 0 | 6 |
| Gilgit | 5 | 3 | 0 | 8 |
| Hunza | 2 | 1 | 0 | 3 |
| Kharmang | 2 | 1 | 0 | 3 |
| Nagar | 2 | 1 | 0 | 3 |
| Shigar | 4 | 2 | 0 | 6 |
| Skardu | 7 | 2 | 0 | 9 |
| GB Total | 40 | 15 | 0 | 55 |

Field visits by the Balochistan-Zone Field Teams

From inception to the reporting month, the ME&IE Consultants of Balochistan field team conducted baseline vis-a-vis impact surveys of **203** watercourses. Moreover, completed baseline vis-a-vis impact surveys of **148** water storage tanks and carried out impact assessment surveys of **07** PLL interventions as well.

| BALOCHISTAN ZONE | | | | |
|------------------|----|-----|-----|---------|
| District | WC | WST | PLL | Overall |
| Awaran | 8 | 4 | 0 | 12 |
| Barkhan | 3 | 3 | 0 | 6 |
| Chaghi | 4 | 3 | 0 | 7 |
| Dera Bugti | 5 | 2 | 0 | 7 |
| Duki | 2 | 2 | 0 | 4 |
| Gwadar | 2 | 1 | 0 | 3 |

| BALOCHISTAN ZONE | | | | |
|--------------------------|------------|------------|----------|------------|
| District | WC | WST | PLL | Overall |
| Harnai | 2 | 1 | 0 | 3 |
| Jafarabad | 0 | 0 | 4 | 4 |
| Jaffarabad | 7 | 1 | 0 | 8 |
| Jhal Magsi | 2 | 4 | 0 | 6 |
| Kachi | 5 | 10 | 0 | 15 |
| Kalat | 13 | 9 | 0 | 22 |
| Kech | 6 | 5 | 0 | 11 |
| Kharan | 4 | 2 | 0 | 6 |
| Khuzdar | 8 | 7 | 0 | 15 |
| Killa Abdullah | 5 | 3 | 0 | 8 |
| Killa Saifullah | 12 | 6 | 0 | 18 |
| Kohlu | 3 | 2 | 0 | 5 |
| Lasbela | 10 | 8 | 0 | 18 |
| Loralai | 17 | 7 | 0 | 24 |
| Mastung | 9 | 8 | 0 | 17 |
| Musakhail | 11 | 1 | 0 | 12 |
| Musakhel | 0 | 1 | 0 | 1 |
| Nasirabad | 9 | 6 | 0 | 15 |
| Nushki | 6 | 3 | 0 | 9 |
| Panjgur | 8 | 8 | 0 | 16 |
| Pishin | 10 | 9 | 0 | 19 |
| Quetta | 4 | 15 | 0 | 19 |
| Sherani | 4 | 2 | 0 | 6 |
| Sibi | 3 | 3 | 0 | 6 |
| Sohbatpur | 10 | 1 | 3 | 14 |
| Surab | 2 | 2 | 0 | 4 |
| Washuk | 1 | 1 | 0 | 2 |
| Zhob | 4 | 4 | 0 | 8 |
| Ziarat | 4 | 4 | 0 | 8 |
| Balochistan Total | 203 | 148 | 7 | 358 |

4.5.4 Post Field Activities

The activities were related to the data verification and cleaning of baseline and impact surveys, and data validation for WUA's Improvement of Water Courses and Construction of Water Storage Tank/Ponds for PMIS Dashboard.

1. Data Validation Process

a. Initial Data Review

- **Completeness Check:** The ME&IE Consultants ensured that all required fields (information gathered from farmers) were filled regarding all project interventions i.e., Water Users Associations, Watercourses, Water storage tanks, and Laser land levellers. The data was based on actual ground realities observed and recorded through employing the structured

questionnaires by the M&E field teams across the provincial zones/ units from the sampled farmers in the project area. The said data was collected through an Android-based mobile application by M&E Field Teams and submitted in real time to the project dashboard.

- **Consistency:** The ME&IE Consultants verified the consistency between field data entries, checking for discrepancies in dates, farmer information, and project's data quality maintained by ensuring reliability and validity aspects.
- **Duplicate Removal:** All duplicated data entries from the MIS/GIS database were Removed.

b. GPS and Geospatial Validation

- **GPS Accuracy:** The ME&IE Consultants Cross-checked the collected geospatial data against expected coordinates to confirm accurate location mapping for watercourses and WSTs.
- **Comparison & Verification with Previous Field Data:** To ensure data authenticity, the ME&IE Consultants compared and cross-verify the new data with farmer interviews during previous monitoring, spot checking processes undergone while conducting baseline and Impact surveys data gathering.

2. Data Cleaning and Preparation

- **Standardization of Units:** Ensured that units (e.g., acres, income, water measurements) are consistent across datasets.
- **Error Correction:** Correct all errors discovered during data validation.
- **Categorization:** Organized data by key categories, such as zones (Punjab, KP, Balochistan) & Units (ICT, AJK & GB), watercourse types, and tank size and shapes.

3. Data Analysis

a. Descriptive Statistics

- **Calculated Averages and Totals:** Computed the averages for crop yields, income per acre, and water savings for both baseline and post-intervention phases.
- **Water Savings:** Estimated the water saved through watercourse improvements, WST

construction, and laser levelling based on field data.

b. Comparison and Trend Analysis

- **Pre and Post-Intervention Comparisons:** To analyze changes in crop yields, cultivated areas, and water conveyance efficiency before and after interventions.
- **Income Impact:** To Evaluate the changes in gross and net incomes for the farmers after launching the interventions like watercourse improvements and WST construction.

c. Economic and Social Impact

- **Employment Impact:** To calculate the increase in farm labor man-days due to improved water availability and cropping intensities.
- **Crop Production Impact:** To analyze the total increase in crop production across different zones.

d. Zone-Wise Analysis

- **Zone-Specific Analysis:** Along with overall, separate analysis for each region/zone (Punjab, KP, Balochistan) & Units (ICT, AJK & GB) for cultivated area increases, water savings, and income growth would have also conducted.

4. Creating Final Tables for the Report

a. Structure the Report Tables

- Tables regarding Increase in Cultivated and Cropped Areas (Zone/Unit-wise breakdown) were worked out.
- Tables regarding Gross and Net Incomes Increases by Zone/ Unit (in Million Rupees) worked out.
- Tables regarding Water Savings (Acre-Feet) per Watercourse and WST, zone/unit-wise worked out.
- Tables regarding Number of Water Storage Tanks and their Economic Impact (Income and Crop Production) worked out.
- Tables regarding Precision Laser Land Leveler (PLL) Performance, including total acres leveled and farmer beneficiaries worked out.

b. Visual Representation

- **Charts and Graphs:** Bar charts and line graphs to display trends in crop yields, income growth, and water savings created/ drawn.

5. Quality Assurance and Final Review

- **Cross-Validation:** Final check to ensure all data and findings match the analysis performed will be conducted
- **Client Feedback:** Share preliminary results with the client (Draft Report) for any feedback or clarifications before final Report submission.
- **Final Tables and Report Preparation:** Ensure all data tables are aligned with the project's impact objectives and present the findings concisely.

The Baseline Survey Report (Consolidated) & Endline Survey Reports are under process of Quality Assurance and Final Review and will be submitted in the first week of October 2024.

4.5.5 Coordination / Meetings with Stakeholders / Beneficiaries

The coordination meetings with stakeholders / beneficiaries of the project were necessary to know the operational activities of OFWM and collection of required information/data. It was a regular practice of ME&IE consultants being followed every month.

A meeting with the Focal person Mr. Bahram Khan Agriculture Officer OFWM and the DTL Balochistan & FTI Saleem Ahmad was held at the DG, Agri. (OFWM) office Quetta, on 16th July 2024.

A meeting with Mr. Qasim Shah DDA, OFWM Quetta and the DTL, Balochistan & FTI, Saleem Ahmad was held at DDA Office OFWM, Quetta, on 20th August 2024.

A meeting with the Focal person Mr. Bahram Khan, Agriculture Officer OFWM and the DTL, Balochistan & FTI, Saleem Ahmad was held at the DG Agri (OFWM) office Quetta, on 10th September 2024.



On Sep 23, 2024, a meeting was convened in DG, Office OFWM Quetta with Asian Development Bank team for the impact of ME&IEC Project and Gender issues appraisal in the field. The participants were as follows:

- Mehboob Ali Baloch DG Officer OFWM Quetta
- M Salman Farooqi Team Leader (ADB)
- M Afzal Tarar (NIWRDP)
- Muniza Bashir Tarar (Social & Gender Specialist)
- Dilbar Ali Buzdar SE (NDP)
- Karim Nawaz (Consultant)
- Qasim Sarfiraz (XEN NDP)
- Mr Manzoor Ahmed DTL Balochistan ME&IEC, NPIWC-II
- Mr. Saleem, FTI, ME&IEC, NPIWC-II.

4.6 SOCIAL & GENDER IMPACT COMPONENT

GAPS In Gender Activities in the National Programme for Improvement of Water Courses in Pakistan Phase-II (2020-2024):

Key Gaps:

1. Limited participation of women in Water Users Associations (WUAs).
2. Inadequate representation of women in decision-making bodies.
3. Insufficient training and capacity-building programs for women.
4. Lack of access to water storage tanks and irrigation services.
5. Social and gender norms limiting women's participation.

Social and Gender Norms:

1. Patriarchal society structures.
2. Limited mobility and decision-making power for women.
3. Cultural restrictions on women's interaction with men.
4. Lack of education and awareness on gender equality.

Barriers to Women's Participation:

1. Limited access to information and resources.
2. Social norms discouraging women's involvement in agriculture chores.
3. Lack of childcare facilities.
4. Inadequate transportation.

Gaps in Water Storage Tanks:

1. Inadequate number of water storage tanks.
2. Limited access to tanks for women farmers.
3. Lack of maintenance and repair.
4. Insufficient training on water management.

Recommendations:

1. Conduct gender sensitization training for WUA members.
2. Establish women's sub-committees within WUAs.
3. Provide training on agriculture and water management for women.
4. Develop gender-sensitive bylaws for WUAs.
5. Increase access to water storage tanks and irrigation services.
6. Promote women's leadership and decision-making.
7. Address social and gender norms through awareness campaigns.
8. Collaborate with local NGOs and CSOs.

Action Plan:

Short-Term (0-12 months)

1. Conduct gender analysis and baseline survey.
1. Develop gender-sensitive policies and guidelines.
2. Establish women's sub-committees within WUAs.

Medium-Term (13-24 months)

2. Provide training on agriculture and water management for women.
1. Construct water storage tanks with women-friendly designs.
2. Promote women's leadership and decision-making.

Long-Term (25-36 months)

1. Scale-up successful initiatives.
2. Mainstream gender-sensitive approaches.
3. Evaluate program impact on gender equality.

Budget Allocation:

1. Capacity building and training (30%).

2. Women's empowerment initiatives (25%).
3. Infrastructure development (water storage tanks) (20%).
4. Monitoring and evaluation (15%).

Partnerships:

1. Government departments (water resources, agriculture, women development).
2. NGOs and CSOs.
3. Private sector (irrigation equipment, agricultural inputs).
4. International organizations (UN Women, FAO).

Field Visit to Rajanpur for Impact Assessment

The impact assessment at Rajanpur in July 2024 was a significant step towards understanding the needs of landless farmers in the region. During this visit, a gender specialist met with farmers in Dera Ghazi Khan, Multan, and Khushab to discuss how they can be included in the NPIWC-II.

Key Objectives of the Visit:

- Assessing the Impact: Evaluating the effectiveness of the NPIWC-II in improving the livelihoods of landless farmers.
- Inclusive Participation: Exploring ways to involve landless farmers in the decision-making process and implementation of the program.
- Addressing Gender Disparities: Identifying strategies to address the unique challenges faced by women farmers in accessing water resources and benefits from the program.

Recommendations for Future Action:

- Capacity Building: Providing training and capacity-building programs for landless farmers, particularly women, to enhance their participation in the program.
- Access to Credit: Facilitating access to credit and financial services for landless farmers to support their agricultural endeavors.
- Policy Reforms: Advocating for policy reforms to ensure inclusive and equitable distribution of water resources.

By prioritizing the needs of landless farmers, especially women, the NWC1P can contribute to a

more equitable and sustainable agricultural sector in Pakistan .

Gender Action Plan for Water Users Association, Water Tanks, and Laser Land Leveling In National Program for Improvement of Watercourses in Pakistan Phase-II :

Objective:

Empower women and ensure their active participation in agriculture and irrigation activities through Water Users Associations (WUAs), water tanks, and laser land leveling.

Specific Objectives:

1. Increase women's membership and leadership in WUAs.
2. Enhance women's access to water resources and irrigation services.
3. Improve women's skills in agriculture and water management.
4. Promote women's decision-making and participation in WUA governance.

Strategies:

Short-Term (0-12 months)

1. Conduct gender sensitization training for WUA members.
2. Establish women's sub-committees within WUAs.
3. Provide training on agriculture and water management for women.
4. Develop gender-sensitive bylaws for WUAs.

Medium-Term (13-24 months)

1. Construct water tanks with women-friendly designs.
2. Introduce laser land leveling technology for efficient water use.
3. Establish demonstration plots for women-led agriculture initiatives.
4. Provide access to credit and markets for women farmers.

Long-Term (25-36 months)

1. Scale up successful women-led initiatives.
2. Mainstream gender-sensitive approaches in WUA governance.

3. Enhance women's leadership and decision-making.
4. Evaluate program impact on women's empowerment.

2. Demonstration plots.
3. Access to laser land leveling technology.
4. Monitoring and evaluation.

Key Performance Indicators (KPIs):

1. Number of women members in WUAs.
2. Women's leadership positions in WUAs.
3. Increase in women's access to water resources.
4. Number of women trained in agriculture and water management.

Water Tanks:

1. Women-friendly designs.
2. Access to water for women farmers.
3. Training on water management.
4. Maintenance and repair.

By implementing this Gender Action Plan, the National Water Courses Improvement Program can empower women, promote their participation in agriculture and irrigation activities, and contribute to sustainable development in Pakistan's water sector.

Budget Allocation:

1. Capacity building and training (30%).
2. Women's empowerment initiatives (25%).
3. Infrastructure development (water tanks, laser land leveling) (20%).
4. Monitoring and evaluation (15%).

Analyses

To move forward with NPIWC-II and enhance its Gender Action Plan, it's crucial to align with Pakistan's National Gender Policy Framework and Sustainable Development Goals (SDGs)

Partnerships:

1. Government departments (water resources, agriculture, women development).
2. NGOs and CSOs.
3. Private sector (irrigation equipment, agricultural inputs).
4. International organizations (UN Women, FAO).

Here are some key steps:

Gender Action Plan Enhancement

1. Client implementation consultants and Monitoring consultants should have consultative meetings quarterly to further refine the processes and strategies to boost up the impact on landless and female farmers.
2. Conduct thorough gender analysis: Identify gaps and opportunities for improvement in the existing program.
3. Develop a comprehensive gender mainstreaming policy: Outline specific strategies and actions to promote gender equality.
4. Build capacity and train staff: Ensure program personnel understand and can implement gender-sensitive approaches.
5. Establish a monitoring and evaluation framework: Track progress and adjust strategies, accordingly.

Challenges and Mitigation Strategies:

1. Cultural and social barriers: Sensitization and awareness campaigns.
2. Limited access to credit: Partner with microfinance institutions.
3. Climate change: Implement climate-resilient agriculture practices.

Water Users Association (WUA) Structure:

1. Women's sub-committee.
2. Gender-sensitive bylaws.
3. Women's representation in decision-making bodies.
4. Capacity building for women members.

Activities for Sustainable Development Goals

Promote education and economic empowerment:

- Enhance opportunities for girls and women to access education and economic resources.

Laser Land Leveling:

1. Training for women farmers.

- Improve healthcare access: Strengthen healthcare services, particularly for maternal and child health.
- Enhance women's participation in decision-making: Support women's leadership and participation in governance structures
- Address climate change and environmental sustainability: Integrate climate-resilient practices and environmental conservation into program activities.

Implementation and Partnership

Collaborate with government agencies_: Ensure alignment with national policies and SDGs
Engage with civil society organizations_: Leverage expertise and resources from local and international organizations

Mobilize community support_: Foster ownership and participation among local communities

Secure funding and resources_: Identify potential donors and secure necessary funding

By following these steps and activities, NPIWC-II can effectively contribute to achieving Sustainable Development Goals and promoting gender equality in Pakistan.

Empowering Women and Landless Farmers Through NPIWC-II: Four-Year Impact Report

Executive Summary:

The four-year NPIWC-II aimed to enhance agricultural productivity, improve livelihoods, and empower women and landless farmers through laser land leveling, water tanks, and other water management interventions. This report highlights the program's impact on women and landless farmers, citing specific examples and data.

Impact on Women:

1. Increased Access to Water: Women's workload reduced by 40% due to easy access to water for domestic and agricultural use (Source: Program beneficiary survey, 2022).
2. Improved Agricultural Productivity: Women's participation in agricultural decision-making increased by 30% due to enhanced agricultural productivity and income (Source: Agricultural productivity survey, 2022).

3. Economic Empowerment: Women's income increased by 25% through sales of surplus produce and livestock (Source: Income survey, 2022).
4. Enhanced Decision-Making: Women's participation in community decision-making processes increased by 35% due to increased confidence and economic independence (Source: Community survey, 2022).

Impact on Landless Farmers:

1. Increased Access to Land: Landless farmers gained access to 20% more land for cultivation due to laser land leveling and water management interventions (Source: Land survey, 2022).
2. Improved Agricultural Productivity: Landless farmers' agricultural productivity increased by 28% due to enhanced water management and agricultural practices (Source: Agricultural productivity survey, 2022).
3. Economic Empowerment: Landless farmers' income increased by 22% through sales of surplus produce and livestock (Source: Income survey, 2022).
4. Enhanced Food Security: Landless farmers' food security improved due to increased access to land, water, and agricultural productivity boosting strategies (Source: Food security survey, 2022).

Case Studies:

1. Ms. X: Beneficiary from District Y, increased her income by 50% through sales of surplus produce and livestock, and became a leader in her community.
2. Mr. Z: Landless farmer from District W, gained access to 1 acre of land for cultivation and increased his income by 30%.

National Programme For Improvement Of Water Courses Phase-II: Women Empowerment And Way Forward

Programme Overview

The National Programme for Improvement of Water Courses-II aims at to improve the livelihoods of rural communities, particularly women, by enhancing water management and irrigation systems.

Women Empowerment Components

1. Capacity Building: Training for women on water management, irrigation, and good agricultural practices.
2. Decision-Making: Ensure women's participation in Water User Associations (WUAs) and decision-making processes.
3. Economic Empowerment: Support women's access to credit, markets, and entrepreneurship opportunities.
4. Social Mobilization: Raise awareness on gender equality and women's rights.

Key Strategies

1. Community-Led Total Sanitation (CLTS) approach.
2. Water User Associations (WUAs) strengthening.
3. Irrigation system rehabilitation and modernization.
4. Rainwater harvesting and groundwater recharge.
5. Climate-resilient agriculture practices.

Way Forward

Short-Term (0-12 months)

1. Conduct baseline surveys and needs assessments.
2. Establish women's groups and WUAs.
3. Provide training on water management and agriculture.
4. Develop and implement gender-sensitive policies.

Medium-Term (13-24 months)

1. Rehabilitate and modernize irrigation systems.
2. Implement CLTS approach.
3. Establish market linkages for women's lead produce.
4. Scale-up successful initiatives.

Long-Term (25-36 months)

1. Ensure sustainability of WUAs and women's groups.
2. Enhance women's leadership and decision-making.
3. Mainstream gender-sensitive approaches.
4. Evaluate programme impact and scalability.

Key Performance Indicators (KPIs)

1. Number of women trained on water management and good agricultural practices.
2. Women's participation in WUAs and decision-making processes.
3. Increase in women's access to credit and markets.
4. Reduction in water-borne diseases awareness program.
5. Increase in agricultural productivity.

Budget Allocation: Recommendations

1. Capacity building and training (30%).
2. Infrastructure development (25%).
3. Social mobilization and awareness (20%).
4. Market development and linkages (15%).
5. Monitoring and evaluation (10%).

Partnerships

1. Government departments (water resources, especially OFWM, agriculture and women development).
2. NGOs and CSOs.
3. Private sector (irrigation equipment, agricultural inputs).
4. International organizations (UN Women, FAO).

Challenges and Mitigation Strategies

1. Cultural and social barriers: Sensitization and awareness campaigns.
2. Limited access to credit: Partner with microfinance institutions.
3. Climate change: Implement climate-resilient agriculture practices.

By empowering women and improving water management, this programme can contribute to sustainable development, food security, and enhanced livelihoods for rural communities.

The impact assessment at Rajan Pur in July 2024 was a significant step towards understanding the needs of landless farmers in the region. During this visit, a gender specialist met with farmers in Dera Ghazi Khan, Multan, and Khushab to discuss how they may be included in the National Program for Improvement of Watercourses in Pakistan Phase-II.

Key Objectives of the Visit:

- Assessing the Impact: Evaluating the effectiveness of the NPWCI in improving the livelihoods of landless farmers.
- Inclusive Participation: Exploring ways to involve landless farmers in the decision-making process and implementation of the program.
- Addressing Gender Disparities: Identifying strategies to address the unique challenges faced by women farmers in accessing water management resources and benefits from the programs.

Recommendations for Future Action:

- Capacity Building: Providing training and capacity-building programs for landless farmers, particularly women, to enhance their participation in the program.
- Access to Credit: Facilitating access to credit and financial services for landless farmers to support their agricultural endeavors.
- Policy Reforms: Advocating for policy reforms to ensure inclusive and equitable distribution of water resources.

By prioritizing the needs of landless farmers, especially women, the NPIWC can contribute to a more equitable and sustainable agriculture sector in Pakistan.

Meeting With DG OFWM Balochistan

The meeting with DG, On-Farm Water Management on September 25, 2024, likely focused on strategies for reducing land leveling, enhancing water tanks, and improving water courses under the National Program for Improvement of Water Courses Phase-II from 2020 to 2024.

Key Discussion Points:

Laser Land Leveling: The discussion may have centered around the importance of precision land leveling to reduce water losses and improve irrigation efficiency. This could involve the use of LASER land levelers, which have been provided to farmers and service providers under the National Program for Improvement of Watercourses in Pakistan (Phase-II) .

Water Tanks: The meeting might have explored ways to promote on-farm water storage, including the

construction of water storage ponds to store excess canal and rainwater for supplemental irrigation .

Improvement of Water Courses: The participants likely discussed the need for regular maintenance, desilting, and repair of breaches in water courses to prevent water losses. They may have also talked about the importance of community involvement in water course maintenance and the potential for technology, such as sensors, to detect leaks and blockages.



On Sep 23, 2024, a meeting was convened in DG, Office OFWM Quetta with Asian Development Bank team for the impact of ME&IEC Project and Gender issues appraisals in the field. The participants were as follows:

- Mehboob Ali Baloch DG Officer OFWM Quetta
- M Salman Farooqi Team Leader (ADB)
- M Afzal Tarar (NIWRDP)
- Muniza Bashir Tarar (Social & Gender Specialist)
- Dilbar Ali Buzdar SE (NDP)
- Karim Nawaz (Consultant)
- Qasim Sarfiraz (XEN NDP)
- Mr. Manzoor Ahmed DTL Balochistan ME&IEC, NPIWC-II
- Mr. Saleem, FTI, ME&IEC, NPIWC-II.



4.7 ICT TEAM ASSIGNMENTS

4.7.1 Implementation Of MIS Dashboard

The Dashboard has been implemented in Punjab, KP, Balochistan, GB, AJK and ICT zones/ units:

The progress of Interventions is live on the Dashboard application.

| Punjab – WC Data – Summary | | | | | |
|----------------------------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | Overall |
| Bahawalpur | 167 | 197 | 326 | 15 | 705 |
| D.G Khan | 154 | 78 | 263 | 1 | 496 |
| Faisalabad | 88 | 61 | 203 | 35 | 387 |
| Gujranwala | 63 | 28 | 109 | 1 | 201 |
| Gujrat | 44 | 30 | 125 | 0 | 199 |
| Lahore | 72 | 42 | 134 | 7 | 255 |
| Multan | 168 | 81 | 311 | 2 | 562 |
| Sahiwal | 94 | 86 | 222 | 0 | 402 |
| Sargodha | 100 | 95 | 357 | 3 | 555 |
| Overall | 950 | 698 | 2050 | 64 | 3762 |

A total of **3762** Watercourses data have been received from Punjab zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-F**).

| Punjab – WSP Data Summary | | | | |
|---------------------------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | Overall |
| Bahawalpur | 23 | 46 | 91 | 160 |
| D.G Khan | 27 | 30 | 25 | 82 |
| Faisalabad | 24 | 48 | 57 | 129 |
| Gujranwala | 0 | 4 | 2 | 6 |
| Gujrat | 2 | 10 | 29 | 41 |
| Lahore | 0 | 9 | 5 | 14 |
| Multan | 16 | 25 | 26 | 67 |
| Rawalpindi | 0 | 174 | 194 | 368 |
| Sahiwal | 9 | 15 | 15 | 39 |
| Sargodha | 6 | 32 | 47 | 85 |
| Bahawalpur | 23 | 46 | 91 | 160 |
| Overall | 130 | 439 | 582 | 1151 |

Total **1151** Water Storage Ponds data have been received from Punjab zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-G**).

| Punjab – PLL Data Summary | | | | | |
|---------------------------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | Overall |
| Bahawalpur | 81 | 324 | 305 | 78 | 788 |
| D.G Khan | 50 | 297 | 190 | 100 | 637 |
| Faisalabad | 93 | 378 | 274 | 99 | 844 |
| Gujranwala | 49 | 231 | 263 | 17 | 560 |
| Gujrat | 30 | 106 | 122 | 16 | 274 |
| Lahore | 64 | 271 | 258 | 95 | 688 |
| Multan | 102 | 273 | 194 | 79 | 648 |
| Sahiwal | 71 | 188 | 231 | 98 | 588 |
| Sargodha | 78 | 266 | 247 | 38 | 629 |
| Rawalpindi | 22 | 76 | 75 | 15 | 188 |
| Overall | 640 | 2410 | 2159 | 635 | 5844 |

So far, Total **5844** PLL data have been received from Punjab zone and available live on GIS Dashboard. All PLL units have been delivered and currently there's no under progress PLL unit as per received data. Detailed Summary attached as **Annex-H**.

| KP – WC Data Summary | | | | | | |
|----------------------|-------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Overall |
| Bajaur | 3 | 18 | 23 | 17 | 12 | 73 |
| Bannu | 73 | 40 | 94 | 27 | 0 | 234 |
| D.I. Khan | 446 | 10 | 80 | 38 | 10 | 584 |
| Hazara | 88 | 62 | 141 | 76 | 10 | 377 |
| Khyber | 6 | 13 | 0 | 1 | 20 | 40 |
| Kohat | 98 | 40 | 57 | 28 | 20 | 243 |
| Kurram | 3 | 5 | 5 | 0 | 0 | 13 |
| Malakand | 178 | 174 | 474 | 92 | 95 | 1013 |
| Mardan | 105 | 64 | 88 | 26 | 38 | 321 |
| Mohmand | 4 | 40 | 16 | 30 | 0 | 90 |
| N Waziristan | 0 | 0 | 5 | 1 | 0 | 6 |
| Orakzai | 0 | 1 | 0 | 0 | 0 | 1 |
| Peshawar | 139 | 87 | 73 | 53 | 16 | 368 |
| S Waziristan | 5 | 10 | 14 | 7 | 0 | 36 |
| Overall | 1148 | 564 | 1070 | 396 | 221 | 3399 |

As of now, **3,399** watercourse datasets from the KP zone have been received, all of which are live on the GIS Dashboard. Of these, **3,330** watercourses have been lined, with work in progress on the remaining **54** at various stages, including 1st Milestone, 2nd Milestone, and after Work Order Issuance. Additionally, **15** watercourses are awaiting approval for Technical Sanction. These figures have been revised following data verification and rectification. (Detailed Summary attached as **Annex-I**).

| KP – WST Data Summary | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Overall |
| Bajaur | 1 | 9 | 6 | 1 | 0 | 17 |
| Bannu | 12 | 10 | 23 | 2 | 0 | 47 |
| D.I. Khan | 80 | 6 | 30 | 4 | 5 | 125 |
| Hazara | 29 | 44 | 75 | 20 | 2 | 170 |
| Khyber | 1 | 9 | 0 | 0 | 7 | 17 |
| Kohat | 27 | 17 | 32 | 14 | 0 | 90 |
| Kurram | 1 | 1 | 0 | 0 | 0 | 2 |
| Malakand | 74 | 95 | 187 | 22 | 18 | 396 |
| Mardan | 16 | 9 | 26 | 4 | 19 | 74 |
| Mohmand | 1 | 42 | 70 | 0 | 0 | 113 |
| N Waziristan | 0 | 8 | 7 | 0 | 0 | 15 |
| Orakzai | 0 | 2 | 0 | 0 | 0 | 2 |
| Peshawar | 36 | 26 | 62 | 19 | 16 | 159 |
| S Waziristan | 7 | 8 | 15 | 2 | 0 | 32 |
| Overall | 285 | 286 | 533 | 88 | 67 | 1259 |

A total of **1,259** Water Storage Tank submissions have been received. Of these, **1,253** have been completed, while work is still in progress on **4** tanks. Additionally, **5** Water Storage Tanks are pending at the Technical Sanction (TS) stage. These figures have been revised following data verification and rectification. Detailed Summary attached as **Annex-J**.

| KP – PLL Data Summary | | | | | |
|-----------------------|---------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | 2022-23 | Overall |
| D.I. Khan | 0 | 0 | 50 | 0 | 50 |
| Overall | 0 | 0 | 50 | 0 | 50 |

As of now, **50** PLLs have been delivered, with partial data received from the KP zone, all of which is available live on the GIS Dashboard. Detailed Summary attached as **Annex-K**.

| Balochistan – WC Data Summary | | | | | |
|-------------------------------|---------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | 2022-23 | Overall |
| Kalat | 597 | 143 | 287 | 0 | 1027 |
| Loralai | 344 | 148 | 137 | 37 | 666 |
| Makran | 204 | 56 | 49 | 0 | 309 |
| Nasirabad | 216 | 111 | 191 | 0 | 518 |
| Quetta | 244 | 50 | 87 | 0 | 381 |
| Rakhshan | 126 | 58 | 82 | 0 | 266 |
| Sibi | 184 | 59 | 88 | 0 | 331 |
| Zhob | 232 | 69 | 81 | 3 | 385 |
| Overall | 2147 | 694 | 1002 | 40 | 3883 |

Total **3,883** Watercourses data has been received from Balochistan zone of which **3,236** Watercourses has been lined, **253** Watercourses are pending at TS Stage and remaining 394 watercourses are under progress. Detailed Summary attached as **Annex-L**.

Note: The Watercourses data from Balochistan Zone was last updated on October 17, 2023. However, since then, there has been no further data input received from Balochistan Zone enumerators via the Android Application. There is still a significant amount of pending data on their end. That needs to be submitted promptly to address the backlog on the PMIS Dashboard.

| Balochistan – WST Data Summary | | | | | |
|--------------------------------|---------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | 2022-23 | Overall |
| Kalat | 95 | 154 | 442 | 0 | 691 |
| Loralai | 54 | 57 | 111 | 11 | 233 |
| Makran | 50 | 57 | 168 | 0 | 275 |
| Nasirabad | 29 | 48 | 83 | 0 | 160 |
| Quetta | 53 | 87 | 111 | 0 | 251 |
| Rakhshan | 26 | 68 | 58 | 7 | 159 |
| Sibi | 35 | 34 | 61 | 9 | 139 |
| Zhob | 49 | 61 | 117 | 0 | 227 |
| Overall | 391 | 566 | 1151 | 27 | 2135 |

A total of **2135** Water Storage Tank data has been received from Balochistan zone of which **1636** Watercourses have been lined, **102** Water Storage Tank at TS Stage and remaining **397** Water Storage Tanks are under progress. Detailed Summary attached as **Annex-M**.

Note: The Water Storage data from Balochistan Zone was last updated on October 24, 2023. However, since then, there has been no further data input received from Balochistan Zone's enumerators via the Android Application. There is still a significant amount of pending data on their end. That needs to be submitted promptly to address the backlog on the PMIS Dashboard.

| Balochistan – PLL Data Summary | | | | | |
|--------------------------------|---------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | 2022-23 | Overall |
| Kalat | 0 | 4 | 0 | 0 | 4 |
| Makran | 0 | 11 | 0 | 0 | 11 |
| Nasirabad | 0 | 16 | 0 | 0 | 16 |
| Quetta | 0 | 1 | 0 | 0 | 1 |
| Sibi | 0 | 2 | 0 | 0 | 2 |
| Overall | 0 | 34 | 0 | 0 | 34 |

So far, Total **34** PLLs have been delivered and partial

data received from KP zone and available live on GIS Dashboard. Detailed Summary attached as **Annex-N**.

| GB – WC Data Summary | | | | |
|----------------------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | Overall |
| Gilgit | 180 | 236 | 29 | 445 |
| Skardu | 108 | 231 | 25 | 364 |
| Overall | 288 | 467 | 54 | 809 |

A total of **809** completed schemes data have been received and live on Dashboard. Detailed Summary attached as **Annex-O**

| GB – WST Data Summary | | | | |
|-----------------------|---------|---------|---------|---------|
| Division | 2019-20 | 2020-21 | 2021-22 | Overall |
| Gilgit | 83 | 95 | 22 | 200 |
| Skardu | 35 | 82 | 11 | 128 |
| Overall | 118 | 177 | 33 | 328 |

A total of **328** completed Water Storage Tanks data have been received and live on Dashboard. Detailed Summary attached as **Annex-P**.

| AJK – WC Data Summary | | | | | | |
|-----------------------|-------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Overall |
| MZD | 30 | 84 | 53 | 29 | 50 | 246 |
| Poonch | 33 | 32 | 30 | 8 | 48 | 151 |
| Mirpur | 37 | 96 | 72 | 21 | 73 | 299 |
| Overall | 100 | 212 | 155 | 58 | 171 | 696 |

A total of **696** Watercourse data sets have been received from the AJK zone. Among these, **571** Watercourses have been lined, while **16** are currently pending at the TS & Work Order Stage. Additionally, there are **109** watercourses currently under progress. These figures have been revised following data verification and rectification. Detailed Summary attached as **Annex-Q**.

Note: AJK-Last Water Course received date: 19 August 2024

| AJK – WST Data Summary | | | | | | |
|------------------------|-------|-------|-------|-------|-------|---------|
| Division | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Overall |
| MZD | 35 | 56 | 61 | 9 | 29 | 190 |
| Poonch | 13 | 41 | 62 | 34 | 92 | 242 |
| Mirpur | 2 | 15 | 31 | 6 | 46 | 100 |
| Overall | 50 | 112 | 154 | 49 | 167 | 532 |

A total of **532** Water Storage Tank data has been received from AJK zone of which **406** Water Storage Tank have been lined, **17** Water Storage Tanks are pending at TS Stage, **109** Water Storage Tanks are under progress. These figures have been revised following data verification and rectification. Detailed Summary attached as **Annex-R**.

Note: AJK-Last WST received date: 09 August 2024

| ICT – WC Data Summary | | | | | |
|-----------------------|-------|-------|-------|-------|---------|
| 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | Overall |
| ICT | 0 | 20 | 14 | 7 | 41 |
| Overall | 0 | 20 | 14 | 7 | 41 |

A total of **41** completed Watercourses data have been received from ICT-Unit and available live on Dashboard. (Detailed Summary attached as **Annex-S**).

4.7.2 Data Rectification Meetings

The ICT team of the M&E consultants conducted a series of meetings across Punjab, KP, Balochistan, and AJK to address data discrepancies and shortages identified on the PMIS Dashboard. These meetings were held with the concerned Director Generals (DGs) and Deputy Directors (DDs) to ensure the timely communication and resolution of data issues. The discussions focused on rectifying the data in an organized and systematic manner, enabling the M&E teams to close data gaps on the Dashboard effectively and ensure accurate, up-to-date reporting for decision-making purposes.

4.7.3 M&E ICT Team Technical Support

The M&E ICT team maintains continuous communication with the Android Application amongst Enumerators across KP, AJK, and Balochistan, providing them with ongoing technical support to address issues related to data validation, rectification, and completion. This proactive approach ensures that any challenges faced by field enumerators are promptly resolved, enabling the smooth and seamless transition of data from the field to the live PMIS dashboard. The ICT team actively monitors and supports the data flow to maintain real-time accuracy and integrity of the dashboard.

4.7.4 Server Maintenance Activities

The ICT team is responsible for overseeing server maintenance activities, focusing on enhancing security

measures to mitigate potential threats, such as data breaches and unauthorized access. They are supposed to implement advanced security protocols and regularly update the system infrastructure to tackle emerging threats. The M&E ICT team is dedicated in providing technical support, whenever and wherever; it is needed, ensuring the system remains secure and operational while facilitating the efficient management of field data for the PMIS dashboard.

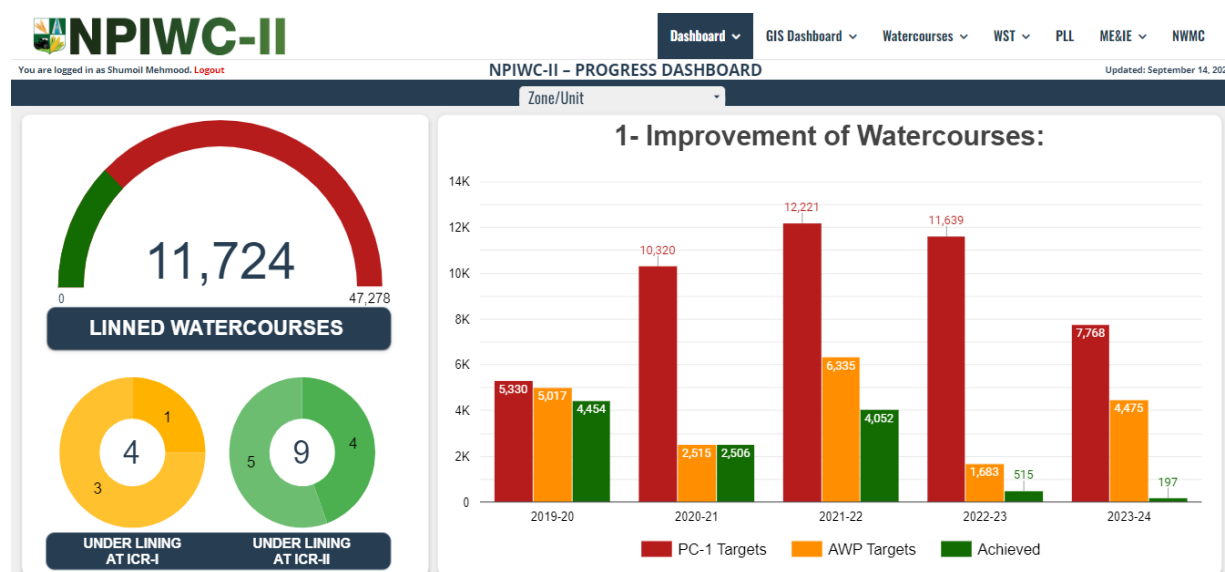
4.7.5 Refresher Training Workshops

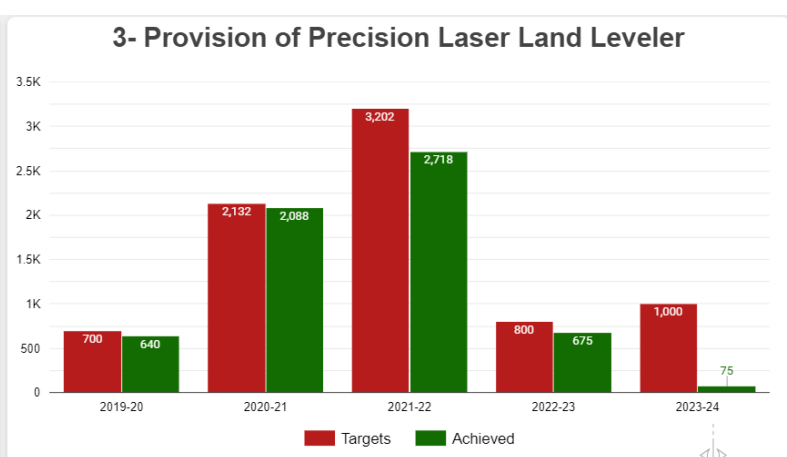
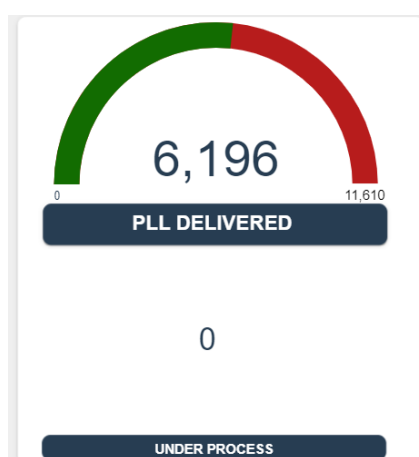
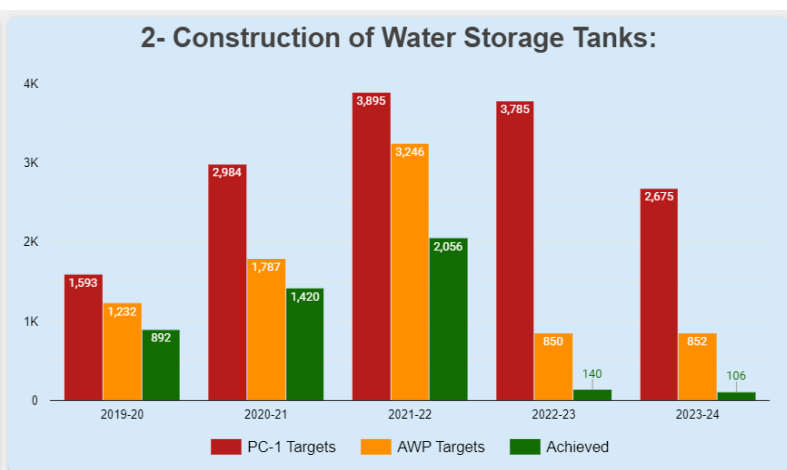
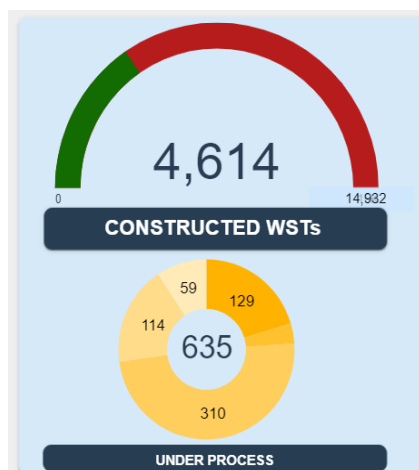
The M&E ICT team has conducted more than 16 training/refresher training workshops since inception till date. The ICT team continues to provide support and technical assistance to all enumerators across all project territories and is prepared to offer additional refresher training sessions as needed or upon request.

4.7.6 On-Going Data Validation & Cleaning

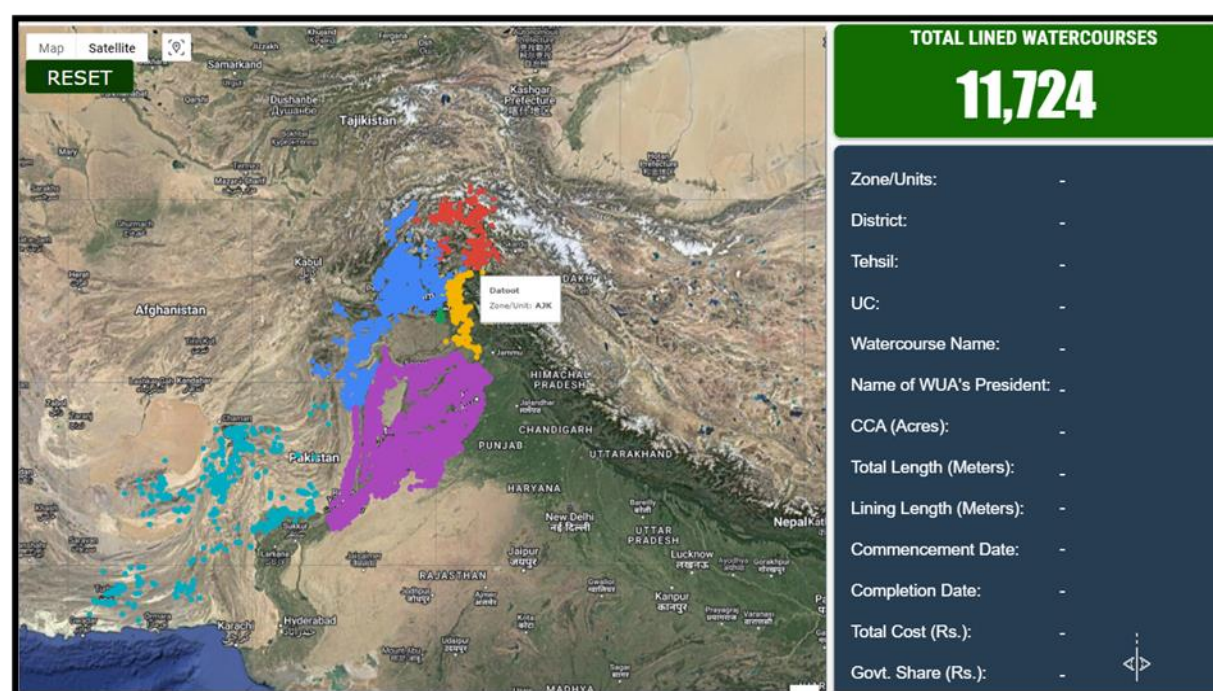
The data submission process is ongoing and will continue until the project concludes. Zonal Field Staff in KP and AJK are consistently entering data through a customized Android application, developed by the ICT team of ME&IE consultants. Meanwhile, the ICT team has remained actively involved in cleaning and validating the incoming data. Any identified errors are immediately communicated to the respective Zonal DDs/ADs for prompt rectification.

NATIONAL PMIS DASHBOARD PROGRESS

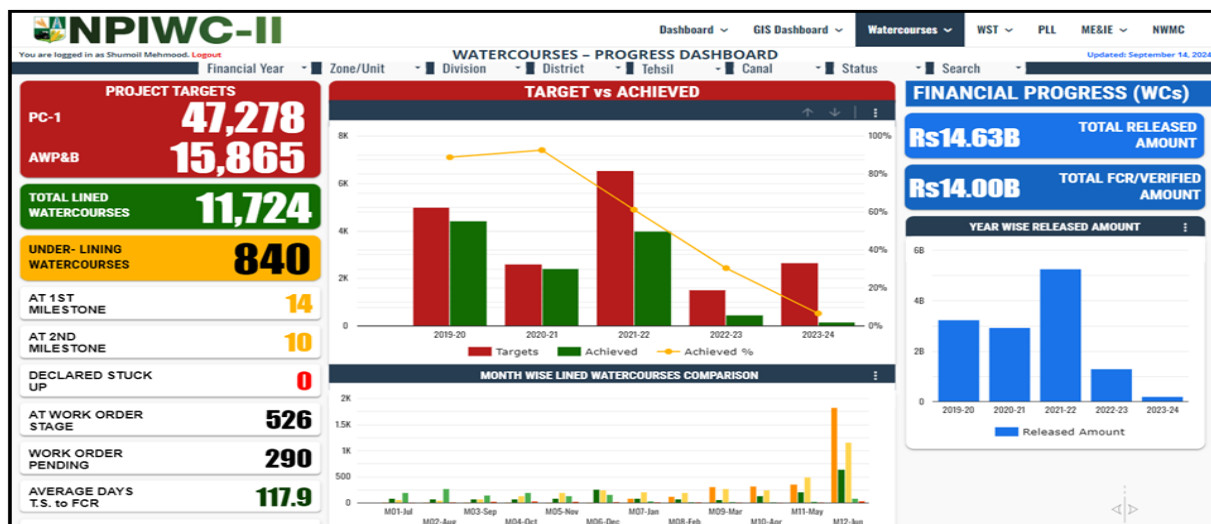




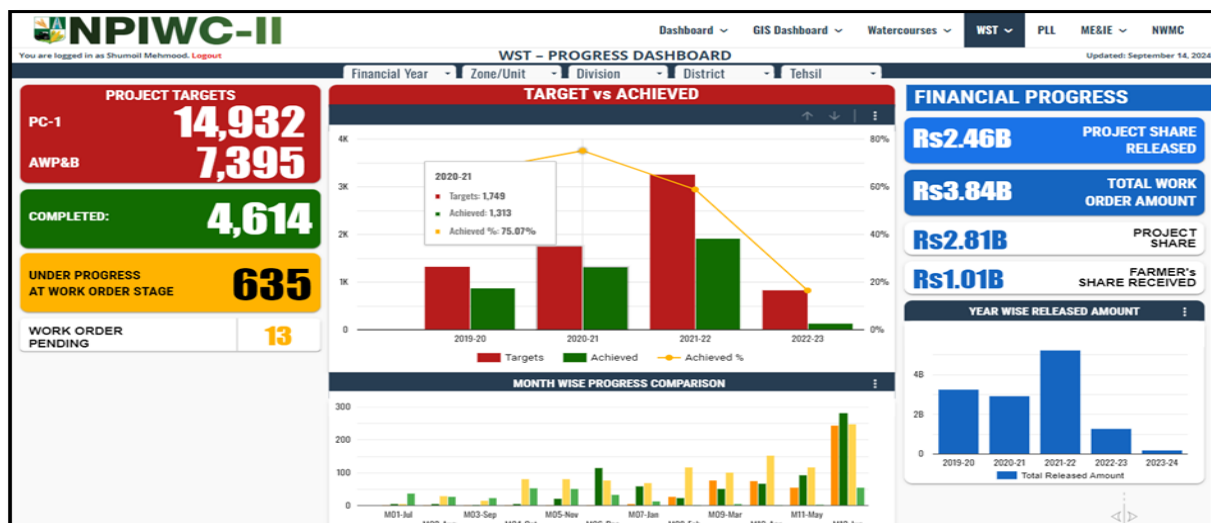
GIS Component



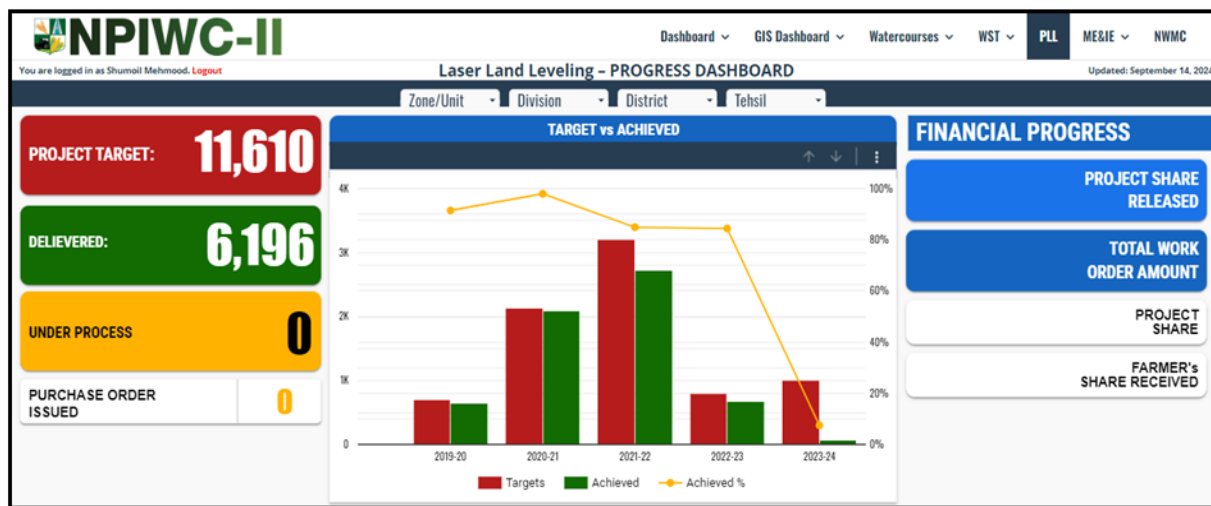
Watercourses Component



Water Storage Tank Component



Precision Laser Land Leveler (PLL)



CHAPTER 5: ISSUES / BOTTLENECKS

The ME&IE Consultants are continuously facing the following issues and constraints for timely instigating the activities:

- Due to non-availability of NWMC (NESPAK) deliverables/reports, ME&IE Consultants are facing problems to monitor & evaluate the working of NWMC. In this regard the cooperation and coordination of NWMCs as well as the relevant Directorates are required.
- Non availability of Technical Sanctions of the watercourses.
- Non-availability of complete up-to-date inventory / data of all interventions from the Client, Provincial Agricultural Departments (OFWM) & NWMCs (NESPAK) till to date.
- Irregularity in the fund releases is also one of the key difficulties in the completion of the required project assignments / tasks, on time.

ANNEXURES A TO T

ANNEXURE A: TENTATIVE WORK PLAN FOR THE FOUR MONTHS (JUL-OCT 2024)

| TENTATIVE WORK PLANNED FOR THE FOUR MONTHS (July 2024 To October 2024) | | | | | | | | | | | | | | | | | Legend | |
|---|--|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------------|-----|
| | | | | | | | | | | | | | | | | | Activity starts | ↓ |
| | | | | | | | | | | | | | | | | | Activity Ends | ↓ |
| | | | | | | | | | | | | | | | | | Activity Span | --- |
| No. | ACTIVITIES | 4 Months-Year 2024 (Weeks) | | | | | | | | | | | | | | | | |
| | | July | | | | Aug | | | | Sep | | | | Oct | | | | |
| | | WK-1 | WK-2 | WK-3 | WK-4 | WK-1 | WK-2 | WK-3 | WK-4 | WK-1 | WK-2 | WK-3 | WK-4 | WK-1 | WK-2 | WK-3 | WK-4 | |
| 1 | Project Closure Activities (Administrative) | | | | | | | | | | | | | | | | | |
| | 1.1 Downsizing of ME&IE Consultants staff & approval of retained Staff | --- | ↓ | | | | | | | | | | | | | | | |
| | 1.2 Preparing Remuneration & Reimbursable invoices | --- | | | | | | | | | | | | | | | | |
| | 1.3 Handing over the project assets to the client | | | | | | | | | | | | | | | | | ↓ |
| 2 | Post Field Activities | | | | | | | | | | | | | | | | | |
| | 2.1 Data Validation Process | --- | | | ↓ | | | | | | | | | | | | | |
| | 2.2 Data Cleaning and Preparation | | ↓ | | | | | | ↓ | | | | | | | | | |
| | 2.3 Data Analysis | | | | | | | ↓ | | | | ↓ | | | | | | |
| | 2.4 Creating Final Tables for the Report | | | | | | | | | ↓ | | | ↓ | | | | | |
| 3 | ICT Assignment | | | | | | | | | | | | | | | | | |
| | 3.1 Improvement/Updation of website of NPIWC-II | --- | | | | | | | | | | | | | | | | |
| | 3.2 Monitoring online data collection and data entry | --- | | | | | | | | | | | | | | | | |
| | 3.3 Monitoring Android based Mobile Application under implementation by field staff. | --- | | | | | | | | | | | | | | | | |
| | 3.4 Data collection of interventions in MIS/GIS database | --- | | | | | | | | | | | | | | | | |
| | 3.5 Capacity Building Trainings / Refresher of Departments | --- | | | | | | | | | | | | | | | | |
| | 3.6 Data entry, Data cleaning, Data processing & data analysis. | --- | | | | | | | | | | | | | | | | |
| 4 | Coordination | | | | | | | | | | | | | | | | | |
| | 4.1 Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues | --- | | | | | | | | | | | | | | | | |
| | 4.2 Meeting of DTLs with respective DTL of PC & concerned OFWM Departments | --- | | | | | | | | | | | | | | | | |
| | 4.3 ME&IE Consultants Internal Meetings | --- | | | | | | | | | | | | | | | | |
| 5 | Deliverable | | | | | | | | | | | | | | | | | |
| | 5.1 Monthly Monitoring Report | ↓ | ↓ | | | ↓ | ↓ | | | ↓ | ↓ | | | ↓ | ↓ | | | |
| | 5.2 Quarterly Monitoring & Evaluation Report (Jul-Sep 2024) | | | | | | | | | | | | | ↓ | ↓ | | | |
| | 5.3 Baseline Survey Report | | | | | | | | | | | | | ↓ | ↓ | | | |
| | 5.4 Endline Survey Report | | | | | | | | | | | | | ↓ | ↓ | ↓ | | |
| | 5.5 Special Reports | | | | | | | | | | | | | ↓ | ↓ | ↓ | | |
| | 5.6 Draft Assignment Completion Report | | | | | | | | | | | | | ↓ | ↓ | ↓ | ↓ | |

ANNEXURE-B: MATRIX OF RESPONSIBILITIES

MATRIX OF RESPONSIBILITIES

| LEGEND | |
|--------|--------------------------|
| ● | Primary Responsibility |
| ○ | Secondary Responsibility |
| ○ | Assistance |

| SR. NO. | DELIVERABLE / ACTIVITIES | NPC-FPMU | Agriculture Dept. (OEWM) | Project Consultants | ME&IE Consultants |
|---------|---|----------|--------------------------|---------------------|-------------------|
| 1 | Provision of Pre-requisite data of project components for starting of Field Activities: <ul style="list-style-type: none"> • Organization of Water Users Associations, • Watercourses Improvement, • Water Storage Tanks, • Laser Land Levelers, | ○ | ● | - | - |
| 2 | Certification of operational documents of the project, <ul style="list-style-type: none"> • Design, cost estimates, completion reports of watercourses, • Design, cost estimates, completion reports of water storage tanks, | ○ | ○ | ● | - |
| 3 | Undertake baseline, midline and endline surveys of the project activities/interventions in all the project areas. | - | - | - | ● |
| 4 | Develop monitoring strategy, framework and Result Based Monitoring (RBM) indicators, | - | - | - | ● |
| 5 | Assessing the water saving per annum on watercourse and water storage tanks as well as aggregate due to the project interventions. | - | - | - | ● |
| 6 | Assessing the improvement in water availability due to provision of conveyance system. | - | - | - | ● |
| 7 | Assessing the economic benefits to the agriculture in terms of increase in yield, irrigated area, cropping pattern, cropping intensity, farm income and employment in command area of watercourses and water storage tanks. | - | - | - | ● |
| 8 | Assessing the extent of community mobilization, financial and administrative sustainability of Water Users' Associations and ensuring the maintenance of watercourses, water storage tanks and laser land levelers. | - | - | - | ● |
| 9 | Economic Impact of project interventions. | - | - | - | ● |
| 10 | Carryout impact evaluation of the project investment on the economy and stakeholders. | - | - | - | ● |
| 11 | Preparation of Monthly, Quarterly and Annual Monitoring, Evaluation and Validation Reports of the project activities. | - | - | - | ● |
| 12 | Develop a website containing information of facilities and services, applications, procedures, watercourses, water storage tanks, and laser levelers database etc. (Maintaining website should be the responsibility of project staff). | - | - | - | ● |
| 13 | Provide technical support for the development of a custom-designed mobile application (Android) to capture on-site project progress, geo tagged photos; should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the | - | - | - | ● |

ANNEXURE-C: MONITORING LOG-FRAME

| PROJECT SUBCOMPONENTS | TARGETS | ACTIVITIES | OUTPUTS | OUTCOME-1 | OUTCOMES-2 | GOALS / IMPACT | METHODOLOGY FOR MEASURING RESULTS | |
|---|---|---|---|--|---|---|---|----|
| C1: Organization of Water Users' Associations (WUAs) | Reactivation of existing / organization of water users' associations. Ensuring one on each target watercourse. Total WUAs ensured 47,278. | a) Community mobilization at 47,278 watercourses | a) Total 47,278 WUAs reactivated / established/registered | a) Right of way of 47,278 watercourses available b) Skilled and unskilled labour required for watercourse improvement available c) Construction material for civil works of watercourses procured d) Alternate arrangement for water conveyance during construction made e) Watercourse improved | a) Disputes among the water users settled b) Farmers' branched improved c) Water allocation made amicably d) Maintenance of watercourses, WST and laser units done e) Cooperation among farmers increased | a) 47,278 watercourses improved and 15 percentage points conveyance losses reduced b) Litigation among farmers reduced | a) The functioning of the WUAs will be established through sample interview surveys of WUAs members twice during the project period | b) |
| C2: Watercourses Improvements | Improvement of 47,278 watercourses on cost sharing basis: 40% farmers in terms of labour, and | a) Establishment of 47,278 Water users' associations (WUAs); b) Registration of 47,278 WUAs; c) Improvement | a) 47,278 WCAs established; b) 47,278 WCAs registered; c) 47,278 watercourses improved and lined; | a) Conveyance losses for improved watercourses decreased by about 15 percentage points. | a) Increase in cropping intensity on improved watercourses by 5-24%; b) Increase in crop yields. | a) Increase in farm income; b) Increase in employment for farm labour; c) Reduction in poverty; | a) The water flow measurements will be carried out at before and after watercourse improvement on 2-5% | e) |

| PROJECT SUBCOMPONENTS | TARGETS | ACTIVITIES | OUTPUTS | OUTCOME-1 | OUTCOMES-2 | GOALS / IMPACT | METHODOLOGY FOR MEASURING RESULTS | |
|-----------------------|------------------------|--|---------|---|---|--|--|--|
| | 60% funded by project. | and realignment of earthen section of 47,278 watercourses; d) Lining of up to 50% length of 47,278 watercourse either by: • Precast concrete parabolic lining (PCPL) segments, or • Rectangular brick masonry, or any other method as approved by the project | | b) 1.654 million households benefited from the activity; c) 11.347 million acres served with improved watercourses | c) Increase in irrigated area d) Increase in agriculture output per unit of water by about 37% | d) Enhanced food security for the country. | sample basis; b) Agriculture survey before and after watercourse improvement on 2-5% sample basis; c) The survey will determine: • Cropping pattern before and after the improvement; • Cropping intensities before and after improvement; • Before and after crop yields; • Before and after employment; d) The difference between before and after will be considered the result of the | |

| PROJECT SUBCOMPONENTS | TARGETS | ACTIVITIES | OUTPUTS | OUTCOME-1 | OUTCOMES-2 | GOALS / IMPACT | METHODOLOGY FOR MEASURING RESULTS | |
|---|---|---|---|--|---|--|---|----|
| | | | | | | | intervention after netting out the contribution of the growth pattern of the crop sector otherwise. | |
| C3: Construction of Water Storage Tanks (WSTs) | a) Construction of 14,932 water storage tanks | a) 14,932 small farmers mobilized to construct water storage tanks for irrigation b) They agree to contribute 40% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 40% on issuance of FCR | a) 14,932 WSTs constructed b) 14,932 WSTs operated and maintained | a) Water which was otherwise largely going to be wasted is saved b) Irrigation provided at critical stages of the crops c) Flexibility achieved for irrigation | a) More area irrigated b) Increased cropping intensities | a) Increased crop yields b) Increased total crop output quantum c) Increased farm income d) Increased farm employment | a) 2-5% sample of WSTs will be surveyed b) A data collection form will be designed to measure water saving due to WSTs c) The forms used for baseline and impact surveys in case of watercourses will also be used for WSTs d) Same data analysis will be carried out here as in case of watercourses. | e) |
| C4: Provision of Land Leveling Units | a) Provision of 11,610 laser land leveling units to | a) 11,610 laser units provided to farmers / service | a) 11,610 farmers / service providers received PLL units; b) Farmers / service | a) Land levelled on Farmers' / service providers' | a) Water application efficiency increased at | e) Increased area under irrigated crops; | a) The land levelling is expected to save irrigation | f) |

| PROJECT SUBCOMPONENTS | TARGETS | ACTIVITIES | OUTPUTS | OUTCOME-1 | OUTCOMES-2 | GOALS / IMPACT | METHODOLOGY FOR MEASURING RESULTS | |
|-----------------------|---|--|---|--|---|---|--|--|
| | farmers and service providers on a cost sharing basis: 50% by farmer / service provider and 50% by the project. | providers; b) Farmers trained in using the units. | providers received training in using the units. | farms; b) Land levelled on fellow farmers on rent; c) Total 3.483million acres levelled by 11,610 units. | field level; b) Even germination of seed. c) Field application losses reduced by 10 percentage points d) Water productivity increased by 24% | f) Enhanced crop yields g) Increased farm income | water and result in better and even germination of seeds which can enhance crop yields. The crop yields thus affected will be reflected in agriculture sample surveys. b) 2-4% sample units will be visited by ME&IE Consultants teams after one years of delivery c) The unit will be verified d) Area treated during the year will be collected e) Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc. | |

ANNEXURE-D: DELIVERABLES/REPORTING REQUIREMENTS

| SR. NO. | DOCUMENT | COPIES | DUE |
|---------|--|--------|---|
| 1 | Draft Inception Report | 8 | 45 days after the effectiveness of the Consulting services Agreement. |
| 2 | Final Inception Report | 15 | One week after the issuance of comments by the Client on Draft Inception Report |
| 3 | Monthly Monitoring Report | 10 | 10 th of the following month |
| 4 | Baseline Survey Report | 10 | 4 months after start of the assignment |
| 5 | Midline Survey Report | 10 | In the middle of the assignment |
| 6 | Endline Survey Report | 10 | At the end of the endline survey |
| 7 | Quarterly Monitoring and Evaluation Report | 10 | 10 th of the first month of following quarter |
| 8 | Annual Monitoring and Evaluation Report | 10 | During first month of following year |
| 9 | Draft Assignment Completion Report | 5 | At completion of physical works / activities |
| 10 | Final Completion Report | 25 | At completion of works as well as financial transactions |
| 11 | Special Reports | 10 | As and when required |

ANNEXURE-E: ECOLOGICAL ZONE WISE ACHIEVEMENTS OF M&E CONSULTANT OF VARIOUS INTERVENTIONS IN PUNJAB ZONE

| Ecological Zone Wise Achievement of Watercourses by ME&IE Consultants Till 30-06-2024 | | | | | |
|---|----------------|---------------------------------------|----------------------------------|----------------------------------|----------------|
| Ecological zone | Districts | W.C Completed By OFWM till 30-06-2024 | Sample Size 5% ME&IE Consultants | Achievement of ME&IE Consultants | Remaining Part |
| Partial Irrigated Barani Zone | Bhakkar | 183 | 9 | 11 | -2 |
| | Mianwali | 146 | 7 | 4 | 3 |
| Sub Total | | 329 | 16 | 15 | 1 |
| Irrigated (Rice Zone) | Gujranwala | 101 | 5 | 7 | -2 |
| | Hafizabad | 85 | 4 | 10 | -6 |
| | Gujrat | 35 | 2 | 6 | -4 |
| | Narowal | 16 | 1 | 1 | 0 |
| | Sialkot | 84 | 4 | 5 | -1 |
| | Mandi Bahu Din | 79 | 4 | 4 | 0 |
| | Lahore | 23 | 1 | 2 | -1 |
| | Kasur | 83 | 4 | 6 | -2 |
| | Sheikhupura | 99 | 5 | 8 | -3 |
| | Nankana Sahib | 50 | 3 | 3 | 0 |
| Sub Total | | 655 | 33 | 52 | -19 |
| Irrigated (Mixed Zone) | Sahiwal | 145 | 7 | 8 | -1 |
| | Okara | 136 | 7 | 15 | -8 |
| | Pakpatan | 121 | 6 | 6 | 0 |
| | Faisalabad | 130 | 7 | 9 | -2 |
| | Jhang | 99 | 5 | 5 | 0 |
| | Chiniot | 34 | 2 | 3 | -1 |
| | Toba Tek Singh | 124 | 6 | 6 | 0 |
| | khushab | 80 | 4 | 8 | -4 |
| | Sargodha | 146 | 7 | 8 | -1 |
| Sub Total | | 1015 | 51 | 68 | -17 |
| Irrigated (Cotton Zone) | Multan | 153 | 8 | 9 | -1 |
| | DG Khan | 118 | 6 | 9 | -3 |
| | Bahawalpur | 154 | 8 | 9 | -1 |
| | Bahawalnagar | 220 | 11 | 22 | -11 |
| | Rahim Yar Khan | 331 | 17 | 18 | -1 |
| | Lodhran | 154 | 8 | 15 | -7 |
| | khanewal | 123 | 6 | 7 | -1 |
| | Rajanpur | 119 | 6 | 6 | 0 |
| | Muzaffargarh | 133 | 7 | 6 | 1 |
| | Layyah | 126 | 6 | 8 | -2 |
| | Vehari | 132 | 7 | 6 | 1 |
| Sub Total | | 1763 | 88 | 115 | -27 |
| Grand Total | | 3762 | 189 | 250 | -61 |
| Updated Figure provided by Punjab OFWM Department (Completed WC till 30-06-2024) | | 4063 | 203 | 250 | -47 |

| Ecological Zone Wise Achievement of WSTs by ME&IE Consultants Till 30-06-2024 | | | | | |
|---|----------------|---|----------------------------------|----------------------------------|-------------------|
| Ecological zone | Districts | W.S.T Completed By OFWM till 30-06-2023 | Sample Size 5% ME&IE Consultants | Achievement of ME&IE Consultants | Remaining Balance |
| Barani | Rawalpindi | 71 | 4 | 4 | 0 |
| | Attock | 79 | 4 | 6 | -2 |
| | Jhelum | 63 | 3 | 2 | 1 |
| | Chakwal | 155 | 8 | 7 | 1 |
| Sub Total | | 368 | 18 | 19 | -1 |
| Partial Irrigated Barani Zone | Bhakkar | 19 | 1 | 5 | -4 |
| | Mianwali | 3 | 0 | 1 | -1 |
| Sub Total | | 22 | 1 | 6 | -5 |
| Irrigated (Rice Zone) | Gujranwala | 1 | 0 | 1 | -1 |
| | Hafizabad | 13 | 1 | 3 | -2 |
| | Gujrat | 27 | 1 | 2 | -1 |
| | Narowal | 0 | 0 | | 0 |
| | Sialkot | 4 | 0 | 1 | -1 |
| | Mandi Bahu Din | 2 | 0 | 2 | -2 |
| | Lahore | 2 | 0 | 1 | -1 |
| | Kasur | 7 | 0 | 2 | -2 |
| | Sheikhupura | 2 | 0 | 2 | -2 |
| | Nankana Sahib | 3 | 0 | 2 | -2 |
| Sub Total | | 61 | 3 | 16 | -13 |
| Irrigated (Mixed Zone) | Sahiwal | 5 | 0 | 1 | -1 |
| | Okara | 19 | 1 | 1 | 0 |
| | Pakpattan | 15 | 1 | 1 | 0 |
| | Faisalabad | 35 | 2 | 2 | 0 |
| | Jhang | 31 | 2 | 2 | 0 |
| | Chiniot | 8 | 0 | 1 | -1 |
| | Toba Tek Singh | 55 | 3 | 3 | 0 |
| | khushab | 28 | 1 | 2 | -1 |
| | Sargodha | 35 | 2 | 2 | 0 |
| Sub Total | | 231 | 12 | 15 | -3 |
| Irrigated (Cotton Zone) | Multan | 17 | 1 | 5 | -4 |
| | DG Khan | 33 | 2 | 3 | -1 |
| | Bahawalpur | 42 | 2 | 1 | 1 |
| | Bahawalnagar | 51 | 3 | 3 | 0 |
| | Rahim Yar Khan | 67 | 3 | 4 | -1 |
| | Lodhran | 14 | 1 | 1 | 0 |
| | khanewal | 22 | 1 | 2 | -1 |
| | Rajanpur | 10 | 1 | 1 | -1 |
| | Muzaffargarh | 21 | 1 | 2 | -1 |
| | Layyah | 18 | 1 | 1 | 0 |
| | Vehari | 14 | 1 | 1 | 0 |
| Sub Total | | 309 | 15 | 24 | -9 |
| Grand Total | | 991 | 50 | 80 | -30 |

| Ecological Zone Wise Achievement of LLL Units by ME&IE Consultants Till 30-06-2024 | | | | | |
|--|----------------|--|----------------------------------|----------------------------------|-------------------|
| Ecological zone | Districts | Total No of Laser Land Levelling units Delivered By OFWM till 30-06-2023 | Sample Size 5% ME&IE Consultants | Achievement of ME&IE Consultants | Remaining Balance |
| Partial Irrigated Barani Zone | Bhakkar | 191 | 10 | 10 | 0 |
| | Mianwali | 146 | 7 | 7 | 0 |
| Sub Total | | 337 | 17 | 17 | 0 |
| Irrigated (Rice Zone) | Gujranwala | 235 | 12 | 12 | 0 |
| | Hafizabad | 188 | 9 | 10 | -1 |
| | Gujrat | 115 | 6 | 6 | 0 |
| | Narowal | 139 | 7 | 7 | 0 |
| | Sialkot | 196 | 10 | 5 | 5 |
| | Mandi Bahu Din | 163 | 8 | 8 | 0 |
| | Lahore | 97 | 5 | 6 | -1 |
| | Kasur | 240 | 12 | 12 | 0 |
| | Sheikhupura | 228 | 11 | 7 | 4 |
| | Nankana Sahib | 140 | 7 | 7 | 0 |
| Sub Total | | 1741 | 87 | 80 | 7 |
| Irrigated (Mixed Zone) | Sahiwal | 208 | 10 | 8 | 2 |
| | Okara | 203 | 10 | 7 | 3 |
| | Pakpatan | 180 | 9 | 11 | -2 |
| | Faisalabad | 275 | 14 | 14 | 0 |
| | Jhang | 253 | 13 | 15 | -2 |
| | Chiniot | 159 | 8 | 15 | -7 |
| | Toba Tek Singh | 206 | 10 | 9 | 1 |
| | khushab | 118 | 6 | 8 | -2 |
| | Sargodha | 219 | 11 | 6 | 5 |
| Sub Total | | 1821 | 91 | 93 | -2 |
| Irrigated (Cotton Zone) | Multan | 139 | 7 | 8 | -1 |
| | khanewal | 187 | 9 | 9 | 0 |
| | Vehari | 199 | 10 | 8 | 2 |
| | Lodhran | 149 | 7 | 8 | -1 |
| | Bahawalpur | 257 | 13 | 12 | 1 |
| | Bahawalnagar | 282 | 14 | 15 | -1 |
| | Rahim Yar Khan | 264 | 13 | 14 | -1 |
| | DG Khan | 123 | 6 | 8 | -2 |
| | Rajanpur | 123 | 6 | 6 | 0 |
| | Muzaffargarh | 235 | 12 | 12 | 0 |
| | Layyah | 166 | 8 | 16 | -8 |
| Sub Total | | 2124 | 106 | 116 | -10 |
| Grand Total | | 6023 | 301 | 306 | -5 |

ANNEXURE F: PUNJAB - WATERCOURSE DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | | | Overall |
|------------------------------|-----------------|-------------|----------------|---------------|-------------------|--------------------|-------------|
| | | | 1st Milestone | 2nd Milestone | Work Order Issued | Work Order Pending | |
| Bahawalpur | Bahawalnagar | 220 | 0 | 0 | 0 | 0 | 220 |
| Bahawalpur | Bahawalpur | 154 | 0 | 0 | 0 | 0 | 154 |
| Bahawalpur | Rahim Yar Khan | 331 | 0 | 0 | 0 | 0 | 331 |
| Bahawalpur Total | | 705 | 0 | 0 | 0 | 0 | 705 |
| Dera Ghazi Khan | Dera Ghazi Khan | 118 | 0 | 0 | 0 | 0 | 118 |
| Dera Ghazi Khan | Layyah | 126 | 0 | 0 | 0 | 0 | 126 |
| Dera Ghazi Khan | Muzaffargarh | 133 | 0 | 0 | 0 | 0 | 133 |
| Dera Ghazi Khan | Rajanpur | 119 | 0 | 0 | 0 | 0 | 119 |
| Dera Ghazi Khan Total | | 496 | 0 | 0 | 0 | 0 | 496 |
| Faisalabad | Chiniot | 34 | 0 | 0 | 0 | 0 | 34 |
| Faisalabad | Faisalabad | 130 | 0 | 0 | 0 | 0 | 130 |
| Faisalabad | Jhang | 99 | 0 | 0 | 0 | 0 | 99 |
| Faisalabad | Toba Tek Singh | 124 | 0 | 0 | 0 | 0 | 124 |
| Faisalabad Total | | 387 | 0 | 0 | 0 | 0 | 387 |
| Gujranwala | Gujranwala | 101 | 0 | 0 | 0 | 0 | 101 |
| Gujranwala | Narowal | 16 | 0 | 0 | 0 | 0 | 16 |
| Gujranwala | Sialkot | 84 | 0 | 0 | 0 | 0 | 84 |
| Gujranwala Total | | 201 | 0 | 0 | 0 | 0 | 201 |
| Gujrat | Gujrat | 35 | 0 | 0 | 0 | 0 | 35 |
| Gujrat | Hafizabad | 85 | 0 | 0 | 0 | 0 | 85 |
| Gujrat | Mandi Bahauddin | 79 | 0 | 0 | 0 | 0 | 79 |
| Gujrat Total | | 199 | 0 | 0 | 0 | 0 | 199 |
| Lahore | Kasur | 83 | 0 | 0 | 0 | 0 | 83 |
| Lahore | Lahore | 23 | 0 | 0 | 0 | 0 | 23 |
| Lahore | Nankana Sahib | 50 | 0 | 0 | 0 | 0 | 50 |
| Lahore | Sheikhupura | 99 | 0 | 0 | 0 | 0 | 99 |
| Lahore Total | | 255 | 0 | 0 | 0 | 0 | 255 |
| Multan | Khanewal | 123 | 0 | 0 | 0 | 0 | 123 |
| Multan | Lodhran | 154 | 0 | 0 | 0 | 0 | 154 |
| Multan | Multan | 153 | 0 | 0 | 0 | 0 | 153 |
| Multan | Vehari | 132 | 0 | 0 | 0 | 0 | 132 |
| Multan Total | | 562 | 0 | 0 | 0 | 0 | 562 |
| Sahiwal | Okara | 136 | 0 | 0 | 0 | 0 | 136 |
| Sahiwal | Pakpattan | 121 | 0 | 0 | 0 | 0 | 121 |
| Sahiwal | Sahiwal | 145 | 0 | 0 | 0 | 0 | 145 |
| Sahiwal Total | | 402 | 0 | 0 | 0 | 0 | 402 |
| Sargodha | Bhakkar | 183 | 0 | 0 | 0 | 0 | 183 |
| Sargodha | Khushab | 80 | 0 | 0 | 0 | 0 | 80 |
| Sargodha | Mianwali | 146 | 0 | 0 | 0 | 0 | 146 |
| Sargodha | Sargodha | 146 | 0 | 0 | 0 | 0 | 146 |
| Sargodha Total | | 555 | 0 | 0 | 0 | 0 | 555 |
| Grand Total | | 3762 | 0 | 0 | 0 | 0 | 3762 |

ANNEXURE G: PUNJAB - WSP DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | Overall |
|------------------------------|-----------------|------------|-------------------|--------------------|------------|
| | | | Work Order Issued | Work Order Pending | |
| Bahawalpur | Bahawalnagar | 51 | 0 | 0 | 51 |
| Bahawalpur | Bahawalpur | 42 | 0 | 0 | 42 |
| Bahawalpur | Rahim Yar Khan | 67 | 0 | 0 | 67 |
| Bahawalpur Total | | 160 | 0 | 0 | 160 |
| Dera Ghazi Khan | Dera Ghazi Khan | 33 | 0 | 0 | 33 |
| Dera Ghazi Khan | Layyah | 18 | 0 | 0 | 18 |
| Dera Ghazi Khan | Muzaffargarh | 21 | 0 | 0 | 21 |
| Dera Ghazi Khan | Rajapur | 10 | 0 | 0 | 10 |
| Dera Ghazi Khan Total | | 82 | 0 | 0 | 82 |
| Faisalabad | Chiniot | 8 | 0 | 0 | 8 |
| Faisalabad | Faisalabad | 35 | 0 | 0 | 35 |
| Faisalabad | Jhang | 31 | 0 | 0 | 31 |
| Faisalabad | Toba Tek Singh | 55 | 0 | 0 | 55 |
| Faisalabad Total | | 129 | 0 | 0 | 129 |
| Gujranwala | Gujranwala | 2 | 0 | 0 | 2 |
| Gujranwala | Sialkot | 4 | 0 | 0 | 4 |
| Gujranwala Total | | 6 | 0 | 0 | 6 |
| Gujrat | Gujrat | 26 | 0 | 0 | 26 |
| Gujrat | Hafizabad | 13 | 0 | 0 | 13 |
| Gujrat | Mandi Bahauddin | 2 | 0 | 0 | 2 |
| Gujrat Total | | 41 | 0 | 0 | 41 |
| Lahore | Kasur | 7 | 0 | 0 | 7 |
| Lahore | Lahore | 2 | 0 | 0 | 2 |
| Lahore | Nankana Sahib | 3 | 0 | 0 | 3 |
| Lahore | Sheikhupura | 2 | 0 | 0 | 2 |
| Lahore Total | | 14 | 0 | 0 | 14 |
| Multan | Khanewal | 22 | 0 | 0 | 22 |
| Multan | Lodhran | 14 | 0 | 0 | 14 |
| Multan | Multan | 17 | 0 | 0 | 17 |
| Multan | Vehari | 14 | 0 | 0 | 14 |
| Multan Total | | 67 | 0 | 0 | 67 |
| Rawalpindi | Attock | 79 | 0 | 0 | 79 |
| Rawalpindi | Chakwal | 155 | 0 | 0 | 155 |
| Rawalpindi | Jhelum | 63 | 0 | 0 | 63 |
| Rawalpindi | Rawalpindi | 71 | 0 | 0 | 71 |
| Rawalpindi Total | | 368 | 0 | 0 | 368 |
| Sahiwal | Okara | 19 | 0 | 0 | 19 |
| Sahiwal | Pakpattan | 15 | 0 | 0 | 15 |
| Sahiwal | Sahiwal | 5 | 0 | 0 | 5 |
| Sahiwal Total | | 39 | 0 | 0 | 39 |
| Sargodha | Bhakkar | 19 | 0 | 0 | 19 |
| Sargodha | Khushab | 28 | 0 | 0 | 28 |
| Sargodha | Mianwali | 3 | 0 | 0 | 3 |
| Sargodha | Sargodha | 35 | 0 | 0 | 35 |
| Sargodha Total | | 85 | 0 | 0 | 85 |
| Overall | | 991 | 0 | 0 | 991 |

ANNEXURE H: PUNJAB - PLL DATA SUBMISSION – SUMMARY

| Division | District | Delivered | Under Progress | Overall |
|------------------------------|-----------------|-------------|----------------|-------------|
| Bahawalpur | Bahawalnagar | 283 | 0 | 283 |
| Bahawalpur | Bahawalpur | 246 | 0 | 246 |
| Bahawalpur | Rahim Yar Khan | 259 | 0 | 259 |
| Bahawalpur Total | | 788 | 0 | 788 |
| Dera Ghazi Khan | Dera Ghazi Khan | 127 | 0 | 127 |
| Dera Ghazi Khan | Layyah | 165 | 0 | 165 |
| Dera Ghazi Khan | Muzaffargarh | 225 | 0 | 225 |
| Dera Ghazi Khan | Rajanpur | 120 | 0 | 120 |
| Dera Ghazi Khan Total | | 637 | 0 | 637 |
| Faisalabad | Chiniot | 160 | 0 | 160 |
| Faisalabad | Faisalabad | 257 | 0 | 257 |
| Faisalabad | Jhang | 236 | 0 | 236 |
| Faisalabad | Toba Tek Singh | 191 | 0 | 191 |
| Faisalabad Total | | 844 | 0 | 844 |
| Gujranwala | Gujranwala | 232 | 0 | 232 |
| Gujranwala | Sialkot | 190 | 0 | 190 |
| Gujranwala | Narowal | 138 | 0 | 138 |
| Gujranwala Total | | 560 | 0 | 560 |
| Gujrat | Gujrat | 114 | 0 | 114 |
| Gujrat | Mandi Bahauddin | 160 | 0 | 160 |
| Gujrat Total | | 274 | 0 | 274 |
| Lahore | Kasur | 232 | 0 | 232 |
| Lahore | Lahore | 94 | 0 | 94 |
| Lahore | Nankana Sahib | 137 | 0 | 137 |
| Lahore | Sheikhupura | 225 | 0 | 225 |
| Lahore Total | | 688 | 0 | 688 |
| Multan | Khanewal | 184 | 0 | 184 |
| Multan | Lodhran | 145 | 0 | 145 |
| Multan | Multan | 126 | 0 | 126 |
| Multan | Vehari | 193 | 0 | 193 |
| Multan Total | | 648 | 0 | 648 |
| Sahiwal | Okara | 203 | 0 | 203 |
| Sahiwal | Pakpattan | 178 | 0 | 178 |
| Sahiwal | Sahiwal | 207 | 0 | 207 |
| Sahiwal Total | | 588 | 0 | 588 |
| Sargodha | Bhakkar | 171 | 0 | 171 |
| Sargodha | Khushab | 111 | 0 | 111 |
| Sargodha | Mianwali | 140 | 0 | 140 |
| Sargodha | Sargodha | 207 | 0 | 207 |
| Sargodha Total | | 629 | 0 | 629 |
| Rawalpindi | Attock | 188 | 0 | 188 |
| Rawalpindi Total | | 188 | 0 | 188 |
| Grand Total | | 5844 | 0 | 5844 |

ANNEXURE I: KP - WATERCOURSE DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | | Pending | Overall |
|-------------------------------|------------------|-------------|----------------|---------------|-------------------|------------|-------------|
| | | | 1st Milestone | 2nd Milestone | Work Order Issued | TS Pending | |
| Bajaur | Bajaur | 73 | 0 | 0 | 0 | 0 | 73 |
| Bajaur Total | | 73 | 0 | 0 | 0 | 0 | 73 |
| Bannu | Bannu | 107 | 0 | 0 | 0 | 0 | 107 |
| Bannu | Lakki Marwat | 122 | 0 | 0 | 0 | 0 | 122 |
| Bannu Total | | 229 | 0 | 0 | 0 | 0 | 229 |
| D.I. Khan | D.I. Khan | 503 | 3 | 0 | 0 | 1 | 507 |
| D.I. Khan | Tank | 77 | 0 | 0 | 0 | 0 | 77 |
| D.I. Khan Total | | 580 | 3 | 0 | 0 | 1 | 584 |
| Hazara | Abbottabad | 34 | 0 | 0 | 0 | 0 | 34 |
| Hazara | Battagram | 49 | 0 | 0 | 0 | 0 | 49 |
| Hazara | Haripur | 74 | 0 | 0 | 0 | 0 | 74 |
| Hazara | Kolai Pallas | 2 | 0 | 0 | 0 | 0 | 2 |
| Hazara | Lower Kohistan | 20 | 0 | 0 | 0 | 0 | 20 |
| Hazara | Mansehra | 138 | 0 | 5 | 0 | 0 | 143 |
| Hazara | Torghar | 38 | 0 | 0 | 0 | 0 | 38 |
| Hazara | Upper Kohistan | 17 | 0 | 0 | 0 | 0 | 17 |
| Hazara Total | | 372 | 0 | 5 | 0 | 0 | 377 |
| Khyber | Khyber | 28 | 0 | 0 | 12 | 0 | 40 |
| Khyber Total | | 28 | 0 | 0 | 12 | 0 | 40 |
| Kohat | Hangu | 67 | 0 | 0 | 0 | 0 | 67 |
| Kohat | Karak | 84 | 0 | 0 | 0 | 0 | 84 |
| Kohat | Kohat | 92 | 0 | 0 | 0 | 0 | 92 |
| Kohat Total | | 243 | 0 | 0 | 0 | 0 | 243 |
| Kurram | Kurram | 13 | 0 | 0 | 0 | 0 | 13 |
| Kurram Total | | 13 | 0 | 0 | 0 | 0 | 13 |
| Malakand | Buner | 114 | 0 | 0 | 0 | 0 | 114 |
| Malakand | Chitral | 118 | 4 | 1 | 0 | 5 | 128 |
| Malakand | Lower Dir | 145 | 1 | 0 | 4 | 0 | 150 |
| Malakand | Malakand | 106 | 0 | 0 | 0 | 0 | 106 |
| Malakand | Shangla | 58 | 0 | 0 | 0 | 0 | 58 |
| Malakand | Swat | 300 | 1 | 1 | 17 | 0 | 319 |
| Malakand | Upper Dir | 138 | 0 | 0 | 0 | 0 | 138 |
| Malakand Total | | 979 | 6 | 2 | 21 | 5 | 1013 |
| Mardan | Mardan | 152 | 0 | 0 | 0 | 9 | 161 |
| Mardan | Swabi | 160 | 0 | 0 | 0 | 0 | 160 |
| Mardan Total | | 312 | 0 | 0 | 0 | 9 | 321 |
| Mohmand | Mohmand | 90 | 0 | 0 | 0 | 0 | 90 |
| Mohmand Total | | 90 | 0 | 0 | 0 | 0 | 90 |
| North Waziristan | North Waziristan | 8 | 0 | 3 | 0 | 0 | 11 |
| North Waziristan Total | | 8 | 0 | 3 | 0 | 0 | 11 |
| Orakzai | Orakzai | 1 | 0 | 0 | 0 | 0 | 1 |
| Orakzai Total | | 1 | 0 | 0 | 0 | 0 | 1 |
| Peshawar | Charsadda | 152 | 1 | 0 | 1 | 0 | 154 |
| Peshawar | Nowshera | 136 | 0 | 0 | 0 | 0 | 136 |
| Peshawar | Peshawar | 78 | 0 | 0 | 0 | 0 | 78 |
| Peshawar Total | | 366 | 1 | 0 | 1 | 0 | 368 |
| S.Waziristan | S.Waziristan | 36 | 0 | 0 | 0 | 0 | 36 |
| S.Waziristan Total | | 36 | 0 | 0 | 0 | 0 | 36 |
| Overall | | 3330 | 10 | 10 | 34 | 15 | 3399 |

ANNEXURE J: KP - WST DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | Pending | Overall |
|-------------------------------|------------------|-------------|----------------|-------------------|------------|-------------|
| | | | 2nd Milestone | Work Order Issued | TS Pending | |
| Bajaur | Bajaur | 17 | 0 | 0 | 0 | 17 |
| Bajaur Total | | 17 | 0 | 0 | 0 | 17 |
| Bannu | Bannu | 12 | 0 | 0 | 0 | 12 |
| Bannu | Lakki Marwat | 35 | 0 | 0 | 0 | 35 |
| Bannu Total | | 47 | 0 | 0 | 0 | 47 |
| D.I. Khan | D.I. Khan | 89 | 0 | 0 | 1 | 90 |
| D.I. Khan | Tank | 35 | 0 | 0 | 0 | 35 |
| D.I. Khan Total | | 124 | 0 | 0 | 1 | 125 |
| Hazara | Abbottabad | 21 | 0 | 0 | 0 | 21 |
| Hazara | Battagram | 29 | 0 | 0 | 0 | 29 |
| Hazara | Haripur | 40 | 0 | 0 | 0 | 40 |
| Hazara | Kolai Pallas | 4 | 0 | 0 | 0 | 4 |
| Hazara | Lower Kohistan | 3 | 0 | 0 | 0 | 3 |
| Hazara | Mansehra | 45 | 3 | 0 | 0 | 48 |
| Hazara | Torghar | 14 | 0 | 0 | 0 | 14 |
| Hazara | Upper Kohistan | 11 | 0 | 0 | 0 | 11 |
| Hazara Total | | 167 | 3 | 0 | 0 | 170 |
| Khyber | Khyber | 17 | 0 | 0 | 0 | 17 |
| Khyber Total | | 17 | 0 | 0 | 0 | 17 |
| Kohat | Hangu | 12 | 0 | 0 | 0 | 12 |
| Kohat | Karak | 73 | 0 | 0 | 0 | 73 |
| Kohat | Kohat | 5 | 0 | 0 | 0 | 5 |
| Kohat Total | | 90 | 0 | 0 | 0 | 90 |
| Kurram | Kurram | 2 | 0 | 0 | 0 | 2 |
| Kurram Total | | 2 | 0 | 0 | 0 | 2 |
| Malakand | Buner | 44 | 0 | 0 | 0 | 44 |
| Malakand | Chitral | 22 | 0 | 0 | 0 | 22 |
| Malakand | Lower Dir | 41 | 0 | 0 | 0 | 41 |
| Malakand | Malakand | 24 | 0 | 0 | 0 | 24 |
| Malakand | Shangla | 40 | 0 | 0 | 0 | 40 |
| Malakand | Swat | 171 | 0 | 0 | 0 | 171 |
| Malakand | Upper Dir | 54 | 0 | 0 | 0 | 54 |
| Malakand Total | | 396 | 0 | 0 | 0 | 396 |
| Mardan | Mardan | 34 | 0 | 0 | 1 | 35 |
| Mardan | Swabi | 39 | 0 | 0 | 0 | 39 |
| Mardan Total | | 73 | 0 | 0 | 1 | 74 |
| Mohmand | Mohmand | 113 | 0 | 0 | 0 | 113 |
| Mohmand Total | | 113 | 0 | 0 | 0 | 113 |
| North Waziristan | North Waziristan | 15 | 0 | 0 | 0 | 15 |
| North Waziristan Total | | 15 | 0 | 0 | 0 | 15 |
| Orakzai | Orakzai | 2 | 0 | 0 | 0 | 2 |
| Orakzai Total | | 2 | 0 | 0 | 0 | 2 |
| Peshawar | Charsadda | 13 | 0 | 0 | 0 | 13 |
| Peshawar | Nowshera | 88 | 0 | 1 | 0 | 89 |
| Peshawar | Peshawar | 57 | 0 | 0 | 0 | 57 |
| Peshawar Total | | 158 | 0 | 1 | 0 | 159 |
| S.Waziristan | S.Waziristan | 32 | 0 | 0 | 0 | 32 |
| S.Waziristan Total | | 32 | 0 | 0 | 0 | 32 |
| Overall | | 1253 | 3 | 1 | 2 | 1259 |

ANNEXURE K: KP - PLL DATA SUBMISSION – SUMMARY

| Division | District | Delivered | Under Progress | Overall |
|----------|----------|-----------|----------------|---------|
| D.I Khan | D.I Khan | 50 | 0 | 50 |
| Overall | | 50 | 0 | 50 |

ANNEXURE L: BALOCHISTAN - WATERCOURSE DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | | Pending | Overall |
|------------------------|-----------------|-------------|----------------|---------------|------------|------------|-------------|
| | | | 1st Milestone | 2nd Milestone | TS Issued | TS Pending | |
| Kalat | Awaran | 150 | 0 | 0 | 0 | 1 | 151 |
| Kalat | Kalat | 281 | 0 | 0 | 0 | 1 | 282 |
| Kalat | Khuzdar | 165 | 0 | 0 | 0 | 0 | 165 |
| Kalat | Lasbela | 154 | 0 | 0 | 35 | 0 | 189 |
| Kalat | Mastung | 191 | 0 | 0 | 6 | 1 | 198 |
| Kalat | Surab | 0 | 0 | 0 | 19 | 23 | 42 |
| Kalat Total | | 941 | 0 | 0 | 60 | 26 | 1027 |
| Loralai | Barkhan | 64 | 0 | 0 | 0 | 0 | 64 |
| Loralai | Duki | 0 | 0 | 0 | 43 | 0 | 43 |
| Loralai | Loralai | 335 | 0 | 0 | 0 | 5 | 340 |
| Loralai | Musakhail | 187 | 0 | 0 | 0 | 32 | 219 |
| Loralai Total | | 586 | 0 | 0 | 43 | 37 | 666 |
| Makran | Gwadar | 23 | 0 | 0 | 0 | 0 | 23 |
| Makran | Kech | 59 | 0 | 0 | 9 | 64 | 132 |
| Makran | Panjgur | 121 | 0 | 0 | 33 | 0 | 154 |
| Makran Total | | 203 | 0 | 0 | 42 | 64 | 309 |
| Nasirabad | Jaffarabad | 141 | 0 | 0 | 0 | 0 | 141 |
| Nasirabad | Jhal Magsi | 27 | 0 | 0 | 0 | 0 | 27 |
| Nasirabad | Kachi | 4 | 0 | 0 | 97 | 1 | 102 |
| Nasirabad | Nasirabad | 55 | 0 | 0 | 86 | 28 | 169 |
| Nasirabad | Sohbatpur | 79 | 0 | 0 | 0 | 0 | 79 |
| Nasirabad Total | | 306 | 0 | 0 | 183 | 29 | 518 |
| Quetta | Killa Abdullah | 110 | 0 | 0 | 0 | 0 | 110 |
| Quetta | Pishin | 186 | 0 | 0 | 0 | 1 | 187 |
| Quetta | Quetta | 83 | 0 | 0 | 1 | 0 | 84 |
| Quetta Total | | 379 | 0 | 0 | 1 | 1 | 381 |
| Rakhshan | Chaghi | 77 | 0 | 0 | 0 | 0 | 77 |
| Rakhshan | Kharan | 26 | 0 | 0 | 2 | 40 | 68 |
| Rakhshan | Nushki | 4 | 0 | 0 | 61 | 36 | 101 |
| Rakhshan | Washuk | 18 | 0 | 0 | 0 | 2 | 20 |
| Rakhshan Total | | 125 | 0 | 0 | 63 | 78 | 266 |
| Sibi | Dera Bugti | 99 | 0 | 0 | 0 | 0 | 99 |
| Sibi | Harnai | 42 | 0 | 0 | 0 | 0 | 42 |
| Sibi | Kohlu | 58 | 0 | 0 | 0 | 0 | 58 |
| Sibi | Sibi | 60 | 0 | 0 | 0 | 0 | 60 |
| Sibi | Ziarat | 71 | 0 | 0 | 1 | 0 | 72 |
| Sibi Total | | 330 | 0 | 0 | 1 | 0 | 331 |
| Zhob | Killa Saifullah | 235 | 0 | 0 | 0 | 0 | 235 |
| Zhob | Sherani | 51 | 0 | 0 | 0 | 18 | 69 |
| Zhob | Zhob | 80 | 0 | 0 | 1 | 0 | 81 |
| Zhob Total | | 366 | 0 | 0 | 1 | 18 | 385 |
| Overall | | 3236 | 0 | 0 | 394 | 253 | 3883 |

ANNEXURE M: BALOCHISTAN - WST DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | | Pending | Overall |
|------------------------|-----------------|-------------|----------------|---------------|------------|------------|-------------|
| | | | 1st Milestone | 2nd Milestone | TS Issued | TS Pending | |
| Kalat | Awaran | 84 | 0 | 0 | 1 | 2 | 87 |
| Kalat | Kalat | 177 | 0 | 0 | 2 | 0 | 179 |
| Kalat | Khuzdar | 139 | 0 | 0 | 0 | 0 | 139 |
| Kalat | Lasbela | 105 | 0 | 0 | 39 | 6 | 150 |
| Kalat | Mastung | 99 | 0 | 0 | 8 | 0 | 107 |
| Kalat | Surab | 0 | 0 | 0 | 29 | 0 | 29 |
| Kalat Total | | 604 | 0 | 0 | 79 | 8 | 691 |
| Loralai | Barkhan | 54 | 0 | 0 | 0 | 0 | 54 |
| Loralai | Duki | 0 | 0 | 0 | 29 | 0 | 29 |
| Loralai | Loralai | 113 | 0 | 0 | 0 | 0 | 113 |
| Loralai | Musakhel | 26 | 0 | 0 | 0 | 11 | 37 |
| Loralai Total | | 193 | 0 | 0 | 29 | 11 | 233 |
| Makran | Gwadar | 7 | 0 | 0 | 0 | 0 | 7 |
| Makran | Kech | 35 | 0 | 0 | 18 | 46 | 99 |
| Makran | Panjgur | 46 | 0 | 1 | 121 | 1 | 169 |
| Makran Total | | 88 | 0 | 1 | 139 | 47 | 275 |
| Nasirabad | Jaffarabad | 17 | 0 | 0 | 0 | 0 | 17 |
| Nasirabad | Jhal Magsi | 30 | 0 | 0 | 0 | 0 | 30 |
| Nasirabad | Kachi | 36 | 0 | 0 | 46 | 0 | 82 |
| Nasirabad | Nasirabad | 0 | 0 | 0 | 17 | 0 | 17 |
| Nasirabad | Sohbatpur | 14 | 0 | 0 | 0 | 0 | 14 |
| Nasirabad Total | | 97 | 0 | 0 | 63 | 0 | 160 |
| Quetta | Killa Abdullah | 55 | 0 | 0 | 0 | 1 | 56 |
| Quetta | Pishin | 107 | 0 | 0 | 10 | 2 | 119 |
| Quetta | Quetta | 75 | 0 | 1 | 0 | 0 | 76 |
| Quetta Total | | 237 | 0 | 1 | 10 | 3 | 251 |
| Rakhshan | Chaghi | 33 | 0 | 0 | 0 | 14 | 47 |
| Rakhshan | Kharan | 15 | 0 | 0 | 13 | 8 | 36 |
| Rakhshan | Nushki | 0 | 0 | 0 | 53 | 9 | 62 |
| Rakhshan | Washuk | 4 | 0 | 0 | 8 | 2 | 14 |
| Rakhshan Total | | 52 | 0 | 0 | 74 | 33 | 159 |
| Sibi | Dera Bugti | 38 | 0 | 0 | 1 | 0 | 39 |
| Sibi | Harnai | 21 | 0 | 0 | 0 | 0 | 21 |
| Sibi | Kohlu | 35 | 0 | 0 | 0 | 0 | 35 |
| Sibi | Sibi | 23 | 0 | 0 | 0 | 0 | 23 |
| Sibi | Ziarat | 21 | 0 | 0 | 0 | 0 | 21 |
| Sibi Total | | 138 | 0 | 0 | 1 | 0 | 139 |
| Zhob | Killa Saifullah | 117 | 0 | 0 | 0 | 0 | 117 |
| Zhob | Sherani | 25 | 0 | 0 | 0 | 0 | 25 |
| Zhob | Zhob | 85 | 0 | 0 | 0 | 0 | 85 |
| Zhob Total | | 227 | 0 | 0 | 0 | 0 | 227 |
| Overall | | 1636 | 0 | 2 | 395 | 102 | 2135 |

ANNEXURE N: BALOCHISTAN - PLL DATA SUBMISSION – SUMMARY

| Division | District | Delivered | Under Progress | Overall |
|-----------|----------------|-----------|----------------|---------|
| Kalat | Lasbela | 4 | 0 | 4 |
| Makran | Panjgur | 5 | 0 | 5 |
| Makran | Turbat | 6 | 0 | 6 |
| Nasirabad | Jaffarabad | 12 | 0 | 12 |
| Nasirabad | Jhal Magsi | 1 | 0 | 1 |
| Nasirabad | Sohbatpur | 3 | 0 | 3 |
| Quetta | Killa Abdullah | 1 | 0 | 1 |
| Sibi | Sibi | 2 | 0 | 2 |
| Overall | | 34 | 0 | 34 |

ANNEXURE O: GB - WATERCOURSES DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | Overall |
|---------------------|----------|------------|----------------|------------|------------|
| | | | TS Issued | TS Pending | |
| Gilgit | Astore | 44 | 0 | 0 | 44 |
| Gilgit | Diamer | 125 | 0 | 0 | 125 |
| Gilgit | Ghizer | 102 | 0 | 0 | 102 |
| Gilgit | Gilgit | 109 | 0 | 0 | 109 |
| Gilgit | Hunza | 35 | 0 | 0 | 35 |
| Gilgit | Nagar | 30 | 0 | 0 | 30 |
| Gilgit Total | | 445 | 0 | 0 | 445 |
| Skardu | Ghanche | 113 | 0 | 0 | 113 |
| Skardu | Kharmang | 42 | 0 | 0 | 42 |
| Skardu | Shigar | 68 | 0 | 0 | 68 |
| Skardu | Skardu | 141 | 0 | 0 | 141 |
| Skardu Total | | 364 | 0 | 0 | 364 |
| Overall | | 809 | 0 | 0 | 809 |

ANNEXURE P: GB - WST DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | Overall |
|---------------------|----------|------------|----------------|------------|------------|
| | | | TS Issued | TS Pending | |
| Gilgit | Astore | 19 | 0 | 0 | 19 |
| Gilgit | Diamer | 50 | 0 | 0 | 50 |
| Gilgit | Ghizer | 45 | 0 | 0 | 45 |
| Gilgit | Gilgit | 60 | 0 | 0 | 60 |
| Gilgit | Hunza | 12 | 0 | 0 | 12 |
| Gilgit | Nagar | 14 | 0 | 0 | 14 |
| Gilgit Total | | 200 | 0 | 0 | 200 |
| Skardu | Kharmang | 24 | 0 | 0 | 24 |
| Skardu | Shigar | 49 | 0 | 0 | 49 |
| Skardu | Skardu | 55 | 0 | 0 | 55 |
| Skardu Total | | 128 | 0 | 0 | 128 |
| Overall | | 328 | 0 | 0 | 328 |

ANNEXURE Q: AJK- WATERCOURSES DATA SUBMISSIONS – SUMMARY

| Division | District | Completed | Under Progress | | Pending | | Overall |
|--------------|----------|-----------|----------------|-------------------|------------|--------------------|---------|
| | | | 1st Milestone | Work Order Issued | TS Pending | Work Order Pending | |
| Muzaffarad | MZD | 103 | 0 | 13 | 7 | 0 | 123 |
| | Jhelum | 32 | 0 | 10 | 0 | 1 | 43 |
| | Neelum | 72 | 1 | 7 | 0 | 0 | 80 |
| MZD Total | | 207 | 1 | 30 | 7 | 1 | 246 |
| Poonch | Poonch | 48 | 1 | 8 | 0 | 0 | 57 |
| | Bagh | 31 | 0 | 7 | 0 | 0 | 38 |
| | Haveli | 10 | 1 | 2 | 0 | 0 | 13 |
| | Sudhnoti | 24 | 1 | 16 | 0 | 2 | 43 |
| Poonch Total | | 113 | 3 | 33 | 0 | 2 | 151 |
| Mirpur | Mirpur | 84 | 0 | 2 | 0 | 1 | 87 |
| | Bhimber | 125 | 0 | 32 | 0 | 0 | 157 |
| | Kotli | 42 | 0 | 8 | 0 | 5 | 55 |
| Mirpur Total | | 251 | 0 | 42 | 0 | 6 | 299 |
| Overall | | 571 | 4 | 105 | 7 | 9 | 696 |

ANNEXURE R: AJK - WST/WHs DATA SUBMISSIONS – SUMMARY

| Division | District | Completed | Under Progress | | | Pending | | Overall |
|---------------------------|--------------|------------|----------------|---------------|-------------------|------------|--------------------|------------|
| | | | 1st Milestone | 2nd Milestone | Work Order Issued | TS Pending | Work Order Pending | |
| Muzaffarabad | Muzaffarabad | 144 | 1 | 0 | 16 | 0 | 0 | 161 |
| | Jhelum | 25 | 0 | 0 | 0 | 2 | 0 | 27 |
| | Neelum | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| Muzaffarabad Total | | 169 | 1 | 0 | 17 | 3 | 0 | 190 |
| Poonch | Poonch | 64 | 1 | 1 | 7 | 0 | 0 | 73 |
| | Bagh | 57 | 1 | 0 | 21 | 0 | 0 | 79 |
| | Haveli | 29 | 0 | 0 | 5 | 2 | 0 | 36 |
| | Sudhnoti | 25 | 1 | 0 | 28 | 0 | 0 | 54 |
| Poonch Total | | 175 | 3 | 1 | 61 | 2 | 0 | 242 |
| Mirpur | Mirpur | 14 | 0 | 0 | 1 | 0 | 0 | 15 |
| | Bhimber | 12 | 0 | 0 | 8 | 0 | 0 | 20 |
| | Kotli | 36 | 0 | 0 | 17 | 0 | 12 | 65 |
| Mirpur Total | | 62 | 0 | 0 | 26 | 0 | 12 | 100 |
| Overall | | 406 | 4 | 1 | 104 | 5 | 12 | 532 |

ANNEXURE S: ICT - WATERCOURSE DATA SUBMISSION – SUMMARY

| Division | District | Completed | Under Progress | | | | Overall |
|----------|----------|-----------|----------------|---------------|-------------------|--------------------|---------|
| | | | 1st Milestone | 2nd Milestone | Work Order Issued | Work Order Pending | |
| ICT | ICT | 41 | 0 | 0 | 0 | 0 | 41 |
| Overall | | 41 | 0 | 0 | 0 | 0 | 41 |

ANNEXURE T: DISTRICT-WISE PROGRESS OF DASHBOARD IN BALOCHISTAN

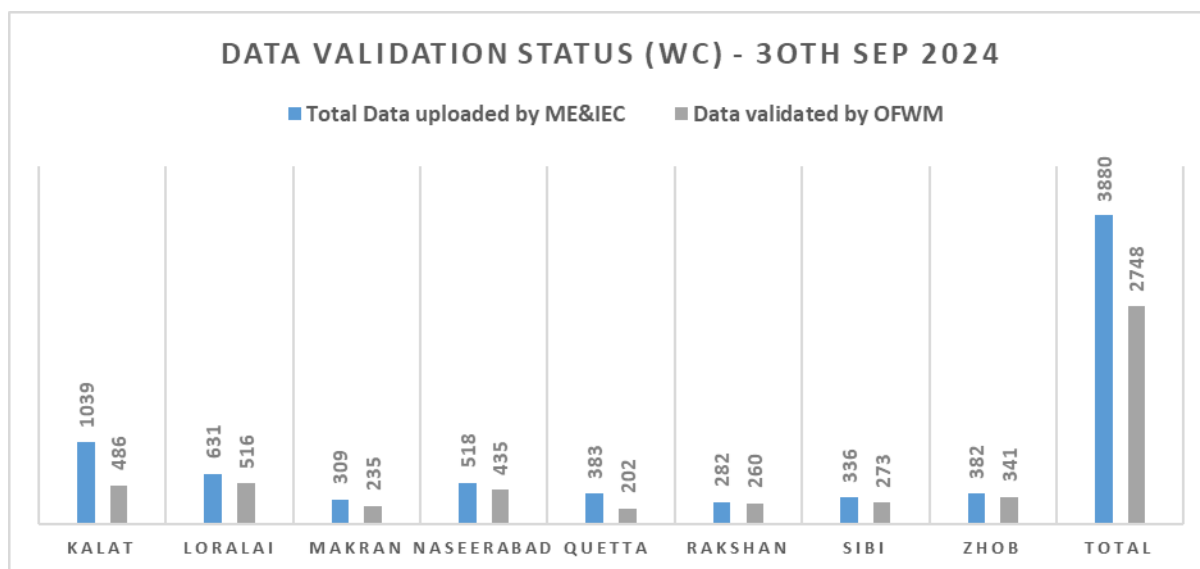
District-wise Progress of Dashboard, Balochistan (Watercourses)

| Division | District | 2019-20 | | 2020-21 | | 2021-22 | | TOTAL | |
|--------------------|-----------------|-------------------------------|-------------------|-------------------------------|-------------------|-------------------------------|-------------------|-------------------------------|-------------------|
| | | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM |
| Kalat | Awaran | 140 | 76 | 22 | 22 | 0 | 0 | 162 | 98 |
| Kalat | Kalat | 97 | 0 | 28 | 28 | 158 | 123 | 283 | 151 |
| Kalat | Khuzdar | 139 | 0 | 17 | 0 | 9 | 6 | 165 | 6 |
| Kalat | Lasbela | 110 | 0 | 35 | 0 | 44 | 35 | 189 | 35 |
| Kalat | Mastung | 102 | 93 | 30 | 1 | 66 | 60 | 198 | 154 |
| Kalat | Surab | 20 | 20 | 11 | 11 | 11 | 11 | 42 | 42 |
| Total | | 608 | 189 | 143 | 62 | 288 | 235 | 1039 | 486 |
| (%) | | 31% | | 43% | | 82% | | 47% | |
| Loralai | Barkhan | 61 | 0 | 0 | 0 | 3 | 0 | 64 | 0 |
| Loralai | Duki | 27 | 27 | 15 | 15 | 1 | 1 | 43 | 43 |
| Loralai | Loralai | 158 | 157 | 47 | 43 | 132 | 130 | 337 | 330 |
| Loralai | Musakhail | 100 | 99 | 86 | 44 | 1 | 0 | 187 | 143 |
| Total | | 346 | 283 | 148 | 102 | 137 | 131 | 631 | 516 |
| (%) | | 82% | | 69% | | 96% | | 82% | |
| Makran | Gwadar | 12 | 0 | 11 | 0 | 0 | 0 | 23 | 0 |
| Makran | Kech | 68 | 68 | 20 | 20 | 44 | 44 | 132 | 132 |
| Makran | Panjgur | 124 | 73 | 25 | 25 | 5 | 5 | 154 | 103 |
| Total | | 204 | 141 | 56 | 45 | 49 | 49 | 309 | 235 |
| (%) | | 69% | | 80% | | 100% | | 76% | |
| Nasirabad | Jaffarabad | 53 | 53 | 32 | 32 | 56 | 56 | 141 | 141 |
| Nasirabad | Jhal Magsi | 16 | 0 | 6 | | 5 | 0 | 27 | 0 |
| Nasirabad | Kachi | 81 | 81 | 18 | 18 | 3 | 3 | 102 | 102 |
| Nasirabad | Nasirabad | 52 | 0 | 35 | 35 | 82 | 82 | 169 | 117 |
| Nasirabad | Sohbatpur | 14 | 14 | 20 | 20 | 45 | 41 | 79 | 75 |
| Total | | 216 | 148 | 111 | 105 | 191 | 182 | 518 | 435 |
| (%) | | 69% | | 95% | | 95% | | 84% | |
| Quetta | Killa Abdullah | 106 | 0 | 2 | 0 | 2 | 0 | 110 | 0 |
| Quetta | Pishin | 99 | 97 | 39 | 2 | 52 | 52 | 190 | 151 |
| Quetta | Quetta | 41 | 25 | 10 | | 33 | 26 | 84 | 51 |
| Total | | 246 | 122 | 51 | 2 | 87 | 78 | 384 | 202 |
| (%) | | 50% | | 4% | | 90% | | 53% | |
| Rakhshan | Chaghi | 49 | 49 | 28 | 28 | 0 | 0 | 77 | 77 |
| Rakhshan | Kharan | 23 | 23 | 3 | | 55 | 55 | 81 | 78 |
| Rakhshan | Nushki | 38 | 38 | 25 | 25 | 40 | 39 | 103 | 102 |
| Rakhshan | Washuk | 18 | 0 | 2 | 2 | 0 | 0 | 20 | 2 |
| Total | | 128 | 110 | 58 | 55 | 95 | 94 | 281 | 259 |
| (%) | | 86% | | 95% | | 99% | | 92% | |
| Sibi | Dera Bugti | 34 | 0 | 0 | 0 | 65 | 65 | 99 | 65 |
| Sibi | Harnai | 23 | 0 | 19 | 15 | 0 | 0 | 42 | 15 |
| Sibi | Kohlu | 41 | 41 | 17 | 17 | 0 | 0 | 58 | 58 |
| Sibi | Sibi | 33 | 33 | 6 | 6 | 25 | 25 | 64 | 64 |
| Sibi | Ziarat | 54 | 54 | 17 | 15 | 2 | 2 | 73 | 71 |
| Total | | 185 | 128 | 59 | 53 | 92 | 92 | 336 | 273 |
| (%) | | 69% | | 90% | | 100% | | 81% | |
| Zhob | Killa Saifullah | 158 | 124 | 38 | 38 | 39 | 39 | 235 | 201 |
| Zhob | Sherani | 19 | 18 | 8 | 8 | 39 | 38 | 66 | 64 |
| Zhob | Zhob | 55 | 55 | 23 | 20 | 3 | 1 | 81 | 76 |
| Total | | 232 | 197 | 69 | 66 | 81 | 78 | 382 | 341 |
| (%) | | 85% | | 96% | | 96% | | 89% | |
| GRAND TOTAL | | 2165 | 1318 | 695 | 490 | 1020 | 939 | 3880 | 2747 |
| (%) | | 61% | | 71% | | 92% | | 71% | |

District-wise Progress of Dashboard, Balochistan (Water Storage Tanks)

| Division | District | 2019-20 | | 2020-21 | | 2021-22 | | TOTAL | |
|--------------------|-----------------|-------------------------------|-------------------|-------------------------------|-------------------|-------------------------------|-------------------|-------------------------------|-------------------|
| | | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM | Total Data uploaded by ME&IEC | Validated by OFWM |
| Kalat | Awaran | 12 | 12 | 27 | 27 | 48 | 0 | 87 | 39 |
| Kalat | Kalat | 20 | 2 | 32 | 32 | 127 | 65 | 179 | 99 |
| Kalat | Khuzdar | 20 | 0 | 30 | 0 | 89 | 68 | 139 | 68 |
| Kalat | Lasbela | 20 | 0 | 24 | 0 | 106 | 45 | 150 | 45 |
| Kalat | Mastung | 20 | 18 | 32 | 2 | 55 | 12 | 107 | 32 |
| Kalat | Surab | 3 | 3 | 9 | 9 | 17 | 17 | 29 | 29 |
| Total | | 95 | 35 | 154 | 70 | 442 | 207 | 691 | 312 |
| (%) | | 37% | | 45% | | 47% | | 45% | |
| Loralai | Barkhan | 15 | 0 | 0 | 0 | 39 | 6 | 54 | 6 |
| Loralai | Duki | 7 | 7 | 9 | 9 | 13 | 13 | 29 | 29 |
| Loralai | Loralai | 22 | 22 | 32 | 3 | 59 | 59 | 113 | 84 |
| Loralai | Musakhail | 11 | 11 | 16 | 16 | 0 | 0 | 27 | 27 |
| Total | | 55 | 40 | 57 | 28 | 111 | 78 | 223 | 146 |
| (%) | | 73% | | 49% | | 70% | | 65% | |
| Makran | Gwadar | 3 | 0 | 4 | 0 | 0 | 0 | 7 | 0 |
| Makran | Kech | 29 | 18 | 24 | 0 | 46 | 46 | 99 | 64 |
| Makran | Panjgur | 18 | 18 | 29 | 25 | 122 | 105 | 169 | 148 |
| Total | | 50 | 36 | 57 | 25 | 168 | 151 | 275 | 212 |
| (%) | | 72% | | 44% | | 90% | | 77% | |
| Nasirabad | Jaffarabad | 0 | 0 | 8 | 8 | 9 | 9 | 17 | 17 |
| Nasirabad | Jhal Magsi | 7 | 0 | 0 | 0 | 23 | 0 | 30 | 0 |
| Nasirabad | Kachi | 18 | 18 | 24 | 24 | 40 | 40 | 82 | 82 |
| Nasirabad | Nasirabad | 0 | 0 | 8 | 8 | 9 | 9 | 17 | 17 |
| Nasirabad | Sohbatpur | 4 | 4 | 8 | 8 | 2 | 1 | 14 | 13 |
| Total | | 29 | 22 | 48 | 48 | 83 | 59 | 160 | 129 |
| (%) | | 76% | | 100% | | 71% | | 81% | |
| Quetta | Killa Abdullah | 22 | 0 | 34 | 0 | 0 | 0 | 56 | 0 |
| Quetta | Pishin | 22 | 22 | 36 | 33 | 61 | 61 | 119 | 116 |
| Quetta | Quetta | 9 | 9 | 17 | | 50 | 32 | 76 | 41 |
| Total | | 53 | 31 | 87 | 33 | 111 | 93 | 251 | 127 |
| (%) | | 58% | | 38% | | 84% | | 51% | |
| Rakhshan | Chaghi | 10 | 10 | 23 | 23 | 14 | 14 | 47 | 47 |
| Rakhshan | Kharan | 3 | 3 | 12 | | 14 | 14 | 29 | 17 |
| Rakhshan | Nushki | 9 | 9 | 23 | 23 | 30 | 30 | 62 | 62 |
| Rakhshan | Washuk | 4 | | 10 | 10 | 0 | 0 | 14 | 10 |
| Total | | 16 | 12 | 45 | 33 | 44 | 44 | 152 | 136 |
| (%) | | 75% | | 73% | | 100% | | 89% | |
| Sibi | Dera Bugti | 11 | 11 | 0 | 0 | 28 | 28 | 39 | 39 |
| Sibi | Harnai | 3 | 3 | 6 | 6 | 12 | 0 | 21 | 9 |
| Sibi | Kohlu | 9 | 9 | 18 | 18 | 0 | 0 | 27 | 27 |
| Sibi | Sibi | 8 | 8 | 5 | 5 | 10 | 5 | 23 | 18 |
| Sibi | Ziarat | 4 | 4 | 6 | 6 | 11 | 11 | 21 | 21 |
| Total | | 35 | 35 | 35 | 35 | 61 | 44 | 131 | 114 |
| (%) | | 100% | | 100% | | 72% | | 87% | |
| Zhob | Killa Saifullah | 30 | 20 | 32 | 32 | 56 | 56 | 118 | 108 |
| Zhob | Sherani | 4 | 4 | 6 | 6 | 15 | 15 | 25 | 25 |
| Zhob | Zhob | 15 | 10 | 24 | 24 | 46 | | 85 | 34 |
| Total | | 49 | 34 | 62 | 62 | 117 | 71 | 228 | 167 |
| (%) | | 69% | | 100% | | 61% | | 73% | |
| GRAND TOTAL | | 382 | 245 | 545 | 334 | 1137 | 747 | 2111 | 1343 |
| (%) | | 64% | | 61% | | 66% | | 64% | |

Division-wise Graphical Progress of Dashboard, Balochistan (Watercourses)



Division-wise Graphical Progress of Dashboard, Balochistan (Water Storage Tank)

