



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

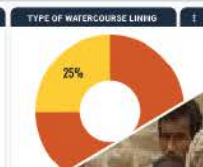
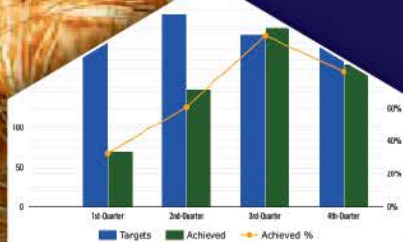
## NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION  
AND IMPACT EVALUATION  
CONSULTANTS



## MONTHLY MONITORING REPORT

NOVEMBER 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)

## MONTHLY MONITORING REPORT November 2024

### CONTENTS

EXECUTIVE SUMMARY .....	1
CHAPTER-1: PROJECT INTRODUCTION .....	3
1.1 PROJECT PROFILE .....	3
1.2 PROJECT DESCRIPTION .....	3
1.2.1 Project Development Objectives.....	3
1.2.2 Project Objectives – General & Quantitative .....	3
1.2.3 Project Beneficiaries.....	4
1.2.4 Project Components.....	4
1.2.5 Project Targets .....	5
CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS.....	8
2.1 OBJECTIVES OF CONSULTING SERVICES.....	8
2.2 SCOPE OF CONSULTING SERVICES .....	8
2.3 MONITORING STRATEGY OF CONSULTANTS .....	9
2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS .....	12
CHAPTER 3: CONSULTANTS' ACTIVITIES DURING THE REPORTING MONTH.....	13
3.1 SUBMISSION OF MONTHLY MONITORING REPORT (MMR).....	13
3.2 NPIWC-II, ME&IE CONSULTANTS CONTINUATION OF SERVICES .....	13
3.3 ACTIVITIES OF ME&IE CONSULTANTS OFFICES – NOVEMBER 2024 .....	13
3.3.1 Overall Field Progress:.....	13
3.3.2 Post Field Activities .....	15
3.3.3 Coordination / Meetings with Stakeholders / Beneficiaries .....	16
3.4 SOCIAL & GENDER IMPACT REPORT – NOVEMBER 2024.....	17
3.5 ICT TEAM ASSIGNMENTS .....	18
3.6.1 Implementation of MIS Dashboard .....	18
3.6.2 Data Rectification Meetings .....	20
3.6.3 M&E ICT Team Technical Support.....	20
3.6.4 Server Maintenance Activities.....	20
3.6.5 Refresher Training Workshops .....	20
3.6.6 On-Going Data Validation & Cleaning .....	21
CHAPTER 4: FOUR MONTHS WORK PLAN-ACTIVITIES (OCTOBER 2024 TO DECEMBER 2024).....	24
4.1 PROJECT CLOSURE ACTIVITIES (ADMINISTRATIVE) .....	24
4.2 POST FIELD ACTIVITIES .....	24

4.3	ICT ASSIGNMENT .....	24
4.4	COORDINATION .....	24
4.5	DELIVERABLES .....	24
4.6	MATRIX OF RESPONSIBILITIES.....	26
<b>CHAPTER 5: ISSUES / BOTTLENECKS .....</b>		<b>27</b>

## LIST OF ANNEXURES

ANNEXURE A: TENTATIVE WORK PLAN FOR THE FOUR MONTHS (OCT -DEC 2024) .....	29
ANNEXURE B: MATRIX OF RESPONSIBILITIES .....	30
ANNEXURE C: MONITORING LOG-FRAME .....	31
ANNEXURE D: DELIVERABLES / REPORTING REQUIREMENTS .....	36
ANNEXURE E: ECOLOGICAL ZONE WISE ACHIEVEMENTS OF M&EC OF VARIOUS INTERVENTIONS IN PUNJAB ZONE..	37
ANNEXURE F: PUNJAB - WATERCOURSE DATA SUBMISSION – SUMMARY .....	40
ANNEXURE G: PUNJAB - WSP DATA SUBMISSION – SUMMARY .....	41
ANNEXURE H: PUNJAB - PLL DATA SUBMISSION – SUMMARY .....	42
ANNEXURE I: KP - WATERCOURSE DATA SUBMISSION – SUMMARY .....	43
ANNEXURE J: KP - WST DATA SUBMISSION – SUMMARY .....	44
ANNEXURE K: KP - PLL DATA SUBMISSION – SUMMARY.....	45
ANNEXURE L: BALOCHISTAN - WATERCOURSE DATA SUBMISSION – SUMMARY .....	46
ANNEXURE M: BALOCHISTAN - WST DATA SUBMISSION – SUMMARY .....	47
ANNEXURE N: BALOCHISTAN - PLL DATA SUBMISSION – SUMMARY .....	48
ANNEXURE O: GB - WATERCOURSES DATA SUBMISSION – SUMMARY .....	49
ANNEXURE P: GB - WST DATA SUBMISSION – SUMMARY .....	50
ANNEXURE Q: AJK- WATERCOURSES DATA SUBMISSIONS – SUMMARY .....	51
ANNEXURE R: AJK - WST/WHs DATA SUBMISSIONS – SUMMARY .....	52
ANNEXURE S: ICT - WATERCOURSE DATA SUBMISSION – SUMMARY .....	53
ANNEXURE T: FPMU LETTER REGARDING ME&IE CONSULTANTS CONTINUATION OF SERVICES.....	54

## ACRONYMS

ADA	Assistant Director Agriculture
AES	Agriculture Extension Services
AF	Acre-Feet
AJK	Azad Jammu & Kashmir
AOSM	Adjustable Orifice Semi-Module
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
FTI	Field Team In charge
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
ODK	Open Data Kit
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 “Monitoring and Evaluation Report for November 2024” comprises of five chapters:

**Chapter-1** describes the detailed introduction and description of the project. The Government of Pakistan is implementing a project entitled “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 is covering Punjab, Khyber Pakhtunkhwa (KP), Baluchistan provinces, and Gilgit Baltistan (GB), Azad Jammu & Kashmir (AJ&K) as well as Islamabad Capital Territory (ICT). The present project is beneficial for the country.

The NPIWC-II comprises of four components to be implemented in Punjab, KP, Balochistan, GB, AJ&K, 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 on the objectives and scope of work of the ME&IE Consultants for the project. The ME&IE Consultants are going to monitor the implementation of all criteria set, procedures defined, and timeline agreed for implementation of various components. All these are reproduced in this report as a ready reference to devise/design M&E strategy, methodology, procedures for monitoring, and impact assessments of the project interventions.

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

**Chapter-3** explains the purpose of the Monthly Monitoring Report (MMR). The current MMR covers the period from 1<sup>st</sup> November 2024 to 30<sup>th</sup> November 2024.

This chapter also covers the activities of ME&IE Consultants, carried out during the reporting period. These are summarized below:

- Post-field activities: this included quality assurance and data re-validation to ensure thorough and accurate review of the submitted consolidated baseline and endline survey draft reports.
- Monitoring of online data collection and Data entry;
- Data collection of interventions in MIS/GIS database;
- Submitted the MMR for October 2024; and
- Meetings of ME&IE Consultants with the respective Stakeholders about Project Progress / Issues in hand and its prospects.

**Chapter-4** highlights the three months’ work plan for the period of 1<sup>st</sup> October 2024 to 31<sup>st</sup> December 2024. The work plan consists of the following activities:

- Project Closure Activities (Administrative)
- Post Field Activities
- ICT Assignment
- Coordination Meetings
- Deliverables

The detailed time for tentative work plan of three months (Oct-Dec 2024) is provided in the Tentative Work Plan **Annex-A**.

**Chapter-5:** Issues / problems faced by the consultants during the reporting period of the assignment are described in this Chapter.

**Table-1: Compliance Status of Tentative Work Plan during the Reporting Quarter**

No.	Activities Planned for the Three Months (Oct-Dec 2024)		Status	
1	Project Closure Activities (Administrative)			
	1.1	Preparing Remuneration & Reimbursable invoices	In Progress	
	1.2	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	In Progress	
	2.2	Data Cleaning and Preparation	In Progress	
	2.3	Data Analysis	In Progress	
	2.4	Creating Final Tables for drafting of the Report	In Progress	
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 when required	
	4.2	Meeting of DTLs with respective DTL of NWMC	Meetings conducted when required	
	4.3	Internal Meetings of ME&IE Consultants	Weekly meetings conducted on a regular basis	
5	Deliverables:			
	5.1	Monthly Monitoring Reports (MMRs)	45 <sup>th</sup> MMR (Sep 2024)	Submitted
			46 <sup>th</sup> MMR (Oct 2024)	Submitted
			47 <sup>th</sup> MMR (Nov 2024)	Report in hand
	5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jul-Sep 2024	Submitted
	5.3	Baseline Survey Report – Consolidated (Draft)	Submitted	
	5.4	Endline Survey Report (Draft)	Submitted	
5.5	Draft Assignment Completion Report	Will be submitted on the stipulated time		

## CHAPTER-1: PROJECT INTRODUCTION

### 1.1 PROJECT PROFILE

This section covers the following detail of the project:

**Project Name:** National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)

**Project Areas:** Punjab, Khyber Pakhtunkhwa, 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:  
Federal Project Management Unit (FPMU),  
i. DGA OFWM Punjab  
ii. DG OFWM KP  
iii. DGA OFWM Baluchistan  
iv. Director Irrigation and Small Dams, AJ&K  
v. Director WM, GB  
vi. Director Agriculture Extension Services (AES) ICT

**Project Period:** 5 Year (2019-2024)

**Total Project Cost:** Rs. 154,542.355 million (Umbrella PC-1, including Sindh)

**ME&IE Consultancy Period:** 4 years

**ME&IE Consultant:** JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering Services (Pvt.) Ltd., Centre for Social Research and Development (CSR), ADA Consultants Inc. Canada, and S&S Associates.

**ME&IE Consultant Mobilized:** November 07, 2020

### 1.2 PROJECT DESCRIPTION

Project description includes the following i.e., the project development objectives, project objectives, project benefits, project components, etc.:

#### 1.2.1 Project Development Objectives

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

#### 1.2.2 Project Objectives – General & Quantitative

The following are the project's general and quantitative:

##### 1) General Objectives:

The Project aims at 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:

- Social mobilization through capacity building of WUAs/ FOs,
- Minimization of conveyance and field application losses,
- Reduction in Water Logging and salinity,
- Equity in water distribution,
- Reduction in water disputes/thefts/litigation,
- Motivation/participation of farmers,
- Poverty reduction through employment generation, and
- Increase in crop yield/self-sufficiency in food.

##### 2) Quantitative Objectives' Outputs and Impacts:

The quantitative objectives' outputs and impacts of the Project are as under:

##### Project outputs

- 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.
- 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 a 60% subsidy through cost-sharing arrangements with the expectation to save about 50% of irrigation water for wheat and about 68% of irrigation water for paddy crops.

#### **Project impacts**

- Reduction in Water Logging and salinity in project areas to the extent of 10%.
- Cropping intensity is expected to increase by 5-20%.
- Crop's yield is estimated to increase by 10-15%.
- Equity in water distribution increased by about 30%.
- Reduction in water disputes/thefts and litigation amongst the Farmers over water distribution by about 80%.
- Help poverty reduction through the generation of employment.
- Self-sufficiency in food through water-saving, including edible oil seed production.

#### **Project's indirect benefits to industry/economic activities**

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

#### **Awareness support to farmers**

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

#### **1.2.3 Project Beneficiaries**

The Majority of the project's direct beneficiaries constitute the number of farmers (owners and tenants) growing crops and orchards on the watercourses improved under NPIWC-II. Assuming 35 farmers on each watercourse, the total number of farmers benefiting from the activity comes to 1.655 million. The same number will be benefited due to Water Users' Associations (WUAs) in terms of cooperative management of irrigation water. Moreover, 14,932 farmers 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, the total net population benefitting is expected to be 8.34 million people.

#### **1.2.4 Project Components**

The NPIWC-II project comprises of four components:

##### **C1: ORGANIZATION OF WATER USERS ASSOCIATIONS:**

Establishment / reactivation of Water Users Associations (WUAs) through a community-driven implementation approach. Following are the scope of WUAs:

- Provide a right of way for constructing a watercourse,
- Arrange skilled and unskilled labour required for reconstruction / maintenance of earthen water channel, installation of water control structures, and lining of critical reaches,
- Procure construction materials for carrying out civil works,
- Settle matters of disputes amongst the water users in respect of channel alignment, fixation of Naccas, distribution of work, etc.
- Make alternate arrangements for conveyance of water during execution of improvement works,
- Carry out civil works by standards and specifications under the supervision of OFWM field staff,
- Regularly undertake O&M of improved watercourses after its construction.

##### **C2: WATERCOURSE IMPROVEMENTS:**

47,278 Watercourses are planned to be improved /reconstructed and lined adopting the following criteria:

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

##### **C3: CONSTRUCTION OF WATER STORAGE TANKS:**

The project will construct 14,932 Water Storage Tanks (WSTs). Following will be the benefits of WSTs:

- 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 canals and rainfall runoff water for its more expedient use subsequently,
  - iii) Collect, store and filter water from:
    - Small Dams, springs, streams, nullahs, etc.
    - Rainfall runoff over agricultural catchment during rainy season
    - Tube-wells and dug wells of low flows
    - Tail-waters from agricultural fields
  - iv) Regulate the flows so that it can be used efficiently when needed at large flow rates.

#### **C4: PROVISION OF LASER LAND LEVELING UNITS:**

Provision of 11,610 Laser Land Leveling (LLL) units to the farmers; the component is strengthening of LLL

services in the country through the provision of LLL Units to farmers/service providers at 50% subsidized rates arrangement.

#### **1.2.5 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**.

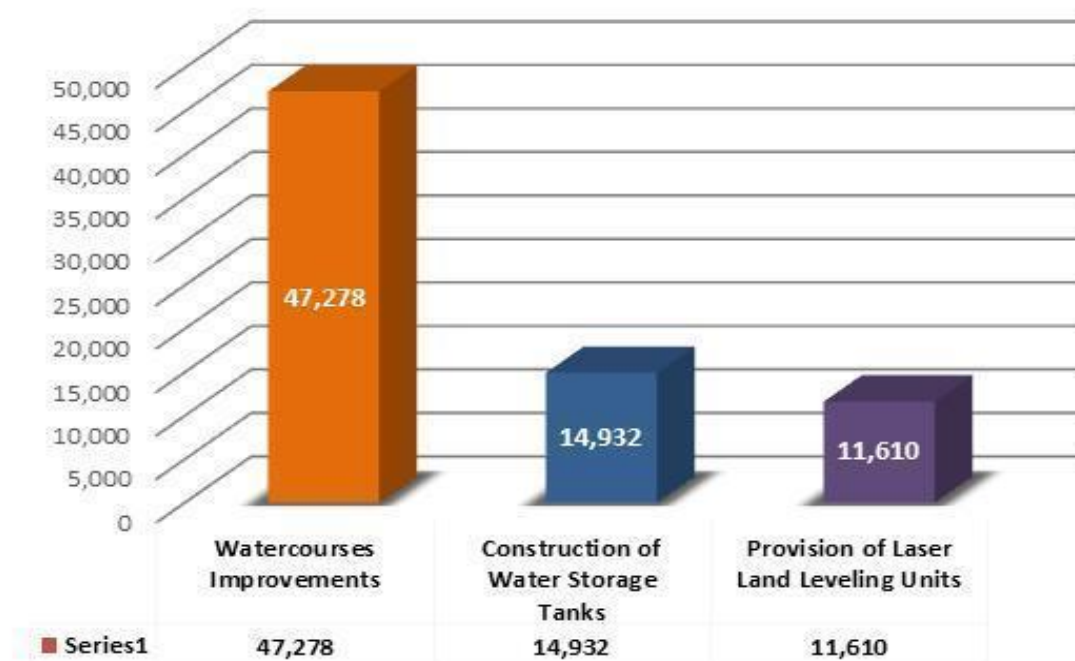
#### Project Targets



**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	<b>Reconstruction of Watercourses</b> (more than 20 years old/Additional lining 50 %)	7,500	3,000	3,589	-	-	-	<b>14,089</b>
	<b>New Watercourses (Unimproved)</b>	2,500	10,000	16,800	2,500	1,165	224	<b>33,189</b>
	<b>Total Watercourses</b>	10,000	13,000	20,389	2,500	1,165	224	<b>47,278</b>
2	<b>Water Storage Tanks</b>	3,000	5,000	5,507	825	600	-	<b>14,932</b>
3	<b>Laser Land Leveling Units</b>	9,500	600	1,500	5	5	-	<b>11,610</b>



**Figure 1.2: National Level Targets**

**Table 1.2: Province-wise year-wise Watercourses targets**

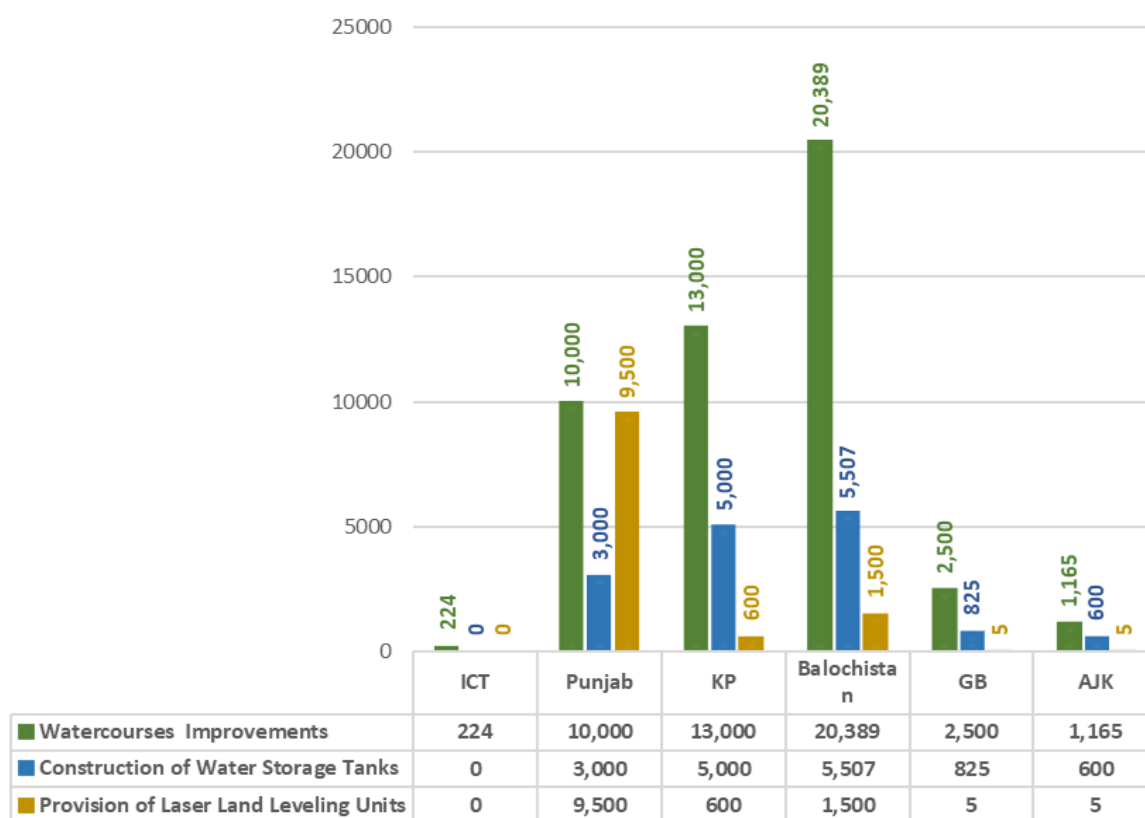
Sr. No.	Province / Unit	Watercourses (Numbers)					
		Year-1	Year-2	Year-3	Year-4	Year-5	Total
1	Punjab	1,000	1,100	2,700	2,800	2,400	10,000
2	Khyber Pakhtunkhwa	1,600	3,200	3,200	3,200	1,800	13,000
3	Balochistan	2,020	5,250	5,530	4,800	2,789	20,389
4	Gilgit Baltistan	496	496	500	504	502	2,500
5	AJK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

**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	-	-	-	-	-	-
<b>Total</b>		<b>1,593</b>	<b>2,984</b>	<b>3,895</b>	<b>3,785</b>	<b>2,675</b>	<b>14,932</b>

**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	-	-	-	-	-	-
<b>Total</b>		<b>1,900</b>	<b>2,754</b>	<b>2,806</b>	<b>2,600</b>	<b>1,550</b>	<b>11,610</b>



**Figure 1.3: Zonal/Unit Level Targets**



## CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS

The ME&IE Consultants' services are designed to be provided through a multi-disciplinary team of qualified professionals. All the firms in the joint venture have rich experience in the field of monitoring and evaluations (M&E). The team deputed for this task in the project, comprises of highly qualified professionals having long and rich practical experience of such projects earlier launched in Pakistan. The consultants are developing a "State-of-the-Art Management Information System" (MIS) with a "Geographical Information System" (GIS) focused on NPIWC-II to monitor progress on project interventions and to carry out an effective monitoring process. The MIS is helping the decision makers to make informed decisions.

### 2.1 OBJECTIVES OF CONSULTING SERVICES

The objective of the ME&IE Consultants' services is to carry out M&E of project impacts to ensure the achievement of project development objectives.

### 2.2 SCOPE OF CONSULTING SERVICES

The ME&IE Consultants are responsible for monitoring, evaluation, and impact evaluation (ME&IE), and in this context are carrying 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 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. The economic impact of project interventions,
- ix. Carry out the impact evaluation of the project intervention on the economy and stakeholders,
- x. Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks, laser Levelers database, etc. (while the project's IT 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 updation / 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 an application interface.
- Development of an 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.
- The application should generate custom-designed reports and analyses as per user-defined requirements.
- The application should generate alerts (SMS, email, web notifications) to the user on the non-conformance of the project's key indicators; the application should have the provision to custom define alert levels and desired notifications.

### 2.3 MONITORING STRATEGY OF CONSULTANTS

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in **Table-2.2**. However, detailed methodology and procedures to

carry out the ME&IE of the project interventions were explained in Chapter 6 of the Inception Report.

**Table 2.2: Monitoring Strategy for ME&IE Activities**

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
1	Baseline, midline, and End line surveys	Team Leader, Socio-Economic Expert, Agricultural Economist, and Deputy Team Leader of the respective Province/Unit.	<ul style="list-style-type: none"> <li>Baseline and impact surveys will be carried out on a sample basis.</li> <li>Data will be collected by field teams on pre-designed data collection tools through an Android application on TABs.</li> <li>Baseline and impact surveys will be carried out in phases as target watercourses are not pre-selected.</li> <li>Baseline will be carried out before launching the interventions and the impact one year (two crop seasons) after the completion of the intervention.</li> <li>The midterm study will review the project progress in the middle of the project implementation.</li> <li>The end line study will assess the impact of the project interventions.</li> </ul>
2	Reporting	All core team members	<p>Following periodic reports will be prepared and submitted:</p> <ul style="list-style-type: none"> <li>Draft Inception Report 45 days after the agreement,</li> <li>Final Inception Report one week after the issuance of comments by the client on the draft,</li> <li>Monthly Monitoring Report on 10th of the following month,</li> <li>Quarterly Monitoring Report on 10th of the first month of the following quarter,</li> <li>Annual Monitoring and Evaluation Report during first month of the following year,</li> <li>Baseline Survey Reports (in three phases),</li> <li>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.</li> <li>Impact Survey Reports (in phases) – two months after the data collection completion for the impact phase,</li> <li>Midline report in the middle of the assignment,</li> <li>End line Report at the end of end line Survey,</li> <li>Draft Assignment Completion Report at completion of the physical works,</li> <li>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 the agriculture sector as well as on the GDP of Pakistan,</li> <li>Special Reports, as and when asked by the client.</li> </ul>
3	Water saving assessment	Irrigation Agronomist, Field Team/ Engineers	<p><b>Water Saving on Watercourses:</b></p> <ul style="list-style-type: none"> <li>Water flow will be measured on sample watercourses selected for the baseline and impact surveys</li> <li>The flow will be measured at four points of the selected watercourses: close to water outlet, head reach, middle reach and tail reach.</li> </ul>

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

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
	the economy	Economist and Socio-Economic Expert	<ul style="list-style-type: none"> <li>Additional food produced due to the project will be estimated. It is benefitted towards food security</li> <li>Project costs and benefits will be compared in economic and financial terms to carry out economic and financial analysis.</li> <li>Parameters like IRR, NPV, and BCR will be estimated.</li> </ul>
7	Impact evaluation on the stakeholders	Team Leader, Agricultural Economist, and Socio-Economic Expert	Analysis as in serial 6 will be carried out concerning 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 land 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 Dept., Project Consultants, ME&IE Consultants & ICT/Technology Specialist	<ul style="list-style-type: none"> <li>The processed data for all the interventions will be fed to the MIS/GIS database.</li> <li>Client's field staff and field teams of consultants will furnish data of their activities.</li> <li>The ME&amp;IE will assist in developing mobile application for this purpose</li> <li>From this data reports will be generated for process monitoring</li> <li>All interventions will be fully (100%) covered.</li> </ul>
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"> <li>The State-of-the-art MIS / Progress Monitoring Model will be developed for NPIWC-II.</li> <li>Customized forms will be developed to collect data from the implementing teams on-site for progress monitoring</li> <li>These forms will be made available to the teams on smart phones through an Android application</li> <li>The teams will be adequately trained to use the application</li> <li>Data on physical and financial stages with dates will be fed to the system for process monitoring</li> <li>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</li> <li>The system will be maintained on GOOGLE server so that it is accessible by the management from anywhere in Pakistan and abroad</li> <li>Custom reports will be possible as the user demands / desires</li> <li>The results could be displayed on small as well as large screens.</li> </ul>
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 are further being enhanced and refined in consultation with the client as well as the stakeholders.

The improvement of indicators is a continuous process throughout the project implementation in the light of real and on-ground situations.

## CHAPTER 3: CONSULTANTS' ACTIVITIES DURING THE REPORTING MONTH

As part of the regular ME&IE assignment, routine field visits and monitoring of project interventions in the field were consistently conducted by the ME&IE consultants. Additionally, the consultants undertook various in-house activities associated with the ME&IE assignment.

### 3.1 SUBMISSION OF MONTHLY MONITORING REPORT (MMR)

In accordance with contractual obligations, the consultants have submitted the forty- sixth Monthly Monitoring Report (MMR) for October 2024. The current submission pertains to the forty-seventh MMR, covering the reporting period of November 2024 (1<sup>st</sup> November 2024 to 30<sup>th</sup> November 2024).

This Monthly Monitoring Report (MMR) outlines the progress and understanding of all activities undertaken as per the Terms of Reference (TORs) of the ME&IE consultants' assignment, ensuring their completion within the specified timeframe. The activities include, but are not limited to, project closure tasks, consolidation of baseline and endline survey data, validation, cleaning, analysis, and interpretation of findings for preparing and documenting the respective reports.

Additionally, ICT-related assignments such as monitoring online data collection in the field, developing and enhancing the project dashboard, and updating or developing the project website were also undertaken. The ICT team maintained regular communication with the Client's officials, assisting with data entry on the dashboard and providing support as needed.

All activities during the reporting month adhered to the three-month work plan of the consultants. Consequently, the primary objective of this MMR is to provide the Client with a comprehensive update on the activities executed by the ME&IE consultants during the reporting period. Reporting remains a critical component of the monitoring and evaluation framework.

### 3.2 NPIWC-II, ME&IE CONSULTANTS CONTINUATION OF SERVICES

The ME&IE Consultancy Contract Agreement between FPMU (Ministry of National Food Security & Research) and G3JV for the NPIWC-II project expired on 25 October 2024. However, in the light of FPMU letter No. F.1-7/2018-PLAN (WM) dated 9<sup>th</sup> October 2024 (copy attached as Annex-T), The G3 JV / ME&IE Consultants are continuing to provide services and are maintaining approved staff and office operations across all zones despite the contract's expiration.

### 3.3 ACTIVITIES OF ME&IE CONSULTANTS OFFICES – NOVEMBER 2024

An overview of the significant tasks completed, observed and assessed by the ME&IE consultants by all the ME&IE Consultants' offices under the supervision of the National Office, Islamabad during November 2024.

#### 3.3.1 Overall Field Progress:

The Monitoring and Evaluation (M&E) and Impact Evaluation (IE) consultants have successfully achieved an overall sample size of more than 5% of the targeted population across nearly all zones, ensuring at least a 5% sample size in each district within the project's zones. This achievement highlights the dedicated efforts of all teams in conducting comprehensive baseline surveys, impact evaluations, and regular or spot-check monitoring activities. By meeting the targeted percentage assigned by the NPC office for the project's zones, a solid foundation has been established for broader data collection and analysis, ensuring a representative sample of the targeted population.

#### Field visits by the ICT Field Team

Since its establishment, the ME&IE Consultants of the ICT-Unit field team have carried out baseline and impact surveys for over **46** watercourses across AJK and ICT, as well as similar assessments for more than **25** water storage tanks in AJK and **19** tanks located within four districts of Punjab's Potohar region.

AJK UNIT			
District	WC	WST	PLL
Bagh	2	3	0
Bhimber	9	2	0
Haveli	1	2	0
Jhelum	3	4	0

AJK UNIT			
Kotli	2	2	0
Mirpur	8	1	0
Muzaffarabad	7	7	0
Neelum	4	0	0
Poonch	2	3	0
Sudhnoti	1	1	0
<b>AJK Total</b>	<b>39</b>	<b>25</b>	<b>0</b>
ICT UNIT			
District	WC	WST	PLL
ICT	7	0	0
<b>ICT Total</b>	<b>7</b>	<b>0</b>	<b>0</b>
POTOHAR REGION OF PUNJAB			
District	WC	WST	PLL
Attock	0	6	0
Chakwal	0	7	0
Jhelum	0	2	0
Rawalpindi	0	4	0
<b>Potohar Region Total</b>	<b>0</b>	<b>19</b>	<b>0</b>

PUNJAB ZONE			
Mandi Bahauddin	4	2	8
Mianwali	4	1	7
Multan	9	5	8
Muzaffargarh	6	2	12
Nankana Sahib	3	2	7
Narowal	1	0	7
Okara	15	1	7
Pakpattan	6	1	11
Rahim Yar Khan	18	4	14
Rajanpur	6	1	6
Rawalpindi	0	4	0
Sahiwal	8	1	8
Sargodha	8	2	6
Sheikhupura	8	2	7
Sialkot	5	1	5
Toba Tek Singh	6	3	9
Vehari	6	1	8
<b>Punjab Total</b>	<b>250</b>	<b>80</b>	<b>306</b>

#### Field visits by the Punjab Field Teams

As of the reporting month, the Punjab field team of ME&IE Consultants has successfully conducted baseline and impact surveys for **250** watercourses. Additionally, **80** water storage tanks in Punjab were surveyed for baseline and impact assessments—**61** visits were completed by the Punjab field team, while **19** were carried out by the ICT-Unit field team. Furthermore, the Punjab field team conducted impact assessments for 306 PLL interventions.

PUNJAB ZONE			
District	WC	WST	PLL
Attock	0	6	0
Bahawalnagar	22	3	15
Bahawalpur	9	1	12
Bhakkar	11	5	10
Chakwal	0	7	0
Chiniot	3	1	15
Dera Ghazi Khan	9	3	8
Faisalabad	9	2	14
Gujranwala	7	1	12
Gujrat	6	2	6
Hafizabad	10	3	10
Jhang	5	2	15
Jhelum	0	2	0
Kasur	6	2	12
Khanewal	7	2	9
Khushab	8	2	8
Lahore	2	1	6
Layyah	8	1	16
Lodhran	15	1	8

#### Field visits by the KP Field Teams

Since its inception, the KP field team of ME&IE Consultants has conducted baseline and impact surveys for **205** watercourses in KP and **40** in GB. Additionally, they have completed baseline and impact surveys for **79** water storage tanks in KP and **15** in GB. The team also carried out impact assessment field visits for **5** PLL interventions in KP.

KP ZONE			
District	WC	WST	PLL
Abbottabad	2	1	0
Bannu	5	1	0
Battagram	3	1	0
Buner	6	2	0
Charsadda	7	1	0
Chitral	6	1	0
Dera Ismail Khan	38	10	5
Hangu	3	0	0
Haripur	9	5	0
Karak	4	4	0
Khyber	2	2	0
Kohat	5	1	0
Lakki Marwat	6	2	0
Lower Dir	7	1	0
Lower Kohistan	1	0	0
Lower Mohmand	2	3	0
Malakand	6	2	0
Mansehra	15	4	0
Mardan	7	3	0
Nowshera	20	8	0
Peshawar	13	7	0
Shangla	3	2	0

KP ZONE			
District	WC	WST	PLL
Swabi	6	1	0
Swat	14	8	0
Tank	4	2	0
Torghar	2	0	0
Upper Dir	6	3	0
Upper Kohistan	1	1	0
Upper Mohmand	2	3	0
<b>KP Total</b>	<b>205</b>	<b>79</b>	<b>5</b>
GB UNIT			
District	WC	WST	PLL
Astore	2	1	0
Diamer	6	2	0
Ghanche	6	0	0
Ghizer	4	2	0
Gilgit	5	3	0
Hunza	2	1	0
Kharmang	2	1	0
Nagar	2	1	0
Shigar	4	2	0
Skardu	7	2	0
<b>GB Total</b>	<b>40</b>	<b>15</b>	<b>0</b>

#### Field visits by the Balochistan-Zone Field Teams

As of the reporting month, the Balochistan field team of ME&IE Consultants has completed baseline and impact surveys for **203** watercourses. Moreover, they conducted baseline and impact surveys for **148** water storage tanks and completed impact assessment surveys for **7** PLL interventions.

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
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

BALOCHISTAN ZONE				
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
<b>Balochistan Total</b>	<b>203</b>	<b>148</b>	<b>7</b>	<b>358</b>

### 3.3.2 Post Field Activities

The ME&IE Consultants performed the following quality assurance and data re-validation activities to ensure thorough and accurate review of the submitted baseline and endline survey draft reports. These activities aim at to enhance the completeness, quality, and clarity of the reports in preparation for the upcoming second draft:

#### 1. Detailed Data Review and Error Checking

**Deep Data Consistency Check:** Rechecked data consistency across the baseline and impact surveys, ensuring all fields (e.g., water savings, and income increases) align logically across different Units/sections and zones.

**Anomaly Detection:** Identified and investigated data outliers or anomalies, particularly in areas like crop yields or income changes. It was looked at for any extreme/ odd values that may have led to distort the overall trends or calculations.

#### 2. Statistical Validation

**Cross-Verification with Statistical Models:** Used basic statistical tests to validate trends between pre- and post-intervention data, ensuring statistical inferential significances in yield and income data changes.

**Re-Evaluation of Calculated Averages and Totals:** Recalculated averages and totals for key variables (e.g., water savings, income growth) to ensure accuracy. The estimated values compared with the initial values to confirm stability.



### 3. Focused Comparison and Trend Analysis

**Zone-by-Zone Review:** Reassessed data of each zone and unit (Punjab, KP, Balochistan, ICT, AJK, GB) independently, ensured that data trends and findings align with the specific regional context.

**Detailed Pre-and Post-Intervention Comparison:** closely watched the changes in crop yields, incomes, and cultivated area metrics for each intervention, verifying accuracy and clarity in reporting.

### 4. Enhanced Data Cleaning

**Further Error Correction:** Performed additional data cleaning of fields that contained minor inconsistencies or errors.

**Data Deduplication:** Re-examined/ reconciled datasets for duplicate entries, particularly in farmer or location data, to ensure no redundancies effect on the final analysis.

### 5. Final Report Structure and Content Review

**Review of Report Tables and Visuals:** Carefully assessed each table, chart, and graph for accuracy, readability, and relevance, and verified that figures and labels accurately represent the data.

**Improved Visualization and Narratives:** Add clear, descriptive captions to all tables and visuals to help the client understand key findings at a glance. Summarize the findings succinctly in each section.

Through this report, we once again request yours good office's feedback on our submitted Baseline Survey Report - Consolidated (Draft) and Endline Survey Report (Draft) which we have still not received from your office after lapse of almost two month.

#### **3.3.3 Coordination / Meetings with Stakeholders / Beneficiaries**

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

During the reporting month, the ME&IE Consultants Zonal teams remained in touch with their respective OFWM Departments.

### 3.4 SOCIAL & GENDER IMPACT REPORT – NOVEMBER 2024

#### Suggestions and steps for improvement of National Water Courses Improvement Program (NWCIP) Phase-II:

1. Conduct a thorough review: Conduct a thorough review of the program's progress, achievements, and challenges to identify areas for improvement.
2. Stakeholder engagement: Engage with stakeholders, including farmers, water users, and local communities, to gather feedback and suggestions for improvement.
3. Capacity building: Provide training and capacity-building programs for program staff, farmers, and water users to enhance their skills and knowledge.
4. Institutional strengthening: Strengthen institutions involved in the program, including water user associations and local government departments.
5. Improved water management: Implement improved water management practices, including water conservation and efficient use of water.
6. Climate-resilient infrastructure: Invest in climate-resilient infrastructure, including flood-resistant canals and water storage facilities.
7. Monitoring and evaluation: Establish a robust monitoring and evaluation system to track progress and identify areas for improvement.
8. Community-based approach: Adopt a community-based approach, involving local communities in the planning, design, and implementation of the program.
9. Private sector participation: Encourage private sector participation in the program, including public-private partnerships and private sector financing.
10. Policy and regulatory framework: Strengthen the policy and regulatory framework governing water resources management and irrigation development.

#### Improving Women's Participation at the Policy Level

1. Conduct a gender analysis: Conduct a gender analysis of the program to identify the different needs, roles, and responsibilities of men and women in water management.
2. Establish a gender mainstreaming strategy: Establish a gender mainstreaming strategy to ensure that women's needs and perspectives are integrated into the program.
3. Increase women's representation: Increase women's representation in decision-making bodies, including water user associations and local government departments.
4. Provide training and capacity building: Provide training and capacity-building programs for women to enhance their skills and knowledge in water management.
5. Support women-led initiatives: Support women-led initiatives and projects that promote women's empowerment and participation in water management.
6. Develop a gender-sensitive monitoring and evaluation framework: Develop a gender-sensitive monitoring and evaluation framework to track progress and identify areas for improvement.
7. Strengthen policy and legislative frameworks: Strengthen policy and legislative frameworks governing water resources management and irrigation development to promote women's rights and participation.
8. Promote women's access to credit and markets: Promote women's access to credit and markets to support their economic empowerment and participation in water management.
9. Support women's organizations and networks: Support women's organizations and networks to promote women's empowerment and participation in water management.
10. Develop a communication strategy: Develop a communication strategy to raise awareness about the importance of women's participation in water management and the benefits of the program.

### 3.5 ICT TEAM ASSIGNMENTS

#### 3.6.1 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	22-23	Overall
Bahawalpur	81	289	344	88	8	810
D.G Khan	50	225	272	93	14	654
Faisalabad	93	315	380	109	24	921
Gujranwala	49	213	278	30	6	576
Gujrat	52	159	222	43	5	481
Lahore	64	231	321	87	3	706
Multan	102	228	266	78	11	685
Sahiwal	71	159	274	91	1	596
Sargodha	78	235	311	56	3	683
Overall	640	2054	2668	675	75	6112

So far, Total **6,112** 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	2019-20	2020-21	2021-22	2022-23	2023-24	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					
Division	19-20	20-21	21-22	22-23	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**).

### 3.6.2 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.

### 3.6.3 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.

### 3.6.4 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.

### 3.6.5 Refresher Training Workshops

The M&E ICT team has conducted more than 16 training/refresher training workshops since inception till date. The list is given below. 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.

**List of Capacity Building Trainings of OFWM Staff**

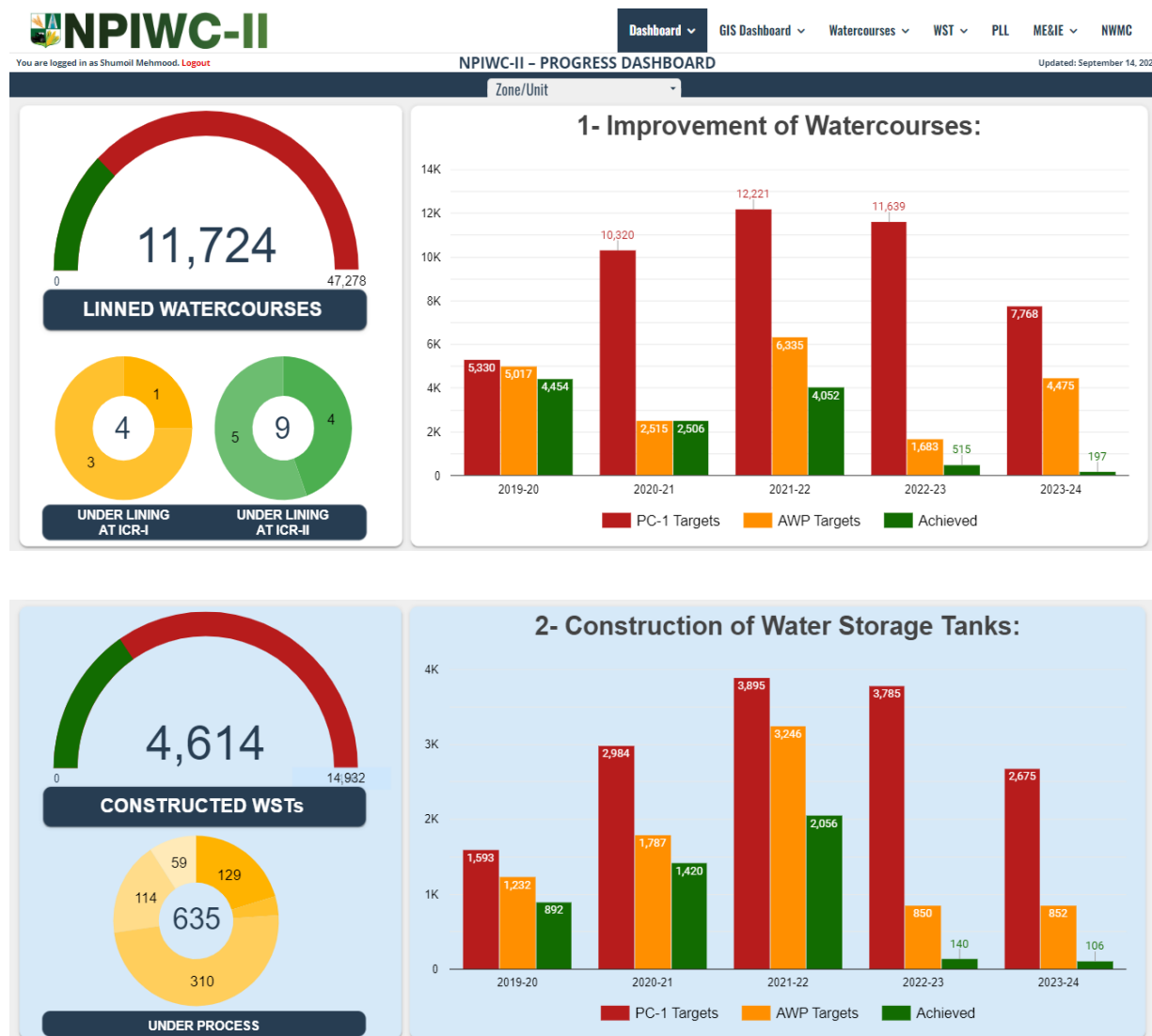
Sr. No.	Training Location	Days	Date
1	Muzaffarabad (AJK)	3	02-Nov to 04-Nov 2021
2	Islamabad	1	14-Jan-22
3	Muzaffarabad – Refresher Training	1	25 Feb 2022
4	Rawalakot – Refresher Training	1	28 Feb 2022
5	D.I. Khan	1	03 Mar 2022
6	Abbottabad	1	08 Mar 2022
7	Peshawar	1	11-Mar-22
8	Peshawar – Refresher Training	1	12 Aug 2022
9	Inhouse Training	4	21-Sep to 24-Sep 2022
10	Quetta	2	07-Dec to 08-Dec 2022
11	Abbottabad – Refresher Training	1	22 Jan 2023
12	Peshawar – Refresher Training	4	06 Feb to 09 Feb 2023
13	Peshawar – Refresher Training	2	29 April to 30 April 2024
14	D.I. Khan – Refresher Training	2	2 May to 3 May 2024
15	Sawat Training	2	7 May to 8 May 2024
16	Abbottabad – Refresher Training	2	9 May to 10 May 2024

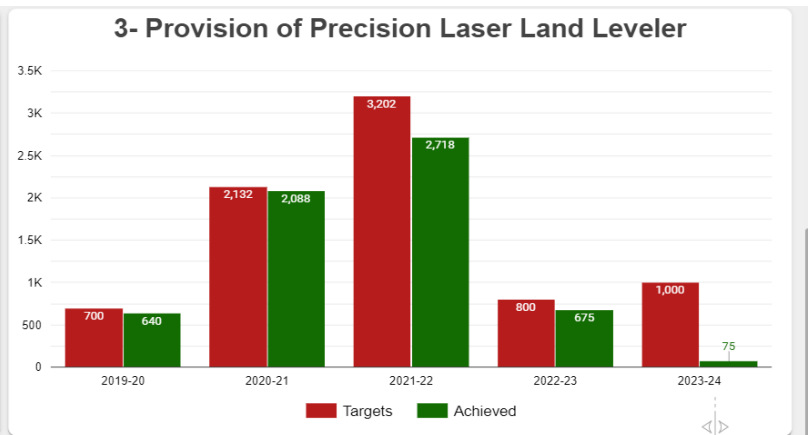
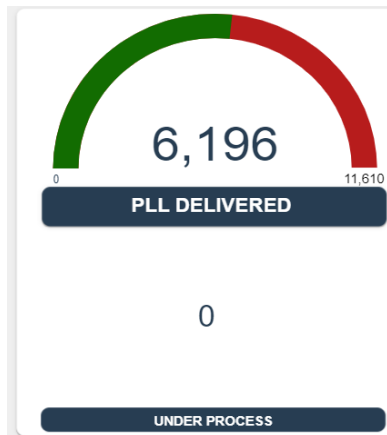
### 3.6.6 On-Going Data Validation & Cleaning

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

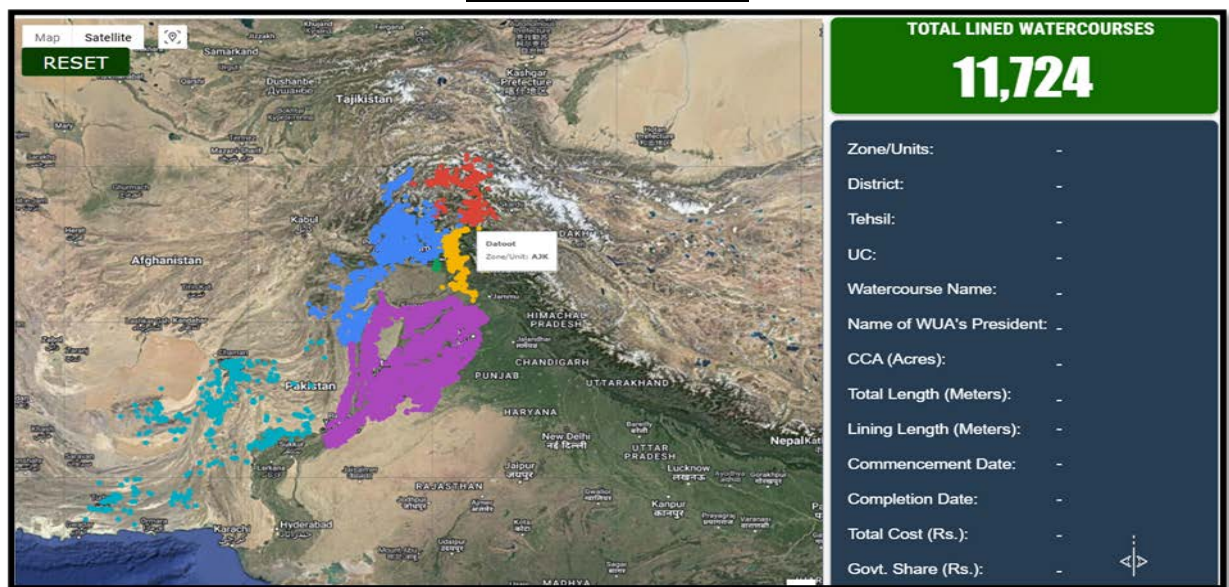
has remained actively involved in cleaning and validating the incoming data. Any identified errors are immediately communicated to the respective Zonal DDs/ADs for prompt rectification..

## NATIONAL PMIS DASHBOARD PROGRESS





## GIS Component



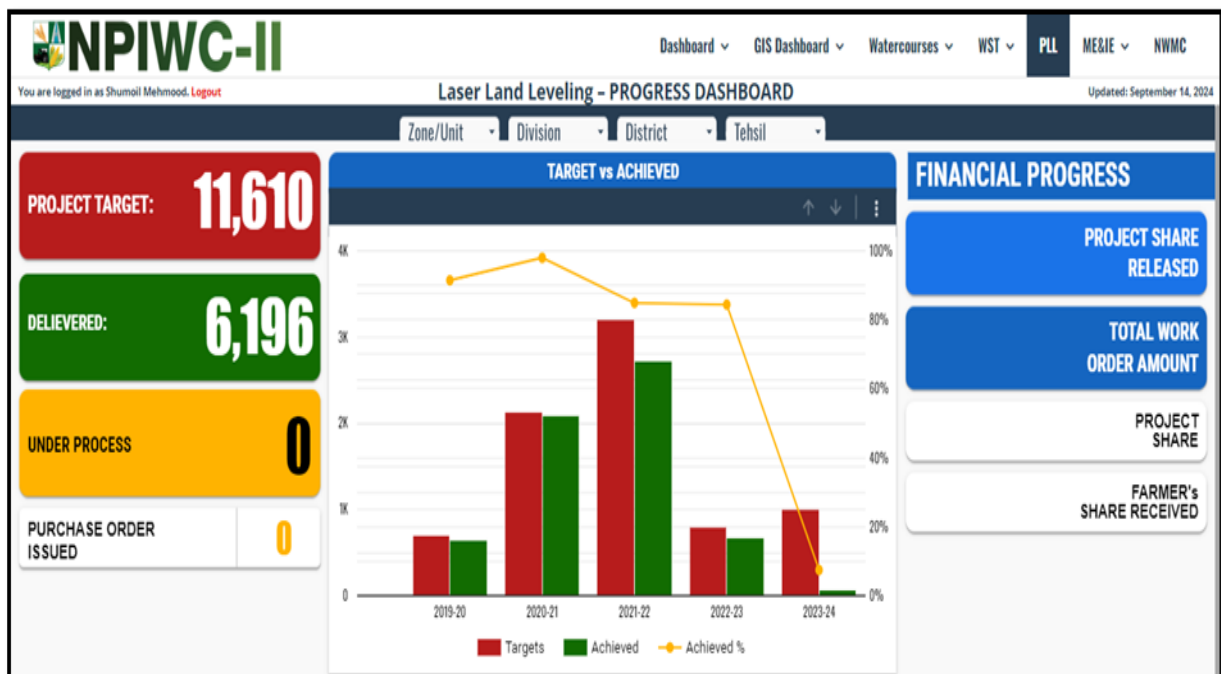
## Watercourses Component



## Water Storage Tank Component



## Precision Laser Land Leveler (PLL)





## CHAPTER 4: FOUR MONTHS WORK PLAN- ACTIVITIES (OCTOBER 2024 TO DECEMBER 2024)

The ME&IE Consultants' activities initiating during the first four months of the financial year, 2024-2025 (1<sup>st</sup> October 2024 to 31<sup>th</sup> December 2024) are listed below: A tentative work plan of four months for this period is given as **Annex-A**.

### 4.1 PROJECT CLOSURE ACTIVITIES (ADMINISTRATIVE)

- Preparing Remuneration & Reimbursable invoices
- Handing over the project assets to the client

### 4.2 POST FIELD ACTIVITIES

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

### 4.3 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.

### 4.4 COORDINATION

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

### 4.5 DELIVERABLES

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

Document	Status
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 <sup>st</sup> )	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
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

Document	Status
Monthly Monitoring Report-Eighteenth (JUNE 2022)	Submitted
Quarterly Monitoring & Evaluation Report- year 2022 (APRIL – JUNE 2022)	Submitted
Annual Monitoring & Evaluation Report (2 <sup>nd</sup> 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
Quarterly Monitoring & Evaluation Report-1 <sup>st</sup> 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	Submitted

Document	Status
Sixth (December 2023)	
Quarterly Monitoring & Evaluation Report-2 <sup>nd</sup> 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)	Submitted
Monthly Monitoring Report-Forty Sixth (October 2024)	Submitted
Monthly Monitoring Report-Forty Seventh (November 2024)	Report in hand being submitted
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
Baseline Survey Report – Consolidated (Draft)	Submitted
Endline Survey Report (Draft)	Submitted
Special Reports submitted: 1) Monitoring Tools	Submitted

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

\* The Yellow highlighted deliverables mentioned above were submitted during the reporting quarter as specified in the QM&ER.

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

#### 4.6 MATRIX OF RESPONSIBILITIES

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

## 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.
- ☐ 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.
- ☐ 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.
- ☐ AJK-Last WST received date was 09 August 2024
- ☐ AJK-Last Water Course received date was 19 August 2024

# ANNEXES A to T



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

TENTATIVE WORK PLANNED FOR THE THREE MONTHS (October 2024 To December 2024)													Legend		
													Activity starts		
													Activity Ends		
													Activity Span		
No.	ACTIVITIES	3 Months-Year 2024 (Weeks)													
		Oct				Nov				Dec					
		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	Preparing Remuneration & Reimbursable invoices													
	1.2	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	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. (CEMM)	Project Consultants	ME&IE Consultants
1	<b>Provision of Pre-requisite data of project components for starting of Field Activities:</b> <ul style="list-style-type: none"> <li>• Organization of Water Users Associations,</li> <li>• Watercourses Improvement,</li> <li>• Water Storage Tanks,</li> <li>• Laser Land Levelers,</li> </ul>	○	●	-	-
2	<b>Certification of operational documents of the project,</b> <ul style="list-style-type: none"> <li>• Design, cost estimates, completion reports of watercourses,</li> <li>• Design, cost estimates, completion reports of water storage tanks,</li> </ul>	○	○	●	-
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 Sub-components	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
<b>C1: Organization of Water Users' Associations (WUAs)</b>	Reactivation of existing / organization of water users' associations. Ensuring one on each target watercourse. Total WUAs ensured 47,278.	i. Community mobilization at 47,278 watercourses	i. Total 47,278 WUAs reactivated / established/registered	i. Right of way of 47,278 watercourses available ii. Skilled and unskilled labor required for watercourse improvement available iii. Construction material for civil works of watercourses procured iv. Alternate arrangement for water conveyance during construction made v. Watercourse improved	i. Disputes among the water users settled ii. Farmers branched improved iii. Water allocation made amicably iv. Maintenance of watercourses, WST and laser units done v. Cooperation among farmers increased	i. 47,278 watercourses improved and 15 percentage points conveyance losses reduced ii. Litigation among farmers reduced	i. The functioning of the WUAs will be established through sample interview surveys of WUAs members twice during the project period
<b>C2: Watercourses Improvements</b>	Improvement of 47,278 watercourses on cost sharing basis: 40% farmers in terms of labor, and	i. Establishment of 47,278 Water users' associations (WUAs); ii. Registration of	i. 47,278 WCAs established; ii. 47,278 WCAs registered; iii. 47,278 watercourses	i. Conveyance losses for improved watercourses decreased by about 15	i. Increase in cropping intensity on improved watercourses by 5-24%;	i. Increase in farm income; ii. Increase in employment for farm	i. The water flow measurements will be carried out at before

60% funded by project.	<p>47,278 WUAs;</p> <p>iii. Improvement and realignment of earthen section of 47,278 watercourses;</p> <p>iv. Lining of up to 50% length of 47,278 watercourses either by:</p> <p>v. Precast concrete parabolic lining (PCPL) segments, or</p> <p>vi. Rectangular brick masonry, or any other method as approved by the project</p>	improved and lined;	<p>percentage points.</p> <p>ii. 1.654 million households benefited from the activity;</p> <p>iii. 11.347 million acres served with improved watercourses</p>	<p>ii. Increase in crop yields.</p> <p>iii. Increase in irrigated area</p> <p>iv. Increase in agriculture output per unit of water by about 37%</p>	<p>labor;</p> <p>iii. Reduction in poverty;</p> <p>iv. Enhanced food security for the country.</p>	<p>and after watercourse improvement on 2-5% sample basis;</p> <p>ii. Agriculture survey before and after watercourse improvement on 2-5% sample basis;</p> <p>iii. The survey will determine:</p> <p>iv. Cropping pattern before and after the improvement;</p> <p>v. Cropping intensities before and after improvement;</p> <ul style="list-style-type: none"> <li>• Before and after crop yields;</li> <li>• Before and</li> </ul>
------------------------	---	---------------------	---	---	--	---

							after employment;  vi. The difference between before and after will be considered the result of the intervention after netting out the contribution of the growth pattern of the crop sector otherwise.
<b>C3: Construction of Water Storage Tanks (WSTs)</b>	i. Construction of 14,932 water storage tanks	i. 14,932 small farmers mobilized to construct water storage tanks for irrigation ii. They agree to contribute 40% of the cost iii. Agree to first construct the tank with his/her own	i. 14,932 constructed WSTs ii. 14,932 operated and maintained	i. Water which was otherwise largely going to be wasted is saved i. Irrigation provided at critical stages of the crops ii. Flexibility achieved for irrigation	i. More area irrigated ii. Increased cropping intensities	i. Increased crop yields ii. Increased total crop output quantum iii. Increased farm income iv. Increased farm employment	i. 2-5% sample of WSTs will be surveyed iii. A data collection form will be designed to measure water saving due to WSTs iv. The forms used for baseline and



		funds and then received subsidy at 40% on issuance of FCR					<p>impact surveys in case of watercourses will also be used for WSTs</p> <p>v. Same data analysis will be carried out here as in case of watercourses.</p>
<b>C4: Provision of Land Leveling Units</b>	<p>i. Provision of 11,610 laser land leveling units to farmers and service providers on a cost sharing basis: 50% by farmer / service provider and 50% by the project.</p>	<p>i. 11,610 laser units provided to farmers / service providers;</p> <p>ii. Farmers trained in using the units.</p>	<p>i. 11,610 farmers / service providers received PLL units;</p> <p>ii. Farmers / service providers received training in using the units.</p>	<p>i. Land leveled on Farmers' / service providers' farms;</p> <p>vi. Land leveled on fellow farmers on rent;</p> <p>vii. Total 3.483million acres leveled by 11,610 units.</p>	<p>i. Water application efficiency increased at field level;</p> <p>viii. Even germination of seed.</p> <p>ix. Field application losses reduced by 10 percentage points</p> <p>x. Water productivity increased by 24%</p>	<p>i. Increased area under irrigated crops;</p> <p>ii. Enhanced crop yields</p> <p>iii. Increased farm income</p>	<p>i. The land leveling is expected to save irrigation 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</p>

							<p>sample surveys.</p> <p>xi. 2-4% sample units will be visited by ME&amp;IE Consultants teams after one years of delivery</p> <p>xii. The unit will be verified</p> <p>xiii. Area treated during the year will be collected</p> <p>xiv. Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.</p>
--	--	--	--	--	--	--	--

## ANNEXURE D: DELIVERABLES / REPORTING REQUIREMENTS

### 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 <sup>th</sup> 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	End line Survey Report	10	At the end of the End line survey
7	Quarterly Monitoring and Evaluation Report	10	10 <sup>th</sup> 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
	Pakpattan	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
<b>Barani</b>	Rawalpindi	71	4	4	0
	Attock	79	4	6	-2
	Jehlum	63	3	2	1
	Chakwal	155	8	7	1
<b>Sub Total</b>		<b>368</b>	<b>18</b>	<b>19</b>	<b>-1</b>
<b>Partial Irrigated Barani Zone</b>	Bhakkar	19	1	5	-4
	Mianwali	3	0	1	-1
<b>Sub Total</b>		<b>22</b>	<b>1</b>	<b>6</b>	<b>-5</b>
<b>Irrigated (Rice Zone)</b>	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
<b>Sub Total</b>		<b>61</b>	<b>3</b>	<b>16</b>	<b>-13</b>
<b>Irrigated (Mixed Zone)</b>	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
<b>Sub Total</b>		<b>231</b>	<b>12</b>	<b>15</b>	<b>-3</b>
<b>Irrigated (Cotton Zone)</b>	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
	khaneval	22	1	2	-1
	Rajanpur	10	1	1	-1
	Muzaffargarh	21	1	2	-1
	Layyah	18	1	1	0
	Vehari	14	1	1	0
<b>Sub Total</b>		<b>309</b>	<b>15</b>	<b>24</b>	<b>-9</b>
<b>Grand Total</b>		<b>991</b>	<b>50</b>	<b>80</b>	<b>-30</b>



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 Cosultants	Remaining Balance
Partial Irrigated Barani Zone	Bhakkar	191	10	10	0
	Mianwali	146	7	7	0
	<b>Sub Total</b>	<b>337</b>	<b>17</b>	<b>17</b>	<b>0</b>
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
	<b>Sub Total</b>	<b>1741</b>	<b>87</b>	<b>80</b>	<b>7</b>
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
	<b>Sub Total</b>	<b>1821</b>	<b>91</b>	<b>93</b>	<b>-2</b>
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
	<b>Sub Total</b>	<b>2124</b>	<b>106</b>	<b>116</b>	<b>-10</b>
<b>Grand Total</b>		<b>6023</b>	<b>301</b>	<b>306</b>	<b>-5</b>

## 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
<b>Bahawalpur Total</b>		<b>705</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>705</b>
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	Rajapur	119	0	0	0	0	119
<b>Dera Ghazi Khan Total</b>		<b>496</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>496</b>
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
<b>Faisalabad Total</b>		<b>387</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>387</b>
Gujranwala	Gujranwala	101	0	0	0	0	101
Gujranwala	Narowal	16	0	0	0	0	16
Gujranwala	Sialkot	84	0	0	0	0	84
<b>Gujranwala Total</b>		<b>201</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>201</b>
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
<b>Gujrat Total</b>		<b>199</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>199</b>
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
<b>Lahore Total</b>		<b>255</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>255</b>
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
<b>Multan Total</b>		<b>562</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>562</b>
Sahiwal	Okara	136	0	0	0	0	136
Sahiwal	Pakpattan	121	0	0	0	0	121
Sahiwal	Sahiwal	145	0	0	0	0	145
<b>Sahiwal Total</b>		<b>402</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>402</b>
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
<b>Sargodha Total</b>		<b>555</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>555</b>
<b>Grand Total</b>		<b>3762</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3762</b>

## 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
<b>Bahawalpur Total</b>		<b>160</b>	<b>0</b>	<b>0</b>	<b>160</b>
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	Rajanpur	10	0	0	10
<b>Dera Ghazi Khan Total</b>		<b>82</b>	<b>0</b>	<b>0</b>	<b>82</b>
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
<b>Faisalabad Total</b>		<b>129</b>	<b>0</b>	<b>0</b>	<b>129</b>
Gujranwala	Gujranwala	2	0	0	2
Gujranwala	Sialkot	4	0	0	4
<b>Gujranwala Total</b>		<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
Gujrat	Gujrat	26	0	0	26
Gujrat	Hafizabad	13	0	0	13
Gujrat	Mandi Bahauddin	2	0	0	2
<b>Gujrat Total</b>		<b>41</b>	<b>0</b>	<b>0</b>	<b>41</b>
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
<b>Lahore Total</b>		<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>
Multan	Khanewal	22	0	0	22
Multan	Lodhran	14	0	0	14
Multan	Multan	17	0	0	17
Multan	Vehari	14	0	0	14
<b>Multan Total</b>		<b>67</b>	<b>0</b>	<b>0</b>	<b>67</b>
Rawalpindi	Attock	79	0	0	79
Rawalpindi	Chakwal	155	0	0	155
Rawalpindi	Jhelum	63	0	0	63
Rawalpindi	Rawalpindi	71	0	0	71
<b>Rawalpindi Total</b>		<b>368</b>	<b>0</b>	<b>0</b>	<b>368</b>
Sahiwal	Okara	19	0	0	19
Sahiwal	Pakpattan	15	0	0	15
Sahiwal	Sahiwal	5	0	0	5
<b>Sahiwal Total</b>		<b>39</b>	<b>0</b>	<b>0</b>	<b>39</b>
Sargodha	Bhakkar	19	0	0	19
Sargodha	Khushab	28	0	0	28
Sargodha	Mianwali	3	0	0	3
Sargodha	Sargodha	35	0	0	35
<b>Sargodha Total</b>		<b>85</b>	<b>0</b>	<b>0</b>	<b>85</b>
<b>Overall</b>		<b>991</b>	<b>0</b>	<b>0</b>	<b>991</b>

## ANNEXURE H: PUNJAB - PLL DATA SUBMISSION – SUMMARY

Division	District	Delivered	Under Progress	Overall
Bahawalpur	Bahawalnagar	301	0	301
Bahawalpur	Bahawalpur	239	0	239
Bahawalpur	Rahim Yar Khan	270	0	270
<b>Bahawalpur Total</b>		<b>810</b>	<b>0</b>	<b>810</b>
Dera Ghazi Khan	Dera Ghazi Khan	137	0	137
Dera Ghazi Khan	Layyah	165	0	165
Dera Ghazi Khan	Muzaffargarh	232	0	232
Dera Ghazi Khan	Rajanpur	120	0	120
<b>Dera Ghazi Khan Total</b>		<b>654</b>	<b>0</b>	<b>654</b>
Faisalabad	Chiniot	166	0	166
Faisalabad	Faisalabad	284	0	284
Faisalabad	Jhang	256	0	256
Faisalabad	Toba Tek Singh	215	0	215
<b>Faisalabad Total</b>		<b>921</b>	<b>0</b>	<b>921</b>
Gujranwala	Gujranwala	236	0	236
Gujranwala	Narowal	142	0	142
Gujranwala	Sialkot	198	0	198
<b>Gujranwala Total</b>		<b>576</b>	<b>0</b>	<b>576</b>
Gujrat	Gujrat	125	0	125
Gujrat	Hafizabad	192	0	192
Gujrat	Mandi Bahauddin	164	0	164
<b>Gujrat Total</b>		<b>481</b>	<b>0</b>	<b>481</b>
Lahore	Kasur	240	0	240
Lahore	Lahore	96	0	96
Lahore	Nankana Sahib	140	0	140
Lahore	Sheikhupura	230	0	230
<b>Lahore Total</b>		<b>706</b>	<b>0</b>	<b>706</b>
Multan	Khanewal	188	0	188
Multan	Lodhran	149	0	149
Multan	Multan	145	0	145
Multan	Vehari	203	0	203
<b>Multan Total</b>		<b>685</b>	<b>0</b>	<b>685</b>
Sahiwal	Okara	203	0	203
Sahiwal	Pakpattan	181	0	181
Sahiwal	Sahiwal	212	0	212
<b>Sahiwal Total</b>		<b>596</b>	<b>0</b>	<b>596</b>
Sargodha	Bhakkar	196	0	196
Sargodha	Khushab	119	0	119
Sargodha	Mianwali	148	0	148
Sargodha	Sargodha	220	0	220
<b>Sargodha Total</b>		<b>683</b>	<b>0</b>	<b>683</b>
<b>Overall</b>		<b>6112</b>	<b>0</b>	<b>6112</b>

## 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
<b>Bajaur Total</b>		<b>73</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>
Bannu	Bannu	107	0	0	0	0	107
Bannu	Lakki Marwat	122	0	0	0	0	122
<b>Bannu Total</b>		<b>229</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>229</b>
D.I. Khan	D.I. Khan	503	3	0	0	1	507
D.I. Khan	Tank	77	0	0	0	0	77
<b>D.I. Khan Total</b>		<b>580</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>584</b>
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
<b>Hazara Total</b>		<b>372</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>377</b>
Khyber	Khyber	28	0	0	12	0	40
<b>Khyber Total</b>		<b>28</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>40</b>
Kohat	Hangu	67	0	0	0	0	67
Kohat	Karak	84	0	0	0	0	84
Kohat	Kohat	92	0	0	0	0	92
<b>Kohat Total</b>		<b>243</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>243</b>
Kurram	Kurram	13	0	0	0	0	13
<b>Kurram Total</b>		<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>
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
<b>Malakand Total</b>		<b>979</b>	<b>6</b>	<b>2</b>	<b>21</b>	<b>5</b>	<b>1013</b>
Mardan	Mardan	152	0	0	0	9	161
Mardan	Swabi	160	0	0	0	0	160
<b>Mardan Total</b>		<b>312</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>321</b>
Mohmand	Mohmand	90	0	0	0	0	90
<b>Mohmand Total</b>		<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>90</b>
North Waziristan	North Waziristan	8	0	3	0	0	11
<b>North Waziristan Total</b>		<b>8</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>11</b>
Orakzai	Orakzai	1	0	0	0	0	1
<b>Orakzai Total</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Peshawar	Charsadda	152	1	0	1	0	154
Peshawar	Nowshera	136	0	0	0	0	136
Peshawar	Peshawar	78	0	0	0	0	78
<b>Peshawar Total</b>		<b>366</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>368</b>
S.Waziristan	S.Waziristan	36	0	0	0	0	36
<b>S.Waziristan Total</b>		<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>
<b>Overall</b>		<b>3330</b>	<b>10</b>	<b>10</b>	<b>34</b>	<b>15</b>	<b>3399</b>



## 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
<b>Bajaur Total</b>		<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>
Bannu	Bannu	12	0	0	0	12
Bannu	Lakki Marwat	35	0	0	0	35
<b>Bannu Total</b>		<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>47</b>
D.I. Khan	D.I. Khan	89	0	0	1	90
D.I. Khan	Tank	35	0	0	0	35
<b>D.I. Khan Total</b>		<b>124</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>125</b>
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
<b>Hazara Total</b>		<b>167</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>170</b>
Khyber	Khyber	17	0	0	0	17
<b>Khyber Total</b>		<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>
Kohat	Hangu	12	0	0	0	12
Kohat	Karak	73	0	0	0	73
Kohat	Kohat	5	0	0	0	5
<b>Kohat Total</b>		<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>90</b>
Kurram	Kurram	2	0	0	0	2
<b>Kurram Total</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
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
<b>Malakand Total</b>		<b>396</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>396</b>
Mardan	Mardan	34	0	0	1	35
Mardan	Swabi	39	0	0	0	39
<b>Mardan Total</b>		<b>73</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>74</b>
Mohmand	Mohmand	113	0	0	0	113
<b>Mohmand Total</b>		<b>113</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>113</b>
North Waziristan	North Waziristan	15	0	0	0	15
<b>North Waziristan Total</b>		<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>
Orakzai	Orakzai	2	0	0	0	2
<b>Orakzai Total</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Peshawar	Charsadda	13	0	0	0	13
Peshawar	Nowshera	88	0	1	0	89
Peshawar	Peshawar	57	0	0	0	57
<b>Peshawar Total</b>		<b>158</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>159</b>
S.Waziristan	S.Waziristan	32	0	0	0	32
<b>S.Waziristan Total</b>		<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>
<b>Overall</b>		<b>1253</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1259</b>

## ANNEXURE K: KP - PLL DATA SUBMISSION – SUMMARY

Division	District	Delivered	Under Progress	Overall
D.I Khan	D.I Khan	50	0	50
<b>Overall</b>		<b>50</b>	<b>0</b>	<b>50</b>

## 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
<b>Kalat Total</b>		<b>941</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>26</b>	<b>1027</b>
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
<b>Loralai Total</b>		<b>586</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>37</b>	<b>666</b>
Makran	Gwadar	23	0	0	0	0	23
Makran	Kech	59	0	0	9	64	132
Makran	Panjgur	121	0	0	33	0	154
<b>Makran Total</b>		<b>203</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>64</b>	<b>309</b>
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
<b>Nasirabad Total</b>		<b>306</b>	<b>0</b>	<b>0</b>	<b>183</b>	<b>29</b>	<b>518</b>
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
<b>Quetta Total</b>		<b>379</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>381</b>
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
<b>Rakhshan Total</b>		<b>125</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>78</b>	<b>266</b>
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
<b>Sibi Total</b>		<b>330</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>331</b>
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
<b>Zhob Total</b>		<b>366</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>18</b>	<b>385</b>
<b>Overall</b>		<b>3236</b>	<b>0</b>	<b>0</b>	<b>394</b>	<b>253</b>	<b>3883</b>

## 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
<b>Kalat Total</b>		<b>604</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>8</b>	<b>691</b>
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
<b>Loralai Total</b>		<b>193</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>11</b>	<b>233</b>
Makran	Gwadar	7	0	0	0	0	7
Makran	Kech	35	0	0	18	46	99
Makran	Panjgur	46	0	1	121	1	169
<b>Makran Total</b>		<b>88</b>	<b>0</b>	<b>1</b>	<b>139</b>	<b>47</b>	<b>275</b>
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
<b>Nasirabad Total</b>		<b>97</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>0</b>	<b>160</b>
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
<b>Quetta Total</b>		<b>237</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>3</b>	<b>251</b>
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
<b>Rakhshan Total</b>		<b>52</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>33</b>	<b>159</b>
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
<b>Sibi Total</b>		<b>138</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>139</b>
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
<b>Zhob Total</b>		<b>227</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>227</b>
<b>Overall</b>		<b>1636</b>	<b>0</b>	<b>2</b>	<b>395</b>	<b>102</b>	<b>2135</b>

## 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
<b>Overall</b>		<b>34</b>	<b>0</b>	<b>34</b>



## 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
<b>Gilgit Total</b>		<b>445</b>	<b>0</b>	<b>0</b>	<b>445</b>
Skardu	Ghanche	113	0	0	113
Skardu	Kharmang	42	0	0	42
Skardu	Shigar	68	0	0	68
Skardu	Skardu	141	0	0	141
<b>Skardu Total</b>		<b>364</b>	<b>0</b>	<b>0</b>	<b>364</b>
<b>Overall</b>		<b>809</b>	<b>0</b>	<b>0</b>	<b>809</b>

## 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
<b>Gilgit Total</b>		<b>200</b>	<b>0</b>	<b>0</b>	<b>200</b>
Skardu	Kharmang	24	0	0	24
Skardu	Shigar	49	0	0	49
Skardu	Skardu	55	0	0	55
<b>Skardu Total</b>		<b>128</b>	<b>0</b>	<b>0</b>	<b>128</b>
<b>Overall</b>		<b>328</b>	<b>0</b>	<b>0</b>	<b>328</b>

## 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	
MZD	MZD	144	1	0	16	0	0	161
	Jhelum	25	0	0	0	2	0	27
	Neelum	0	0	0	1	1	0	2
MZD 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
<b>Overall</b>		41	0	0	0	0	41

## ANNEXURE T: FPMU LETTER REGARDING ME&IE CONSULTANTS CONTINUATION OF SERVICES



Tel: 051-9252463  
Fax: 051-9252442

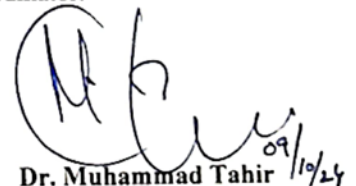
No.F.1-7/2018-PLAN(WM)  
Government of Pakistan  
Ministry of National Food Security & Research  
Federal Project Management Unit,  
\*\*\*\*\*

2<sup>nd</sup> Floor, Plot No. 4, Sitara Market G-7 Markaz,  
Islamabad, the 9<sup>th</sup> October, 2024

Subject: **NPIWC-II, ME & IE CONSULTANTS CONTINUATION OF SERVICES**

I am directed to refer this letter and stated that reference to our earlier correspondence with your office regarding subject Project extension. The ME&IE Consultants' Contract Agreement on the subject project will be expired on October 25<sup>th</sup>, 2024. However, in view of the instruction of the Ministry of National Food Security & Research Islamabad (Copy of Minutes of meeting is attached), you are hereby conveyed to continue the Consultants services with approved minimum staff until the decision of the project. Hold the ME & IE consultants National office and Deputy Team Leader offices along with the project assets till further orders.

2. In this regard, the Consultants' liabilities will be settled, subject to the release of funds to FPMU, NPIWC-II, Islamabad.
3. This issues with the approval of National Projects Coordinator.

  
Dr. Muhammad Tahir 09/10/24  
Deputy Director (Coord)  
FPMU

Team Leader  
ME & IE Consultants,  
Islamabad

CC:  
• Master File