



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

OCTOBER 2023





**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**  
**OCTOBER 2023**

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## 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 Report for the month of October 2023” comprises 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 will cover Punjab, Khyber Pakhtunkhwa (KP), Baluchistan 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 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 the objectives and scope of work of the ME&IE Consultants for the project. Since the ME&IE Consultants are going to monitor implementation of all criteria set, procedures defined, and timeline agreed for implementation of various components. All these are reproduced in this report as ready reference to devise / design M&E strategy, methodology, procedures for monitoring and impact assessments of the project 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). This current MMR covers the period from 1<sup>st</sup> October 2023 to 31<sup>st</sup> October 2023.

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

- Submission of Mid-Term Monitoring and Impact Evaluation Report (Consolidated)
- Regular Monitoring of Interventions in the Field
- 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
- Preparation for 3rd-Phase Baseline Survey
- Data entry, cleaning, validation
- Submitted the MMR for the Month of September 2023.
- Meetings of ME&IE Consultants with Stakeholders about Project Progress / Issues

**Chapter-4** highlights the quarterly work plan for the period of 1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023. The work plan consists of following activities:

- Pre-field Activities
- Field Activities
- ICT Assignment
- Coordination Meetings
- Deliverables

The detailed time span for the 4<sup>th</sup> quarter of year 2023 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 Reporting Period

No.	Activities Planned for the Reporting Quarter	Status
<b>1</b>	<b>Pre-Field Activities</b>	
	1.1 Preparation for 3rd-Phase Baseline Survey	In Progress
	1.2 Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey	In Progress
	1.3 Refresher Training of Field Staff for 3rd-Phase Baseline Survey	In Progress
<b>2</b>	<b>Field Activities:</b>	
	2.1 Regular Monitoring of Interventions in the field	In Progress
	2.2 Data collection of the interventions in the field	In Progress
	2.3 Baseline Survey Stage III	Pending
<b>3</b>	<b>ICT Assignment:</b>	
	3.1 Development / Improvement of website of NPIWC-II	In Progress
	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
<b>4</b>	<b>Coordination</b>	
	4.1 Meetings of TL, ME&IE Consultants with NPC regarding Project Progress / Issues	Meetings conducted on regular basis
	4.2 Meeting of DTLs with respective DTL of NWMC	Meetings conducted on regular basis
	4.3 Internal Meetings of ME&IE Consultants	Weekly meetings conducted on regular basis
<b>5</b>	<b>Deliverables:</b>	
	5.1 Monthly Monitoring Reports (MMRs)	33 <sup>rd</sup> MMR (Sep 2023)
		34 <sup>th</sup> MMR (Oct 2023)
		35 <sup>th</sup> MMR (Nov 2023)
	5.2 Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jul-Sep 2023
	5.3 Mid-Term Monitoring and Impact Evaluation Report (Consolidated)	Submitted

## CHAPTER-1: PROJECT INTRODUCTION

### 1.1 PROJECT PROFILE

This section covers the following detail of the project:

<b>Project Name:</b>	National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)
<b>Project Areas:</b>	Punjab, Khyber Pakhtunkhwa, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir, and Islamabad Capital Territory (ICT)
<b>Sponsoring Agency</b>	Ministry of National Food Security & Research
<b>Executing Agencies (EAs):</b>	<p>Following are different EAs:</p> <p>Federal Project Management Unit (FPMU),</p> <ul style="list-style-type: none"> <li>i. DGA OFWM Punjab</li> <li>ii. DG OFWM KP</li> <li>iii. DGA OFWM Baluchistan</li> <li>iv. Director Irrigation and Small Dams, AJ&amp;K</li> <li>v. Director WM, GB</li> <li>vi. Director Agriculture Extension Services (AES) ICT</li> </ul>
<b>Project Period:</b>	5 Year (2019-2024)
<b>Total Project Cost:</b>	Rs. 154,542.355 million (Umbrella PC-1, including Sindh)
<b>ME&amp;IE Consultancy Period:</b>	4 years
<b>ME&amp;IE Consultant:</b>	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.
<b>ME&amp;IE Consultant Mobilized:</b>	November 07, 2020

### 1.2 PROJECT DESCRIPTION

Project description includes followings 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

Following is the project general and quantitative:

#### 1) General Objectives:

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

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

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

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

#### Project outputs

- i) Mobilization through capacity building of Water Users Associations/Farmers Organizations in improved water management techniques and their registration under On-Farm Water Management and Water User Associations Ordinance [Act] 1981 and organization of 47,278 WUAs.
- ii) Reconstruction/renovation and remodeling of 47,278 watercourses, involving complete earthen renovation, partial lining of critical reaches (50% of the total watercourse length as decided in the high-level meeting), and installation of water control structures. It is expected to save around 5.82 MAF per

annum (approx. saving of 123 acre-feet (AF) per watercourse per annum).

iii) Construction of 14,932 water storage tanks with 60% subsidy through cost sharing arrangements with the expectation to save about 50% irrigation water for wheat and about 68% of irrigation water for paddy crops.

#### Project impacts

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

#### Project indirect benefits to industry/economic activities

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

#### Awareness support to farmers

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

#### **1.2.3 Project Beneficiaries**

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

of Laser Land Leveling Units. Thus, total gross direct beneficiaries are expected to be around 3.336 million households. However, net beneficiaries are expected to be 1.668 million.

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

#### **1.2.4 Project Components**

The NPIWC-II project comprises four components.

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

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

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

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

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

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

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

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

- i) Store water during the rainy season and times of no use in the commands of perennial / non-perennial canals for subsequent irrigations at the critical crop growth stages,
- ii) Provide flexibility for storage of plentiful canal and rainfall runoff water for its more expedient use subsequently,
- iii) Collect, store and filter water from:
  - Small Dams, springs, streams, mullahs 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 LLL services in the country through provision of LLL Units to farmers / service providers on 50% subsidized rates.

**1.2.5 Project Targets**

Project aims at achieving the targets for 5 years starting from the year 2019-20 to 2023-24, presented in **Figure-1.1**. Whereas the targets for each Province / Zone (excluding Sindh) are presented in **Figure-1.2**.

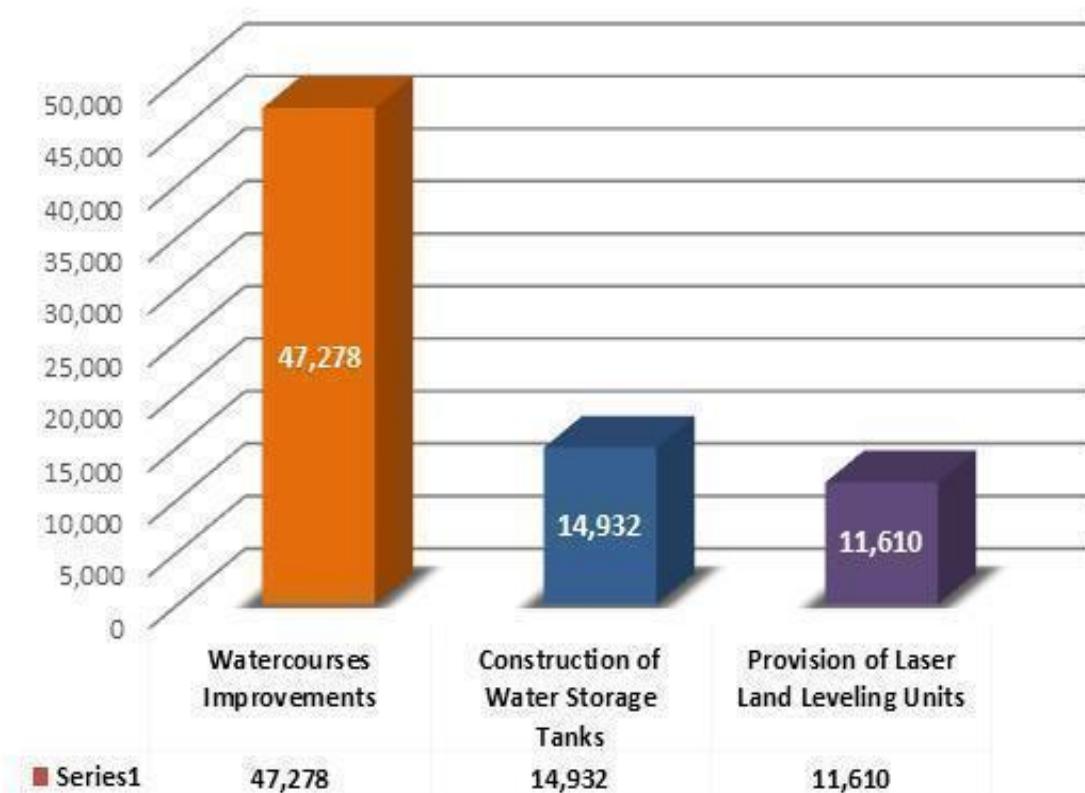


Figure 1.1: NPIWC-II Project WCs, WSTs, and LLL Targets in Pakistan



Figure 1 2: Zone-Wise WCs Improvement, WSTs, and LLL Target

## 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 highly qualified professionals having long practical experience of such projects earlier launched in Pakistan. The consultants are developing a "State-of-the-Art Management Information System" (MIS) with "Geographical Information System" (GIS) focused for NPIWC-II to monitor progress on project interventions and to carry out an effective monitoring process. The MIS is helping decision makers to make informed decisions.

### 2.1 OBJECTIVES OF CONSULTING SERVICES

The objective of ME&IE Consultant's services is to carry out M&E of project impacts to ensure 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 the agriculture in terms of changes in yields, irrigated area, cropping pattern, cropping intensity, farm income and employment in command area of watercourses and water storage tanks,
- vii. Assessing the extent of community mobilization, financial and administrative sustainability of water users' associations and

- ensuring the maintenance of watercourses, water storage tanks and laser land Levelers,
- viii. Economic impact of project interventions,
- ix. Carry out the impact evaluation of the project intervention on the economy and stakeholders,
- x. Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks and 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 up-dation/up-gradation of water management GIS database.
- Development of web-based GIS application as a dashboard interface for comprehensive representation of all spatial and tabular information: custom designed web GIS application be developed for large LED screens, should be self-operative and represent project data on multiple layouts of application interface.
- Development of a MIS application as an integral part of web GIS to maintain information on facilities and services, applications, procedures, watercourses database, etc.
- Development of a custom designed mobile application (Android) to capture on-site project progress, geo-tagged photos; should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management.
- Application should generate custom designed reports and analysis as per user-defined requirements.
- Application should generate alerts (SMS, email, web-notifications) to the user on the non-conformance of project's key indicators; the application should have the provision to custom define alerts levels and desired notifications.

### 2.3 MONITORING STRATEGY 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 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 Endline 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 of 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 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>Endline 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 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> <li>The measurements will be done through current meters.</li> </ul>

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
			<ul style="list-style-type: none"> <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 on a continuous basis, the water savings will be assessed on the basis of 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 the surveys same forms will be used and 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 the economy	Team Leader, Agricultural Economist and Socio-Economic	<ul style="list-style-type: none"> <li>The results of the baseline and impact surveys will be used to quantify impact on the economy</li> <li>Additional food produced due to the project will be estimated. It is benefitted towards food security</li> </ul>

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
		Expert	<ul style="list-style-type: none"> <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 with reference to various stakeholders, like community, government, farmers, etc.
8	Spot checking	Team Leader, Deputy Team Leaders & Field teams/Engineers	During the field visits for WUAs baselines impacts of Watercourses, WSTs and laser 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 Deptt., 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 a regular part of the ME&IE assignment, routine field visits & monitoring of project interventions in the field remained continued by ME&IE consultants. The Consultants also carried out different in-house activities related to ME&IE assignment:

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

As per contractual obligation, the consultants have submitted thirty third MMR (September 2023). While the thirty fourth MMR (the Report in hand) for the month of October 2023 (1<sup>st</sup> October 2023 to 31st October 2023) is being submitted.

Monthly Monitoring Report (MMR) explains the understanding towards all activities to be carried out as per TORs of ME&IE consultants' assignment and their completion within stipulated time frame. The activities include but are not limited to pre-field/ in-house activities, field monitoring activities i.e., monitoring of project interventions, ICT assignments including monitoring of online data collection in the field, and development / improvement of project dashboard and website etc. Consultants of ICT Team also remained in contact with Clients' officials for entering data in Dashboard and provided assistance when and where was required by client. All the activities of the current month were in compliance with the quarterly work plan of the consultants. Hence, the main objective of the Monthly Monitoring Report is to update the Client about the activities carried out by the ME&IE Consultants during the reporting month. Reporting is an integral part of the monitoring and evaluation framework.

### 3.2 MID-TERM MONITORING AND IMPACT EVALUATION REPORT - CONSOLIDATED

The Government of Pakistan is implementing a National Program for Improvement of Watercourses in Pakistan, Phase-II (NPIWC-II) funded by the Ministry of National Food Security and Research (MNFSR), Islamabad. The executing agencies (EAs) are Federal Water Management Cell (FWMC), Provincial Directorates of OFWM and respective departments of AJ&K, GB and ICT and Water Users Association (WUAs). The Project Consultant (NESPAK & JV Partners) carries out the project supervision. The task of Monitoring Evaluation & Impact

Evaluation has been entrusted to ME&IE Consultants. The coordination rests with the Federal Project Management Unit (FPMU) and Federal Water Management Cell (FWMC).

The Project comprises 4 Components: namely (1) Social Mobilization (Capacity building and establishment of Water Users Associations), (2) Reconstruction/renovation and remodeling of 47,278 watercourses, (3) Construction of 14,932 Water Storage Tanks and (4) Provision of 11,610 Laser Land Levelers.

The Project Covers; Punjab, Khyber Pakhtunkhwa (KP), Balochistan, Gilgit Baltistan (GB), Azad Jammu and Kashmir (AJ&K) and Islamabad Capital Territory (ICT).

Project Direct Benefit includes, cropping intensity to increase by 5-20%, Crops yield to increase by 10-15%, Equity in water distribution to increases by about 30%, water disputes / thefts and litigation amongst the Farmers over water distribution to reduce by about 80%, Help poverty reduction through generation of employment and Self-sufficiency in food through utilization of water saved.

The total number of project beneficiaries are estimated 1.668 million farmers (owners as well as tenants). Taking family size at five, total net population benefitting is expected to be 8.34 million people.

In the middle of the assignment, ME&IE Consultants are required to submit Midline Survey/ Mid-term Impact Evaluation report. Thus, in compliance with its contractual requirement, the ME&IE Consultants have prepared this report which evaluates Project's mid-term Monitoring and Impact assessment results up to end December 2022 until unless mentioned otherwise elsewhere. It is to be clarified here that these assessments are, however, not final. Rather these are interim and until all the surveys and studies are completed after the termination of all project activities, these will remain indicative. Thus, these assessments should be taken just as interim or indicative and not final for the time being. The main findings of the report are summarized below:

#### Progress Monitoring:

During the Project period (5 years), a total number of 47,278 watercourses were targeted to be improved. By the end of June 2023 (during 4 years), 13,777 watercourses have been improved, showing only 29% achievement.

During the Project period (5 years), a total number of 14,932 Water Storage Tanks were targeted to be

constructed. By the end of June, 2023 (during 4 years), **5,390** WSTs were constructed, thus showing only 36% achievement.

During the Project period (5 years), a total number of 11,610 Precision Laser Land Leveling (PLL) Units were targeted to be delivered. By the end of June, 2023 (during 4 years), 5,928 PLL Units were delivered showing a progress of 51% achievement.

#### **Monitoring Evaluation of Component C1 (Organization of Water Users' Associations)**

On an overall basis, 85% of farmers were aware about the existence / working of WUAs on their watercourses. About 94% of respondents informed that OFWM used to hold awareness meetings before the formation of the WUAs. About 74% members had been participating in the meeting of WUAs and 98% members reported that the WUAs were formed through democratic process. On the whole, 92% of respondent farmers were found the members of WUAs of which 42% were located at the head of WC reaches, 33% at middle reaches and 25% at tail reaches and 88% of members were found water users of lined watercourses. About 94% of farmers reported that WUAs were functioning properly.

About half (49%) of the respondent farmers informed that meetings by WUAs were held, 27% informed that no meeting were held and 24% were of the view that these meetings were held to some extent. Moreover, 39% of respondents informed that they always participated in the meetings, 60% participated occasionally and one percent never participated.

Out of total, 8% respondents informed that the meetings were held every month, 6% told quarterly, 2% once a year and the remaining 84% informed that these meetings used to be held as and when need arose. About 85% of respondents informed the WUAs were established through democratic process.

About 97% of member farmers responded that they did not face any dispute. Only 3% faced disputes, out of which 50% got their disputes resolved always, 38% to some extent and 12% never got their disputes resolved.

Out of 3% respondents who faced disputes, 31% related to Land Acquisition, 59% on distribution of Naccas, and 10% regarding funding for accounts. About 45% of disputes were solved by WUAs, 50%

by OFWM department and 5% by Irrigation Department.

#### **Impact Evaluation of Component C2 (Improvement of Watercourses)**

Land use intensity due to watercourse improvement on sample farms has increased on an average by 4.1%, meaning thereby an increase of 4.1% in cultivated area. Cropping intensity has increased by 10.9%. These increases in land use and cropping intensities have resulted in about 11.8% increase in cropped area under various crops.

The Watercourse Improvement Impact on Crop Yields per acre varied from 4% to 49% averaging at 11.4% on an overall basis.

Cumulative impact of Watercourses Improvement is reflected in total production of various crops. Production of various crops has increased at different rates varying from 11.6% in the case of peaches to 317.6% in case of other vegetables. However, weighted average impact calculates at 23% (11.4% due to yield increase and 11.8% due to area increase and one percent due interaction between the two).

On total completed watercourses up to June 2023, total increases in crop area have also been estimated. On total 12,968 (excluding GB) improved watercourses, increase in the crop area has been estimated around 196 thousand acres.

The impact of watercourse Improvement on agriculture employment has also been significant. Labor man days at the farm have increased ranging from 2 percent to more than 100% after WC Improvement averaging at 15% due to increase in crop area, crop yields and crop production.

Impact of WC Improvement on per acre net income varies from crop to crop. It varies from PKR 1,008 for cotton to PKR 37,950 for vegetables per acre averaging at PKR. 4,053 for all crops.

Water Conveyance Efficiency on 20% lined additional improved watercourses increases by 14%age point and on new 50% lined watercourses increase by 29%age point. On piped lined watercourses efficiency increases by 50%. On overall basis saving in water losses calculates to 30% of 154 AF per watercourse per annum.

Spot Checking of Trees on Watercourses shows that 3,552 trees were cut down during the process of their improvement. As per rule, at least three times (10,656) trees were required to be planted in place

of 3,552 cut down trees, however, during the spot check it was observed that only 5,259 saplings (49% of the required ones) were planted out of which, 2,731 were survived after one year of their plantation.

Spot Checking of Brick Lined Watercourses shows that the compliance of engineering parameters on Rectangular / Brick Lined Watercourses, on the whole, was satisfactory. However, Lining length as per design was found on 76% watercourses. Full length improved water courses were extremely low i.e., kacha portion of only 18% were fully improved. Katcha portions of remaining 82% watercourses remained unimproved.

Spot Checking of PCP Lining Watercourses: On Parabolic (PCPL) Watercourses, compliance of most of the parameters was found satisfactory. However, Lining length as per design was found on 73% watercourses and full-length improved water courses were extremely low i.e., only 16%.

Spot Checking of Pipelined Watercourses: The quality of pipe was found good in 51% cases, satisfactory in 45% cases and poor in 4% cases only. Pipeline length as per design in 93% cases, bends and flanges were as per design in 68% cases, tees were as per design in 63% cases and sockets were 56% as per design.

Due to 12,968 watercourses improvement (excluding GB), cultivated area increased by 61,144 acres, cropped area by 196,304 acres, gross income increased by 43,352 million PKR and net income by 19,414 million PKR. Zone wise detail may be seen in **Table 1.**

**Table1: Increase in Area and Incomes of the farms under Completed Watercourses**

Zone / Unit	Increase in			
	Cultivated Area	Cropped Area	Gross Income	Net Income
	Acres		Million Rupees	
Punjab	18,624	86,615	29,209	12,530
KP	4,901	39,072	5,673	2,702
Balochistan	25,213	69,188	8,122	4,028
AJ&K	225	1,399	344	152
ICT	10	31	5	2
<b>Overall</b>	<b>61,144</b>	<b>196,304</b>	<b>43,352</b>	<b>19,414</b>

### Impact Evaluation of Component C3 (Construction of WSTs)

Land use intensity due to WSTs Construction on sample farms has increased on an average by 6.3%, meaning thereby an increase of 6.3% in cultivated area. Cropping intensity has increased by 15.4%. These increases in land use and cropping intensities have resulted in about 22% increase in cropped area under various crops.

The WSTs construction Impact on Crop Yields per acre varied from 6.6% in the case of Rabi fodder to 16.7% in case of pulses, averaging 10.2% on an overall basis.

Cumulative impact of WSTs reflected in total production of various crops. Production of various crops has increased at different rates varying from 20% in the case of cotton to 86% in the case of sugarcane. However, weighted average impact calculates at 35% (10% due to yield increase and 22% due to area increase and 3 percent due interaction between the two).

On total 5,062 completed WSTs (excluding GB) up to June, 2023, total increases in area have also been estimated 10,604 acres.

The impact of WSTs on agriculture employment has also been significant. Labor man days at the farm have increased ranging from 10% to 69% after WSTs construction averaging at 22% due to increase in crop area, crop yields and crop production.

The impact of WSTs on per acre net income varies from crop to crop. It varies from 1,008 PKR for cotton to 37,905 PKR for other vegetables per acre averaging at 22,262 PKR for all crops.

As before the construction of tank, there was no such saving of water losses. The total water storage capacity from above mentioned sources of tank along with the reported filing up frequency leads to calculate the water saving impact. On overall basis, saving in water losses calculates to 7.31 AF per Storage Tank per annum.

On 222 spot checked WSTs, 256 trees were reported to be cut down. In their place 922 (more than thrice as per requirement) Saplings were planted out of which 327 survived after one year. WST protection arrangements were about 84% satisfactory and 98% WSTs were properly being maintained.

Out of 222 spot checked WSTs, satisfactory Excavation Certificates were issued by the Consultants to 192 (87%) WSTs.

About 171 (77%) WSTs were completed before receiving the subsidy amount. The rest 51 (23%) were completed after receiving the subsidy from the department.

Out of total 222 spot checked WST, on over all basis, 203 (91%) have been completed as per approved standards and specifications.

Due to 5,062 WSTs (excluding GB), cultivated area increased by 3,460 acres, cropped area by 10,604 acres, gross income increased by 3,275 million PKR and net income by 1,780 million PKR. Zone wise detail may be seen in **Table 2**.

**Table 2: Increase in Area, and Incomes of the farms under completed WSTs**

Zone / Unit	Increase in			
	Cultivated Area	Cropped Area	Gross Income	Net Income
	Acres		Million Rupees	
Punjab	420	2,558	982	535
KP	793	2,955	878	477
Balochistan	1,781	3,862	1,097	596
AJ&K	466	1,229	318	173
<b>Overall</b>	<b>3,460</b>	<b>10,604</b>	<b>3,275</b>	<b>1,780</b>

#### Impact Evaluation of Component C4 (Provision of PLL)

**Educational Profile of Sample Beneficiaries:** Most of the beneficiaries (95%) found literate. About 15% beneficiaries are primary / middle level, 27% matric, 20% Intermediate, 25% Graduates and 9% postgraduate.

**Suppliers of Precision (Laser) Land levelers:** About 50% i.e., 80 PLL sample units have been supplied by 4 Supply and Service Companies (SSCs), namely Crosfield Agro (21), Easy Farming (24), Modern Farming (14) and Ruba Digital Laser. Out of these 80 PLL units, 79 were delivered by these companies in the Punjab. In KP, 3 PLL were delivered by Cross Field Agro, one by Modern Farming PLL Services and one by Ruba Digital Laser. In Balochistan, all the seven PLL units were delivered by Amjad Brothers Zarai Industries.

About 56% of PLL drivers were fully trained for running PLLs in the field and got formal training for this purpose. Around 41% were self-trained and the rest 3% were found un-trained during the monitoring survey.

About 64% of respondents ranked these PLL units as good, 31% as satisfactory and 4% as not satisfactory. About 1 to 2 percent responded that do not know. It means that 95% of beneficiaries regarded the

quality / durability of the delivered PLL units satisfactory at least.

Regarding after-sales service, 61% regarded it as good, 13% as poor, 6% as very poor and 21% responded that they do not know.

About 53% of beneficiaries responded that the attended complaints by SSCs were prompt and 16% informed that the complaints were not being attended promptly.

As for the prices of PLL, 9% of respondent beneficiaries informed that the SSCs charged high prices, 54% informed that the prices were normal, while the rest 37% responded that they did not know.

The respondents were also asked about the availability of spare parts by the SSCs. Out of total 160 respondents, 30% responded that spare parts were available with SSCs whenever required, 7% informed that it took time long time, whereas the rest 63% informed that they did not need these spare parts as yet.

As for the prices of PLL spare parts charged by the SSCs, 8% of respondent beneficiaries informed that the SSCs charged high prices, 27% informed that the prices were normal, while the rest 66% responded that they did not need these spare parts as yet.

The respondent beneficiaries were also asked about the availability of spare parts in the open market. About 36% of respondents informed that these spare parts are only available with the SSCs, 7% informed that the spare parts were also available in the market, while the rest 57% informed that they did not know.

While spot checking, all 160 (100%) respondents were using PLL for agricultural purposes. No respondent was found using PLL for non-agricultural purposes.

The PPLs were also spot checked with respect to their working conditions. Out of the total, 60% were found in good condition and well maintained. The condition of 35% was satisfactory and the remaining 5% were found in poor / Unsatisfactory condition.

**Record Keeping of Laser Land Leveling Services to Other Farmer:** About 97% PLL owners provide laser leveling servicing to the other fellow farmers. Out of these service providers only 14% keep a complete or partial record of their lending services. Out of these 14 percent, 55% keep record on logbooks, 36% on loose papers.

Land Leveled during last Rabi and Kharif cropping Seasons: Total laser land levelled by the 160 respondent PLL owners during last Rabi and Kharif cropping seasons was **40,711** acres or 254 acres per PLL. Out of these total **40,711** acres, **4,092** acres (26 acres per equipment) was owned land, and **36,619** acres (228 acres per equipment) were laser levelled on rent of other fellow farmers.

PLL Beneficiaries: Total annual PLL beneficiaries calculate to 11,331 farmers including the owners themselves or 71 farmers per equipment.

Impact of PLL on Crop yields: Impact of PLL on crop yield was also assessed through the farmers' perception. The growers were of the view that laser leveling increases yields of various crops ranging from 8% to 14% averaging at 11% on the whole. Economics and economic benefits of PLL use were also estimated. Total number of delivered PLL up to end of June 2023 is 5,928. At the rate of 254 acres per PLL, total area levelled by all the delivered PLL calculates as 1,506 thousand acres. Net benefits per PLL comes to 521 thousand PKR per annum and for total 5,928 delivered PLL these calculate to 3,091 million PKR.

Water Saving Impact of PLL Units: Information was also asked from the growers regarding the saving of water due to Precision Land Leveling. On an average 25% saving in water use has been reported.

Economic Analysis: The Benefit Cost Ratio at 12% discount factor in the midterm evaluation calculates at 2.5 and Internal Rate of Return as 50%.

### 3.3. ACTIVITIES ICT UNIT – OCTOBER 2023

The report presented below provides a brief overview of the significant actions that ICT-UNIT ME&IE consultants have witnessed and appraised during the ongoing monitoring month.

- Regular Monitoring and spot Checking at village "Pind baigwal" conducted.
- Scheduled regular meetings were held with Coordinating/Client, cooperating, and internal technical personnel, as well as the Administration and Finance departments of the Zonal and National Offices in order to ensure timely completion of targeted deliverables.
- Coordinated with Deputy Director On-Farm-Water-Management, Rawalpindi and Deputy Director Chakwal OFWM in order to collect

basic data required for dashboard as well as sampling frame to determine the sample size.

- The Quarterly tentative plan for Baseline-III and regular Monitoring & Spot-Checking visits were drafted and submitted for further processing through the proper channel of Administration & Finance of the Unit.
- Submitted the MMR Sep-2023 after editing, verifying, and processing through the respective stakeholders.
- Admin and Financial liabilities were supervised by the Team Leader and Deputy Team Leader of the ICT-Unit as well as National Office at Islamabad.
- Other extracurricular activities attended by the professionals to build their capacity as well as subject matter knowledge and skills.

#### 3.3.1. Overall Progress:

In respect to acquaint back run up dated activities of the ME&IE consultants, Islamabad Unit, they had completed the Baseline- I &II, Midline Impact survey as well as the routine regular monitoring and spot checking activities in collaboration with cooperating field operational departments, viz., OFWM, Water Users Associations and beneficiaries of the targeted schemes (i.e., WC, WST).Overall, 147 visits of the ME&IE Consultants of the IC-Unit were performed to cover all aforementioned activities across all the sampled targeted districts of the project area. The site's details have already been depicted through graphs in the previous reports.

#### 3.3.2. Quarterly Work and Visit Plan – Islamabad Unit

The ME&IE consultants ICT & AJK Units have revised the tentative visit schedule for conducting the Baseline-III survey, encompassing regular monitoring, spot checking and case studies. These surveys will focus on sampled households and programs associated with WC, WST, and Laser Land Levelers. The fundamental information for identifying these programs has been acquired from the OFWM department in AJK and ICT. While data collection in the Punjab Barani zone Potohar regions is still ongoing, some data has already been shared. The quarterly work plan (October to December 2023 is given as **Annex-A**).

Tentative Field Survey Schedule for the Sampled Schemes during the Current Quarter

Sr. No	Date	Zone	District	Village	Scheme	Purpose
1	23-Oct-23	ICT	ICT	Mauza Nilor	WC	Regular Monitoring+ baseline
2	24-Oct-23	ICT	ICT	Chak Shehzad	WC	Spot check+ baseline
3	25-Oct-23	ICT	ICT	Mauza Chirah	WC	Regular Monitoring+ baseline
4	26-Oct-23	Punjab	Rwp	Chakri	WST	Regular Monitoring+ baseline
5	27-Oct-23	Punjab	Rwp	Mahota	WST	Regular Monitoring+ baseline
6	1-Nov-23	ICT	ICT	Chak Shehzad	WC	Spot check+ baseline
7	6-Nov-23	Punjab	Rwp	Gandian	WST	Regular Monitoring+ baseline
8	7-Nov-23	Punjab	Rwp	Salmon	WST	Spot check+ baseline
9	13-Nov-23	AJK	Muzaffarabad	Tehriyan Bala	WST	Regular Monitoring+ baseline
10	14-Nov-23	AJK	Muzaffarabad	Knoor	WC	Spot check+ baseline
11	15-Nov-23	AJK	Muzaffarabad	Musa Agarr	WC	Regular Monitoring+ baseline
13	20-Nov-23	AJK	Mirpur	Bung	WC	Regular Monitoring+ baseline
14	22-Nov-23	AJK	Jehlum	Chakhama	WC	Spot check+ baseline
15	23-Nov-23	AJK	Jehlum	Langla	WC	Regular Monitoring+ baseline
16	24-Nov-23	AJK	Jehlum	Kohorian	WST	
16	27-Nov-23	AJK	Kotli	Koirata	WC	Regular Monitoring+ baseline
17	28-Nov-23	AJK	Kotli	Nainsukh	WST	Spot check+ baseline
18	4-Dec-23	AJK	Poonch	Topa Tower Kheriyan	WC	Spot check+ baseline
19	5-Dec-23	AJK	Poonch	WC-Kanyann	WC	Regular Monitoring+ baseline
20	6-Dec-23	AJK	Poonch	Mangar	WC	
21	12-Dec-23	AJK	Bhimber	Khol 1	WC & WST	Spot check+ baseline
22	12-Dec-23	AJK	Bhimber	W/C Sakrana	WC & WST	Spot check+ baseline
23	20-Dec-23	Punjab	Texila	Ghazi khohli	WST	Spot check+ baseline
24	26-Dec-23	AJK	Muzaffarabad	Mishtimba	WST	Regular Monitoring+ baseline
25	27-Dec-23	AJK	Muzaffarabad	Nora seri	WC	Spot check+ baseline
26	28-Dec-23	AJK	Muzaffarabad	Percha	WC	Spot check+ baseline

### 3.3.3. Regular Monitoring and Spot Checks / Field Visit to the ICT Village-Pind baigwal

The ME&IE consultants arranged at their own a spot visit on the targeted beneficiary's farm, Chaudhry Khanzada in ICT- village, 'Pind Begwal' At this farm, an underground pipeline scheme was installed and it was nicely maintained by the farmer. The water storage tank is fully covered from the top measuring 20x13x9 Sq. Foot size was constructed from the farmer's own sources. Along with the tank, he has also made fish ponds and involved in *fish farming* for domestic consumption purposes.

He is irrigating 5 Acres of land with this water tank. He has planted Okra and tomatoes on 2.5 Acres of land. He has planted garlic and onion crops.

It was fascinating that he is using all his land in a proper way. Along with the boundary of the farm, he has planted grapes with the iron support as well as lemon plants.

He had planned to plant wheat on 0.5 ha., but the plot was full of 'Parthenium'-a noxious local weed. He has been advised to remove this weed manually and then prepare the land for wheat planting. The farmer had a problem of fetching a good quality of wheat seed, and hence, the survey team managed for him to get the certified seed from the NARC-Wheat Program.

#### Before and After Impact of the Intervention:

As a result of the introduction of intervention, the cropping Pattern changed with the efforts of the beneficiary, previously he was producing only Maize crop and now he was growing different vegetables crops including Okra, Tomato and Onion. Ultimately, he was having high hopes for harvesting good crop produce that would increase his Income. However, he was concerned about the high electricity bills cost and the availability of quality seeds for the intended future crops.

#### Conclusion:

The farmer was utilizing all land but his productivity was very low due to mismanagement of good crop practices. So, it is recommended in this project along with the water management facilities, the services of advisory departments are desired to council and extend training amongst the beneficiaries to teach good agronomic practices as well as uses of high irrigation efficiency techniques amenable towards higher crop productivity.



**Tomato Crop Cultivated at Village 'Pind Begwal'**



**Water storage Tank Village Pind Begwal**



**ME&IE Consultants with Beneficiary at Pindbaigwal**

### 3.3.4. Professional Awareness and Knowledge & Skill Development Activities

A Seminar on "The Emerging Role of Hydroponics in Pakistan" was presented on 26<sup>th</sup> October 2023 at the premises of Lok Sanjh Foundation, G-9/4 Market, Islamabad, by Dr. Arshad Mahmood, the senior faculty member of Economics Department and Director, Hydroponic Institute, Pir Mehar Ali Shah Arid Agriculture University, Rawalpindi (PMAAUR). I, Dr. Ikram Saeed, DTL, ICT-Zone, National Office, Islamabad had the opportunity to participate in the seminar. The participants of the seminar were representing a very diversified group of academia, students, researchers, practitioners, hobby farmers, NGO representatives, etc. The salient points were noticed out of the presenter's discussion.

Tomato production through employing the hydroponic technique is more feasible as compared to other fruits and vegetables crops being produced, since its yield is 30 times more as compared to field crop cultivation. Its comparative economic advantage is promising, almost fetching double returns to the investment. Since, this product has earned niche market status with due regard to capital intensive crop production. Presently. Its major consumer is UAE, so PMAUR's hydroponic project earns maximum foreign exchange by selling its all produce to the middle east countries but always short in supply in comparison to their respective demands. The tomato produced through hydroponic technique is tastier, delicious and rich in nutrition as compared to table tomatoes, and it is being used as a fruit rather than vegetable. Thus, it is a safe product with minimal hazards to the health of human beings, as far as it has been reported to date. This product is fairly meeting standards of size, taste and color but expensive, hence the average consumer of Pakistan can't afford to buy it. The analysis of the hydroponic professionals showed that the water productivity of hydroponic tomatoes is highly significant (i.e., 60 Liter water consumes against 1,000-liter water per unit consumed to produce in the open field cultivation) for producing the tomato.

#### Limitations of this Technology and Recommendations:

- It is capital intensive; thus an average farmer can't adopt without launching the support programs like either subsidy or sponsorship;
- Search of new markets will always be a challenge as well as to maintain the supply against the corresponding demands;
- Quality nutrients used (water soluble) for the production of tomatoes are imported, currently there is no perfect substitutes available, locally --- It warrants the research agenda that should be designed and carried out to develop the solution of the issue; and
- Environmental externalities research is required to understand the over exploitation of the intensive use of the chemicals for the production of tomato crop.



#### 3.3.5. Second Seminar Attended

On October 26, 2023, Mr. Salman, Technical Support Officer, National Office, Islamabad had the opportunity to attend a seminar focusing on the **"Energy Efficiency Potential in the Gas Sector"**; the speaker sharpened his discussion illustrating the crucial topic of winter gas load management.

The seminar speaker and the chief guest was Mr. Mansoor Khan, DG, Oil and Gas Regulatory Authority (OGRA). Mr. Khan underscored the significance of the impending winter season, wherein the demand for gas is expected to surge significantly due to its multiple uses in addition to home consumption. Consequent upon the high demand during the winter months, he emphasized on the importance of efficient gas utilization and thus urged all the stakeholders to work collectively in order to assure the effective energy needs of the real consumers by watching out for the fake gas consumers. Additionally, Mr. Khan expressed OGRA's commitment to tackle the issues of illegal gas usage, indicating that stringent measures would be taken to curb such practices. Since the winter is approaching, therefore, the seminar will serve as a timely reminder for responsible consumers to address their increased gas needs on a sustainable

basis in lieu to maintain reliable energy supply during the colder months.

Date	2-10-2023
Venue	OFWM office Rawalpindi
<b>Participants</b>	
• Ms. Farkhanda, D.D, OFWM, Rwp.	
• Dr. Ikram Saeed, DTL, ICT-Unit, National Office.	
• Mr. Rasheed Ahmed Zehri, FTI, ICT	
• Ms. Sana Gull, ME&IE Officer, ICT	
• Ms. Hafiza Maryam Iqbal, ME & IE Officer, ICT	
<b>Meeting Agenda/Points discussed:</b>	
○ Debriefing on the status of WST construction under the operational control of NPIWC-II project.	
○ Discussion on field visit plan for next surveys.	
○ Meeting held with Deputy Director, OFWM for seeking the basic data that was required before initiating the baseline survey as well as manifestation of sampling frame/ Dashboard data bank storage. (A complete set of data is presented in Annexure Tables)	



Meeting at OFWM Office, District Rawalpindi Office

ICT-Unit, Islamabad ME&IE consultants are portrayed in the meeting with Director, OFWM, Rawalpindi Division, Mr. Sajjad Shah as well as D.D RWP District, Mrs. Farkhanda.

Date	18-10-2023
Venue	OFWM Office Rwp.
<b>Participants</b>	
• Mr. Sajjad Shah, Director, OFWM, Rawalpindi	
• Ikram Saeed, DTL, ICT-Unit, National Office.	
• Dr. Islam, Agricultural Agronomist.	
• Mr. Rasheed Ahmed Zehri, FTI, ICT	
• Ms. Sana Gull, ME & IE Officer, ICT.	
• Ms. Hafiza Maryam Iqbal, ME & IE Officer, ICT	
<b>Meeting Agenda/Points discussed:</b>	
• Apprised the on-going NPIWC-II project activities;	
• launched the formal request to supply the up- to-date progress of the targeted intervention's schemes committed by the OFWM, Department in order to	

fulfill the data needs of Dashboard as well as for determining the sample size to start mandatory field responsibilities of the consultants.

- In-line full support was assured by Mr. Sajjad Shah to carry out the project's field activities, Moreover, he realized the significance of the project intervention from the view point of beneficiaries.



ME&IE Consultants' Meeting at OFWM office Rwp

### Some of the Challenges & Mitigation Measures Adopted Discussed as under

- Some of the Constraints are as Follows: Field visits could not have been managed as per scheduled plans, and hence cancelled with revised program as illustrated in earlier section of this report. Some of the limitations discussed as under:
  - Non release of funds to meet the field survey expenses, and
  - Non provision of updated list of beneficiaries for the on-going and in-process schemes of the targeted interventions (to determine the sample size, the need of sampling frame is prerequisite).

### Key Proposals to Manage the suggested Field as well as HQs. Plans:

- a. Availability of sampling frame list to work out feasible sample size about the targeted interventions for the schemes including WCs and WSTs as well as LLLs from the respective stakeholders.
- b. First aid box, and basic necessities like, umbrella, water with cooler must be provided to the field teams to combat emergency situation,
- c. Tablet may be provided to the Field team members for facilitating online data transfer.

List of water storage tanks, Rawalpindi Division (Districts including Attock, Chakwal and Jehlum) for sampling frame to conduct surveys is attached as **Annexure E**:

### 3.4. ACTIVITIES PUNJAB ZONE – OCTOBER 2023

During the month of October, due to certain unavoidable circumstances such as financial constraints, limited field activities were carried out by the ME&IE consultants.

The consultants generally remain busy in their usual functions as under.

- i. Pre-Field Activities- Planning stage
- ii. Field Activities-Collection of data/information from project area.
- iii. Post Field Activities-Review of accumulated data and its validation.
- iv. Meeting with Stakeholders/Beneficiaries

#### 3.4.1. Pre-Field Activities

The main Pre-Field Activities were the review of the past performance and designing strategy for the future. Field the OFWM of Data / Information reviewed, the target and achievement of ME&IE consultants were studied in depth again for managing the upcoming field activities.

Such activities were very useful for planning and working in the field.

#### 3.4.2. Field Activities

During the Month under review, the ME&IE Consultants performed some field activities. The field staff also performed rectification of data. This exercise was carried out from the field offices through telephonic conversations/emails. However, ME&IE consultants closely monitored the status of the field operations.

#### 3.4.3. Post Field Activities

Review of accumulated data and its validation. The activities were related to the field data on Water User Associations Improvement of Watercourses and Construction of Water Storage Tank/Ponds Intervention. Such data pertained to monitoring, baseline, and Impact surveys of the interventions.

#### 3.4.4. Coordination/Meetings with Stakeholders/Beneficiaries

The coordination meetings with stakeholders/beneficiaries of the project were necessary to know the operational Status of OFWM and the collection of required information/data. For the purpose of consultants, I found it was a regular

practice of ME&IE consultants being followed every month.

During the month ME&IE consultants could hold the following physical meetings with field staff of OFWM.

#### 1. Meeting Held at Assistant Director Agriculture OFWM Office ChaK Jhumra

Date	23-10-2023
Venue	WC Site 38818-L Chak No 25 JB Chak Jhumra
<b>Participants</b>	
I.	Mr. Irfan Ahmad Agri Engineer OFWM Chak Jhumra
II.	Mr. Muhammad Yousaf Bhatti Deputy Team Leader/ ME&IE Consultants Lahore Punjab
<b>Discussions/Decisions of Meeting held in the field</b>	
1.	Mr. Irfan briefed on the activities of OFWM particularly on improvement of water course under NPIWC-II in chak no 245-JB. He also provided the data on water course 38818-L that was recently completed.
2.	Mr. Allah Ditta, Chairman of the concerned water course was not available. So, it was decided to Visit the Site along with him next time. The Deputy Team Leader ME and IE Consultant showed his satisfaction over the performance of OFWM in the area.
Deputy Team Leader ME&IE Consultants had a face-to-face meeting with Mr. Irfan Ahmad Agri Engineer Chak Jhumra at a farm site Chak25 JB Faisalabad.	

## 2. Meeting Held in DDA/DA OFWM Office Faisalabad

Date	24-10-2023
Venue	Director Agriculture OFWM Office Faisalabad
<b>Participants</b>	
i.	Mr. M. Khurshid Mufti Assistant Director OFWM Agri Chak Jhumra
ii.	Mr. Imran Ashraf Assistant Director Agriculture (Tehsil) Faisalabad
iii.	Mr. Shafqat Nadeem Water Management Officer Faisalabad
iv.	Mr. Muhammad Yousaf Bhatti Deputy Team Leader/ ME&IE Consultants Lahore Punjab
<b>Discussions/Decisions of Meeting held at Assistant Director Agriculture Faisalabad</b>	
1.	DTL briefed on-field activities of ME&IE Consultants regarding Baseline survey monitoring and impact survey to the participants. Mr. Asam Rafiq DDA/DA Faisalabad was not available due to other assignments.
2.	The Participant, Mr. Imran Ashraf briefed about the OFWM activities in Faisalabad Division. He is also informed to provide the data regarding targets of divisional data to ME&IE Consultants soon.
3.	The Various problems/ Issues/Bottlenecks faced by the field team were also disused.
4.	The cooperation of field offices in this regard was appreciated by ME&IE Consultants and expected in the future.
 <b>Group Photo of participants of the Meeting held in DDA/DA office Faisalabad.</b>	

### 3.4.5. Internal Meeting /Capacity Building

The Team Leader conducted regular meetings with Field Team in- charge/ Field staff to update the project activities. In these meetings, various suggestions were given for the improvement of monitoring tools, issues and measures in order to improve capacity building of the field teams. These sessions were held under the supervision of DTL and other Core team members.

## 3.5. ACTIVITIES KP ZONE – OCTOBER 2023

The ME&IE Consultants are committed to achieving the project objectives well in time. So It is important to keep cordial relations with all the stakeholders including the Agriculture/ OFWM Department, and the beneficiaries of the NPIWC-II, project through availing the facility of project's interventions including water course improvement/water storage tanks construction. Keeping in view the mandate and the available resources in mind, the consultants of KP zone confined their activities to the OFWM Directorate, Agriculture Secretariat, and other office work. What follows next, the office activities performed by the KP zonal staff in Peshawar during October 2023.

Major activities of ME&IE Consultants, KP Zone include:

- ❖ Monitoring Field Activities
- ❖ Meetings (Formal and Informal)
- ❖ Monitoring of data
- ❖ Verification of WC and WSTs through Google Earth
- ❖ Preparation of MMR (September 2023)

● **Informal Meetings:** As a routine activity, several meetings were held with OFWM Department's relevant official when and where required to update ME&IE consultants' staff about the ongoing activities of the OFWM Department related to NPIWC-II, project. These meetings/contacts were held both physically and telephonically for the collection of relevant information about undergoing schemes. Mostly these meetings were informal. As per the ME&IE consultants' discussion with the OFWM Department officials, it was found that schemes were mostly completed under the NPIWC-II project. New schemes for the improvement/ construction of water courses and water storage tanks will be initiated after the release of funds by the respective authorities.

### ● **Formal meetings:**

13<sup>th</sup> Joint Review meeting of NPIWC-II, WCBA, and NP-ECABA Projects. A meeting was called by the Provincial Project Management Unit (PMU) on **October 25, 2023 at 3.00 pm. The venue of the meeting was the committee room of the PMU, Gul Mohar Lane, University Town Peshawar.**



Meeting with Special Secretary Agriculture

Mr. Fawad Ahmad-ICT Technology Specialist and Mr. Kaiser Khan, Field Team Incharge (FTI) represented the M&E Consultants of KP Zone in this meeting. The agenda of the meeting was to review the progress made so far, in the above-mentioned projects. Special Secretary, Agriculture, KP chaired the meeting. Detailed discussion was made on Co-ordination, Cooperation, Support, Sharing of Data regarding the project's interventions Progress & Follow up of previous meetings pertaining to NPIWC- II & NP-ECABA projects. Project Director, Mr. Saeed-ur-Rehman elaborated on the agenda of the meeting. Mr. Fawad Ahmed deliberated on the data input financial and technical and how the consultant team is working round the clock to upload and streamline the data to be available on the dashboard. Notification of the meeting and pictures are annexed at the end of the report.

- **Monitoring of data:** Training has been imparted to the officials of the OFWM Department for data entry to the Dashboard. Now they are directly entering the data on the Android application. The ICT Manager, KP zone strictly monitor data entries and make necessary rectification by guiding the concerned staff of the various districts of KP.
- **Verification of WC and WSTs through Google Earth:** ME/IE consultants KP zone made verification of all watercourse, and water storage tank schemes coordinate through Google Earth and identified incorrect coordinates.
- **Writing of MMR of September 2023.**

### 3.5.1. Description of Progress:

During the month of October 2023, the OFWM Department staff extended all possible help towards the ME/IE consultants. Close contacts through meetings/Telephone calls with different cadre officials of the OFWM department were held regarding the ongoing activities under the NPIWC-II project during the current reporting month. The purpose of these meetings was to collect the GPS location-based data for dashboard completion and visits of teams to different destinations for baseline surveys. OFWM directorate extended their full support and provided all the relevant information. The ME&IE Consultants, KP made frequent visits to the directorate of OFWM to acquaint themselves with the ongoing schemes under the NPIW-II project by the concerned department. During these meetings, general discussions were also made about the perceptions pf the OFWM Department officials and of the farmers about these schemes. As per the OFWM Department's officials, most of the farmers were satisfied with the benefits of these schemes in terms of increase in crop productivity, cropping intensities, and water/ time savings at the farm gate levels. Apart from the meetings with OFWM Department officials, the ME/IE Consultants attended the desired calls/ meetings arranged by the Provincial PMU each on October 25, 2023.

### FIELD SURVEYS:

Monitoring / Baseline pertains to various interventions of the project viz., improvement of watercourses, water user associations, construction of water storage tanks, and laser land levelers surveys are carried out from time to time as a part of regular monitoring activities of ME&IE Consultants. As already mentioned in the last MMR, for the month of September 2023 that limited field surveys were conducted due to lack of financial resources, the same was the case during the month of October 2023. As soon as the funds will be released, the 3<sup>rd</sup> baseline field surveys will be launched in different sampled zones of KP as the sampling frame is already in hand.

**Data Entry and GPS Validation:** During October 2023, KP Teams entered and validated the GPS locations for hundreds of schemes of KP province. The activity was distributed among different team members with the help of the ICT team of KP.

OFWM directorate extended their usual support and provided all the relevant information.

### 3.5.2. Capacity Building of OFWM Staff on Android Application

The ICT team of the ME/IE consultants have trained the officials of OFWM in the Southern, Central, and Northern zones to enter data directly into the Dashboard through Android applications. Now they can enter the data directly to the dashboard from their respective offices. However, sometimes when they were stuck somewhere in this exercise, the ME/IE Consultants' continuous support was provided to OFWM officials on the telephone for any issue while operating the Android system and/or data collection process. In this regard, the ICT team regularly paid visits to the Directorate of OFWM, KP office and support to the field staff in respect of the utilization of the Android application to collect the data of GPS coordinates. It was found that there was some lapses on the part of the staff of OFWM in the collection of GPS coordinates, which was planned to amend by guiding them shortly on the next visit to their offices.

The gaps were filled in the understanding of the field teams of OFWM and ensured that they may follow the principles of the data collection shortly for better data gathering.

### 3.5.3. Limitations/Hurdles of ME/IE Consultants facing in achieving the required Targets

All the staff members are very devoted and hard-working towards fulfilling their responsibilities. Similarly, the OFWM staff is extending all possible help and cooperation towards fulfillment of the ME/IE Consultants, KP Zone's required information. But sorry to say that the Consultants failed to achieve the required targets because of lack of financial resources and its timely availability from the Client as well as from the Consultancy firm entrusted to conduct the ME&IE activities.

Moreover, despite raising the issue by the DTLs in their respective meetings with the management, still the field staff are not equipped with the required Android sets/tablets.

The KP zonal office has been provided with only one Pigmy meter for three field teams. Which I understand is not sufficient and may delay the field activity.

### 3.5.4. Key Challenges

As already reported in the previous MMRs of 2023, certain limitations were noted during meetings with the OFWM staff members. These are included as under:

- Shortage of funds from the Client.
- OFWM, KP Directorate remain involved in the implementation of other funded projects with the NPIW-II project. Hence, sometimes they might not be in a position to spare their staff for ME&IE Consultants' activities.

### 3.5.5. Recommendations:

In order to meet the targets well on time, following recommendations are forwarded:

- Central Quarter planning for 3<sup>rd</sup> baseline is still pending thus teams did not move for field activities. This should be materialized along with the required funds for the above-mentioned 3<sup>rd</sup> baseline survey.
- To meet the daily expenses, as well as the monthly payments of salaries may be ensured for all the staff members.
- First aid box and necessities (umbrella) must be provided to the field team to meet any emergency.
- The assurance of funds availability for conducting field surveys must be ensured in advance so they can execute their planning well on time without hindrance.

### 3.5.6. Quarterly Work Plan – KP Zone

The ME&IE Consultants, KP is committed to accomplishing all deliverables on due dates.

A comprehensive tentative Quarterly Work Plan for next quarter is due until the targets may be assigned by the Team Leader for the baseline-III survey.

### 3.5.7. Conclusions:

Though no tangible output has been achieved during October, still with the existing financial resources, the progress made so far is good. As far as other activities are concerned, including meetings with different stakeholders were frequently held both physically and digitally for updating about the ongoing interventions under the NPIWC-II, project schemes.

**3.6. ACTIVITIES DONE BY BALOCHISTAN ZONE – OCTOBER 2023**

**3.6.1. Filed Activity, Balochistan Zone:**

Monitored by Mr. Manzoor Kasi, DTL, M&E Consultants, Ms. Abida, Social and Gender Expert, Mr. Kamran, M&E Officer, Balochistan

**01- Field Visit Date – 24<sup>th</sup> October, 2022**

<b>Scheme:</b>	Water Storage Tank
<b>Name of Farmer:</b>	Abdul Quddus Lehri
<b>Union council:</b>	Shamozai
<b>Chairman WUA:</b>	<b>Abdul Quddus Lehri</b>
<b>District:</b>	Quetta
<b>Tehsil</b>	Quetta
<b>Source of irrigation:</b>	Tube Well
<b>Size of WST</b>	60x60
<b>No of beneficiaries:</b>	1
<b>Coordinates:</b>	N 30.1138, E 66.9414
<b>Shape of Water Storage Tank:</b>	Square
<b>Size of Water Storage Tank:</b>	60x60 ft.
<b>Tank:</b>	
<b>Depth of WST:</b>	4.5 ft.
<b>Financial Year:</b>	2019-2020
<b>Quality of Work</b>	Satisfactory
<b>Reduction in Water Logging and salinity</b>	<i>No such Problem in the area</i>
<b>Cropping intensity increased</b>	Yes
<b>Crops yield increased</b>	Yes
<b>Equity in water distribution increased</b>	<i>No such Problem in the area</i>
<b>Reduction in water disputes/thefts</b>	<i>No such Problem in the area</i>
<b>Poverty reduction through generation of employment.</b>	Yes,
<b>Overall feedback of Farmer / Beneficiary</b>	<ul style="list-style-type: none"> <li>According to the beneficiary, his cultivated area increased up to 4 to 5 acres due to this intervention.</li> <li>Water Saving increased by 80%</li> <li>The Farmer said that he has started tunnel farming after the availability of sufficient water.</li> </ul>

<b>General Observations</b>	<ul style="list-style-type: none"> <li>A good impact was observed on livestock.</li> <li>Due to Heavy load shedding farmers are facing a lot of problems.</li> <li>Heavy prices of crop-related items were observed to be unbearable by farmers.</li> </ul>
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**Figure-4.1: View of the field site, intervention of WST.**



**Figure-4.2: The DTL for Balochistan and the Social and Gender Experts were taking the views of the farmers. The Sub-Engineer from OFWM was also present at the meeting.**

**3.6.2. Updated Status of Dashboard Balochistan.**

The DTL, Balochistan zone has diligently undertaken several visits to the DG, OFWM Office, and these efforts have attained positive results, with the OFWM staff responding positively and cooperatively.

Furthermore, the Office of Water and Flood Management (OFWM) staff has been extremely supportive, demonstrating a commendable level of responsiveness. Their cooperation has been

instrumental in providing the necessary data, covering the fiscal year 2020-21 comprehensively.

The detailed summary of the received data "Technical Sanction (TS)" till F.Y. 2020-21 is listed below:

- 11<sup>th</sup> October 2023. Districts: Dera Bugti, Awaran, Barkhan.
- 13<sup>th</sup> October 2023. Districts: Chagai, Gwadar, Harnai, Jaffarabad, Noshki, Kalat, Kech, Kharan, Khuzdar
- 16<sup>th</sup> October 2023. Killa Abdullah, Kohlu, Killa Saifullah, Lasbela, Loralai, Mastung, Musakhail
- 18<sup>th</sup> October 2023. Naseerabad, Nushki, Pangur, Pishin, Quetta, Sherani and Sibi
- 19<sup>th</sup> October 2023. Sohbatpur, Surab, Washuk, Zhob and Ziarat.

This significant data forward in achieving our objectives for the Dashboard of Balochistan.

The worthy DG, OFWM, Balochistan is requested to direct the concerned officials to expedite the data validation process of the last three financial years i.e. 2019-20, 2020-21, and 2021-22, and provide the necessary support and resources they require. It is also requested give the necessary direction to all DDs and concerned staff to upload the beneficiary data on "Dashboard, Balochistan" through the Android Based data application of the current F.Y. 2022-23 so that the ME&IE Consultants could plan the field visits plan and start the 3<sup>rd</sup> Baseline surveys activities accordingly.

The updated progress of Dashboard, Balochistan, district-wise is stated below:

#### District-wise Progress of Dashboard, Balochistan (Watercourses)

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Kalat	Awaran	140	76	22	22	0	0	162	98
Kalat	Kalat	97	0	28	28	158	123	283	151
Kalat	Khuzdar	139	0	17	0	9	6	165	6
Kalat	Lasbela	110	0	35	0	44	35	189	35
Kalat	Mastung	102	93	30	1	66	60	198	154
Kalat	Surab	20	20	11	11	11	11	42	42
<b>Total</b>		<b>608</b>	<b>189</b>	<b>143</b>	<b>62</b>	<b>288</b>	<b>235</b>	<b>1039</b>	<b>486</b>
(%)		31%		43%		82%		47%	
Loralai	Barkhan	61	0	0	0	3	0	64	0
Loralai	Duki	27	27	15	15	1	1	43	43
Loralai	Loralai	158	157	47	43	132	130	337	330
Loralai	Musakhail	100	99	86	44	1	0	187	143
<b>Total</b>		<b>346</b>	<b>283</b>	<b>148</b>	<b>102</b>	<b>137</b>	<b>131</b>	<b>631</b>	<b>516</b>
(%)		82%		69%		96%		82%	
Makran	Gwadar	12	0	11	0	0	0	23	0
Makran	Kech	68	68	20	20	44	44	132	132
Makran	Panjgur	124	73	25	25	5	5	154	103
<b>Total</b>		<b>204</b>	<b>141</b>	<b>56</b>	<b>45</b>	<b>49</b>	<b>49</b>	<b>309</b>	<b>235</b>
(%)		69%		80%		100%		76%	
Nasirabad	Jaffarabad	53	53	32	32	56	56	141	141
Nasirabad	Jhal Magsi	16	0	6		5	0	27	0
Nasirabad	Kachi	81	81	18	18	3	3	102	102
Nasirabad	Nasirabad	52	0	35	35	82	82	169	117
Nasirabad	Sohbatpur	14	14	20	20	45	41	79	75
<b>Total</b>		<b>216</b>	<b>148</b>	<b>111</b>	<b>105</b>	<b>191</b>	<b>182</b>	<b>518</b>	<b>435</b>
(%)		69%		95%		95%		84%	
Quetta	Killa Abdullah	106	0	2	0	2	0	110	0
Quetta	Pishin	99	97	39	2	52	52	190	151
Quetta	Quetta	41	25	10		33	26	84	51
<b>Total</b>		<b>246</b>	<b>122</b>	<b>51</b>	<b>2</b>	<b>87</b>	<b>78</b>	<b>384</b>	<b>202</b>
(%)		50%		4%		90%		53%	

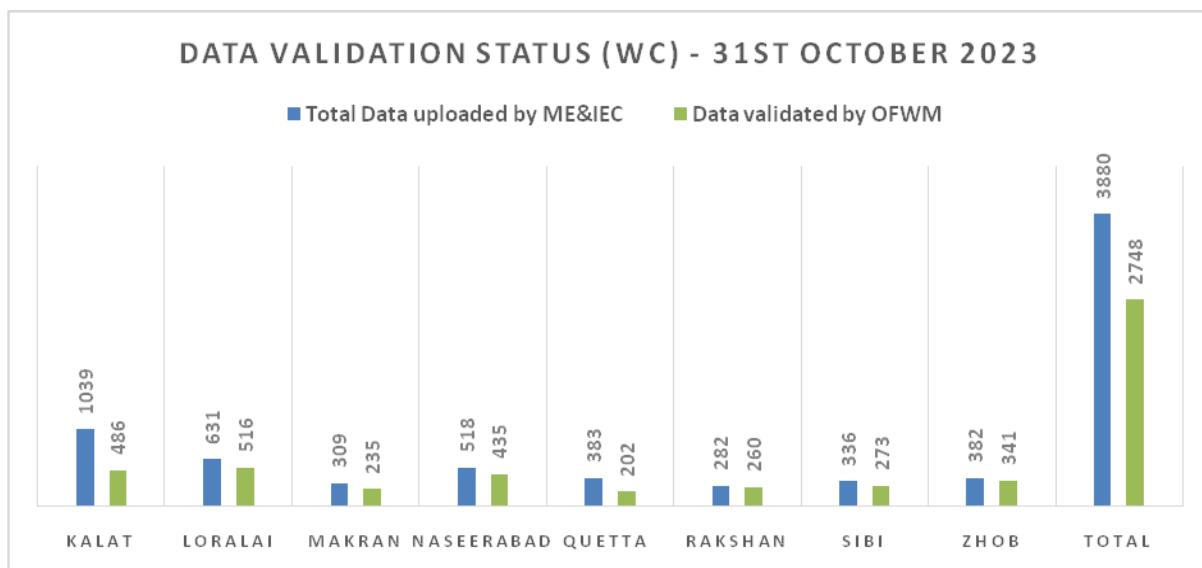
Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Rakhshan	Chaghi	49	49	28	28	0	0	77	77
Rakhshan	Kharan	23	23	3		55	55	81	78
Rakhshan	Nushki	38	38	25	25	40	39	103	102
Rakhshan	Washuk	18	0	2	2	0	0	20	2
<b>Total</b>		<b>128</b>	<b>110</b>	<b>58</b>	<b>55</b>	<b>95</b>	<b>94</b>	<b>281</b>	<b>259</b>
(%)		86%		95%		99%		92%	
Sibi	Dera Bugti	34	0	0	0	65	65	99	65
Sibi	Harnai	23	0	19	15	0	0	42	15
Sibi	Kohlu	41	41	17	17	0	0	58	58
Sibi	Sibi	33	33	6	6	25	25	64	64
Sibi	Ziarat	54	54	17	15	2	2	73	71
<b>Total</b>		<b>185</b>	<b>128</b>	<b>59</b>	<b>53</b>	<b>92</b>	<b>92</b>	<b>336</b>	<b>273</b>
(%)		69%		90%		100%		81%	
Zhob	Killa Saifullah	158	124	38	38	39	39	235	201
Zhob	Sherani	19	18	8	8	39	38	66	64
Zhob	Zhob	55	55	23	20	3	1	81	76
<b>Total</b>		<b>232</b>	<b>197</b>	<b>69</b>	<b>66</b>	<b>81</b>	<b>78</b>	<b>382</b>	<b>341</b>
(%)		85%		96%		96%		89%	
<b>GRAND TOTAL</b>		<b>2165</b>	<b>1318</b>	<b>695</b>	<b>490</b>	<b>1020</b>	<b>939</b>	<b>3880</b>	<b>2747</b>
(%)		61%		71%		92%		71%	

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

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Kalat	Awaran	12	12	27	27	48	0	87	39
Kalat	Kalat	20	2	32	32	127	65	179	99
Kalat	Khuzdar	20	0	30	0	89	68	139	68
Kalat	Lasbela	20	0	24	0	106	45	150	45
Kalat	Mastung	20	18	32	2	55	12	107	32
Kalat	Surab	3	3	9	9	17	17	29	29
<b>Total</b>		<b>95</b>	<b>35</b>	<b>154</b>	<b>70</b>	<b>442</b>	<b>207</b>	<b>691</b>	<b>312</b>
(%)		37%		45%		47%		45%	
Loralai	Barkhan	15	0	0	0	39	6	54	6
Loralai	Duki	7	7	9	9	13	13	29	29
Loralai	Loralai	22	22	32	3	59	59	113	84
Loralai	Musakhail	11	11	16	16	0	0	27	27
<b>Total</b>		<b>55</b>	<b>40</b>	<b>57</b>	<b>28</b>	<b>111</b>	<b>78</b>	<b>223</b>	<b>146</b>
(%)		73%		49%		70%		65%	
Makran	Gwadar	3	0	4	0	0	0	7	0
Makran	Kech	29	18	24	0	46	46	99	64
Makran	Panjgur	18	18	29	25	122	105	169	148
<b>Total</b>		<b>50</b>	<b>36</b>	<b>57</b>	<b>25</b>	<b>168</b>	<b>151</b>	<b>275</b>	<b>212</b>
(%)		72%		44%		90%		77%	
Nasirabad	Jaffarabad	0	0	8	8	9	9	17	17
Nasirabad	Jhal Magsi	7	0	0	0	23	0	30	0
Nasirabad	Kachi	18	18	24	24	40	40	82	82
Nasirabad	Nasirabad	0	0	8	8	9	9	17	17

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Nasirabad	Sohbatpur	4	4	8	8	2	1	14	13
	<b>Total</b>	<b>29</b>	<b>22</b>	<b>48</b>	<b>48</b>	<b>83</b>	<b>59</b>	<b>160</b>	<b>129</b>
	(%)	76%		100%		71%		81%	
Quetta	Killa Abdullah	22	0	34	0	0	0	56	0
Quetta	Pishin	22	22	36	33	61	61	119	116
Quetta	Quetta	9	9	17		50	32	76	41
	<b>Total</b>	<b>53</b>	<b>31</b>	<b>87</b>	<b>33</b>	<b>111</b>	<b>93</b>	<b>251</b>	<b>127</b>
	(%)	58%		38%		84%		51%	
Rakhshan	Chaghi	10	10	23	23	14	14	47	47
Rakhshan	Kharan	3	3	12		14	14	29	17
Rakhshan	Nushki	9	9	23	23	30	30	62	62
Rakhshan	Washuk	4		10	10	0	0	14	10
	<b>Total</b>	<b>16</b>	<b>12</b>	<b>45</b>	<b>33</b>	<b>44</b>	<b>44</b>	<b>152</b>	<b>136</b>
	(%)	75%		73%		100%		89%	
Sibi	Dera Bugti	11	11	0	0	28	28	39	39
Sibi	Harnai	3	3	6	6	12	0	21	9
Sibi	Kohlu	9	9	18	18	0	0	27	27
Sibi	Sibi	8	8	5	5	10	5	23	18
Sibi	Ziarat	4	4	6	6	11	11	21	21
	<b>Total</b>	<b>35</b>	<b>35</b>	<b>35</b>	<b>35</b>	<b>61</b>	<b>44</b>	<b>131</b>	<b>114</b>
	(%)	100%		100%		72%		87%	
Zhob	Killa Saifullah	30	20	32	32	56	56	118	108
Zhob	Sherani	4	4	6	6	15	15	25	25
Zhob	Zhob	15	10	24	24	46		85	34
	<b>Total</b>	<b>49</b>	<b>34</b>	<b>62</b>	<b>62</b>	<b>117</b>	<b>71</b>	<b>228</b>	<b>167</b>
	(%)	69%		100%		61%		73%	
	<b>GRAND TOTAL</b>	<b>382</b>	<b>245</b>	<b>545</b>	<b>334</b>	<b>1137</b>	<b>747</b>	<b>2111</b>	<b>1343</b>
	(%)	64%		61%		66%		64%	

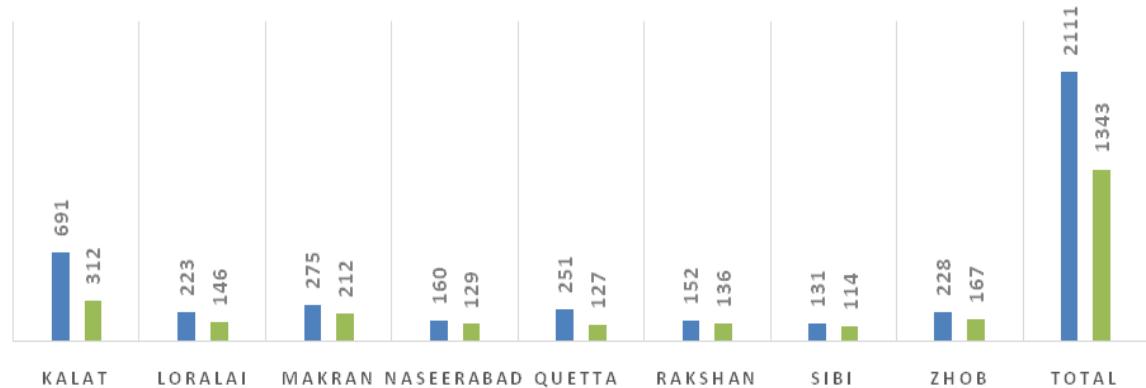
Division-wise Graphical Progress of Dashboard, Balochistan (Watercourses)



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

## DATA VALIDATION STATUS (WST) - 31ST OCTOBER 2023

■ Total Data uploaded by ME&IEC ■ Data validated by OFWM



### 3.6.3. Meetings:

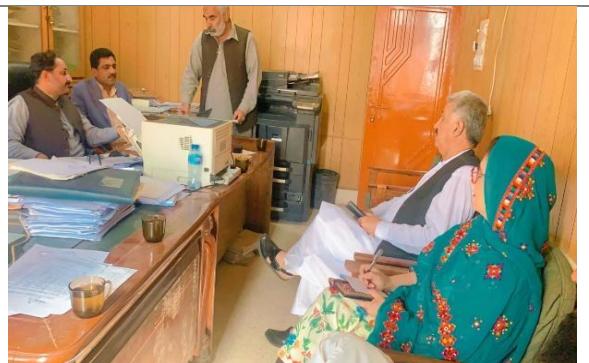
#### Meetings/Coordination with stakeholders Balochistan Zone

<b>Date</b>	20-10-2023
<b>Venue</b>	Balochistan Zonal Office, Quetta {Arbab Karam Khan Road marri street Quetta)
<b>Participants</b>	
<ol style="list-style-type: none"> <li>1. Mr. Manzoor Ahmed Kasi, DTL, Balochistan-Zonal office</li> <li>2. Mr. Saleem, ME &amp; IE Officer, Balochistan Zone.</li> <li>3. Mr. Kamran, ME &amp; IE Officer, Balochistan Zone.</li> <li>4. Mr. Absoor Khan Computer Operator, Balochistan zone.</li> <li>5. Mr. Rizwan TRP, ME&amp;IE, NPIWC-II</li> <li>6. Ms. Abida Munir, Social &amp; Gender Specialist, Balochistan-Zonal office.</li> </ol>	
<b>Meeting Agenda/Points discussed:</b>	
<p>A productive meeting was held with the Balochistan team.</p> <p>Following discussion points were discussed regarding Social &amp; Gender related activities.</p> <p>Discussion on field visit plan for four main purposes:</p> <ul style="list-style-type: none"> <li>• Regular Monitoring</li> <li>• Potential Case Studies</li> <li>• Meeting with Govt officials.</li> <li>• Focus group discussion</li> <li>• Data collection</li> </ul>	



**Social & Gender Specialist conducted meeting  
Balochistan Zonal Office team at Quetta**

<b>Date</b>	23-10-2023
<b>Venue</b>	OFWM Balochistan Quetta
<b>Participants</b>	
<ol style="list-style-type: none"> <li>1. Mr. Behram OFWM Balochistan Quetta</li> <li>2. Mr. Manzoor Ahmed Kasi, DTL, Balochistan-Zonal office</li> <li>3. Mr. Saleem, ME &amp; IE Officer, Balochistan Zone.</li> <li>4. Mr. Kamran, ME &amp; IE Officer, Balochistan Zone.</li> <li>5. Ms. Abida Munir, Social &amp; Gender Specialist, Balochistan-Zonal office.</li> </ol>	
<b>Meeting Agenda/Points discussed:</b>	
<p>Discussion on Social &amp; Gender related activities in Balochistan Zone</p> <ul style="list-style-type: none"> <li>• Role of female in farming activities in different districts of Balochistan</li> <li>• Impact of NPIWC-II</li> </ul>	



**Social & Gender Specialist conducted meeting at OFWM Balochistan Quetta**

<b>Date</b>	2 <sup>nd</sup> October 2023
<b>Venue</b>	ME&IE Consultants Office, Arbab Karam Khan Road, Marri Street, Quetta

**Participants**

- I. Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
- I. Mr. Rizwan Ahmed, TRP, ME&IEC, NPIWC-II.
- I. Staff of ME&IEC, Balochistan zone.

**Meeting Agenda/Points discussed:**

- A farewell party/internal meeting was held at the Zonal Office in Quetta."
- The farewell party was held in honor of Mr. Shareef, the FTI/M&E Expert.
- Several administrative issues were discussed, including adherence to office timings and the maintenance of office decorum.



**Figure-4.2: Farewell party held at the Zonal Office, Quetta.**

<b>Date</b>	4 <sup>th</sup> October 2023
<b>Venue</b>	ME&IE Consultants Office, Arbab Karam Khan Road, Marri Street, Quetta

**Participants**

- I. Mr. Imran, Deputy Director, FPMU, NPIWC-II, Islamabad.

- II. Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
- III. Mr. Rizwan Ahmed, TRP, ME&IEC, NPIWC-II.
- IV. Staff of ME&IEC, Balochistan zone.

**Meeting Agenda/Points discussed:**

- The meeting commenced with a comprehensive review of the updated progress within the Balochistan zone.
- The DTL, Balochistan provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.
- The matter of long pending staff salaries was brought to the forefront. The attendees deliberated on potential measures in the clearance of ME&IE Consultant's invoices at the client's end to streamline the salary distribution process and ensure timely disbursement to the staff.
- The meeting was adjourned at 4:00 pm, acknowledging the constructive discussions and proposed actions for resolving the identified issues.



**Figure-4.3: View of meeting with Mr. Imran, DD, FPMU, NPIWC-II held at Quetta Office**



**Figure-4.3: A group photo with Mr. Imran, DD, FPMU, NPIWC-II at Quetta Office**

<b>Date</b>	23 <sup>rd</sup> October 2023
<b>Venue</b>	ME&IE Consultants Office, Arbab Karam Khan Road, Marri Street, Quetta
<b>Participants</b>	
I. Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta II. Mr. Rizwan Ahmed, TRP, ME&IEC, NPIWC-II. III. Ms. Abida, Social and Gender Expert, ME&IEC, NPIWC-II, Balochistan. IV. Staff of ME&IEC, Balochistan zone.	
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"><li>• A highly productive meeting was held with the Social and Gender Expert regarding the Social and Gender component.</li><li>• Various suggestions were given by the Social and Gender Expert on how to collect data from the field and how to increase women's participation in the NPIWC-II Project.</li><li>• The DTL Balochistan planned a field visit to physically show the field activities to the Social and Gender Expert of the Balochistan zone.</li></ul>	



Figure-4.3: View of meeting at Quetta Office



Figure-4.3: A group photo at Quetta Office

### 3.7. SOCIAL & GENDER ACTIVITIES BALOCHISTAN ZONE – OCTOBER 2023

In the month of October 2023, the social and Gender specialist conducted field visits at district Quetta Balochistan, in order to survey the installed interventions and to collect data from the beneficiaries. During the current month the Social and Gender specialists were engaged in meeting with government officials. The Gender team was also engaged in working on Gender related documents.

Held frequent meetings for the purposes of reviewing progress, planning, and strategizing to begin the Project's targeted activities under the direction and supervision of TL, DTL, and Social and Gender experts, as well as on a need-based basis. (Minutes of meeting is attached)

The major activities conducted by Social & Gender team during the current month were:

1. Draft GRM (Gender Redressal Mechanism) is prepared and final draft will be shared in the coming months.
2. Draft GAP (Gender Action Plan) was prepared and is shared with DTL and TL for finalization.
3. Regular meeting with DTL, TL and Gender expert on Gender related activities & documents.
4. Social & Gender Specialist visited Quetta office NPIWC-II Monitoring consultants and OFWM office Balochistan in order to coordinate with relevant stakeholders.
5. Social & Gender Specialist conducted field surveys at two schemes of District Quetta, Balochistan.

#### Next Planning

1. S & G specialist will visit the Naseer Abad division in next Quarter.
2. Case study of Killi Shamoza will be prepared in next Quarter.

#### FILED ACTIVITY, BALOCHISTAN ZONE:

Social and Gender Specialist planned and organized the visit to Quetta, Balochistan. The aim of the visit was to observe the impact of targeted interventions under the project NPIWC II. The team was present at the decided location and time that was coordinated with the beneficiaries.

Social & Gender Specialist Ms. Abida Munir visited 02 schemes along with Mr. Manzoor Kasi, DTL, Mr. Kamran, M&E Officer, Balochistan and Qari Abdul Basit Sub-Engineer OFWM Quetta Balochistan.

The following finding were observed during the visit



Field Visit Date	24.10. 2022
Scheme:	Water Storage Tank
Name of Farmer	Abdul Quddus Lehri
Union council	Shamoza
WUA	Chairman: Abdul Quddus
UC	Shamoza
Tehsil	Quetta
District	Quetta
<b>BEFORE INTERVENTION</b>	<b>AFTER INTERVENTION</b>
According to farmers before intervention water was wasted.	Now water is saved and 80% of Water Saving increased.
Cultivated area was not increased due to water scarcity.	According to the beneficiary, his cultivated area increased up to 4 to 5 acres due to this intervention. 50% of loss covered.
Due to water shortage, they were unable to start tunnel farming,	It was observed that now they started tunnel farming after availability of sufficient water.
Before intervention they had only 6 goats and 1 cow.	After intervention the livestock increased. Now they have 20 goats and 3 cows.
Before intervention they had hired 6 laborers.	After intervention they hired more laborer because farming activity increased. Now

	they have 35 laborers which includes PHL and daily wages.
	Farmers have also made a football ground for children of their community which is a very healthy activity for children.
	Farmer has made his own small farmhouse where different animals like Markhor and birds were seen.



**S&G specialist during killi Shamoza visit at Quetta Balochistan**



**S&G specialist and DTL Balochistan with OFWM Balochistan Quetta Office.**



**S&G Specialist at OFWM**



**S&G Specialist, DTL Balochistan and sub-Engineer OFWM at Killi Shamoza Quetta**

#### PICTURE GALLERY



**S&G specialist and DTL Balochistan with beneficiary at Killi Shamoza Quetta.**



**S&G specialist, M&E officer and Sub-Engineer OFWM at Killi Shamoza Quetta**

## OVERALL OBSERVATION/FINDING

- Due to cultural restrictions, women are not permitted to take photos.
- Male members refused to grant permission for the female member to be interviewed.
- Electricity is a major issue in their region. Farmer indicated that electricity load shade lasts for eighteen hours.
- They own a farm house where they keep Markhoor and many animals and birds.
- The farmer indicates that they are happy and satisfied with the intervention.
- Farmers demand water storage tanks for the Zaitoon and Paista plantations (scheme Shadizai Quetta Balochistan).
- At their own expense, they installed their own solar system.
- They exclusively use drip irrigation in scheme Shadizai Quetta Balochistan.
- Women were not permitted to take pictures due to cultural restrictions.
- The male member refused to allow a female to be interviewed.
- Females were not member of WUAs
- Female has no knowledge about WUAs.
- Women participating in farming activities like picking tomatoes and other seasonal vegetables.
- Farmer has given the house and other basic facilities to PHL.
- Farmer female family members have less knowledge about farming activities.
- The female labor is also involved in farming and has knowledge about it.
- Farmers are paying 600-700/- PKR to daily wage labor, no female laborers worked on daily wages.
- Monthly wages along with additional benefits, such as housing, food, and other necessities of life, are given to permanent hire laborers.
- They have livestock but they never market their meat, milk and other dairy products; they use them for their own consumption.

### Decision making in farming activities/Farming activities

A large proportion of the population in Killi Shadizai and Killi Shamozai is from the Brahvi tribe. They didn't allow their women to work in farms.

Labor family women only assist their male members in picking vegetables like tomatoes and cleaning land.

Male didn't involve women in farming decisions as they thought women had no knowledge regarding farming.

Men excluded women from farming decision-making because they assumed that women lacked farming knowledge.

Cultural constraints that our society and other family members will have problems start talking against them.

Women do not have that much confidence to work independently.

### Decision making in household activities

Majority male members didn't involve women in household decisions.

In educated families, male members involved women in decision making in respect of the education and marriage matters of their children and other household matters.

Mostly family norms are traditional which keeps the women far from the decision making and in the involvement of the farming activities.

Females are not earning a justified income as they are kept in the premises of their house.

### Land ownership

Majority women haven't owned a piece of land.

### NPIWC-II /WUAs knowledge

Women's knowledge was very low about the WUAs' awareness. The women of the area did not have any knowledge regarding the NPIWC-II. Women were not members of WUAs.

Women were never invited to any WUA meeting. It was observed women did not receive an invitation or did not attend any WUA meetings.

### 3.8. ICT TEAM ASSIGNMENTS

#### 3.8.1. Implementation of MIS Dashboard

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

The progress of Interventions is live on the Dashboard application.

Punjab – WC Data - Summary					
Division	2019-20	2020-21	2021-22	2022-23	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-H**)

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	107	393	491	991

Total **911** Water Storage Ponds data have been received from Punjab zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-I**)

Punjab – PLL Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bahawalpur	81	324	305	78	788
D.G Khan	50	297	190	100	637
Faisalabad	93	378	274	99	844
Gujranwala	49	231	263	17	560
Gujrat	30	106	122	16	274
Lahore	64	271	258	95	688
Multan	102	273	194	79	648
Sahiwal	71	188	231	98	588
Sargodha	78	266	247	38	629
Rawalpindi	22	76	75	15	188
Overall	640	2410	2159	635	5844

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

KP – WC Data Summary						
Division	19-20	20-21	21-22	22-23	23-24	Overall
Bajaur	3	19	39	18	0	79
Bannu	75	35	94	28	0	232
D.I Khan	448	12	110	7	0	577
Hazara	86	71	152	59	0	368
Khyber	6	13	7	1	0	27
Kohat	98	40	57	28	9	232
Kurram	3	5	3	0	0	11
Malakand	182	179	479	62	0	902
Mardan	105	64	88	15	0	272
Mohmand	4	39	18	30	0	91
N.W Agency	2	3	5	1	0	11
Orakzai	0	1	0	0	0	1
Peshawar	141	89	94	38	0	362
S.W Agency	3	12	15	7	0	37
Overall	1156	582	1161	294	9	3202

So far, Total **3202** Watercourses data have been received from KP zone and available live on GIS Dashboard. By which **3008** Watercourses have been lined, **7** Watercourses Work Order Canceled and remaining **138** watercourses are under progress on different stages like 1st Milestone, 2nd Milestone, and Work Order Issued. The remaining **49** Watercourses are pending with Work Order Approval. (Detailed Summary attached as **Annex-K**)

KP – WST Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur	1	10	9	1	21
Bannu	13	10	23	2	48
D.I Khan	81	6	35	0	122
Hazara	28	47	84	13	172
Khyber	1	9	12	0	22
Kohat	27	17	32	14	90
Kurram	1	1	0	0	2
Malakand	74	96	195	9	374
Mardan	16	9	26	4	55
Mohmand	1	40	69	0	110
Orakzai	0	2	0	0	2
Peshawar	36	25	65	15	141
S.W Agency	0	15	15	2	32
N.W Agency	0	8	8	1	17
Overall	279	295	573	61	1208

Overall Water Storage Tank data submissions are **1209** of which **1116** WST have been completed and **60** are under progress. While **32** Water Storage Tanks Work Order Pending. (Detailed Summary attached as **Annex-L**)

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

So far, Total **50** PLL have been delivered and partial data received from KP zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-M**)

Balochistan – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Kalat	597	143	287	0	1027
Loralai	344	148	137	32	661
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	0	382
<b>Overall</b>	<b>2147</b>	<b>694</b>	<b>1002</b>	<b>32</b>	<b>3875</b>

Total **3875** Watercourses data has been received from Balochistan zone of which **3230** Watercourses have been lined, **247** Watercourses are pending at TS Stage and remaining **398** watercourses are under progress and. (Detailed Summary attached as **Annex-N**)

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
<b>Overall</b>	<b>391</b>	<b>566</b>	<b>1151</b>	<b>27</b>	<b>2135</b>

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

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

So far, Total **34** PLL have been delivered and partial data received from KP zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-P**)

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

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

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

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

AJK – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	2023-24
					Overall
MZD	31	94	79	31	1
Poonch	37	38	77	26	26
Mirpur	38	106	85	22	53
<b>Overall</b>	<b>106</b>	<b>238</b>	<b>241</b>	<b>79</b>	<b>744</b>

A total of **744** Watercourses data has been received from AJK zone of which **507** Watercourses have been lined, **81** Watercourses are pending at TS & Work Order Stage, **44** watercourses are under progress pending and **112 Watercourses** Work Order have been canceled. (Detailed Summary attached as **Annex-S**).

AJK – WST Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	2023-24
					Overall
MZD	35	61	81	11	0
Poonch	13	48	142	97	37
Mirpur	2	16	44	7	22
<b>Overall</b>	<b>50</b>	<b>125</b>	<b>267</b>	<b>115</b>	<b>616</b>

A total of **616** Water Storage Tank data has been received from AJK zone of which **358** Water Storage Tanks Have been lined, **87** Water Storage Tanks are pending at TS Stage, **29** Water Storage Tanks are under progress pending and **142** Watercourses Work Order have been canceled. (Detailed Summary attached as **Annex-T**)

ICT – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
ICT	0	20	14	0	34
<b>Overall</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>0</b>	<b>34</b>

A total of **34** completed Watercourse's data have been received and available live on Dashboard. (Detailed Summary attached as **Annex-U**)

### 3.8.2. On-Going Data Validation & Cleaning

Data submission is an ongoing process & will continue till the end of the project. Zonal Field Staff of AJK, KP, and Balochistan is continuously feeding data through customized Android Application provided & trained by the ICT team of ME&IE consultants.

However, The ICT team is continuously cleaning and validating the received data and communicating mistakes to the concerned Zonal DDs/ADs for correction.

## CHAPTER 4: QUARTERLY WORK PLAN- ACTIVITIES (OCTOBER 2023 TO DECEMBER 2023)

The ME&IE Consultants' activities initiating during the 4<sup>th</sup> Quarter of the year 2023 (1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023) are listed below. A tentative Work Plan for the 4<sup>th</sup> Quarter of the year 2023 (1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023) showing time span detail is given as **Annex-A**.

### 4.1 PRE-FIELD-ACTIVITIES

- i. Preparation for 3rd-Phase Baseline Survey
- ii. Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey
- iii. Training of Field Staff for Impact Survey and 3rd-Phase Baseline Survey

### 4.2 FIELD ACTIVITIES

- i. Regular Monitoring of Interventions in the field
- ii. Data collection of the interventions in the field
- iii. Baseline Survey Stage III
- iv. Online data entry in android-based application

### 4.3 ICT ASSIGNMENT

- i. Development / Improvement of website of NPIWC-II
- ii. Monitoring online data collection and Data entry
- iii. Monitoring Android based Mobile Application under implementation by field staff.
- iv. Data collection of interventions in MIS/GIS database
- v. Capacity Building Trainings / Refresher of Departments
- vi. Data Cleaning.

### 4.4 COORDINATION

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

### 4.5 DELIVERABLES

- iv. Monthly Monitoring Reports
- v. Quarterly Monitoring & Evaluation Report (QM&ER)
- vi. Mid-Term Monitoring and Impact Evaluation Report (Consolidated)

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

Document	Status
Draft Inception Report	Submitted
Final Inception Report	Submitted
Monthly Monitoring Report-First (DEC 2020-JAN 2021)	Submitted
Monthly Monitoring Report-Second (FEB 2021)	Submitted
Monthly Monitoring Report-Third (MAR 2021)	Submitted
Quarterly Monitoring & Evaluation Report-First (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-Second (APR-JUN 2021)	Submitted
Monthly Monitoring Report-Seventh (JULY)	Submitted
Monthly Monitoring Report-Eighth (AUG 2021)	Submitted
Annual Monitoring & Evaluation Report (1 <sup>st</sup> )	Submitted
Baseline Survey Report-I	Submitted
Monthly Monitoring Report-Ninth (SEPTEMBER 2021)	Submitted
Quarterly Monitoring & Evaluation Report-Third (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-Fourth Quarter year 2021 (OCTOBER – DECEMBER 2021)	Submitted
Monthly Monitoring Report-Thirteenth (JANUARY 2022)	Submitted
Monthly Monitoring Report-Fourteenth (MARCH 2022)	Submitted
Monthly Monitoring Report-Fifteen (MARCH 2022)	Submitted
Quarterly Monitoring & Evaluation Report-First Quarter year 2022 (JANUARY – MARCH 2022)	Submitted

Document	Status
Monthly Monitoring Report-Sixteen (APRIL 2022)	Submitted
Monthly Monitoring Report-Seventeenth (MAY 2022)	Submitted
Monthly Monitoring Report-EIGHTEENTH (JUNE 2022)	Submitted
Quarterly Monitoring & Evaluation Report-2 <sup>nd</sup> Quarter 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-3 <sup>rd</sup> Quarter 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-1 <sup>st</sup> Quarter 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
Monthly Monitoring Report-Thirty Fourth (October 2023)	Report in hand
Quarterly Monitoring & Evaluation Report-1 <sup>st</sup> Quarter year 2023 (Jul –	Submitted

Document	Status
Sep 2023)	
Baseline Survey Report -I	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
Baseline (Phase I&II) Consolidated Report	Submitted
Mid-Term Monitoring and Impact Evaluation Report	Submitted
Special Reports submitted:	
1) Monitoring Tools	
2) Survey Manual on MTs	
3) PAM	
4) Working Paper on Technology and Methodology for Implementation of Android Based Field Progress Data Collection and GIS Based Progress Monitoring Analytical Dashboard.	Submitted
5) Baseline-Endline Manual Survey Manual	
6) Android Application PMIS Dashboard Manual	

Deliverables/Reporting Requirements are placed at Annex-D.

#### 4.6 MATRIX OF RESPONSIBILITIES

The Matrix of Responsibilities is placed at 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 i.e., required for performing baseline surveys – III, as well as the required obligatory surveys including Midline and end line
- 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.
- While reviewing Dashboard during our in-house exercise we have witnessed some stuck-up cases. Following are different levels/stages in term of days and area of jurisdiction:

<u>Days</u>	<u>Departments</u>
100 to 119	District
120 to 149	Division
150 to 164	NPC/DDPC

As some of the cases have crossed third level which is execution agency DG, therefore, you are hereby intimated for your personal intervention to sort out these stuck ups.

We have already pointed out Stuck-Up Cases of NPIWC II Watercourses through our office letter No. NPIWC-II / ME&IE / NOISD / 0623-0256 submitted to your office dated 15 June 2023. Your prompt action is required in this matter.

It is also important to mention that when ME&IE Consultants pointed out certain stuck-up cases to FPMU, a quick response has been observed from FPMU vide its Letter dated 12 July 2023 and raise the issue with executing agencies to settle the issue on priority basis.

# ANNEXES A to U

ANNEXURE A: TENTATIVE QUARTERLY WORK PLAN (OCTOBER TO DECEMBER 2023)

TENTATIVE WORK PLANNED FOR THE QUARTER (October 2023 To December 2023)												Legend
No.	ACTIVITIES	3 Months-Year 2023 (Weeks)								Legend		
		October				November			December			
		WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4			
<b>1</b>	<b>Pre-Field Activities</b>											
1.1	Preparation for 3rd-Phase Baseline Survey											
1.2	Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey											
1.3	Refresher Training of Field Staff for 3rd-Phase Baseline Survey											
<b>2</b>	<b>Field Activities</b>											
2.1	Regular Monitoring of Interventions in the field											
2.2	Data collection of the interventions in the field											
2.3	Baseline Survey stage - 3											
2.4	Online data entry in android-based application											
<b>3</b>	<b>ICT Assignment</b>											
3.1	Development / Improvement 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 Cleaning.											
<b>4</b>	<b>Coordination</b>											
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											
<b>5</b>	<b>Deliverable</b>											
5.1	Monthly Monitoring Report											
5.2	Quarterly Monitoring & Evaluation Report (July-Sep 2023)											
5.3	Midterm Monitoring & Impact Evaluation Report (Consolidated)											

## ANNEXURE B: MATRIX OF RESPONSIBILITIES

### MATRIX OF RESPONSIBILITIES

SR. NO.	DELIVERABLE / ACTIVITIES	RESPONSIBILITY			
		NPC-FPMU	Agriculture Dept. (OCEMM)	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	-	-	-	●

LEGEND		
●	Primary Responsibility	
○	Secondary Responsibility	
○	Assistance	

## 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/register ed	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	i. Establishment of 47,278 Water users'	i. 47,278 WCAs ii. 47,278 WCAs	i. Conveyance losses for improved	i. Increase in cropping intensity on	i. Increase in farm income; ii. Increase in	i. The water flow measurements will be carried

Project Sub-components	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
	cost sharing basis: 40% farmers in terms of labor, and 60% funded by project.	<p>associations (WUAs);</p> <p>ii. Registration of 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</p>	<p>iii. registered; 47,278 watercourses improved and lined;</p>	<p>watercourses decreased by about 15 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>improved watercourses by 5-24%;</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>employment for farm labor;</p> <p>iii. Reduction in poverty;</p> <p>iv. Enhanced food security for the country.</p>	<p>out at before 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 after</li> </ul>

Project Sub-components	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
		the project					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	i. 14,932 WSTs constructed ii. 14,932 WSTs operated and maintained	i. Water which was otherwise largely going to be wasted is saved ii. 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 ii. Increased total crop output quantum iii. Increased farm income iv. Increased farm employment

Project Sub-components	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
		tank with his/her own funds and then received subsidy at 40% on issuance of FCR					impact surveys in case of watercourses will also be used for WSTs v. Same data analysis will be carried out here as in case of watercourses.
<b>C4: Provision of Land Leveling Units</b>	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.	i. 11,610 laser units provided to farmers / service providers; ii. Farmers trained in using the units.	i. 11,610 farmers / service providers received PLL units; ii. Farmers / service providers received training in using the units.	i. Land leveled on Farmers' / service providers' farms; vi. Land leveled on fellow farmers on rent; vii. Total 3.483million acres leveled by 11,610 units.	i. Water application efficiency increased at field level; viii. Even germination of seed. ix. Field application losses reduced by 10 percentage points x. Water productivity increased by	i. Increased area under irrigated crops; ii. Enhanced crop yields iii. Increased farm income	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 sample surveys.

Project Sub-components	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
					24%		<ul style="list-style-type: none"> <li>xi. 2-4% sample units will be visited by ME&amp;IE Consultants teams after one years of delivery</li> <li>xii. The unit will be verified</li> <li>xiii. Area treated during the year will be collected</li> <li>xiv. Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.</li> </ul>

## 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	Endline Survey Report	10	At the end of the Endline 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: LIST OF WATER STORAGE TANKS, RAWALPINDI DIVISION  
(DISTRICTS INCLUDING ATTOCK, CHAKWAL AND JEHLUM) FOR SAMPLING  
FRAME TO CONDUCT SURVEYS**

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Attock	Bafahad	225,901	8.5	5.5	2021-22
Rawalpindi	Attock	Noorpur	280,335	8	5	2021-22
Rawalpindi	Attock	Gadda	240,000	10	7	2021-22
Rawalpindi	Attock	Ismail	232,682	10	6.83	2021-22
Rawalpindi	Attock	Tarab	300,000	10.5	6	2021-22
Rawalpindi	Attock	Meerwal	232,873	11	6.5	2021-22
Rawalpindi	Attock	Behlot	280,733	11	6	2021-22
Rawalpindi	Attock	Domiyal	300,000	12	5.9	2021-22
Rawalpindi	Attock	Makhad	300,000	13	6	2021-22
Rawalpindi	Attock	Jhammat	300,000	13	8	2021-22
Rawalpindi	Attock	Dhok Lohar	300,000	13	7.5	2021-22
Rawalpindi	Attock	Tarab	300,000	12.5	6	2021-22
Rawalpindi	Attock	Fateh ullah	300,000	11	6	2021-22
Rawalpindi	Attock	Bhedian	241,280	9	5	2021-22
Rawalpindi	Attock	Saidan	300,000	10	6	2021-22
Rawalpindi	Attock	sarwala	175,027	9	5.4	2021-22
Rawalpindi	Attock	sarwala	179,575	10	5	2021-22
Rawalpindi	Attock	Noshehra	300,000	11	6.1	2021-22
Rawalpindi	Attock	Dandi	300,000	9	5.3	2021-22
Rawalpindi	Attock	Jabbi	300,000	10	6	2021-22
Rawalpindi	Attock	Dewal	290,000	12	7	2021-22
Rawalpindi	Attock	Burj	183,882	11	6	2021-22
Rawalpindi	Attock	Thatti Saidu Shah	300,000	14	6.5	2021-22
Rawalpindi	Attock	Malik Mala	234,815	15	8	2021-22
Rawalpindi	Attock	Qutbal	186,255	13	7	2021-22
Rawalpindi	Attock	Sheh-Rai Bahadar	266,043	14.5	8.54	2021-22
Rawalpindi	Attock	Jabbi	271,831	12	6.5	2021-22
Rawalpindi	Attock	Baryar	221,571	11	6	2021-22
Rawalpindi	Attock	KotSundki	211,000	10	6	2021-22
Rawalpindi	Attock	Garyala	283,056	11.75	6.5	2021-22
Rawalpindi	Attock	Jaaba	218,874	11	6	2021-22
Rawalpindi	Attock	Surg Salar	300,000	11.9	7	2021-22
Rawalpindi	Attock	Golra	400,283	11.5	6.9	2021-22
Rawalpindi	Attock	DhokGhulab Khan	205,889	11.78	7.4	2021-22
Rawalpindi	Attock	Jabbi	279,922	10	5.5	2021-22
Rawalpindi	Attock	Pindi gheb	300,000	10.5	5	2021-22
Rawalpindi	Attock	Noshehra	300,000	10	6	2021-22
Rawalpindi	Attock	Golra	300,000	12.5	6.5	2021-22
Rawalpindi	Attock	Dakhnair	300,000	11	6	2021-22
Rawalpindi	Attock	Jassian	300,000	11	5.9	2021-22
Rawalpindi	Attock	Fateh ullah	300,000	10	5.5	2021-22
Rawalpindi	Attock	Thatta	300,000	10.5	6	2021-22
Rawalpindi	Attock	MalhuWali	229,379	10.5	5.85	2021-22
Rawalpindi	Attock	Noor Pur	300,000	10	5.5	2021-22
Rawalpindi	Attock	Qandhari Pur	300,000	10	5.5	2021-22

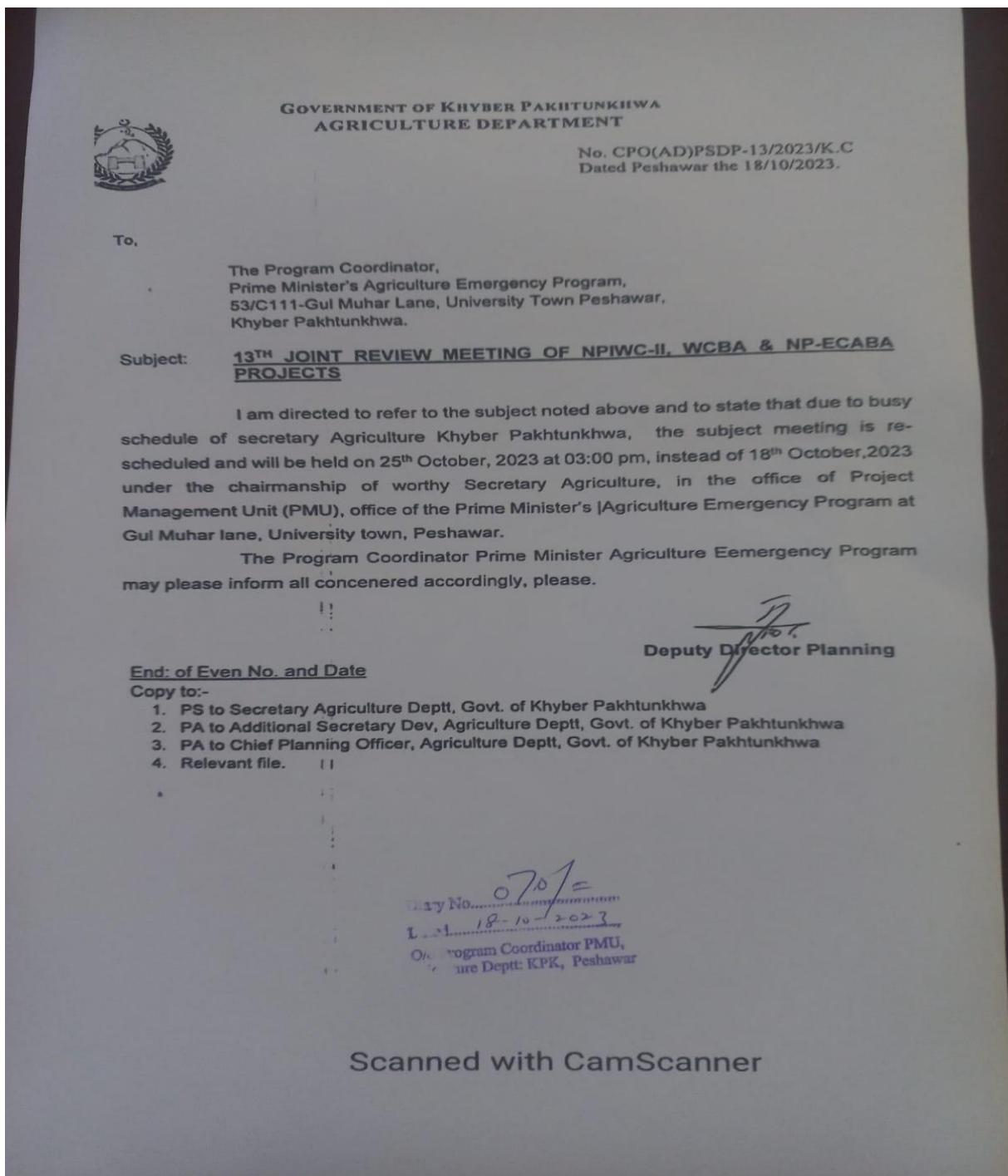
Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Attock	Bai	232,873	8.9	5	2021-22
Rawalpindi	Attock	Dhak Arazi	269,040	10	5.9	2021-22
Rawalpindi	Attock	Dandi	300,000	10	5.5	2021-22
Rawalpindi	Attock	Kharpa	300,000	10.5	6	2021-22
Rawalpindi	Attock	Golra	190,000	11	6	2021-22
Rawalpindi	Attock	PatharGarh	300,000	9.5	5	2021-22
Rawalpindi	Attock	Hassar	240,000	9	5	2021-22
Rawalpindi	Attock	Choora Sharif	300,000	8.5	5.1	2021-22
Rawalpindi	Attock	Amrati	300,000	9	5	2021-22
Rawalpindi	Attock	Haji Shah	300,000	10	5	2021-22
Rawalpindi	Attock	Makhad	300,000	11	5.5	2021-22
Rawalpindi	Attock	Amrati	300,000	10.5	5	2021-22
Rawalpindi	Attock	Uchri	176,517	12	6.5	2021-22
Rawalpindi	Attock	Mansar	130,000	10.8	7	2021-22
Rawalpindi	Attock	Makhad	300,000	10	6	2021-22
Rawalpindi	Attock	Makhad	18,000	11.2	6.5	2021-22
Rawalpindi	Attock	Makhad	287,493	10.5	5.5	2021-22
Rawalpindi	Attock	Injra	240,000	10.8	5.5	2021-22
Rawalpindi	Attock	Kani	300,000	10.8	5	2021-22
Rawalpindi	Attock	Pind Sultani	300,000	9.88	5	2021-22
Rawalpindi	Attock	Pindi gheb	300,000	9.5	5.7	2021-22
Rawalpindi	Attock	Noshehra	300,000	9.41	6.12	2021-22
Rawalpindi	Attock	Noshehra	300,000	9.77	6	2021-22
Rawalpindi	Attock	Dandi	300,000	8.96	5	2021-22
Rawalpindi	Attock	Malohwali	107,619	8.5	4.99	2021-22
Rawalpindi	Attock	Fateh ullah	300,000	10	5	2021-22
Rawalpindi	Attock	Pind Niazi	300,000	11.5	5.5	2021-22
Rawalpindi	Attock	Gharsheen	241,280	11	5.5	2021-22
Rawalpindi	Attock	Karalan Kalan	300,000	11.5	6	2021-22
Rawalpindi	Attock	Shah Rai Chiragh	300,000	10.5	5	2021-22
Rawalpindi	Chakwal	ThohaHamayon	261201	10.5	10.5	2021-22
Rawalpindi	Chakwal	Dalwal Tehsil ChoaSaidan Shah FT Kallar Kahar	257910	5	5	2021-22
Rawalpindi	Chakwal	Thoha Mahram Khan	278131	8	8	2021-22
Rawalpindi	Chakwal	Bhoune	257910	8.22	8.22	2021-22
Rawalpindi	Chakwal	Minwal	300000	12.1	12.1	2021-22
Rawalpindi	Chakwal	Kallar Kahar	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	BhounTeh. Kallar Kahar	252301	6	6	2021-22
Rawalpindi	Chakwal	Changa Teh. Lawa	225514	7.2	7.2	2021-22
Rawalpindi	Chakwal	TM Khan Teh. Talagang	300000	12	12	2021-22
Rawalpindi	Chakwal	PirhaFatihalTeh, Talagang	297504	9	9	2021-22
Rawalpindi	Chakwal	Gattal. Teh. Lawa	300000	15	15	2021-22
Rawalpindi	Chakwal	Kot Sarang Teh. Talagang	300000	11	11	2021-22
Rawalpindi	Chakwal	KotehraTeh. Talagang	245131	10	10	2021-22
Rawalpindi	Chakwal	BhoneTeh. Kallar Kahar	300000	8.36	8.36	2021-22
Rawalpindi	Chakwal	Marth Teh Chakwal	235033	6	6	2021-22
Rawalpindi	Chakwal	Thnil Kamal Teh Chakwal	300000	10	10	2021-22
Rawalpindi	Chakwal	MureedTeh Chakwal	300000	12.4	12.4	2021-22
Rawalpindi	Chakwal	Thoa Mehram Khan Tehsil Talagang	297285	10	10	2021-22

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Chakwal	Thoa Mehram Khan Tehsil Talagang	298491	15	15	2021-22
Rawalpindi	Chakwal	Pahar Khan Tehsil Kallar Kahar	300000	8	8	2021-22
Rawalpindi	Chakwal	Narrah Teh Lawa	300000	15	15	2021-22
Rawalpindi	Chakwal	Dhedwal	300000	8.2	8.2	2021-22
Rawalpindi	Chakwal	Chak Malook	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Dhakoo	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Tatral	300000	8.2	8.2	2021-22
Rawalpindi	Chakwal	Nachandi	300000	10.3	10.3	2021-22
Rawalpindi	Chakwal	Gugh	300000	11	11	2021-22
Rawalpindi	Chakwal	Mari	300000	7	7	2021-22
Rawalpindi	Chakwal	Akwal	267978	6.5	6.5	2021-22
Rawalpindi	Chakwal	Janga	300000	12	12	2021-22
Rawalpindi	Chakwal	Pichnand	300000	10	10	2021-22
Rawalpindi	Chakwal	Mehmood Wala	250000	5	5	2021-22
Rawalpindi	Chakwal	Dhoke Fateh Shah	300000	7	7	2021-22
Rawalpindi	Chakwal	Thoa Mehram Khan	300000	10	10	2021-22
Rawalpindi	Chakwal	Dandi Sorhali	277090	7	7	2021-22
Rawalpindi	Chakwal	Kot Sarang	300000	12	12	2021-22
Rawalpindi	Chakwal	Kot Sarang	300000	5.52	5.52	2021-22
Rawalpindi	Chakwal	Khichian	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Tala Sharaq	300000	7.42	7.42	2021-22
Rawalpindi	Chakwal	Perah Fatehal	300000	5.2	5.2	2021-22
Rawalpindi	Chakwal	Perah Fatehal	300000	10	10	2021-22
Rawalpindi	Chakwal	Nakka Rehan	272398	5	5	2021-22
Rawalpindi	Chakwal	Bhugtal	300000	8	8	2021-22
Rawalpindi	Chakwal	Bhugtal	300000	7	7	2021-22
Rawalpindi	Chakwal	Sagghar	291544	8	8	2021-22
Rawalpindi	Chakwal	Turab Janobi	300000	6.21	6.21	2021-22
Rawalpindi	Chakwal	Lawa	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Lawa	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Pichnand	300000	7	7	2021-22
Rawalpindi	Chakwal	Pichnand	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Bhalwal	300000	4.25	4.25	2021-22
Rawalpindi	Chakwal	Dhidimber	300000	6.5	6.5	2021-22
Rawalpindi	Chakwal	Dhidimber	300000	7	7	2021-22
Rawalpindi	Chakwal	Kot Gulla	300000	6	6	2021-22
Rawalpindi	Chakwal	Dhurnal	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Bhalwal	300000	4.5	4.5	2021-22
Rawalpindi	Chakwal	Laiti	300000	5	5	2021-22
Rawalpindi	Chakwal	Lawa	300000	12.5	12.5	2021-22
Rawalpindi	Chakwal	Manak Pur	252788	9	9	2021-22
Rawalpindi	Chakwal	Jhamra	210392	8	8	2021-22
Rawalpindi	Chakwal	Jhamra	274785	10	10	2021-22
Rawalpindi	Chakwal	Manak Pur	261517	8.5	8.5	2021-22
Rawalpindi	Chakwal	Choiye	300000	12.75	12.75	2021-22
Rawalpindi	Chakwal	Balkasar	278081	12	12	2021-22
Rawalpindi	Chakwal	Jhamra	205259	10	10	2021-22
Rawalpindi	Chakwal	Wadhal	220513	12.5	12.5	2021-22

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Chakwal	Kallar Kahar	300000	12	12	2021-22
Rawalpindi	Chakwal	Waulah	300000	12	12	2021-22
Rawalpindi	Chakwal	Rehna Sadaat	300000	12	12	2021-22
Rawalpindi	Chakwal	Kallar Kahar	300000	12	12	2021-22
Rawalpindi	Chakwal	Kallar Kahar	300000	12	12	2021-22
Rawalpindi	Chakwal	Kallar Kahar	300000	12	12	2021-22
Rawalpindi	Chakwal	Kallar Kahar	300000	12	12	2021-22
Rawalpindi	Chakwal	Balkasar	300000	12	12	2021-22
Rawalpindi	Jhelum	Malot	363261	11	6.5	2021-22
Rawalpindi	Jhelum	Wagh	814430	10.5	7	2021-22
Rawalpindi	Jhelum	Wagh	500000	12	7	2021-22
Rawalpindi	Jhelum	Padri	500000	12.5	7.5	2021-22
Rawalpindi	Jhelum	Pandori	500000	11.5	6.55	2021-22
Rawalpindi	Jhelum	Kund, Pandori	500000	10.5	6	2021-22
Rawalpindi	Jhelum	Chak Meion	412166	9.9	5.5	2021-22
Rawalpindi	Jhelum	ChhabbarSyedan	716434	10	6	2021-22
Rawalpindi	Jhelum	Chak Tareda	623872	10.5	6	2021-22
Rawalpindi	Jhelum	Bangial	500000	11	6	2021-22
Rawalpindi	Jhelum	Bakrala	500000	12	7	2021-22
Rawalpindi	Jhelum	Mandhar	720659	13	7	2021-22
Rawalpindi	Jhelum	Buggah	500000	12.5	6.9	2021-22
Rawalpindi	Jhelum	Baganwala	541966	11	5.5	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	10.5	5	2021-22
Rawalpindi	Jhelum	Buggah	619842	10	5	2021-22
Rawalpindi	Jhelum	Chak Hameed	373162	9.5	5.8	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	8.9	5	2021-22
Rawalpindi	Jhelum	Kareempur	412310	10	5.2	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	10.5	5	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	11	6	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	10	5	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	11	5.5	2021-22
Rawalpindi	Jhelum	Haranpur	471818	11	5	2021-22
Rawalpindi	Jhelum	Ahmadabad	500000	12	6	2021-22
Rawalpindi	Jhelum	Baganwala	500000	11	5.5	2021-22
Rawalpindi	Jhelum	Bara Guwah	440015	10	5	2021-22
Rawalpindi	Jhelum	Chak Mughlan	438641	10	5	2021-22
Rawalpindi	Jhelum	Kalowal	397586	11	5	2021-22
Rawalpindi	Jhelum	Chontra	409115	10	5.5	2021-22
Rawalpindi	Jhelum	Kotla Aima	407552	10	5	2021-22
Rawalpindi	Jhelum	Kotyam	619656	11.5	6.1	2021-22
Rawalpindi	Jhelum	GurhaChaudhriyan	721707	12	6	2021-22
Rawalpindi	Jhelum	Jakkar	337708	12	6.5	2021-22
Rawalpindi	Jhelum	Mota Phalla	341440	11.5	6	2021-22
Rawalpindi	Jhelum	Kund	614337	10.5	5.5	2021-22
Rawalpindi	Jhelum	Bagwala	623242	10.5	5	2021-22
Rawalpindi	Jhelum	Mohri	743422	10	5	2021-22
Rawalpindi	Jhelum	Mangoor	482471	10	5.5	2021-22
Rawalpindi	Jhelum	Lal Nagar	359235	9.5	5	2021-22
Rawalpindi	Jhelum	Thapla	773841	11	5	2021-22
Rawalpindi	Jhelum	Ahmadabad	490213	14	6.5	2021-22
Rawalpindi	Jhelum	Ahmadabad	602675	13	6	2021-22

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Jhelum	Ahmadabad	602675	10.5	5	2021-22
Rawalpindi	Jhelum	Ahmadabad	545443	9.5	5	2021-22
Rawalpindi	Jhelum	Baganwala	492843	10	6	2021-22

## ANNEXURE F: NOTIFICATION OF THE MEETING WITH PROJECT MANAGEMENT UNIT



## ANNEXURE G: PICTURES OF THE MEETING WITH PROJECT MANAGEMENT UNIT (KP ZONE)



Figure: Meeting with Special Secretary Agriculture KP

**ANNEXURE H: 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	Rajanpur	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 I: 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 J: PUNJAB - PLL DATA SUBMISSION - SUMMARY

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

ANNEXURE K: KP - WATERCOURSE DATA SUBMISSION – SUMMARY

Division	District	Completed	Work Order Canceled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
Bajaur Agency	Bajaur	60	0	0	0	13	6	0	79
<b>Bajaur Agency Total</b>		<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>6</b>	<b>0</b>	<b>79</b>
Bannu	Bannu	110	0	0	0	0	0	0	110
Bannu	Lakki Marwat	122	0	0	0	0	0	0	122
<b>Bannu Total</b>		<b>232</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>232</b>	
D.I. Khan	D.I. Khan	507	0	3	0	0	0	0	510
D.I. Khan	Tank	67	0	0	0	0	0	0	67
<b>D.I. Khan Total</b>		<b>574</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>577</b>	
Hazara	Abbottabad	30	0	0	0	0	0	0	30
Hazara	Battagram	49	0	0	0	0	0	0	49
Hazara	Haripur	73	0	0	0	0	0	0	73
Hazara	Lower Kohistan	7	0	0	0	0	13	1	21
Hazara	Mansehra	99	0	0	40	0	0	0	139
Hazara	Torghar	34	2	0	0	1	0	0	37
Hazara	Upper Kohistan	9	0	0	0	0	8	0	17
Hazara	Kolai Pallas	2	0	0	0	0	0	0	2
<b>Hazara Total</b>		<b>303</b>	<b>2</b>	<b>0</b>	<b>40</b>	<b>14</b>	<b>9</b>	<b>0</b>	<b>368</b>
Khyber Agency	Khyber	20	0	0	0	5	2	0	27
<b>Khyber Agency Total</b>		<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>27</b>
Kohat	Hangu	49	0	0	0	0	9	0	58
Kohat	Karak	82	0	0	0	0	0	0	82
Kohat	Kohat	92	0	0	0	0	0	0	92
<b>Kohat Total</b>		<b>223</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>232</b>
Kurram Agency	Kurram	10	0	0	0	0	1	0	11
<b>Kurram Agency Total</b>		<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>11</b>
Malakand	Buner	106	0	0	0	0	0	0	106
Malakand	Chitral	94	0	0	0	0	0	0	94
Malakand	Lower Dir	102	0	0	3	26	4	1	136
Malakand	Malakand	106	0	0	0	1	1	0	108
Malakand	Shangla	54	0	2	1	1	1	1	60
Malakand	Swat	282	3	0	2	0	0	0	287
Malakand	Upper Dir	111	0	0	0	0	0	0	111
<b>Malakand Total</b>		<b>855</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>28</b>	<b>6</b>	<b>2</b>	<b>902</b>
Mardan	Mardan	137	0	0	0	4	0	0	141
Mardan	Swabi	130	0	0	1	0	0	0	131
<b>Mardan Total</b>		<b>267</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>272</b>
M. Agency	Upper Mohmand	64	0	2	0	0	0	0	66
M. Agency	Lower Mohmand	22	0	2	0	1	0	0	25
<b>M. Agency Total</b>		<b>86</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>91</b>
Orakzai Agency	Orakzai	1	0	0	0	0	0	0	1
<b>Orakzai Agency Total</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Peshawar	Charsadda	135	1	0	0	15	1	0	152
Peshawar	Nowshera	127	0	0	0	1	2	0	130
Peshawar	Peshawar	73	1	0	0	1	4	1	80
<b>Peshawar Total</b>		<b>335</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>7</b>	<b>1</b>	<b>362</b>
S.W Agency	S.W Agency	37	0	0	0	0	0	0	37
<b>S.W Agency Total</b>		<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37</b>
N.W Agency	N.W Agency	5	0	0	0	0	6	0	11
<b>N.W Agency Total</b>		<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>11</b>
<b>Overall</b>		<b>3008</b>	<b>7</b>	<b>9</b>	<b>47</b>	<b>82</b>	<b>46</b>	<b>3</b>	<b>3202</b>

ANNEXURE L: KP - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	Work Order Issued		
Bajaur Agency	Bajaur	17	0	0	1	3	21
<b>Bajaur Agency Total</b>		<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>21</b>
Bannu	Bannu	12	0	0	0	1	13
Bannu	Lakki Marwat	35	0	0	0	0	35
<b>Bannu Total</b>		<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>48</b>
D.I.Khan	D.I.Khan	83	1	1	5	0	90
D.I.Khan	Tank	32	0	0	0	0	32
<b>D.I.Khan Total</b>		<b>115</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>122</b>
Hazara	Abbottabad	18	0	0	0	0	18
Hazara	Battagram	26	0	0	4	0	30
Hazara	Haripur	40	0	0	0	0	40
Hazara	Kolai Pallas	2	0	0	2	0	4
Hazara	Lower Kohistan	0	0	0	0	1	1
Hazara	Mansehra	40	1	5	2	0	48
Hazara	Torghar	17	0	0	1	0	18
Hazara	Upper Kohistan	7	0	0	0	6	13
<b>Hazara Total</b>		<b>150</b>	<b>1</b>	<b>5</b>	<b>9</b>	<b>7</b>	<b>172</b>
Khyber Agency	Khyber	10	0	0	6	6	22
<b>Khyber Agency Total</b>		<b>10</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>22</b>
Kohat	Hangu	12	0	0	0	0	12
Kohat	Karak	73	0	0	0	0	73
Kohat	Kohat	5	0	0	0	0	5
<b>Kohat Total</b>		<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>90</b>
Kurram Agency	Kurram	2	0	0	0	0	2
<b>Kurram Agency Total</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Malakand	Buner	43	0	0	0	0	43
Malakand	Chitral	21	0	0	0	0	21
Malakand	Lower Dir	18	2	5	12	0	37
Malakand	Malakand	24	0	0	0	0	24
Malakand	Shangla	43	0	0	0	0	43
Malakand	Swat	163	0	0	0	1	164
Malakand	Upper Dir	39	1	1	0	1	42
<b>Malakand Total</b>		<b>351</b>	<b>3</b>	<b>6</b>	<b>12</b>	<b>2</b>	<b>374</b>
Mardan	Mardan	33	0	0	1	0	34
Mardan	Swabi	21	0	0	0	0	21
<b>Mardan Total</b>		<b>54</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>55</b>
M. Agency	Lower Mohmand	28	0	0	0	0	28
M. Agency	Mohmand Agency	33	0	0	0	0	33
M. Agency	Upper Mohmand	49	0	0	0	0	49
<b>M. Agency Total</b>		<b>110</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>
Orakzai Agency	Orakzai	2	0	0	0	0	2
<b>Orakzai Agency Total</b>		<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Peshawar	Charsadda	13	0	0	1	0	14
Peshawar	Nowshera	71	0	0	0	0	71
Peshawar	Peshawar	44	0	0	3	9	56
<b>Peshawar Total</b>		<b>128</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>141</b>
S.W Agency	S.W Agency	32	0	0	0	0	32
<b>S.W Agency Total</b>		<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>
N.W Agency	N.W Agency	8	0	0	5	4	17
<b>N.W Agency Total</b>		<b>8</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>17</b>
<b>Overall</b>		<b>1116</b>	<b>5</b>	<b>12</b>	<b>43</b>	<b>32</b>	<b>1208</b>

### ANNEXURE M: 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 N: BALOCHISTAN - WATERCOURSE DATA SUBMISSION - SUMMARY**

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	TS Issued		
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	190	0	0	6	2	198
Kalat	Surab	0	0	0	19	23	42
<b>Kalat Total</b>		<b>940</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>27</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	0	335
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>32</b>	<b>661</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	3	0	0	98	1	102
Nasirabad	Nasirabad	52	0	0	89	28	169
Nasirabad	Sohbatpur	79	0	0	0	0	79
<b>Nasirabad Total</b>		<b>302</b>	<b>0</b>	<b>0</b>	<b>187</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	3	0	0	61	37	101
Rakhshan	Washuk	18	0	0	0	2	20
<b>Rakhshan Total</b>		<b>124</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>79</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	15	66
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>15</b>	<b>382</b>
<b>Overall</b>		<b>3230</b>	<b>0</b>	<b>0</b>	<b>398</b>	<b>247</b>	<b>3875</b>

ANNEXURE O: BALOCHISTAN - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	TS Issued		
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 P: BALOCHISTAN - PLL DATA SUBMISSION - SUMMARY

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

**ANNEXURE Q: 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 R: 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 S: AJK - WATERCOURSES DATA SUBMISSIONS - SUMMARY

Division	District	Completed	Work Order Canceled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
Mzd	Mzd	99	11	0	0	5	9	0	
	Jhelum	25	2	0	0	12	5	0	44
	Neelum	54	13	1	0	0	0	0	68
Mzd Total		178	26	1	0	17	14	0	236
Poonch	Poonch	40	10	0	0	2	3	1	56
	Bagh	29	15	0	0	0	0	17	61
	Haveli	10	21	0	0	2	0	3	36
	Sudhnoti	23	16	0	0	1	0	11	51
Poonch Total		102	62	0	0	5	3	32	204
Mirpur	Mirpur	77	2	0	0	6	0	0	85
	Bhimber	111	0	0	0	9	0	26	146
	Kotli	39	22	0	0	6	1	5	73
Mirpur Total		227	24	0	0	21	1	31	304
Overall		507	112	1	0	43	18	63	744

ANNEXURE T: AJK - WST/WHS DATA SUBMISSIONS - SUMMARY

Division	District	Completed	Work Order Canceled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MJD	MJD	142	14	0	0	1	4	0	161
	Jhelum	17	0	0	0	7	3	0	27
<b>MJD Total</b>		<b>159</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>7</b>	<b>0</b>	<b>188</b>
Poonch	Poonch	54	21	0	1	3	25	0	104
	Bagh	44	38	0	0	1	21	0	104
	Haveli	26	30	3	0	0	19	0	78
	Sudhnoti	21	24	2	0	0	4	0	51
<b>Poonch Total</b>		<b>145</b>	<b>113</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>69</b>	<b>0</b>	<b>337</b>
Mirpur	Mirpur	12	3	0	0	3	0	0	18
	Bhimber	12	0	0	0	0	0	0	12
	Kotli	30	12	3	0	5	2	9	61
<b>Mirpur Total</b>		<b>54</b>	<b>15</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>91</b>
<b>Overall</b>		<b>358</b>	<b>142</b>	<b>8</b>	<b>1</b>	<b>20</b>	<b>78</b>	<b>9</b>	<b>616</b>

### ANNEXURE U: ICT - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
ICT	ICT	34	0	0	0	0	34
Overall		34	0	0	0	0	34