



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

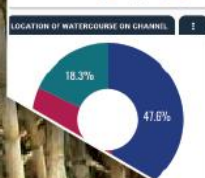
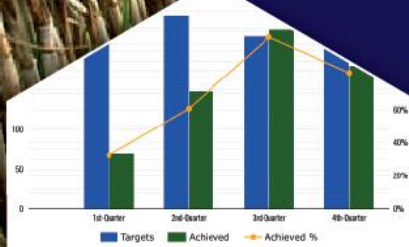
# NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION  
AND IMPACT EVALUATION  
CONSULTANTS



## QUARTERLY MONITORING & EVALUATION REPORT

OCT TO DEC 2023



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



**EASE-PAK**

**ADA**  
Consultants Inc.

In Association with **S&S Associates**





Federal Project Management Unit (FPMU)

Ministry of National Food Security & Research, Islamabad

Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants

For

National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)

## QUARTERLY MONITORING AND EVALUATION REPORT

OCTOBER – DECEMBER 2023

### CONTENTS

ACRONYMS .....	iii
EXECUTIVE SUMMARY .....	1
CHAPTER-1: INTRODUCTION .....	3
1.1 PROJECT PROFILE .....	3
1.2 PROJECT DESCRIPTION .....	3
1.2.1 Project Development Objectives .....	3
1.2.2 Project Objectives – General & Quantitative .....	3
1.3 PROJECT BENEFICIARIES .....	4
1.4 PROJECT COMPONENTS .....	4
1.4.1 Project Targets .....	5
CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS.....	6
1.5 OBJECTIVES.....	6
1.6 SCOPE OF THE SERVICES.....	6
1.7 MONITORING STRATEGY.....	6
1.8 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS.....	9
CHAPTER 3: WORK PLAN OF THE CONSULTANTS FOR THIRD QUARTER .....	10
1.9 COMPLIANCE STATUS OF WORK PLAN OF 4th QUARTER OCT-DEC 2023 .....	10
CHAPTER 4: ACTIVITIES DURING THE REPORTING QUARTER .....	12
4.1 INTRODUCTION .....	12
4.2 OBJECTIVE OF QM&ER .....	12
4.3 REPORTING QUARTER .....	12
4.3.1 Data Validation of Baseline and Impact Survey .....	12
4.3.2 Monitoring of Interventions in the Field .....	12
4.3.3 Mid-Term Monitoring and Impact Evaluation Report - Consolidated .....	12
4.4 ACTIVITIES ICT UNIT – DURING REPORTING QUARTER .....	16
4.4.1 Monitoring / Impact Field Visits of Interventions by ICT Unit Field Team .....	17
4.5 ACTIVITIES PUNJAB ZONE – DURING REPORTING QUARTER .....	29
4.5.1 Pre Field-Activities .....	29

4.5.2	Field Activities	29
4.5.3	Post Field Activities	30
4.5.4	Coordination / Meetings with Stakeholders / Beneficiaries.	31
4.5.5	Internal Meeting /Capacity Building	33
4.6	ACTIVITIES KP ZONE – DURING REPORTING QUARTER .....	34
4.6.1	Brief summary of the ME/IE Consultants’ KP Zone activities for the Quarter of October-December 2023	34
4.6.2	Major Activities Performed during the Quarter:	34
4.7	ACTIVITIES BALOCHISTAN ZONE – DURING REPORTING QUARTER .....	38
4.7.1	Updated Progress Of ME&IE Consultants - Balochistan.	38
4.7.2	Updated Status of Dashboard Balochistan.	39
4.7.3	Field Activities:	43
4.7.4	Meetings:	43
4.8	SOCIAL AND GENDER COMPONENT.....	47
4.9	ICT TEAM ASSIGNMENTS.....	51
4.9.1	Implementation Of MIS Dashboard	51
4.9.2	On-Going Data Validation & Cleaning	53
5	CHAPTER 5: ISSUES / BOTTLENECKS.....	54

## LIST OF ANNEXURES

ANNEX A:	TENTATIVE QUARTERLY WORK PLAN (OCTOBER TO DECEMBER 2023) .....	56
ANNEX B:	MATRIX OF RESPONSIBILITIES.....	57
ANNEX C:	MONITORING LOG-FRAME .....	58
ANNEX D:	DELIVERABLES/REPORTING REQUIREMENTS.....	63
ANNEX E:	LIST OF WATER STORAGE TANKS .....	64
ANNEX F:	PUNJAB - WATERCOURSE DATA SUBMISSION - SUMMARY .....	71
ANNEX G:	PUNJAB - WSP DATA SUBMISSION - SUMMARY .....	72
ANNEX H:	PUNJAB - PLL DATA SUBMISSION - SUMMARY .....	73
ANNEX I:	KP - WATERCOURSE DATA SUBMISSION - SUMMARY .....	74
ANNEX J:	KP - WST DATA SUBMISSION - SUMMARY .....	75
ANNEX K:	KP - PLL DATA SUBMISSION – SUMMARY .....	76
ANNEX L:	BALOCHISTAN - WATERCOURSE DATA SUBMISSION - SUMMARY .....	77
ANNEX M:	BALOCHISTAN - WST DATA SUBMISSION - SUMMARY .....	78
ANNEX N:	BALOCHISTAN - PLL DATA SUBMISSION - SUMMARY .....	79
ANNEX O:	GB - WATERCOURSES DATA SUBMISSION - SUMMARY .....	80
ANNEX P:	GB - WST DATA SUBMISSION - SUMMARY .....	81
ANNEX Q:	AJK - WATERCOURSES DATA SUBMISSIONS - SUMMARY .....	82
ANNEX R:	AJK - WST/WHs DATA SUBMISSIONS - SUMMARY .....	83
ANNEX S:	ICT - WATERCOURSE DATA SUBMISSION - SUMMARY .....	84

## ACRONYMS

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

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

## EXECUTIVE SUMMARY

The report in hand, “Quarterly Monitoring and Evaluation Report for the period of 1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023 is comprised of five chapters.

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

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

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

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

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

**Chapter -3** of this report covers the detail of ME&IE Consultants’ activities initiating during the reporting period (1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023) as listed below:

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

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

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

- Preparation for Baseline and Impact Survey
- Regular Monitoring of Interventions in The Field
- Baseline and Endline Impact survey Field visits
- Validation of Midterm Impact survey
- Refresher Training of Field Staff for Baseline and impact Survey
- Data Collection of Interventions in MIS/GIS Database
- Online Data Entry in Android Based Application. Updataion of data on Dashboard.
- Implementation of Mis Dashboard
- Monitoring Android based Mobile Application under implementation by field staff.
- Capacity Building Trainings of OFWM nominated staff.
- Monitoring / Data Collection on Social and Gender Component
- Coordination Meetings of ME&IE Consultants with Client and Stakeholders
- Internal Meetings of ME&IE Consultants
- Midterm/Midline Impact Evaluation Survey Report

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

Table-ES-1: Compliance Status of Quarterly Tentative Work Plan, 1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023

No.	Activities Planned for the Reporting Quarter	Status
<b>1</b>	<b>Pre-Field Activities</b>	
1.1	Refresher Training of Field Staff for Baseline and Impact Survey	Completed
1.2	Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for endline impact Survey	Completed
<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 and Endline Impact survey Field visits	In Progress
2.4	Online data entry in android-based application	In Progress
<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
3.6	Data Cleaning.	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) Submitted 34 <sup>th</sup> MMR (Oct 2023) Submitted 35 <sup>th</sup> MMR (Nov 2023) Submitted
5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jul-Sep 2023 Submitted
5.3	Mid-Term Monitoring and Impact Evaluation Report (Consolidated)	Submitted

## CHAPTER-1: INTRODUCTION

### 1.1 PROJECT PROFILE

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

### 1.2 PROJECT DESCRIPTION

#### 1.2.1 PROJECT DEVELOPMENT OBJECTIVES

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

#### 1.2.2 PROJECT OBJECTIVES – GENERAL & QUANTITATIVE

##### 1) General Objectives:

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

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

##### 2) Quantitative Objectives:

The quantitative objectives of the Project are as under:

The DTL, Balochistan shared updated progress of Balochistan zone and discussed other issues. The Focal Person and FTI, Naseerabad Zone also attended the meeting.

##### 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.
- iv. Provision of 11,610 Laser Land Levelers at 50% cost sharing, with the expectation to save about 50% irrigation water for wheat and about 68% of irrigation water for paddy.

##### Project Impacts

- i. Reduction in Water Logging and salinity in project areas to the extent of 10%.



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

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

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

#### Awareness support to farmers

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

### 1.3 PROJECT BENEFICIARIES

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

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

### 1.4 PROJECT COMPONENTS

The NPIWC-II comprises four components.

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

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

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

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

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

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

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

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

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

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

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

#### 1.4.1 PROJECT TARGETS

Project aims at achieving the targets (Figure-1.1) for 5 years starting from year 2019-20 to 2023-24. The

targets for each province/Zone (excluding Sindh) are given in below Figure-1.2.

Project Targets:

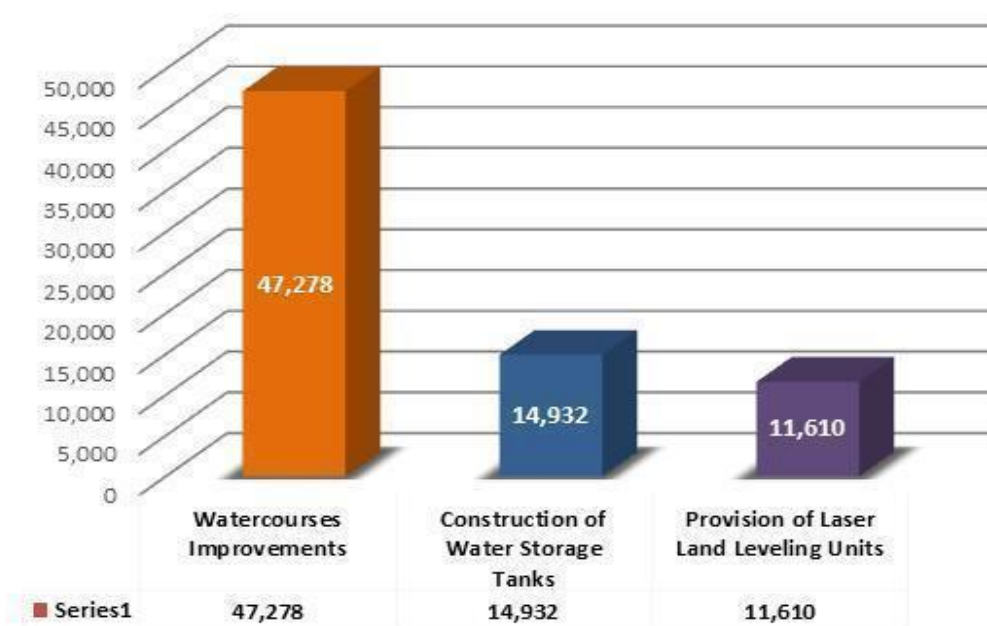


Figure-1.1: Pakistan Targets

Zonal Targets:

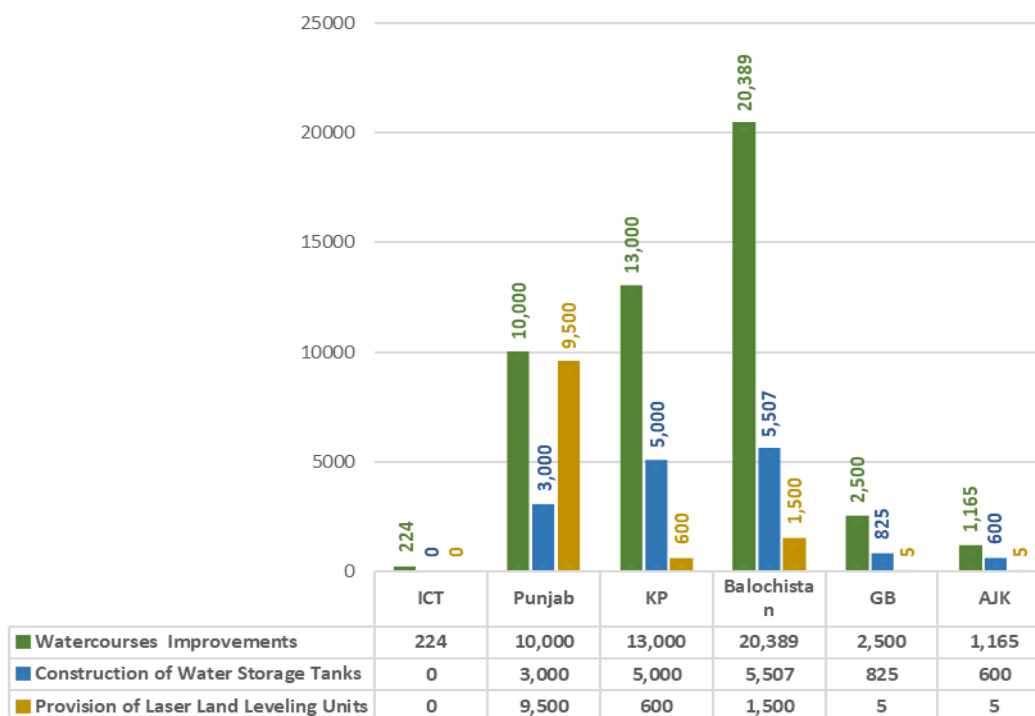


Figure-1.2: Zonal Targets

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

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

### 1.5 OBJECTIVES

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

### 1.6 SCOPE OF THE SERVICES

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

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

- ix) Carry out the impact evaluation of the project 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 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.*

### 1.7 MONITORING STRATEGY

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



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

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

**Table 2.1: Monitoring Strategy for ME&IE Activities**

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
1	Baseline, midline and endline surveys	Team Leader, Socio-Economic Expert, Agricultural Economist and Deputy Team Leader of respective province/unit.	<ul style="list-style-type: none"> <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 preselected.</li> <li>Baseline will be carried out before the intervention and the impact one year (two crop seasons) after the completion of the intervention.</li> <li>The midterm study will review the project progress at middle of the project implementation</li> <li>The endline 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 10<sup>th</sup> of following month,</li> <li>Quarterly Monitoring Report on 10<sup>th</sup> 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 endline 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> <li>Based on water savings on sample watercourses, total water</li> </ul>

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
			<p>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.</p> <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 periodic 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 levelled: <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> </ul> <p>The difference will be water saving due to laser land leveling</p> <p>Based on water savings on sample LLL units, total water savings will be estimated for all project LLL units. The savings will be reported per LLL unit, per annum and aggregate for the project in LPS and in Acre feet.</p>
4	Community mobilization	Social and Gender Specialist and Socio-Economic Expert	<p>The extent of community mobilization will be assessed by investigating whether:</p> <ul style="list-style-type: none"> <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 the agriculture</li> </ul>
6	Impact evaluation-on	Team Leader, Agricultural	<ul style="list-style-type: none"> <li>• The results of the baseline and impact surveys will be used to quantify impact on the economy</li> <li>• Additional food produced due to the project will be</li> </ul>

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
	the economy	Economist and Socio-Economic Expert	<p>estimated. It is benefit towards food security</p> <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 & Socio-Economic Expert	<ul style="list-style-type: none"> <li>Analysis as in serial 6 will be carried out with reference to various stakeholders, like community, government, farmers, etc.</li> </ul>
8	Spot checking	Team Leader, Deputy Team Leaders & Field teams/Engineers.	During the field visits for WUAs baselines impacts of Watercourses, WSTs and laser leveling units, the interventions will be spot checked for quality of construction, material, functioning and beneficiaries' satisfaction etc.
9	Process monitoring	Field Teams of Agriculture Deptt., Project Consultants, ME&IE Consultants & ICT/Technology Specialist	<ul style="list-style-type: none"> <li>The process 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.

## 1.8 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS

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

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



## CHAPTER 3: WORK PLAN OF THE CONSULTANTS FOR THIRD QUARTER

### 1.9 COMPLIANCE STATUS OF WORK PLAN OF 4th QUARTER OCT-DEC 2023

The activities of ME&IE Consultants commencing in the 4th Quarter of 2023 (from October 1, 2023, to December 31, 2023) are outlined below. For a detailed breakdown of the time frame, please refer to the tentative Work Plan for the 4<sup>th</sup> Quarter of 2023 provided in **Annex-A**.

#### Pre Field-Activities

- Refresher Training of Field Staff for Baseline and Impact Survey
- Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for endline impact Survey

#### Field Activities

- Regular Monitoring of Interventions in the Field
- Data collection of the interventions in the field
- Baseline and Endline Impact survey Field visits
- Online data entry in android based application

#### ICT Assignment

- Implementation of MIS Dashboard
- 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
- On-Going Data Validation and cleaning
- Improvement of the website of NPIWC-II

#### Coordination

- Meetings of TL, ME&IE Consultants with NPC regarding Project Progress / Issues
- Meeting of DTLs with respective DTL of NWMC
- Internal Meetings of ME&IE Consultants

#### Deliverables

- Monthly Monitoring Report
- Quarterly Monitoring Report (Jul-Sep 2023)
- Consolidation of Mid-Line Monitoring & Impact Evaluation Report

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

Document	Status
Draft Inception Report	Submitted
Final Inception Report	Submitted

Document	Status
Monthly Monitoring Report-First (DEC 2020-JAN 2021)	Submitted
Monthly Monitoring Report-Second (FEB 2021)	Submitted
Monthly Monitoring Report-Third (MAR 2021)	Submitted
Quarterly Monitoring & Evaluation Report-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 (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
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	Submitted

Document	Status
(APRIL – JUNE 2022)	
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
Quarterly Monitoring & Evaluation Report-1 <sup>st</sup> Quarter year 2023 (JAN – MAR 2023)	Submitted
Monthly Monitoring Report-Twenty-eighth (APRIL 2023)	Submitted
Monthly Monitoring Report-Twenty-Ninth (MAY 2023)	Submitted
Monthly Monitoring Report-Thirtieth (JUNE 2023)	Submitted
Quarterly Monitoring & Evaluation Report-2 <sup>nd</sup> Quarter year 2023 (APR – JUN 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 Forth (OCTOBER 2023)	Submitted
Monthly Monitoring Report-Thirty Fifth (NOVEMBER 2023)	Submitted
Quarterly Monitoring & Evaluation Report-3 <sup>rd</sup> Quarter year 2023 (JUL – SEP 2023)	Submitted
Quarterly Monitoring & Evaluation Report-4 <sup>th</sup> Quarter year 2023 (OCT – DEC 2023)	Report in hand

Document	Status
Annual Monitoring & Evaluation Report (3 <sup>rd</sup> ) 2022-23	Submitted
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) (Draft)	Submitted
Baseline (Phase I&II) Consolidated Report - Final	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. 5) Survey Methodology & Questionnaires for Baseline Survey Phase-II 6) Baseline-Endline Manual Survey Manual 7) Android Application PMIS Dashboard Manual 8) Survey Manual on MTs (Updated)	Submitted

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

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

#### Matrix of Responsibilities

The Matrix of Responsibilities is placed at **Annex-C**.

## CHAPTER 4: ACTIVITIES DURING THE REPORTING QUARTER

### 4.1 INTRODUCTION

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

### 4.2 OBJECTIVE OF QM&ER

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

### 4.3 REPORTING QUARTER

This current QM&ER covers the period from 1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023.

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

#### 4.3.1 Data Validation of Baseline and Impact Survey

The data validation for Baseline Phase-II and the Impact survey was completed during this quarter.

#### 4.3.2 Monitoring, Baseline & Impact field visits

ME&IE Consultants performed Baseline Phase-II and Impact survey as well as regular monitoring and spot check field visits during the reporting period. The routine monitoring tasks under the project NPIWC-II are comprised of input-output and process as defined in the Annual Work Plan / Budget and tracking of the outcome's indicators. Regular routine monitoring is to look at the extent to which the proposed project activities are being implemented as planned. Routine monitoring by the ME&IE consultants remained in progress during the reporting quarter.

Consultants field activities, which include routine monitoring of interventions and data collection for the remaining baseline and impact survey continued during the reporting period.

#### 4.3.3 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 increase 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 filling 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 PLLs 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 Levelled 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%.

#### 4.4 ACTIVITIES ICT UNIT – DURING REPORTING QUARTER

The current QM&ER covers the period from 01<sup>st</sup> Oct 2023 to 31<sup>st</sup> Dec 2023.

This Report provides the progress made in various activities relating to the accomplishment of Monitoring activities of project interventions e.g., Baseline and Impact Field Surveys / Monitoring of the field interventions. This report also describes all activities to be carried out as per quarterly work plan.

Activities during the reporting period are given below:

- Regular Monitoring and spot Checking.
- Baseline and impact survey field visits of 5 WST schemes in chawal and one in Jhelum district.
- Monthly tentative plan for remaining field visits of Baseline-III, Impact survey, and regular Monitoring & Spot Check duly approved and submitted to the Administration & Finance department of the company for further processing and necessary action.
- 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.
- Five-day training workshop on 'Planning and Management of Developmental Projects and "Manual for development Projects" attended by the ME&IE consultants in order to build their respective capacity/ refreshing knowledge and skills and attitude.
- A special Meeting arranged under the chair of Director, G3 Mr Saifullah Ejaz, in order to discuss and review the overall and up to date progress of the NPIWC-II project under the given ToRs/ objectives/ goals.
- Reviewed & updated "the Mid-term Impact Monitoring Report", and conveyed its technical comments to the respective stakeholders for adjusting towards its

finalization and printing. Moreover, the review of Gender Action Plan is under process.

- Scheduled regular meetings were held with Coordinating/Client, cooperating, and internal technical personals, as well as, the Administration and Finance departments of the Zonal and National Offices to ensure timely completion of the deliverables.
- Moreover, during the month of December, 2023, consultants of the ICT-Unit assisted to the Team Leader of the project in preparation of the updated progress of the project that was presented by the team of the consultants including TL, Director (JV/G3) and IT Expert to the Federal Secretary, Ministry of Food Security and Research in the office of the National Project Coordination of the NPIWC-II project.
- Professionally edited and reviewed the integrated MMR report for the month of Sep, Oct and Nov 2023, and submitted for its processing towards final printing and distribution amongst the respective stakeholders.
- Looked after and supported to the Admin and Financial liabilities entrusted under the supervision of Team Leader and Deputy Team Leader of the ICT-Unit along with the National Office, Islamabad.

#### 4.4.1 Monitoring / Impact Field Visits of Interventions by ICT Unit Field Team

The routine monitoring is containing brief analysis of the results; calculating achievement rates and establishing trends, relevant findings that may help or constraint the future data collection activities in the established periods and, if appropriate, propose specific solutions assessing the advantages and disadvantages of each.

The regular monitoring assignments under the project NPIWC-II are comprised of input-output and process as defined in the Annual Work Plan / Budget and tracking of the outcome's indicators. Regular routine monitoring is to look at the extent to which the proposed project activities are being implemented as planned. Routine monitoring by the ME&IE consultants remained in progress during the reporting quarter.

#### 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). From inception to date, the ME&IE Consultants ICT field team conducted baseline vis-a' vis impact surveys of **43** watercourses in AJK & ICT as well as baseline vis-a'-vis impact surveys of more than **18** water storage tanks in AJK and **19** in Potohar region of Punjab Zone. The details about those schemes have already been presented in the tabular and graphic forms in the previous MMRs.

ME&IE consultants of ICT-Zone have completed their targets of Baseline-I and Baseline-II. The impact/midline survey has also been completed. The consultants had prepared the final draft and submitted the Midline Impact Evaluation report to the client against the completed baselines including first and second with the criterion which interventions had completed at least two crop seasons at the point in time of arresting the middle of the project. The results of the midline impact evaluation report have also submitted in October 2023 and presented to the Federal Secretary, Food and Security and Research in the office of NPC, Client of the Project during the month of December, 2023.

#### Regular Monitoring and Spot Checks Field Visit to the ICT Village – Pindbaigwal

The ME&IE consultants arranged at their own a spot visit on the targeted beneficiary's farm, Chaudhry Khanzada in ICT- village, 'Pindbaigwal'. At this farm, underground pipeline scheme was installed and it was nicely maintained by the farmer. The water storage tank (20x13x9 Sq. Feet size) was fully covered from the top, as constructed by the farmer from his own sources. Along with the WST, he is using it dual purposes like fish pond for domestic consumption too.

He was irrigating 5 Acres of lands with this water tank. He had planted Okra and tomato vegetable crops, onion and garlic crops vegetable crops on of land. He has planted garlic and onion crops.

It was fascinating that he was using all his land judiciously. Along with the boundary line of the farm, he has planted grapes and lemon plants with the support of iron hedge.

He has planned to plant wheat on 0.5 ha., but the plot was full of 'Parthenium' - a noxious local weed. He was advised by the ME&IE consultants to remove

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

#### Conclusions:

Despite, farmer was utilizing all land but his productivity was very low due to mismanagement of good crop practices. So, it was recommended in this project along with the provision of improved water management facilities including high irrigation efficiency techniques, viz., the services of advisory departments are desired to extend counselling equipped with the good agronomic practices amongst the beneficiaries for arresting higher crop productivity.



Tomato Crop Cultivated at Village 'Pindbaigwal'



#### Water Storage Tank at Village Pindbaigwal



ME&IE Consultants at the farm of the Beneficiary in Pindbaigwal village

#### PROFESSIONAL AWARENESS AND KNOWLEDGE & SKILL DEVELOPMENT ACTIVITIES

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

Tomato production by employing the hydroponic technique is more feasible as compared to other fruits and vegetables crops being produced through this method, since its yield is 30 times more as compared to all other prevalent field crop cultivation in practice. Its comparative economic advantage is promising, almost fetches double returns to the invested amount. Since, this produce has earned niche market status with due regard of capital intensive crop production. Presently, Its major consumer is UAE, so PMAAUR's hydroponic project earns maximum foreign exchange by selling its total tomato produce to the middle east countries. It was highlighted in the presentation that there was always shortfall in the supply against the quantity demanded. 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 vegetable. Thus, it is a safe product with minimal hazards to the health of human beings, as far as it reported to date. This product is fairly



meeting the standards of size, taste and color on the cost of expensive product, hence an average consumer of Pakistani 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 for open field cultivation of per unit produce) for producing the tomato.

#### Limitations of this Technology & Recommendations:

- It is capital intensive; thus an average farmer can't adopt without the facility of 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;
- Pre-requisite of Quality nutrients using (water soluble) for the production of hydroponic tomatoes. Presently these are being imported, since, 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
- The use of this technology warranted new research agenda, "the environmental externalities need to explore for the comprehension about understanding the merits and demerits of over utilization of the chemicals for the production of tomato crop.



A Snap Shot of the Seminar Participants

#### 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 about 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), Islamabad. 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 of household 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 and pin pointing at 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 a timely reminder for the responsible consumers to address their increased gas need on a sustainable basis in lieu to maintain reliable energy supply during the colder months.

#### Regular Monitoring and Spot Checking

Spot visit to Moza kholia tehsil Hasan Abdal of Mr. Javeed Akhtar Butt who has planted approximately 4000 fruit trees of seedless citrus and Sweet Lime ('Meethay' - sweet or Persian Lime) under the technical supervision of Deputy Director of OFWM, Attock. Along with the fruits, farmer is also growing vegetables for their domestic use. He has 20x50 sq.ft. water storage tank and feeding the water to the tank through extracting water from well at the depth of 200 ft. He has a drip irrigation system in operation on 10.6 acres which is meeting the energy needs from the installed solar system. Citrus yields are very sensitive to the performance/ condition of soil, weather, and the amount and quality of water availability. As a result of bad cultural and environmental status, the citrus plants are not bearing good fruit crop due to irrigation water shortages that leads to leave loss, reduction in CO2 emissions, plant cell development decreases that trigger to plant growth inhibition. According to the farmer, to deal with irrigation water shortage in order to keep the health of the crops in good shape for fetching desirable yields that forced us to use



water resources more efficiently, especially by installing drip irrigation system on the farm.

The site was located at 33.8210° N and 72.6800° E, exhibiting at an altitude of 308 m. The weather conditions of the site are arid to semiarid with average annual rainfalls to the tune of 500 mm. A drip irrigation system was installed in the fields, manually. This system comprised of a main and sub main lines for each set having 38 mm diameter pipe made of polyvinyl chloride (PVC), further attached to lateral lines having 16 mm diameter made of low-density polyethylene (LDPE) fitted with 0.006 m<sup>3</sup>/h two drip laterals. The drip laterals were placed 0.50 m far from the orange trees. The single drippers/plants were placed on the lateral line for fruit plants (citrus and 'meethay').

#### Conclusion:

Citrus is a leading fruit crop in Punjab province with 90% of its total production in the country. This fruit crop exhibits multiple processes of different value chains nodes/ modes realized in domestic as well as international markets. The local farmers have planted two main varieties of sweet orange, i.e., Ruby Red and Valencia Late. Despite, the fruits were healthy but inadequate and improper fertilization practices noticed, may be one of the basic factors for poor productivity. Vegetative growth has a profound impact on the current reproductive growth of citrus because citrus bears on current season growth emerging from one-year-old branches. Pruning in time was another important issue which increased the plant canopy but may cause towards poor setting of fruits on tree branches for some periodical cycle of fruit bearing seasons.



Different Snap Shots of Site at the Farm of Mr. Javeed Akthare Butt, Moza kholia Tehsil Hasan Abdal, District Attock

#### Capacity Building/ Refreshing Training Workshop

##### Five Days Training on 'Planning and Management for Development Projects'

#### OBJECTIVES & PURPOSE OF TRAINING:

A 05 days' training course from 13th to 17th Nov 2023 was conducted at Akhtar Hameed National Center for Rural Development titled, "Planning and Management for Development Projects".

The primary objective of a training program was to raise employees' performance and productivity by enhancing current skills and acquiring new ones. The purpose of training was to train participants on the concept of Participatory Planning and Development and its role in the government & private system. Training contents included various topics such as Participatory Development, Participatory Planning, Role of Local Government Representatives and various skills and traits required for effective participatory planning.

#### METHODOLOGY OF TRAINING:

The training methodology was interactive as the trainers ensured that knowledge was not only disseminated but accurately perceived and understood by the participants. In order to ensure this, trainers engaged participants in discussions and kept the forum open for feedback, queries and suggestions. Discussions and interactive sessions of the training course were supported during training through power point presentations.

## Day:1

### Fundamentals of Planning and Management

- **Project:** A specific starting and ending points and intends to achieve specific objective (s); An investment while utilizing resources to create assets focused on desired output or results
- **Program:** package of various projects focused on desired outcomes and benefits
- **A Plan** is a package of socio-economic policies expressed with quantified targets and objectives achieved during specific period.

### Projects Fundamentals:

#### i. CONCEPTION AND INITIATION

- Concept Clearance Proposals by the aid of "Concept Clearance Committee"
- Feasibility Study (PC-II)
- Risk Assurance

#### ii. PLANNING

- Design: Project Document(PC-I)
- Scope, cost and time
- Approval process (Project Approving Fora: PDWP, DDWP,CDWP,ECNEC)

#### iii. EXECUTION

- Implementation within approved scope, cost and time.

#### iv. MONITORING

- Efficiency (Input versus Output)
- RBMIs/KPIs
- Quarterly and Annual Monitoring Report(PC-III)
- Risk Management

#### v. PROJECT CLOSURE

- Effectiveness (Input and output versus outcome)
- Project Completion Report(PC-IV)
- Annual Progress after Completion(PC-V).

### Development Framework:

- Alignment of Development Plans/ Projects / Annual Budget
- Pakistan Vision, 2025
- 12<sup>th</sup> Five Year Plan (2018-2023)
- 13<sup>th</sup> Five Year Plan (2023-2028)
- Manual for Development Projects, 2021
- 5E's Framework (i.e. Exports, Equity, Empowerment, Environment and Energy)

## Day:2

### Part 1:

**Project feasibility study, planning, scope and mode of financing:**

### Purpose of a feasibility study

- To **assess the viability** of a proposed project
- To **identify and mitigate potential risks**
- To make **informed decisions** about whether to **proceed with a project or not**

### Conducting a feasibility study: How

- Data collection and analysis
- Risk assessment
- Financial modeling
- Presentation of findings and recommendations

### Project identification:

- Needs assessment
- Opportunity Analysis
- Alignment with National and Global Development Agendas

### Project feasibility assessment:

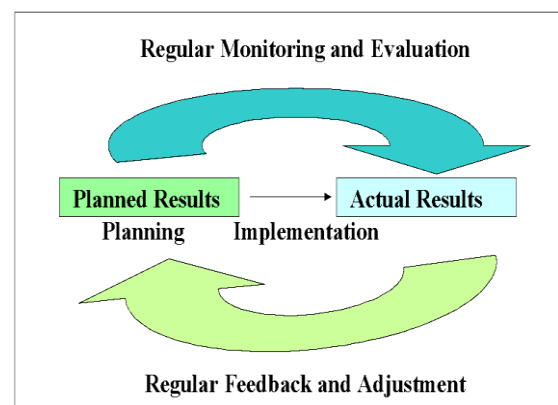
- Technical feasibility study
- Economic feasibility study
- Financial feasibility study
- Institutional feasibility study
- Environmental impact assessment (EIA)
- Social impact assessment (SIA)

### Project proposal components:

- Executive summary
- Problem statement
- Project objectives
- Project activities
- Project Timeline
- Project budget
- Project team
- Monitoring and evaluation plan

### Part 2:

### PROJECT MONITORING AND EVALUATION THROUGH LOGICAL FRAMEWORK:



#### M&E method:

- Performance indicators
- The logical framework (Log frame)
- Theory-based evaluation
- Formal surveys
- Rapid appraisal methods
- Participatory methods
- Public expenditure tracking surveys

#### Logical framework method:

The LOGFRAME uses a 16 box Matrix to lay out a program or project design, including:

- Each box contains specific information about the project.
- The boxes have a dynamic tension among them.
- Changes in one affect changes in others.
- The boxes concern people and interests so that these changes may require face to face re-negotiations of agreements.



Figure 1-2. Project Management Framework

#### Advantages of Logical framework:

- It ensures that fundamental questions are asked and weaknesses are analyzed in order to provide managers with better and more relevant information.
- It guides systematic and logical analysis of the interrelated key elements which constitutes as well as designed project.
- It facilitates common understating and other communication between decision makers, mangers and other parties involved.
- It ensures continuity of approach in case the original staff is replaced.
- It is flexible, resource based, team work, demand driven and client based technique.

- Used for project scheduling
- It determines the duration of activities for implementation
- Vertical side = a list of the activities
- Horizontal side = Dates, bars/timelines
- Start date
- Duration, and
- End date.

#### Gantt chart allows to see:

- What are the activities included in a project?
- When each activity will begin and end
- How long each activity is scheduled to last?
- Where activities overlap with other activities, and by how much
- The start and end date of the whole project

#### Day 3:

##### Part 1:

- Project management is “the application of knowledge, skills, tools and techniques to project activities to meet project requirement.

#### Gantt Chart:

- A Gantt chart is a popular tool of project management – Also known as Progress Chart

## PROJECT STATUS

March 2023

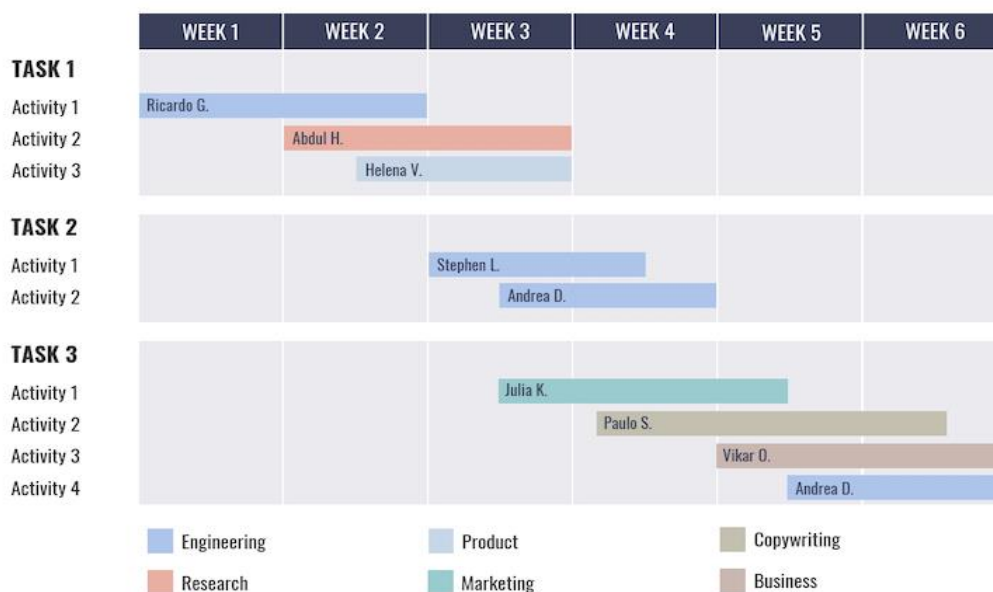


Figure-2 Format Gantt Chart

### Part 2:

#### Project Appraisal:

For any type of appraisal, basic task of project planner is to:

- Identify
- Quantify
- Value
- relevant Costs and Benefits of the project for the Year in which they occur and enter these in cash flows.

#### Discounting Techniques:

Discounting technique is used to determine the present value of the future costs and benefits of the project so as to make them comparable in terms of a common denominator i.e., present Value. The formula for discounting is as under:

$$P = F \frac{1}{(1 + r)^n}$$

Or

$$P = F (1 + r)^{-n}$$

#### Unit cost analysis:

**Outputs of project** –number of patients treated, students graduated, Kwh delivered, cu.m of water delivered.

**Outcomes of project** –lives saved, years of life gained, improved jobs attained, etc.

**Typical measure:** annual unit cost of output or outcome (e.g., \$ per Kwh, \$ per added years of life gained and \$ per student).

**Use** - select lowest cost way of achieving output or outcome in allocating limited budget.

#### Limitations of Financial Analyses:

i. **True Economic Costs and Benefits:** Problem here concerns transfer of payments from society's viewpoint, taxes borne by project are part of benefit rather than cost of project. Subsidies by comparison represent a cost to the society.

ii. **Public (Social) Goods:** These are goods consumed collectively by members of society. Market prices cannot be used to value such goods. Use of Cost-Effectiveness Analysis is appropriate in such cases.

#### Day 4:

##### What does PM include?

- Setting goals
- Defining the scope of work



- Allocating resources
- Scheduling task
- Monitoring progress

#### PM knowledge area:

- Project management
- Schedule management
- Cost management
- Quality management
- Communication management
- Procurement management
- Risk management
- Stakeholder management
- Integrated management

#### Project analysis techniques

- Need analysis
- Logical framework analysis
- Project appraisal –
- cost benefit analysis techniques etc...

#### Project planning techniques:

- WBS
- CPM

#### WBS: Construction Project:

- Purchase of land
- Identification
- Valuation
- Data Collection / Recent records
- Data Analysis
- Valuation
- Negotiation
- Payment / Transfer
- Designing
- Construction / Civil Work
- Finishing
- Furnishing

#### CPM

- **Activity:** A specific or set of tasks required by the project
- **Event:** Outcome of one or more activities
- **Network:** Combination of all activities and events
- **Path:** Series of connected activities or between any two events
- **Critical path:** Longest - Any delay would delay the project
- **Slack/float:** Allowable slippage for a path

#### Day 5:

#### Risk management includes following steps:

#### 3 Steps:

1. Identify Risks and Possibility of Occurrence
2. Analyze Impact
3. Develop a Management Plan

#### Key element of risk:

- Chances of Occurrence of Risk
- Impact of Risk

#### Stakeholder management:

The goal of a stakeholder management plan is to ensure effective communication and engagement with all stakeholders throughout the project.

#### 1. Identify Stakeholders

Define project stakeholders. e.g., donors, government, partners, network members, community members.

#### 2. Understand Roles and Objectives

Identify their roles, objectives and expectations.

#### 3. Stakeholder Analysis

Run an analysis to map out project stakeholders.

#### 4. Develop a Communication Plan

This includes a timeline to reach out to each stakeholder for learning What platform you'll use by What information to share.



Lecture Session in Progress at NCRD, Islamabad

#### Lessons learned:

At the end of training the participants shared their knowledge with the college/ learners in the training to recap the whole training course. Training programs are an ideal way to acquire project management knowledge; however, capturing and applying lessons learned is an excellent way to develop participants' gained knowledge regarding the development and management of the strategic planning. Participants have gained knowledge

regarding the development, management, the strategic planning, administration and controlling of a project during its development of life cycle from project planning through to construction, completion and project exit.

Project managers work diligently to better define goals and optimize workflows to improve productivity and project quality; with a clear roadmap in hand, teams can better navigate the project and perform the required tasks, ultimately improving the overall quality of work and producing a high-quality product.



Group Activity Process held during the Training Session

#### EVALUATION SESSION:

At the end of the training, participants were given workshop evaluation forms to share their feedback. In addition, a post-training assessment test was also administered to help gauge the perceived changes in knowledge and skills by the participants at the end of the training.

#### CONCLUSION:

In this training course, four ME&IE consultants including three female and one male participated from ICT-Unit Islamabad. However, the present training and development is considered a strategy for growth in every organization. It is adopted by the organization to fill the gap between skills and future opportunities. These training programs definitely enhance skills, improve efficiency, and productivity and growth opportunities for the employees/ learners.



Five Days Training on Planning and Management of Development Projects at NCRD, Islamabad

## Brief Report of Training Course on “MANUAL FOR DEVELOPMENT PROJECTS”

### Description:

One ME&IE male consultant from ICT-Unit, Islamabad has the opportunity to participate in a Five Day Training on **Manual for Development Projects**, at Pakistan Planning and Management Institute (PPMI), Islamabad from **Nov 13 to Nov 17 2023**. About 150 Participants representing different Public and Semi-Government entities from all over the Country have participated in the training sessions. The speakers who spearheaded the training sessions were considered to be authority in the determined areas of the training exhibiting good reputation academically, as well as, professionally artifact in the deliverance of relevant knowledge and skills effectively amongst the training participants/ learners.

After registration, the training session on its 1<sup>st</sup> day was started with recitation from the Holy Quran. Introduction and welcome note session was attended by the Director General, PPMI, Islamabad.

### Schedule and Scope of Training

#### First Day: Monday 13th November 2023

- Overview of modern Project.
- Objective of Development Manual.
- Annual Plan/PSDP.

#### Second Day: Tuesday 14th November 2023

- Life cycle for managing Projects.
- Project Identification Process.
- Project financing.
- Key Components of PC-I & PC-II.
- PFM Act and its salient features.

#### Third Day: Wednesday 15th November 2023

- Project Appraisal and its steps.
- Risk Assessment.
- Procedure for approval of Projects, Program and Foreign Loans.

#### Fourth Day: Thursday 16th November 2023

- Project Implementation.
- Role of Sponsoring agencies.
- Project Evaluation and Impact assessment.
- Project monitoring.

#### Fifth Day: Friday 17th November 2023

- Steps and procedure for Project closing.
- Certificate Award Ceremony.

### Objectives:

The objectives of the training were to apprise the participants in-detail about history and different stages of evaluation of the **Project Manual** and the time and again amendments made in it. Information about different important clauses of **PFM Act**. Implementation of projects from PC-I to PC-VI under the guide lines of the **Project Manual**. Need of Manual, expected outcomes, schematic framework of planning approaches and Annual Plan/PSDP. To extend knowledge about Appraisal process and flaws during the appraisal stages. Financing and financial management of Foreign **Loans**, Need Assessment, Execution of Monitoring and Evaluation of the projects. To extend information about proper project closing process and steps of projects under the directions of **Manual**.

### Methodology:

The training methodology was interactive as the trainers ensured that knowledge was not only disseminated but accurately perceived and understood by the participants; in order to ensure this, trainers engaged the participants in discussions and kept the forum open for feedback, queries and suggestions. Discussions and interactive sessions of the training course were supported during training through power point presentations.

### Basic Features of the Course:

- Setting Project design through Need Identification Approaches.
- Project Cycle Management and different phases of Project Cycle.
- Project Monitoring and Evaluation through Logical Framework.
- Risk Management and Project Stakeholder Management.
- Preparation and revision of PC-I & II, and discussing key component of PC-I & II.
- Project approval process.
- Project appraisal process.
- Responsibilities of different positions and stakeholders during project closing.

The lectures were delivered by very distinguished and competent speakers. All speakers were professionals as well as academia conversant with the relevant knowledge and skills.

The training course was successfully ended with auspicious Group Photo session and Certificate award ceremony on 17<sup>th</sup> November 2023.



### Lessons Learned:

The skills and approaches learned were very helpful to the learners with special reference to the participants' assignments and job description under NPIWC-II as an ME & IE consultant. There were lot of major procedural steps and concepts about project design, appraisal, execution, implementation, financial management and closer, which were either **lacking** or of less important to our professional knowledge before going through **Project Manual**. In this type of training, the participants got highlighted and refreshed their knowledge of project management. Gained sufficient knowledge about new methods and approaches towards Planning Management and Development of Projects as well as ME & IE.

As the part of project/organization, this training enhanced out capacity & knowledge. The relevant training, as of this kind is very crucial for the capacity building of the employees/ learners especially who are at the infancy stage of their stage. Besides, getting technical knowledge this training gave a good opportunity to us of having fruitful interactions and exchange of views with the participants from different ministries of the country.

**Suggestions:** In the light of above report and its conclusions, I suggest more and frequent refreshing trainings for the capacity building of ME&IE consultants of National/ Zonal/ Units levels, especially in the innovative areas of project management and its operational/ implementation mechanisms, accordingly.



*Training Session in Progress at PPMI, Islamabad*



*A Group Photo Session of the Participants of the Training at PPMI, Islamabad*



### Coordination Meetings of ME&IE Consultants with The Client

The status of project performance was brought under discussion especially from the view point of client as well as Project Board of Management. Team Leader debriefed the technical progress briefly by narrating that nothing is pending on the part of ME&IE consultants' deliverance. For example, baseline I & II, as well as its clubbed baseline reports have been completed and handed in to the client office. Moreover, mid-term impact monitoring report has been completed and posted to the client office for their processing. So for, on these reports no comments/ feedback have been received. After waiting of the comments on the aforementioned reports, now we should proceed further by printing the final version of these reports. In this respect, the decision of the company authorities is warranted to act upon accordingly. Additionally, some concerns and opportunities were brought up during the proceedings of the meeting, especially financial crunch that is severely affecting on the progress of the project targets including last baseline, and end-line impact evaluation surveys.

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

Date	2-10-2023
Venue	OFWM office Rwp.
<b>Participants</b>	
<ul style="list-style-type: none"> <li>Ms. Farkhanda, D.D, OFWM, Rwp.</li> <li>Dr. Ikram Saeed, DTL, ICT-Unit, National Office, Islamabad</li> <li>Mr. Rasheed Ahmed Zehri, FTI, ICT</li> <li>Ms. Sana Gull, ME&amp;IE Officer, ICT.</li> <li>Ms. Hafiza Maryam Iqbal, ME &amp; IE Officer, ICT</li> </ul>	
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>Debriefing on the status of WST construction under the operational control of NPIWC-II project.</li> <li>Discussion on field visit plan for next surveys.</li> <li>Meeting held with Deputy Director, OFWM for seeking the basic data that 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)</li> </ul>	




ME&IE Consultants' Meeting at OFWM Office, District Rawalpindi Office

Date	18-10-2023
Venue	OFWM Office Rwp.
<b>Participants</b>	
<ul style="list-style-type: none"> <li>Mr. Sajjad Shah, Director, OFWM, Rawalpindi,</li> <li>Dr. Ikram Saeed, DTL, ICT-Unit, National Office.</li> <li>Dr. Mohammad Islam, Irrigation Agronomist, National Office, Islamabad. Dr. Islam, Agricultural Agronomist.</li> <li>Mr. Rasheed Ahmed Zehri, FTI, ICT</li> <li>Ms. Sana Gull, ME &amp; IE Officer, ICT.</li> <li>Ms. Hafiza Maryam Iqbal, ME &amp; IE Officer, ICT</li> </ul>	
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>Apprised the on-going NPIWC-II project activities;</li> <li>launched the formal request to supply the up-to-date progress of the targeted interventions about the 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.</li> <li>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 the beneficiaries.</li> </ul>	



ME&IE Consultants' Meeting at OFWM Office Rawalpindi

Date	28-11-2023
Venue	National Office, Islamabad
<b>Participants</b>	
1.	Mr. Saifullah Ejaz Chaudry, Director, G3 JV
2.	Dr. Usman Mustafa, TL, NPIWC-II
3.	Ms. Abida Munir, S&G Specialist
4.	Mr. Rasheed Ahmed Zehri, FTI.
5.	Ms. Sana Gull, ME & IE, Officer
6.	Ms. Hafiza Maryam Iqbal, ME & IE, Officer
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>○ Discussion on field visit plan for four main purposes: <ul style="list-style-type: none"> <li>i. Baseline-III &amp; Impact surveys</li> <li>ii. Regular Monitoring</li> <li>iii. Spot Checks, and</li> <li>iv. Potential Case Studies</li> </ul> </li> <li>○ Opportunity Sampling of watercourses and water storage tanks for Baseline-III &amp; Impact surveys.</li> <li>○ Revisiting field visit estimates in accordance to the site of the prospective scheme as well as manpower strength employed to conduct the field surveys.</li> <li>○ Project Progress Review meetings and development of strategies to overcome the hindrances in the way of smooth running of the targeted project targets, etc.</li> </ul>	
	
ME&IE Consultants' Meeting with Director- G3 JV Co. in the National Office at Islamabad	

**For Smooth operation of field as well as HQs. activities following are the main Suggestions:**

- a) Availability of sampling frame list about WCs and WSTs as well as LLLs from the respective stakeholders,
- b) Immediate release of Direct cost Invoices payments from Client.

#### 4.5 ACTIVITIES PUNJAB ZONE – DURING REPORTING QUARTER

The consultants during this period remained 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
- v. Internal Meeting /Capacity Building Sessions

##### 4.5.1 Pre Field-Activities

The main Pre-Field Activities were the review of the past performance and designing strategy for the future working. Data / Information to be collected in near future and the targets of ME&IE consultants were studied in depth again for managing the upcoming field activities.

A summary of the achievements/covered number of units of each interventions surveyed during Monitoring, The baseline surveys and impact of the project were estimated as under:

##### Achievement of ME&IE Consultants till December 31, 2023

Ecological (Zone)	No of Water course surveyed	No of Water storage tank covered
Barani	-	19
Partially Barani	3	5
Irrigated (Rice Zone)	52	14
Irrigated (Mixed Zone)	60	14
Irrigated (Cotton Zone)	88	22
South Punjab Total	88	22
<b>Grand Total</b>	<b>203</b>	<b>74</b>

In the light of the above-cited table, it is decided that partially Barani zone and irrigated Cotton Zone will be covered on sampling in the ongoing survey for proper representation of each area.

##### 4.5.2 Field Activities

The ME&IE Consultants' Punjab field team conducted baseline vis-a' vis impact surveys on a total of **203** watercourses. In addition, they completed baseline and impact surveys for **74** water storage tanks (**55** by Punjab field team and **19** of Potohar Region by ICT Field team) and conducted impact assessments on **148** PLL interventions.

## Field Visit and Meeting of Watercourse No. 38818/L,

### Brief profile of Watercourse

Date of Visit	November 2, 2023
District	Faisalabad
Tehsil	Chak Jhumra
(Disty /Minor)	BuraliDisty
Watercourse Number	38818/L
Village/Chak	Chak 24/JB Lahorainwala
UC (No)	2
PP (No)	97
NA (No)	101
Name of Chairman	Mr. Allah Ditta
Share Holders (Nos)	48
Moga Type	AOSM
Regular/Additional	Additional
Improvement Year	2023-24
Sanctioned Discharge	37 LPS
Design Discharge	100 LPS
Area (GCA)	472 Acres
Area (CCA)	412 Acres
Total Length of WC	3861 Meters
Length of Lining	1925 Meters
Lining Type	PCPS
Nakkas Installed (Nos)	50
Culverts Construction (Nos)	0
Drop Structure	0
Buffalo Bath	0
Other Structure (Nos)	1
Ground Water Quality (Fresh/Saline)	Saline



A View of Watercourse No. 38818 /L Chak 24 JB Lahorian Wala, Chak Jhumra



Muhammad Yousaf Bhatti Deputy Team leader ME&IE Consultants discussing with MR, Allah Ditta Chairman of WUA and OFWM field team at the site



OFWM Field Supervisors Mr. Aqib Ahmad and Mr. Arif Ali briefing DTL on the Status of Said Watercourse while sitting in a farmer's house in the village

As a result of field visit of DTL and his discussions with chairman WUA and briefing by OFWM field staff, it was concluded that.

- The watercourse construction work was satisfactory.
- The farmers as well as OFWM staff were quite happy and cooperative with each other.
- Nominal patches of waterlogging and salinity were observed.
- Almost all the farmers/beneficiaries were small having an area of around 8 acres per farm.
- The main crops were wheat rice and sugarcane
- An Increase in water quantum was assessed by about 20-25%
- The increase in yield of existing major crops was estimated about 5-10%.
- No change in cropping pattern was noticed.

#### 4.5.3 Post Field Activities

It is related to the review of accumulated data and its validation. The activities were related to the field data on Water User Associations, Improvement of water Courses and Construction of Water Storage Tank/Ponds Intervention. Such data pertained to



baseline, monitoring and Impact survey of the interventions.

The attention of the field staff also remained on missing / rectification of data. Such data collected earlier were also validated for PMIS Dash Board.

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

The coordination meetings with stakeholders / beneficiaries of the project were necessary to know the operational Status of OFWM and collection of required information / data. For the purpose of consultant's findings, it was a regular practice of ME&IE consultants being followed every month.

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

##### 1. Meeting Held at Agri. Engineer (ADA OFWM Office) Chak Jhumra

Date	23, October 2023
Venue	WC Site 38818-L Chak No 24 JB Chak Jhumra
<b>Participants</b>	
1. Mr. Irfan Ahmad Agri Engineer OFWM Chak Jhumra	
2. 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 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 meeting with Mr. Irfan Ahmad Agri Engineer Chak Jhumra

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

Date	24, October 2023
Venue	Director Agriculture OFWM Office Faisalabad
<b>Participants</b>	
1. Mr. M. Khurshid Mufti Assistant Director OFWM Agri Chak Jhumra	
2. Mr. Imran Ashraf Assistant Director Agriculture (Tehsil) Faisalabad	
3. Mr. Shafqat Nadeem Water Management Officer Faisalabad	
4. Mr. Muhammad Yousaf Bhatti Deputy Team Leader/ ME&IE Consultants Lahore Punjab	
<b>Discussions/Decisions of Meeting held</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 another assignments.	
2. The Participants Mr. Imran Ashraf brief about the OFWM actives in Faisalabad Division. He also informs to provide the data regarding targets of divisional data to ME&IE Consultants soon.	
3. The Various problems/ Issus/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 it in future.	




Group Photo of participants of the Meeting held in DDA/DA office Faisalabad.

##### 3. Meeting held with Director General (OFWM)

Date:	27, November 2023
Venue:	DG Office (OFWM) Lahore
<b>Participants</b>	
1. Mr. Malik Muhammad Akram D.G (OFWM) Lahore.	
2. Hafiz Yaseen Qasir Director Headquarter (OFWM) Lahore.	
3. Mr. Tahir Mehmood DDA (Climate Change) Lahore.	
4. Dr. Uman Mustafa Team Leader (ME&IE Consultants) National Office Islamabad.	
5. Mr. Muhammad Yousaf Bhatti Deputy Team	



Leader (ME&IE Consultants) Lahore.
6. Mr. Muhammad Rizwan Suleman Field Team In charge (ME&IE Consultants) Lahore.
<b>Discussions/Decisions</b>

<b>View of the Meeting held with Director General (Agri) OFWM Lahore</b>
<p>I. Detailed discussions were held on ongoing activities of the project particularly achievements of the project in the Punjab</p> <p>II. The ME&amp;IE consultants briefed about the completed tasks in terms of nearly 5% of interventions completed by (OFWM)</p> <p>III. The Deputy Director reported the nonfunctional of dashboard installed in the DG office, Then Deputy Team leader consultants informed to make it operative soon.</p> <p>IV. It was further decided by the Director General and team leader ME&amp;IE Consultants. to start the regular meeting again between the zonal office of consultants Lahore and (OFWM) Directorate,</p> <p>V. Although the ultimate beneficiaries/ stakeholders are the. Farmers in the Project area., their benefits should be highlighted in the impact as observed by the consultants, Moreover, the impact of social mobilization on the farm community should also be reported</p>

#### 4. Meeting held with DDA in Directorate General (Agri) OFWM Office Lahore

<b>Date:16.11.2023</b>
<b>Venue: DG Office (OFWM) Lahore</b>
<b>Participants:</b>
<p>1. <b>Mr. Tahir Mehmood</b> Focal Person of DGA OFWM/ DDA Climate Change</p> <p>2. <b>Muhammad Yousaf Bhatti</b> Deputy Team Leader ME&amp;IE Consultants Punjab zone Lahore</p> <p>3. <b>Mr. Muhammad Rizwan Suleman</b> Focal Person to DGA OFWM, ME&amp;IE Consultants Punjab Zone Lahore</p>
<b>Discussions/Decisions</b>
I. The consultants briefed on current activities of

- the project,
- II. The DDA also shared their status on project performance,
- III The ME&IE consultants requested for data regarding district-wise targets of various interventions for the year 2023-2034,
- IV Both side of the participants agreed to have next meeting in early December,



**View of the Meeting held in Directorate General (Agri) OFWM Office Lahore**

#### 5. Meeting held with Assistant Director (Agri) OFWM ChakJhumra

<b>Date: 26, December 2023</b>
<b>Venue: Office of the Assistant Director (OFWM) Chak Jhumra. District Faisalabad</b>
<b>Participants:</b>
<p>1. Mr. Muhammad Khurshid Mufti Assistant Director OFWM Chak Jhumra</p> <p>2. Mr. Muhammad Yousaf Bhatti Deputy Team Leader ME&amp;IE Consultants Punjab zone Lahore</p>
<b>Discussions/Decisions</b>
<p>I. The consultants briefed on current activities of the project in the vicinity and asked the AD some details.</p> <p>II. The AD explained the position that in the field at the moment two independent projects namely Punjab Resilient and Inclusive Agriculture Transformation (PPRIAT) and National Program for Improvement of Water Courses_2 (NPIWC_2)</p> <p>III. Each project has its own interventions while operating in the same areas.</p> <p>IV. Both participants agreed to have such meetings in the future</p>



**The Deputy Team Leader Muhammad Yousaf Bhatti had a Meeting with Mr. M. Khurshid Mufti Assistant Director OFWM Chak Jhumra**

#### 4.5.5 Internal Meeting /Capacity Building

The Deputy Team Leader conducted regular meetings with Field Team in- charges/ Field staff to update the project activities. In these meetings, various suggestions were discussed for the improvement of monitoring tools. Certain number of capacity building sessions were also held for field teams. These sessions were held under the supervision of DTL and other Core team members.

#### 1. Capacity building Session with Team Leader on 27.11.23



**View of the Meeting with Dr. Usman Mustafa Team Leader Islamabad .in Punjab Zonal Office Lahore**

- I. Dr. Usman Mustafa, Team Leader ME&IE consultants visited the Punjab Zonal Office in Lahore the Team Leader had a detailed session with Deputy Team Leader and his Field team.
- II. The Deputy Team Leader explained the Team Leader on the field activities in Punjab. The Team Leader has shown satisfaction with the achievements/ performance of the zonal office. The Team Leader has provided certain "tips" to the field staff regarding the upcoming field surveys. Dr. Usman Mustafa provided certain guidelines in this respect of finding the selection of the sampled respondents' data collection instruments interviewing the farmer etc.

- III. He suggests certain measures to be taken while submitting data on ODK and the data validation. The zonal office should ensure the quality of data before submitting it for its field processing analysis by ICT.



**Group Photo with Dr. Usman Mustafa on his visit to Zonal Office Punjab Lahore**

#### 2.Capacity Session with JDC Consultants Lahore on 22.11.23

A team of International Development Consultants visited zonal office (NPIWC-II) Punjab Zonal Office Lahore. The Team was comprised of

1. Mr. Shaukat Ali shahid (Social Development Specialist)
2. Ms. Effat Umer (Environment Specialist)
3. Mr. Zafar Ahmad (Social and Gender Specialist)

They briefed and shared the activities of their projects while Deputy Team Leader ME&IE Consultants Muhammad Yousaf Bhatti also described the progress on the NPIWC project,

Then some senior staff members also joined the meeting. Both the consultants discussed the various aspects of field activities like data collection techniques. Data processing, such exchange of views and discussions provided a new insight experience to ME&IE consultants and the team members



**Capacity building sessions with IDC Consultants Team Lahore**

#### 4.6 ACTIVITIES KP ZONE – DURING REPORTING QUARTER

##### 4.6.1 Brief summary of the ME/IE Consultants' KP Zone activities for the Quarter of October-December 2023

The ME&IE Consultants KP field team conducted Baseline and Impact survey as well as regular monitoring and spot check field visits during the reporting period. The relevant staff of the ME/IE Consultants frequently paid visits to concerned offices of stake-holders of the NPIWC-II for the collection of the required information. During these visits a number of activities has been performed by the KP Zonal office. The Consultants were in direct contacts with all the stake-holders of the NPIWC-II, viz Directorate of OFWM KP, Focal Person/Coordinator NPIWC-II of OFWM Department, District Directors OFWM Department and other relevant officials. The principle of cost minimization was applied during these contacts. Mostly these contacts were made electronically. However, where necessary, personal visits were paid to different offices of the stake-holders. The purpose of these contacts was to update the ME/IE Consultants about the schemes launched under the NPIWC-II project in the KP. Continuous guidance both through direct contacts as well as through telephonic calls were offered to the OFWM Department KP official in uploading of the data through android application to the Dashboard. Several meetings with Project coordinator were held regarding newly launched schemes in the year 2023-24 of Water Courses and Water Storage Tanks in KP.

##### 4.6.2 Major Activities Performed during the Quarter:

- ❖ Meetings (both formal and Informal) with OFWM Department KP Officials
- ❖ Close Coordination with Provincial Project Management Unit (PMU) officials
- ❖ Baseline and Impact survey field visits
- ❖ Monitoring of data entry to the Dashboard of the OFWM Department Officials
- ❖ Close Coordination with OFWM focal person for the data entry to the dashboard
- ❖ Coordination with the OFWM Department KP for Technical Sanction issued for new schemes.
- ❖ Collection, cleaning and entering of data for dashboard from OFWM.
- ❖ Prepared quarterly work plan

- ❖ Writing of MMRs for the months of September, October and November 2023.

• **Informal Meetings:** As a routine activity a number of 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 collection of relevant information of undergoing schemes. Mostly these meeting were informal. As per the ME&IE discussions with the OFWM Department official, it was found that schemes were mostly completed under NPIW-II program. New schemes for construction/improvement of water courses and water storage tanks will be initiated after the release of funds by the 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. Venue of the meeting was committee room of the PMU, Gul Mohar Lane University Town Peshawar.**



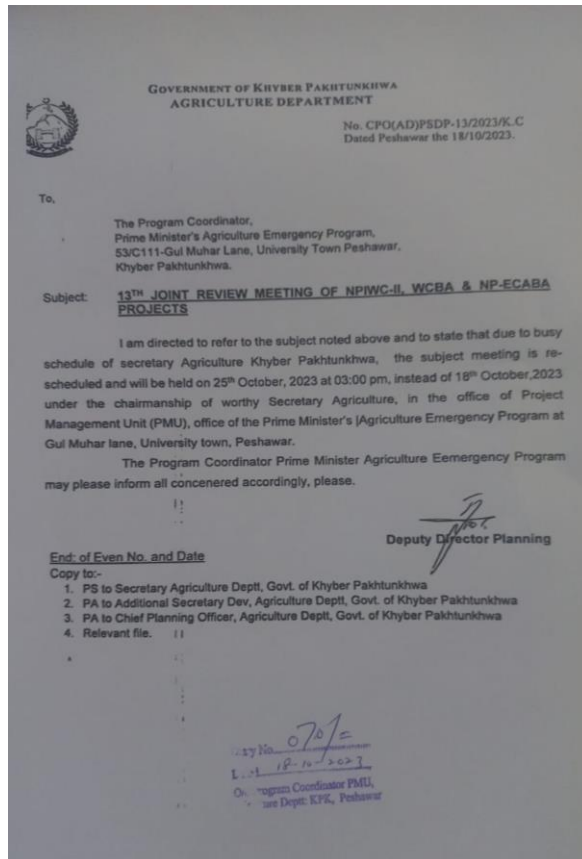
Figure 1 Meeting with Special Secretary Agriculture

Mr. Fawad Ahmad- ICT technology Specialist and Mr. Kaiser Khan Field Team Incharge (FTI) represented the M&E Consultants KP Zone in this meeting. Agenda of the meeting was to review the progress made so far in the above-mentioned projects. Special Secretary Agriculture KP chaired the meeting. Detail discussion was made on, Co-ordination, Cooperation, Support, Sharing of Data regarding the project interventions Progress & Follow up of previous meeting NPIWC II & NP-ECABA. Project Director Mr. Saeed-ur-Rehman elaborated 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.

missing data in the schemes and the difference in the number of completed schemes shared by the OFWM department with PMU, NWMC verified schemes, and the Dashboard.



**Meeting with the Focal Person NPIWC-II.** A courtesy visit was made to the office of the Focal Person of NPIWC-II in **November 2023**. The following were present.

1. Mr. Hayat Khan, Focal Person NPIWC-II
2. Dr. Humayun Khan, DTL ME/IE consultants KP Zone
3. Mr. Fawad Ahmad, Manager ICT ME/IE consultants KP Zone

During this visit general discussion was made on the data entry by the OFWM officials to the dashboard. The ME/IE consultants offered their services for assisting the concerned staff of the OFWM in data entry to the Dashboard. The meeting was adjourned with a vote of thanks by the Focal Person of NPIWC-II project.

Several meetings were held between Mr. Fawad Ahmad (ICT/Technology Specialist KP) and Mr. Muhammad Hayat Khan focal person NPIWC-II, in the Directorate of OFWM Office Peshawar in the month of November 2023. During these meetings, the progress of Dashboard data provision from KP districts for Dashboard was discussed and shared with the OFWM department. In addition, Fawad Ahmad (ICT/Technology Specialist KP) identified the





Figure 2: Meeting with special Secretary Agriculture KP

- **Monitoring of data:** Trainings have been imparted to the officials of the OFWM Department for data entry to the Dashboard. Now they are directly entering the data on 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:** Drafted KP MMR for the month of September, October & November 2023.

#### Description of Progress:

During the reporting quarter the OFWM Department staff extended all possible help towards the ME/IE consultants. Close contacts though meetings/Telephone calls with different cadre officials of OFWM department were held regarding the ongoing activities under the NPIW-II during the current reporting quarter. 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 extends their usual support and provided all the relevant information. The ME&IE Consultants, KP made frequent visits to the directorate of OFWM for acquainting their-selves about the on-going schemes under the NPIW-II by the concerned department. During these meetings general discussion were also made about the perceptions pf the OFWM Department officials and

of the farmers about these schemes. As per the OFWM Departments officials most of the farmers were satisfied from the benefits of these schemes in terms of increase of crop productivity, cropping intensities and time saving. Apart from the meetings with OFWM Department officials, the ME/IE Consultants attended called by the Provincial PMU one each on October 25, 2023.

#### Field surveys:

From inception to date the KP field team of ME&IE Consultants conducted baseline vis-a-vis impact surveys of **190** watercourses in KP and **40** in GB. Moreover, the consultants had completed baseline vis-a-vis impact surveys of **72** water storage tanks in KP and **15** in GB. Impact assessment field visits of **05** PLL interventions were also carried out in KP.

**Data Entry and GPS validation:** During the reporting quarter, KP Teams entered and validated the GPS locations for hundreds of schemes of KP province. The activity was distributed among different team members with help of ICT team of KP. OFWM directorate extends their usual support and provided all the relevant information.

#### Capacity Building of OFWM staff on Android Application

The ICT team of the ME/IE consultants' have trained the officials of OFWM in Southern, Central and Northern zones for entering data directly to the Dashboard through android applications. Now they are able to enter the data directly to the dashboard from their offices. However, some time when they stuck somewhere in this exercise, the ME/IE Consultants continuous support was provided to OFWM officials on telephone for any issue while operating android system and/or data collection process. In this regard the ICT team always paid visits to Directorate of OFWM KP and assess the understanding of field staff for utilization of android application to collect the data of GPS coordinates. It was found that there was some negligence from staff of OFWM in collection of GPS coordinates, which was planned to overcome.

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

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

All the staff members are very devoted and hard-worker towards fulfilling their responsibilities. Similarly, the OFWM 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 following challenges are faced by the ME&IE Consultants.

#### Key Challenges

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

- Due to overall economic situation & liquidity crunches prevailing in the country currently, funds release delays were evident leading to slowing down progress of overall project.
- Directorate remains involved in implementation of other funded projects with the NPIW-II. So, they are not able to give much time to ME&IE Consultants.

#### Recommendations:

In order to meet the targets well in time following recommendation are forwarded.

- There should be a proper modus operandi for meetings and consistent follow-up among stakeholders to ensure smooth functioning of all aspects and timely resolutions of any impeding hindrances.
- Exposure of Dashboard with its broader perspective and application may present amongst the relevant authorities for its importance and further release of funds for the project activities.

#### Quarterly Work Plan – KP Zone

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

#### 4.7 ACTIVITIES BALOCHISTAN ZONE – DURING REPORTING QUARTER

The report in hand, titled "Quarterly Monitoring and Evaluation Report for the period of 01st October to December 2023," comprises different activities conducted by ME&IE Consultants, Balochistan.

During the past quarter, significant progress has been made on our ongoing project. We have successfully completed several milestones and achieved key objectives as outlined in the project plan. The project's overall implementation is on track, and we remain dedicated to accomplishing our goals within the designated time frame. The team has worked diligently to ensure smooth execution and overcome any challenges that arose.

Based on comprehensive analysis, we have observed significant positive outcomes resulting from the project implementation. The project has contributed to the expansion of agricultural land by implementing land reclamation and irrigation initiatives. Additionally, our water conservation measures have resulted in substantial water savings, benefiting both the environment and the local communities. Moreover, the engagement and participation of the community have been encouraging, leading to enhanced ownership and sustainability of the project.

A presentation was given by Ch. Saifullah Ejaz, Authorized Representative, ME&IE, NPIWC-II to the Federal Secretary of Agriculture and the National Provincial Coordinator, NPIWC-II, where the profound impact of the NPIWC-II project intervention was vividly illustrated. The project's multifaceted approach demonstrated remarkable achievements in the realms of water conservation, heightened crop intensity, and a surge in farmers' enthusiasm for project involvement. Through innovative water-saving techniques and efficient irrigation practices, the project substantially mitigated water wastage while concurrently enhancing agricultural productivity. The tangible results showcased a significant increase in crop intensity, indicative of improved land utilization and agricultural output. Furthermore, the overwhelming interest exhibited by farmers underscored the project's resonance within the farming community, signifying its relevance and effectiveness in addressing pertinent agricultural challenges. In recognition of these remarkable accomplishments, the Federal Secretary, impressed by the project's success, extended its tenure by two years, affirming the government's commitment to fostering sustainable agricultural development and

empowering farming communities across the country.

The project's monitoring dashboard has been continuously updated with relevant data, providing us with real-time insights into the progress and performance indicators. However, it has come to our attention that certain areas in Balochistan are experiencing slower progress than anticipated. To address this concern, immediate actions are required from the Deputy Directors, OFWM. We urge the DDs to assess the bottlenecks and implement strategies to expedite progress. Timely intervention is crucial to ensure the project's overall success.

Over the past three months, we have actively engaged in meetings with the Deputy Directors and other stakeholders. These meetings provided a platform for open dialogue and collaboration, enabling us to address challenges, share updates, and align our efforts toward project goals. Valuable feedback and suggestions were received from the stakeholders, which have been taken into consideration for ongoing and upcoming project activities.

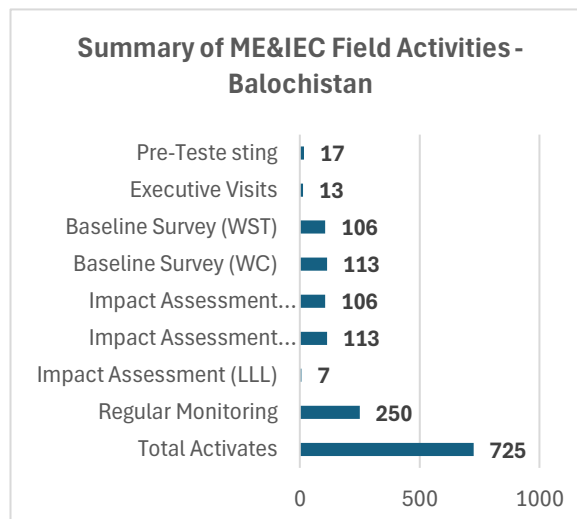
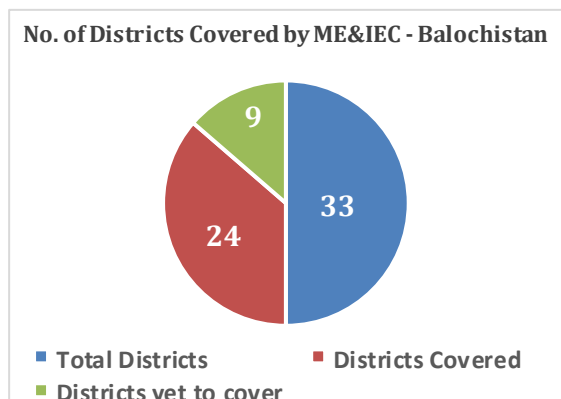
Looking ahead to the upcoming quarter, we have developed an updated tentative work plan to guide our activities. This plan includes specific tasks, timelines, and deliverables, designed to ensure continued progress and adherence to project objectives.

##### 4.7.1 Updated Progress Of ME&IE Consultants - Balochistan.

##### OVERALL PROGRESS:

The ME&IE Consultants, Balochistan, have monitored **17** sites during the pre-testing of Monitoring Tools in different months. A total of **13** sites were monitored during executive visits with high officials. The ME&IE Consultants, Balochistan have conducted three baseline surveys, the first was conducted in 2021, the second was conducted in 2022 and the third was in 2023-24. A total of **219** sites were visited during the baseline surveys i.e., **113** Watercourses and **106** Water Storage Tanks. The ME&IE, field teams visited **07** sites of PLL out of 34 total sites; the percentage of monitored sites is 20%. The Impact Assessment Survey was conducted in the 2022-23 and 2023-24 in which **219** sites (**113** Watercourses and **106** Water Storage Tanks) have been visited so far. Regular monitoring/spot-checking is another important activity of ME&IE Consultants in which more than **250** sites of 24 Districts have been visited/monitored till the reporting month. In regular monitoring, ME&IE

Consultants monitored ongoing / completed sites covering till date. The district wise updated status of the total activities done is given in the table below.



**Table: Summary of Field Activities, District-wise till 31<sup>st</sup> December 2023**

Sr. #	District	Baseline Survey		Impact Assessment Survey		Impact Survey (LLL)
		WC	WST	WC	WST	
1	Barkhan	3	3	3	3	-
2	Dera Bugti	5	2	5	2	-
3	Duki	2	2	2	2	-
4	Harnai	2	1	2	1	-
5	Jaffarabad	7	1	7	1	4
6	Jhal Magsi	2	4	2	4	-
7	Kachi	5	10	5	10	-
8	Kalat	13	9	13	9	-
9	Khuzdar	3	7	3	7	-
10	Killa Abdullah	5	3	5	3	-
11	Killa Saifullah	4	4	4	4	-
12	Kohlu	3	2	3	2	-
13	Loralai	7	7	7	7	-
14	Mastung	5	8	5	8	-
15	Musakhail	1	1	1	1	-
16	Nasirabad	9	6	9	6	-
17	Nushki	2	1	2	1	-
18	Pishin	10	9	10	9	-
19	Quetta	4	15	4	15	-
20	Sherani	2	2	2	2	-
21	Sibi	3	3	3	3	-
22	Sohbatpur	10	1	10	1	3
23	Zhob	2	1	2	1	-
24	Ziarat	4	4	4	4	-
<b>Sub-Total</b>		<b>113</b>	<b>106</b>	<b>113</b>	<b>106</b>	<b>7</b>

#### 4.7.2 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.

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. 2023-24 so that the ME&IE Consultants could

update their field visits plan and complete remaining Baseline and impact field survey 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>
<b>(%)</b>		<b>31%</b>		<b>43%</b>		<b>82%</b>		<b>47%</b>	
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>
<b>(%)</b>		<b>82%</b>		<b>69%</b>		<b>96%</b>		<b>82%</b>	
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>
<b>(%)</b>		<b>69%</b>		<b>80%</b>		<b>100%</b>		<b>76%</b>	
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>
<b>(%)</b>		<b>69%</b>		<b>95%</b>		<b>95%</b>		<b>84%</b>	
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>
<b>(%)</b>		<b>50%</b>		<b>4%</b>		<b>90%</b>		<b>53%</b>	
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>
<b>(%)</b>		<b>86%</b>		<b>95%</b>		<b>99%</b>		<b>92%</b>	
Sibi	Dera Bugti	34	0	0	0	65	65	99	65

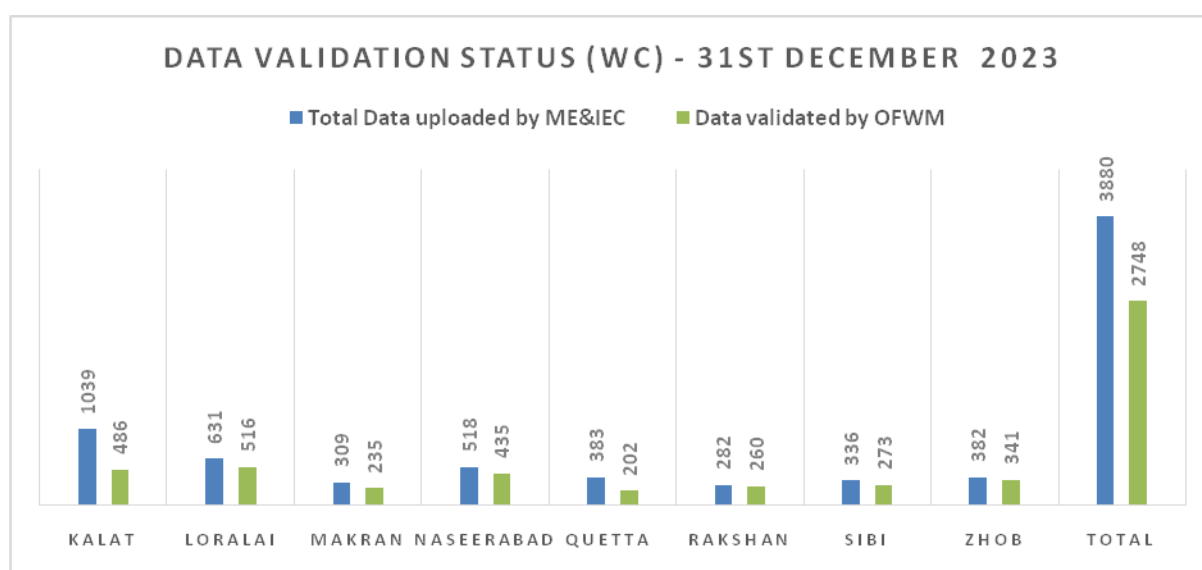
Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Sibi	Harnai	23	0	19	15	0	0	42	15
Sibi	Kohlu	41	41	17	17	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>
<b>(%)</b>		<b>69%</b>		<b>90%</b>		<b>100%</b>		<b>81%</b>	
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>
<b>(%)</b>		<b>85%</b>		<b>96%</b>		<b>96%</b>		<b>89%</b>	
<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>
<b>(%)</b>		<b>61%</b>		<b>71%</b>		<b>92%</b>		<b>71%</b>	

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

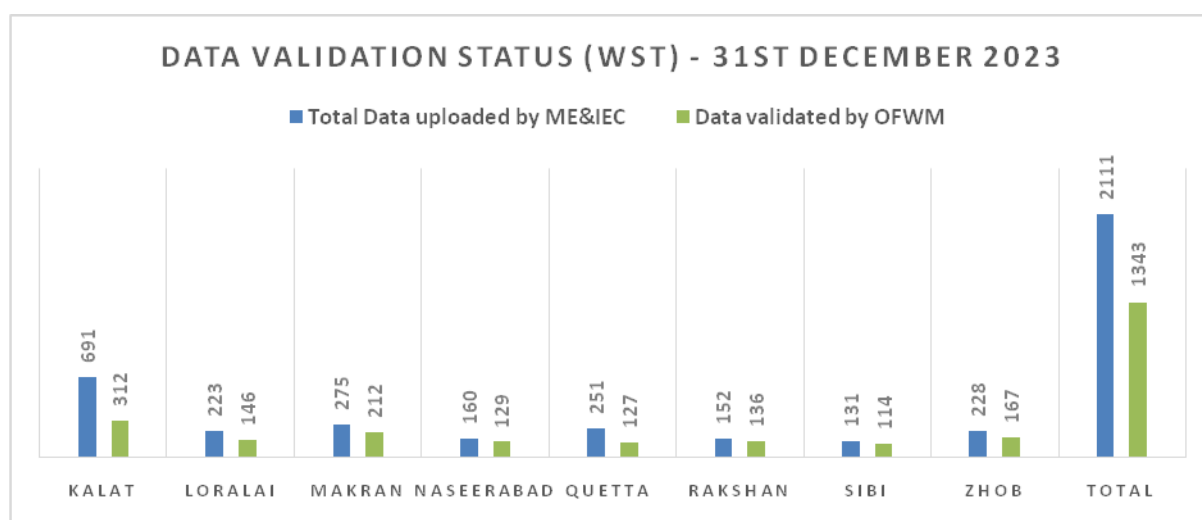
Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Kalat	Awaran	12	12	27	27	48	0	87	39
Kalat	Kalat	20	2	32	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>
<b>(%)</b>		<b>37%</b>		<b>45%</b>		<b>47%</b>		<b>45%</b>	
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>
<b>(%)</b>		<b>73%</b>		<b>49%</b>		<b>70%</b>		<b>65%</b>	
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>
<b>(%)</b>		<b>72%</b>		<b>44%</b>		<b>90%</b>		<b>77%</b>	
Nasirabad	Jaffarabad	0	0	8	8	9	9	17	17
Nasirabad	Jhal Magsi	7	0	0	0	23	0	30	0
Nasirabad	Kachi	18	18	24	24	40	40	82	82
Nasirabad	Nasirabad	0	0	8	8	9	9	17	17
Nasirabad	Sohbatpur	4	4	8	8	2	1	14	13
<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>
<b>(%)</b>		<b>76%</b>		<b>100%</b>		<b>71%</b>		<b>81%</b>	
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>
<b>(%)</b>		<b>58%</b>		<b>38%</b>		<b>84%</b>		<b>51%</b>	
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>
<b>(%)</b>		<b>75%</b>		<b>73%</b>		<b>100%</b>		<b>89%</b>	
Sibi	Dera Bugti	11	11	0	0	28	28	39	39

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
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>
<b>(%)</b>		<b>100%</b>		<b>100%</b>		<b>72%</b>		<b>87%</b>	
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>
<b>(%)</b>		<b>69%</b>		<b>100%</b>		<b>61%</b>		<b>73%</b>	
<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>
<b>(%)</b>		<b>64%</b>		<b>61%</b>		<b>66%</b>		<b>64%</b>	

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



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





#### 4.7.3 Field Activities:

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

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

Scheme:	Water Storage Tank
Name of Farmer:	Abdul Quddus Lehri
Union council:	Shamozai
Chairman WUA:	Abdul Quddus Lehri
District:	Quetta
Tehsil	Quetta
Source of irrigation:	Tube Well
Size of WST	60x60
No of beneficiaries:	1
Coordinates:	N 30.1138, E 66.9414
Shape of Water Storage Tank:	Square
Size of Water Storage Tank:	60x60 ft.
Depth of WST:	4.5 ft.
Financial Year:	2019-2020
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	No such Problem in the area
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	No such Problem in the area
Reduction in water disputes/thefts	No such Problem in the area
Poverty reduction through generation of employment.	Yes,
Overall feedback of Farmer / Beneficiary	<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> <li>A good impact was observed on livestock.</li> </ul>
General Observations	<ul style="list-style-type: none"> <li>Due to Heavy load shedding farmers facing a lot of</li> </ul>

problems.

- Heavy prices of crop-related items were observed unbearable by farmers.



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.

#### 4.7.4 Meetings:

Date	2 <sup>nd</sup> October 2023
Venue	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&IE, NPIWC-II.	
III. Staff of ME&IE, Balochistan zone.	
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>● A farewell party/internal meeting was held at the Zonal Office in Quetta."</li> <li>● The farewell party was held in honor of Mr. Shareef, the FTI/M&amp;E Expert.</li> <li>● Several administrative issues were discussed, including adherence to office timings and the maintenance of office decorum.</li> </ul>	



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

**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>	4 <sup>th</sup> October 2023
<b>Venue</b>	ME&IE Consultants Office, Arbab Karam Khan Road, Marri Street, Quetta
<b>Participants</b>	
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&IE, NPIWC-II.
IV.	Staff of ME&IE, Balochistan zone.
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>The meeting commenced with a comprehensive review of the updated progress within the Balochistan zone.</li> <li>The DTL, Balochistan provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.</li> <li>The matter of long pending staff salaries was brought to the forefront. The attendees deliberated on potential measures in the clearance of ME&amp;IE Consultant's invoices at the client's end to streamline the salary distribution process and ensure timely disbursement to the staff.</li> <li>The meeting was adjourned at 4:00 pm, acknowledging the constructive discussions and proposed actions for resolving the identified issues.</li> </ul>	



<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&IE, NPIWC-II.
III.	Ms. Abida, Social and Gender Expert, ME&IE, NPIWC-II, Balochistan.
IV.	Staff of ME&IE, 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**



<b>Date</b>	3 <sup>rd</sup> Nov. 2023
<b>Venue</b>	Office of the DG, Agriculture, GoB, Rani Bagh, Sariab Road, Quetta.
<b>Participants</b>	
I.	Mr. Abdul Wali, Deputy Director, Tech. OFWM, Quetta.
II.	Mr. Behram, Focal Person, NPIWC-II, OFWM, Quetta
III.	Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>The meeting commenced with a comprehensive review of the updated progress within the Balochistan zone.</li> <li>The DTL, Balochistan provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.</li> <li>The meeting was adjourned at 4:00 pm, acknowledging the constructive discussions and proposed actions for resolving the identified issues.</li> </ul>	
	
<b>Figure-4.3: View of meeting with DD, OFWM at DG Office, Quetta</b>	

<b>Date</b>	8 <sup>th</sup> Nov. 2023
<b>Venue</b>	Office of the DG, Agriculture, GoB, Rani Bagh, Sariab Road, Quetta.
<b>Participants</b>	
I.	Mr. Ali Raza Jamali, Ex-DG, OFWM, GoB, Quetta.
II.	Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
III.	OFWM Staff
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>A farewell party was conducted in honor of Mr. Jamali, Ex DG, OFWM. The forum endorsed his great efforts for OFWM and sepecially for NPWIC-II project. The Ex-DG paid thanks to all OFWM staff for their best cooperation and efforts, contributing to the success of the project NPIWC-II, Balochistan Zone.</li> </ul>	



<b>Date</b>	20 <sup>th</sup> Nov. 2023
<b>Venue</b>	ME&IE Consultants Office, Arbab Karam Khan Road, Marri Street, Quetta
<b>Participants</b>	
II.	Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
III.	Technical Staff of ME&IEC, NPIWC-II, Balochistan Zone
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>The DTL Balochistan called a meeting for all technical staff to discuss issues related to data collection for the Dashboard, Balochistan.</li> <li>The forum shared the updated progress and findings of meetings held with DDs of OFWM. Additionally, the forum discussed the field plan regarding upcoming baseline activities.</li> <li>The DTL, Balochistan provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.</li> </ul>	
	
<b>Figure-4.3: View of internal meeting held at ME&amp;IEC office, Quetta.</b>	



<b>Date</b>	27 <sup>th</sup> Nov. 2023
<b>Venue</b>	Office of the DG, Agriculture, GoB, Rani Bagh, Sariab Road, Quetta.
<b>Participants</b>	
I.	Mr. Saleh Baloch, DD, Kharan, OFWM.
II.	Mr. Naseeb Jan, FTI, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
III.	Mr. Qaisar Tareen, M&E Officer, ME&IE Consultants
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>The meeting commenced with a comprehensive review of the updated progress within the Balochistan zone.</li> <li>The FTI provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.</li> </ul>	



**Figure-4.3: View of meeting with DD, Kharan, OFWM at DG Office, Quetta**



**Figure-4.3: View of meeting with Focal Person, NPIWC-II, OFWM at DG Office, Quetta**

<b>Date</b>	30 <sup>th</sup> Nov. 2023
<b>Venue</b>	Office of the DG, Agriculture, GoB, Rani Bagh, Sariab Road, Quetta.
<b>Participants</b>	
I.	Mr. Behram Mulghani, Focal Person, NPIWC-II, OFWM, Quetta.
II.	Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
III.	Mr. Naseeb Jan, FTI, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
IV.	Mr. Qaisar Tareen, M&E Officer, ME&IE Consultants.
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>A meeting was held with the Focal Person, NPIWC-II to discuss the weak response of OFWM field staff regarding data validation on the Dashboard.</li> <li>The issue of missing Technical Sections was also discussed.</li> <li>The Focal Person assured the ME&amp;IEC that necessary measures will be taken against staff whose responses are weak in data validation.</li> </ul>	

<b>Date</b>	7 <sup>th</sup> Dec. 2023
<b>Venue</b>	ME&IE Consultants, National Office, Islamabad.

**Participants**

- I. Mr. Usman Mustafa, Team Leader, ME&IEC, NPIWC-II, Islamabad
- II. Mr. Akram Saeed, Deputy Team Leader, ME&IEC, NPIWC-II, Islamabad
- III. Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
- IV. Mr. Shumail, IT Expert, ME&IE Consultants, NPIWC-II, Balochistan, Quetta

**Meeting Agenda/Points discussed:**

- A meeting was held at the National Office in Islamabad.
- The Team Leader, Deputy Team Leader, ICT, and Mr. Shumail, IT Expert, participated in the meeting.
- The Deputy Team Leader, Balochistan shared the updated progress of the Balochistan zone, including the status of the Balochistan Dashboard.
- The DTL, Balochistan highlighted issues such as the non-availability of funds and vehicles for field activities.
- The forum discussed the planning regarding the 3rd baseline activities.
- The Team Leader assured the Deputy Team Leader, Balochistan for earlier settlements of the issues raised by him.





**Figure-4.3: View of meeting held at National Office, Islamabad.**

<b>Date</b>	21 <sup>st</sup> Dec, 2023
<b>Venue</b>	Office of the DG, Agriculture, GoB, Rani Bagh, Sariab Road, Quetta.
<b>Participants</b>	
I.	Mr. Saleh Baloch, DD, Kharan, OFWM.
II.	Mr. Manzoor Ahmed Kasi, DTL, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
III.	Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
IV.	Mr. Kamran, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta
<b>Meeting Agenda/Points discussed:</b>	
<ul style="list-style-type: none"> <li>The meeting commenced with a comprehensive review of the updated progress within the Balochistan zone.</li> <li>The DTL, Balochistan provided a detailed overview of the ongoing projects, highlighting achievements, challenges, and areas requiring immediate attention.</li> </ul>	

**Figure-4.3: View of meeting with DDs at DG Office, OFWM, Quetta.**

#### 4.8 SOCIAL AND GENDER COMPONENT

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.

The major activities conducted by Social & Gender team during the current quarter 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	Shamozai
WUA	Chairman: Abdul Quddus
UC	Shamozai
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.

#### PICTURE GALLERY



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



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



**S&G specialist during killi Shamozai 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 Shamozai 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.

In this quarter despite of challenges and hurdles team tried to find out reasons by reviewing data, why women are not participating in program activities. Government of Pakistan is signatory on sustainable development goals and committed to achieve objectives by 2030 but still lagging behind especially goals related to women and women empowerment.

Reasons are as follow;

- social and cultural issues,
- Lack of ownership,

- Lack of policies
- Poverty.
- Illiteracy.
- Lack of Government interest in women participation while designing programs.
- Low representation at program units.
- Lack of financing for women.
- Lack of awareness raising activities.
- Gender based activities not included.
- Inheritance laws not implemented.
- Water Acts in Pakistan do not address the strategic gender needs, and they largely ignore women.
- The National policies—do not give significant importance to the concerns related to gender.
- Less resources are allocated for skill development and trainings.

Gender action plan was submitted and waiting for comments to further improve it, few questions should be raised with the clients that who is going to implement it as G3 & JV partners are monitoring consultants and don't have budget for this. It is suggested that it should be included in next agenda. While planning for extension, it should be included and budget should be allocated.

Obstacles and way forward.

- Budget should be assigned for continuous skill development of female farmers.
- Exposure trips.
- Awareness raising brochures regarding components and subsidies should be distributed.

## 4.9 ICT TEAM ASSIGNMENTS

### 4.9.1 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-F**)

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

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 underprogress PLL unit as per received data. (Detailed Summary attached as **Annex-H**)

KP – WC Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	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	68	147	45	0	346
Khyber	6	13	7	1	0	27
Kohat	98	40	57	28	13	236
Kurram	3	5	3	0	0	11
Malakand	182	178	474	62	0	896
Mardan	105	64	88	13	0	270
Mohmand	4	39	17	26	0	86
N.W Agency	2	3	5	1	0	11
Orakzai	0	1	0	0	0	1
Peshawar	141	89	73	38	0	341
S.W Agency	3	12	15	7	0	37
Overall	1156	578	1129	274	13	3150

So far, Total **3150** Watercourses data have been received from KP zone and available live on GIS Dashboard. By which **3028** Watercourses have been lined and remaining **86** watercourses are under progress on different stages like 1st Milestone, 2nd Milestone, and Work Order Issued. The remaining **36** Watercourses are pending with Work Order Approval. (Detailed Summary attached as **Annex-I**)

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	82	12	169
Khyber	1	9	12	0	22
Kohat	27	17	32	14	90
Kurram	1	1	0	0	2
Malakand	74	97	193	9	373
Mardan	16	9	26	2	53
Mohmand	1	40	69	0	110
Orakzai	0	2	0	0	2
Peshawar	36	25	56	15	132
S.W Agency	0	15	15	2	32
N.W Agency	0	8	8	1	17
Overall	279	296	560	58	1193

Overall Water Storage Tank data submissions are **1193** of which **1114** WST have been completed and **55** are under progress. While **24** Water Storage Tanks Work Order Pending. (Detailed Summary attached as **Annex-J**)

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

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-K**)

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

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

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

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

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

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

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

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

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

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

AJK – WC Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Overall
MZD	30	84	53	29	33	229
Poonch	33	32	30	8	29	132
Mirpur	37	96	72	21	62	288
Overall	100	212	155	58	124	649

A total of **649** Watercourses data has been received from AJK zone of which **528** Watercourses have been lined, **11** Watercourses are pending at TS & Work Order Stage, **110** watercourses are under progress. (Detailed Summary attached as **Annex-Q**)

AJK – WST Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Overall
MZD	35	56	61	9	23	184
Poonch	13	41	62	33	34	183
Mirpur	2	15	31	6	29	83
Overall	50	112	154	48	86	450

A total of **450** Water Storage Tank data has been received from AJK zone of which **366** Water Storage Tanks have been lined, **9** Water Storage Tanks are pending at TS Stage, **75** Water Storage Tanks are under progress. (Detailed Summary attached as **Annex-R**)

ICT – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
ICT	0	20	14	7	41
Overall	0	20	14	7	41

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

#### **4.9.2 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 5: ISSUES / BOTTLENECKS

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

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

During our internal review of the dashboard, we identified several cases that were experiencing delays. The cases are distributed across various levels and stages, taking into account both the time elapsed and the geographic 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 has 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 bases.

## ANNEXURES A TO S

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

TENTATIVE WORK PLANNED FOR THE QUARTER (October 2023 To December 2023)												Legend				
														Activity starts	↓	
														Activity Ends	↓	
														Activity Span	---	
No.	ACTIVITIES				3 Months-Year 2023 (Weeks)											
					October				November				December			
					WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4
1	Pre-Field Activities															
	1.1	Refresher Training of Field Staff for Baseline & Endline Impact Surveys														
	1.2	Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for Endline Survey														
2	Field Activities															
	2.1	Regular Monitoring of Interventions in the field														
	2.2	Baseline Survey Phase-III & Impact field survey visits														
	2.3	Online data entry in android-based application														
3	ICT Assignment															
	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.														
4	Coordination															
	4.1	Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues														
	4.2	Meeting of DTLs with respective DTL of PC & concerned OFWM Departments														
	4.3	ME&IE Consultants Internal Meetings														
5	Deliverable															
	5.1	Monthly Monitoring Report				↓	↓			↓	↓			↓	↓	
	5.2	Quarterly Monitoring & Evaluation Report (July-Sep 2023)				↓	↓									
	5.3	Midterm Monitoring & Impact Evaluation Report (Consolidated)				↓	↓									

## ANNEX B: MATRIX OF RESPONSIBILITIES

### MATRIX OF RESPONSIBILITIES

LEGEND	
●	Primary Responsibility
○	Secondry Responsibility
○	Assistance

SR. NO.	DELIVERABLE / ACTIVITIES	NPC-FPMU	Agriculture Dept. (JOE/MU)	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	-	-	-	●



## ANNEX C: MONITORING LOG-FRAME

PROJECT SUBCOMPONENTS	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.	a) Community mobilization at 47,278 watercourses	a) Total 47,278 WUAs reactivated / established/registered	a) Right of way of 47,278 watercourses available b) Skilled and unskilled labour required for watercourse improvement available c) Construction material for civil works of watercourses procured d) Alternate arrangement for water conveyance during construction made e) Watercourse improved	a) Disputes among the water users settled b) Farmers' branched improved c) Water allocation made amicably d) Maintenance of watercourses, WST and laser units done e) Cooperation among farmers increased	a) 47,278 watercourses improved and 15 percentage points conveyance losses reduced b) Litigation among farmers reduced	a) The functioning of the WUAs will be established through sample interview surveys of WUAs members twice during the project period	b)
<b>C2: Watercourses Improvements</b>	Improvement of 47,278 watercourses on cost sharing basis: 40% farmers in	a) Establishment of 47,278 Water users' associations (WUAs); b) Registration of	a) 47,278 WCAs established; b) 47,278 WCAs registered; c) 47,278 watercourses improved and lined;	a) Conveyance losses for improved watercourses decreased by about 15	a) Increase in cropping intensity on improved watercourses by 5-24%;	a) Increase in farm income; b) Increase in employment for farm labour;	a) The water flow measurements will be carried out at before and after watercourse	e)

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

PROJECT SUBCOMPONENTS	TARGETS	ACTIVITIES	OUTPUTS	OUTCOME-1	OUTCOMES-2	GOALS / IMPACT	METHODOLOGY FOR MEASURING RESULTS	
							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>	a) Construction of 14,932 water storage tanks	a) 14,932 small farmers mobilized to construct water storage tanks for irrigation b) They agree to contribute 40% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 40% on issuance of FCR	a) 14,932 WSTs constructed b) 14,932 WSTs operated and maintained	a) Water which was otherwise largely going to be wasted is saved b) Irrigation provided at critical stages of the crops c) Flexibility achieved for irrigation	a) More area irrigated b) Increased cropping intensities	a) Increased crop yields b) Increased total crop output quantum c) Increased farm income d) Increased farm employment	a) 2-5% sample of WSTs will be surveyed b) A data collection form will be designed to measure water saving due to WSTs c) The forms used for baseline and impact surveys in case of watercourses will also be used for WSTs d) Same data analysis will	e)



PROJECT SUBCOMPONENTS	TARGETS	ACTIVITIES	OUTPUTS	OUTCOME-1	OUTCOMES-2	GOALS / IMPACT	METHODOLOGY FOR MEASURING RESULTS	
							be carried out here as in case of watercourses.	
<b>C4: Provision of Land Leveling Units</b>	a) 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.	a) 11,610 laser units provided to farmers / service providers; b) Farmers trained in using the units.	a) 11,610 farmers / service providers received PLL units; b) Farmers / service providers received training in using the units.	a) Land levelled on Farmers' / service providers' farms; b) Land levelled on fellow farmers on rent; c) Total 3.483million acres levelled by 11,610 units.	a) Water application efficiency increased at field level; b) Even germination of seed. c) Field application losses reduced by 10 percentage points d) Water productivity increased by 24%	e) Increased area under irrigated crops; f) Enhanced crop yields g) Increased farm income	a) The land levelling 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. b) 2-4% sample units will be visited by ME&IE Consultants teams after one years of delivery c) The unit will be verified d) Area treated during the	f)

PROJECT SUBCOMPONENTS	TARGETS	ACTIVITIES	OUTPUTS	OUTCOME-1	OUTCOMES-2	GOALS / IMPACT	METHODOLOGY FOR MEASURING RESULTS	
							year will be collected e) Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.	

## ANNEX D: DELIVERABLES/REPORTING REQUIREMENTS

SR. NO.	DOCUMENT	COPIES	DUE
1	Draft Inception Report	8	45 days after the effectiveness of the Consulting services Agreement.
2	Final Inception Report	15	One week after the issuance of comments by the Client on Draft Inception Report
3	Monthly Monitoring Report	10	10 <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

## ANNEX E: LIST OF WATER STORAGE TANKS

### 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



Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
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	Kot Sundki	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	Dhok Ghulab 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
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	Pathar Garh	300,000	9.5	5	2021-22
Rawalpindi	Attock	Hassar	240,000	9	5	2021-22
Rawalpindi	Attock	Choor Sharif	300,000	8.5	5.1	2021-22
Rawalpindi	Attock	Amrati	300,000	9	5	2021-22

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
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	Thoha Hamayon	261201	10.5	10.5	2021-22
Rawalpindi	Chakwal	Dalwal Tehsil Choa Saidan Shah FT Kallar Kahar	257910	5	5	2021-22
Rawalpindi	Chakwal	Thoha Mahram Khan	278131	8	8	2021-22
Rawalpindi	Chakwal	Bhoun	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	Bhoun Teh. Kallar Kahar	252301	6	6	2021-22
Rawalpindi	Chakwal	Changa Teh. Lawa	225514	7.2	7.2	2021-22

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
Rawalpindi	Chakwal	TM Khan Teh. Talagang	300000	12	12	2021-22
Rawalpindi	Chakwal	Pirha Fatihal Teh, 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	Kotehra Teh. Talagang	245131	10	10	2021-22
Rawalpindi	Chakwal	Bhone Teh. 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	Mureed Teh Chakwal	300000	12.4	12.4	2021-22
Rawalpindi	Chakwal	Thoa Mehram Khan Tehsil Talagang	297285	10	10	2021-22
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

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
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	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	Chhabbar Syedan	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

Division	District	WST- ID	Total Cost in RS.	GCA (ACRE)	CCA (ACRE)	Financial Year
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	Kot Yam	619656	11.5	6.1	2021-22
Rawalpindi	Jhelum	Gurha Chaudhriyan	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
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

## ANNEX F: PUNJAB - WATERCOURSE DATA SUBMISSION - SUMMARY

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

## ANNEX G: PUNJAB - WSP DATA SUBMISSION - SUMMARY

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



## ANNEX H: PUNJAB - PLL DATA SUBMISSION - SUMMARY

Division	District	Delivered	Under Progress	Overall
Bahawalpur	Bahawalnagar	283	0	283
Bahawalpur	Bahawalpur	246	0	246
Bahawalpur	Rahim Yar Khan	259	0	259
<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>

## ANNEX I: KP - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending		Overall
			1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
Bajaur Agency	Bajaur	60	0	0	13	6	0	79
<b>Bajaur Agency Total</b>		<b>60</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	110
Bannu	Lakki Marwat	122	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	3	0	0	0	0	510
D.I. Khan	Tank	67	0	0	0	0	0	67
<b>D.I. Khan Total</b>		<b>574</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>577</b>
Hazara	Abbottabad	30	0	0	0	0	0	30
Hazara	Battagram	49	0	0	0	0	0	49
Hazara	Haripur	73	0	0	0	0	0	73
Hazara	Lower Kohistan	7	0	0	13	1	0	21
Hazara	Mansehra	105	0	14	0	0	0	119
Hazara	Torghar	34	0	0	1	0	0	35
Hazara	Upper Kohistan	9	0	0	0	8	0	17
Hazara	Kolai Pallas	2	0	0	0	0	0	2
<b>Hazara Total</b>		<b>309</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>0</b>	<b>346</b>
Khyber Agency	Khyber	20	0	0	5	2	0	27
<b>Khyber Agency Total</b>		<b>20</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>27</b>
Kohat	Hangu	62	0	0	0	0	0	62
Kohat	Karak	82	0	0	0	0	0	82
Kohat	Kohat	92	0	0	0	0	0	92
<b>Kohat Total</b>		<b>236</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>236</b>
Kurram Agency	Kurram	10	0	0	0	1	0	11
<b>Kurram Agency Total</b>		<b>10</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	106
Malakand	Chitral	94	0	0	0	0	0	94
Malakand	Lower Dir	103	0	2	25	4	1	135
Malakand	Malakand	106	0	0	1	1	0	108
Malakand	Shangla	54	2	1	1	1	1	60
Malakand	Swat	282	0	0	0	0	0	282
Malakand	Upper Dir	111	0	0	0	0	0	111
<b>Malakand Total</b>		<b>856</b>	<b>2</b>	<b>3</b>	<b>27</b>	<b>6</b>	<b>2</b>	<b>896</b>
Mardan	Mardan	137	0	0	2	0	0	139
Mardan	Swabi	130	0	1	0	0	0	131
<b>Mardan Total</b>		<b>267</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>270</b>
M. Agency	Upper Mohmand	64	0	0	0	0	0	64
M. Agency	Lower Mohmand	22	0	0	0	0	0	22
<b>M. Agency Total</b>		<b>86</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>86</b>
Orakzai Agency	Orakzai	1	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>1</b>
Peshawar	Charsadda	135	0	0	0	0	0	135
Peshawar	Nowshera	127	0	0	1	2	0	130
Peshawar	Peshawar	73	0	0	1	2	0	76
<b>Peshawar Total</b>		<b>335</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>341</b>
S.W Agency	S.W Agency	37	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>37</b>
N.W Agency	N.W Agency	5	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>6</b>	<b>0</b>	<b>11</b>
<b>Overall</b>		<b>3028</b>	<b>5</b>	<b>18</b>	<b>63</b>	<b>34</b>	<b>2</b>	<b>3150</b>

## ANNEX J: KP - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
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>
Dera Ismail Khan	Dera Ismail Khan	83	1	1	5	0	90
Dera Ismail Khan	Tank	32	0	0	0	0	32
<b>Dera Ismail 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	39	0	5	1	0	45
Hazara	Torghar	17	0	0	1	0	18
Hazara	Upper Kohistan	7	0	0	0	6	13
<b>Hazara Total</b>		<b>149</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>7</b>	<b>169</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	4	11	0	35
Malakand	Malakand	24	0	0	0	0	24
Malakand	Shangla	43	0	0	0	1	44
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>5</b>	<b>11</b>	<b>3</b>	<b>373</b>
Mardan	Mardan	32	0	0	0	0	32
Mardan	Swabi	21	0	0	0	0	21
<b>Mardan Total</b>		<b>53</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53</b>
Mohmand Agency	Lower Mohmand	31	0	0	0	0	31
Mohmand Agency	Upper Mohmand	79	0	0	0	0	79
<b>Mohmand 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	0	47
<b>Peshawar Total</b>		<b>128</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>132</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>0</b>	<b>1114</b>	<b>4</b>	<b>11</b>	<b>40</b>	<b>24</b>	<b>1193</b>

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

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



## ANNEX L: BALOCHISTAN - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	TS Issued	TS Pending	
Kalat	Awaran	150	0	0	0	1	151
Kalat	Kalat	281	0	0	0	1	282
Kalat	Khuzdar	165	0	0	0	0	165
Kalat	Lasbela	154	0	0	35	0	189
Kalat	Mastung	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>

### ANNEX M: BALOCHISTAN - WST DATA SUBMISSION - SUMMARY

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

## ANNEX N: BALOCHISTAN - PLL DATA SUBMISSION - SUMMARY

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

## ANNEX O: GB - WATERCOURSES DATA SUBMISSION - SUMMARY

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



## ANNEX P: GB - WST DATA SUBMISSION - SUMMARY

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

## ANNEX Q: AJK - WATERCOURSES DATA SUBMISSIONS - SUMMARY

Division	District	Completed	Under Progress			Pending		Overall
			1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MZD	MZD	103	0	0	13	7	0	123
	Jhelum	26	2	0	12	0	0	40
	Neelum	59	5	1	1	0	0	66
MZD Total		188	7	1	26	7	0	229
Poonch	Poonch	41	0	0	6	0	0	47
	Bagh	29	0	0	8	1	0	38
	Haveli	10	1	0	4	0	0	15
	Sudhnoti	23	0	0	7	0	2	32
Poonch Total		103	1	0	25	1	2	132
Mirpur	Mirpur	77	0	0	6	0	0	83
	Bhimber	121	0	0	36	0	0	157
	Kotli	39	2	0	6	0	1	48
Mirpur Total		237	2	0	48	0	1	288
Overall		528	10	1	99	8	3	649

## ANNEX R: AJK - WST/WHs DATA SUBMISSIONS - SUMMARY

Division	District	Completed	Under Progress			Pending		Overall
			1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MZD	MZD	144	1	0	16	0	0	161
	Jhelum	19	0	0	3	0	0	22
	Neelum	0	0	0	1	0	0	1
MZD Total		163	1	0	20	0	0	184
Poonch	Poonch	54	0	1	11	0	0	66
	Bagh	44	0	0	20	0	0	64
	Haveli	28	0	0	0	0	0	28
	Sudhnoti	22	1	0	2	0	0	25
Poonch Total		148	1	1	33	0	0	183
Mirpur	Mirpur	12	0	0	3	0	0	15
	Bhimber	12	0	0	8	0	0	20
	Kotli	31	5	0	3	0	9	48
Mirpur Total		55	5	0	14	0	9	83
Overall		366	7	1	67	0	9	450

### ANNEX 5: ICT - WATERCOURSE DATA SUBMISSION - SUMMARY

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