



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

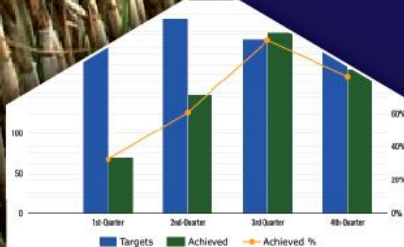
NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION AND IMPACT EVALUATION CONSULTANTS



QUARTERLY MONITORING & EVALUATION REPORT

APR TO JUN 2024



A Joint Venture of
G3 Engineering Lead Firm
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
APRIL – JUNE 2024

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ACRONYMS

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

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

EXECUTIVE SUMMARY

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

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

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

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

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

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

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

- Regular Monitoring of the Interventions in the Field
- Monitoring through Android-based Mobile Application under implementation by field staff.
- Data verification and analysis of baseline and impact surveys
- Capacity Building / Refresher Trainings of Departments
- Data collection of interventions in MIS/GIS database
- Submitted the MMRs for the months of March 2024 , April 2024 and May 2024.
- Submitted the QM&ER for Jan 2024 to Mar 2024.
- Meetings of ME&IE Consultants with the respective Stakeholders about Project Progress / Issues in hand and its prospects.

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

Table-ES-1: Compliance Status of Quarterly Tentative Work Plan, 1st April 2024 to 30th June 2024

No.	Activities Planned for the Reporting Quarter		Status	
1	Pre-Field Activities			
	1.1	Refresher Training of Field Staff for Baseline Survey & End Line Impact Survey	Accomplished	
2	Field Activities:			
	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 & Endline Impact survey Fild visits	In Progress	
	2.4	Online data entry in android-based application	In Progress	
3	ICT Assignment:			
	3.1	Improvement/Updation of website of NPIWC-II	Accomplished	
	3.2	Monitoring online data collection and data entry	In Progress	
	3.3	Monitoring Android-based Mobile Application under implementation by field staff.	In Progress	
	3.4	Data collection of interventions in MIS/GIS database	In Progress	
	3.5	Capacity Building Trainings / Refresher of Departments	In Progress	
	3.6	Data entry, Data cleaning, Data processing & data analysis.	In Progress	
4	Coordination			
	4.1	Meetings of TL, ME&IE Consultants with NPC regarding Project Progress / Issues	Meetings conducted regularly	
	4.2	Meeting of DTLs with respective DTL of NWMC	Meetings conducted regularly	
	4.3	Internal Meetings of ME&IE Consultants	Weekly meetings conducted on regular basis	
5	Deliverables:			
	5.1	Monthly Monitoring Reports (MMRs)	39 th MMR (Mar 2024)	Submitted
			40 th MMR (Apr 2024)	Submitted
			41 st MMR (May 2024)	Submitted
			42 nd MMR (June 2024)	Report in Hand
	5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jan-Mar 2024	Submitted
QM&ER Apr-Jun 2024			Will be submitted on the stipulated time	

CHAPTER-1: INTRODUCTION

1.1 PROJECT PROFILE

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

1.2 PROJECT DESCRIPTION

1.2.1 PROJECT DEVELOPMENT OBJECTIVES

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

1.2.2 PROJECT OBJECTIVES – GENERAL & QUANTITATIVE

1) General Objectives:

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

- i. Social mobilization through capacity building of WUAs/ FOs,
- ii. Minimization of conveyance and field application losses,
- iii. Reduction in Water Logging and salinity,
- iv. Equity in water distribution,
- v. Reduction in water disputes/thefts/litigation,
- vi. Motivation/participation of farmers,
- vii. Poverty reduction through employment generation,
- 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. (seems out of box here it should be in the relevant section)

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:

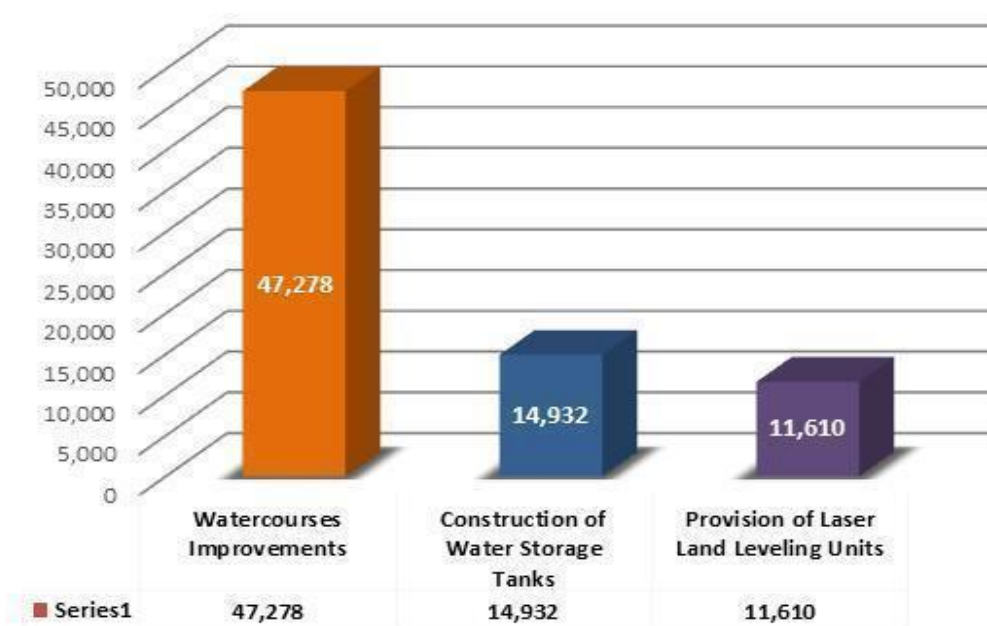


Figure-1.1: Pakistan Targets

Zonal Targets:

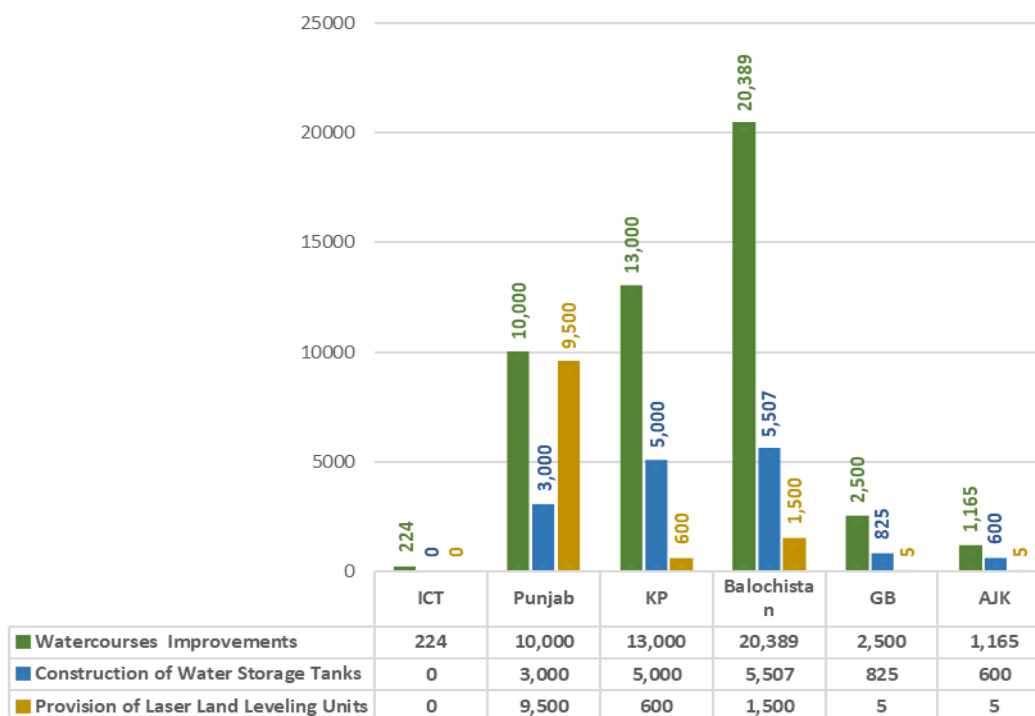


Figure-1.2: Zonal Targets

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.

2.1 OBJECTIVES

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

2.2 SCOPE OF THE SERVICES

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

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

- x) intervention on the economy and stakeholders,
- 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.

2.3 MONITORING STRATEGY

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

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

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

Table 2.1: Monitoring Strategy for ME&IE Activities

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

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

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

2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS

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

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

CHAPTER 3: WORK PLAN OF THE CONSULTANTS FOR THIRD QUARTER

3.1 COMPLIANCE STATUS OF WORK PLAN OF 4th QUARTER APR-JUN 2024

The activities of ME&IE Consultants commencing in the 4th Quarter of 2024 (from 1st April 2024 to 30th June 2024) are outlined below. For a detailed breakdown of the time frame, please refer to the tentative Work Plan for the 4th Quarter of 2024 provided in **Annex-A**.

Annex-A.

3.1.1 Pre-Field-Activities

- i. Refresher Training of Field Staff for Baseline & End Line impact Survey

3.1.2 Field Activities

- i. Regular Monitoring of Interventions in the field
- ii. Data collection of the interventions in the field
- iii. Field activities regarding Endline Impact survey
- iv. Online data entry in Android-based application

3.1.3 ICT Assignment

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

3.1.4 Coordination

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

3.1.5 Deliverables

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

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

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

Document	Status
Evaluation Report-First Quarter year 2022 (JANUARY – MARCH 2022)	
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 nd Quarter year 2022 (APRIL – JUNE 2022)	Submitted
Annual Monitoring & Evaluation Report (2 nd) Jul 2021-June 2022	Submitted
Monthly Monitoring Report-Nineteenth (JULY 2022)	Submitted
Monthly Monitoring Report-Twentieth (AUGUST 2022)	Submitted
Monthly Monitoring Report-Twenty First (SEPTEMBER 2022)	Submitted
Quarterly Monitoring & Evaluation Report-3 rd Quarter year 2022 (JUL – SEP 2022)	Submitted
Monthly Monitoring Report-Twenty Second (OCTOBER 2022)	Submitted
Monthly Monitoring Report-Twenty Third (NOVEMBER 2022)	Submitted
Monthly Monitoring Report-Twenty Fourth (DECEMBER 2022)	Submitted
Monthly Monitoring Report-Twenty Fifth (JANUARY 2023)	Submitted
Monthly Monitoring Report-Twenty Sixth (FEBRUARY 2023)	Submitted
Monthly Monitoring Report-Twenty Seventh (March 2023)	Submitted
Monthly Monitoring Report-Twenty-eighth (April 2023)	Submitted
Quarterly Monitoring & Evaluation Report-1 st Quarter year 2023 (JAN – MAR 2023)	Submitted
Monthly Monitoring Report-Twenty-Ninth (May 2023)	Submitted
Monthly Monitoring Report-Thirtieth (June 2023)	Submitted
Monthly Monitoring Report-Thirty First (July 2023)	Submitted
Monthly Monitoring Report-Thirty Second (August 2023)	Submitted
Monthly Monitoring Report-Thirty Third (September 2023)	Submitted
Quarterly Monitoring & Evaluation Report-1 st Quarter year 2023-24 (Jul – Sep 2023)	Submitted

Document	Status
Monthly Monitoring Report-Thirty Fourth (October 2023)	Submitted
Monthly Monitoring Report-Thirty Fifth (November 2023)	Submitted
Monthly Monitoring Report-Thirty Sixth (December 2023)	Submitted
Quarterly Monitoring & Evaluation Report-2 nd Quarter year 2023-24 (Oct – Dec 2023)	Submitted
Monthly Monitoring Report-Thirty Seventh (January 2024)	Submitted
Monthly Monitoring Report-Thirty Eighth (February 2024)	Submitted
Monthly Monitoring Report-Thirty Ninth (March 2024)	Submitted
Monthly Monitoring Report-Fortieth (April 2024)	Submitted
Monthly Monitoring Report-Forty First (May 2024)	Submitted
Quarterly Monitoring & Evaluation Report-1 st Quarter year 2024 (Jan – Mar 2024)	Submitted
Quarterly Monitoring & Evaluation Report-2 nd Quarter year 2024 (Apr – Jun 2024)	Report in Hand
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	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 &	Submitted

Document	Status
Questionnaires for Baseline Survey Phase-II	
6) Baseline-End Line Manual Survey Manual	
7) Android Application PMIS Dashboard Manual	
8) Survey Manual on MTs (Updated)	
9) Water Saving Through NPIWC-II Project Interventions	
10) Special Report on Monitoring and Impact Evaluation of Precision (Laser) Land Leveling	
11) Monitoring, Evaluation, and Impact Analysis of The Project "NPIWC-II".	

* 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-D**.

3.2 MATRIX OF RESPONSIBILITIES

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

CHAPTER 4: ACTIVITIES DURING THE REPORTING QUARTER

4.1 INTRODUCTION

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

4.2 OBJECTIVE OF QM&ER

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

4.3 REPORTING QUARTER

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

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

4.4 SUBMISSION OF PROGRESS REPORTS MMRS & QM&ER

As per contractual obligation, the consultants have submitted thirty-ninth MMR (March 2024), fortieth MMR (April 2024), forty first MMR (May 2024) and 13th QM&ER Jan-Mar 2024. While the 14th QM&ER (the Report in hand) for 1st April 2024 to 30th June 2024 is being submitted.

4.5 MONITORING OF INTERVENTIONS IN THE FIELD

The regular monitoring contains 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 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 continued during the reporting period.

4.6 ACTIVITIES OF ICT UNIT – DURING REPORTING QUARTER APRIL – JUNE 2024

4.6.1 Introduction

The Quarterly Monitoring & Evaluation Report (QM&ER) provides a detailed overview of all activities conducted during the recent past quarter (April to June 2024) as specified in the Project's Terms of Reference (TORs). The QM&ER focuses on fulfilling Monitoring, Evaluation, and Impact Assessment (ME&IE) objectives within the stipulated timeframe.

4.6.2 Objective of QM&ER

The primary aim of the Quarterly Monitoring and Evaluation Report (QM&ER) is supposed to provide the current information amongst the respective stakeholders pertaining to the activities conducted by ME&IE Consultants during the quarter in relation to the specified goals. Regular reporting is essential within the established monitoring and evaluation framework.

The QM&ER for the period spanning from 1st April 2024 to 30th June 2024, outlines the advancements in diverse activities concerning the monitoring and evaluation of project interventions. These include field surveys aimed at assessing the status of interventions in relation to specified targets and quarterly work plans.

The activities conducted during the reporting period are presented as under:

- Submitted the deliverables including reports: QMR (Jan to March 2024) and MMR March, April and May 2024 after editing, verifying, and processing of the same integrated reports compiled by the respective stakeholders across all the zones/ units of the NPIWC-II, project.
- Field visits conducted to district Muzaffrabad Neelum, Jehlumin and Haveli for carrying out Baseline, Impact, Regular Monitoring and Spot Checking.
- Data verification and analysis of baseline and impact surveys.

- Coordination meetings within and across the respective stakeholders managed and held between OFWM, FPMU, FWMC, Agricultural Extension, Team Leader, DTLs, field team consultants, etc.
- Capacity building of professional human resources continued as per routine duty of the professionals of this project.
- Submitted the deliverable report, viz., MMR for the month of May-2024 after editing, verifying, and processing through the respective stakeholders.
- Work in progress to finalize the deliverable Annual Report (1st July 2023 to 30th June 2024) and Quarterly report (April to June 2024).
- Admin and Financial liabilities were supervised by the Team Leader and Deputy Team Leader of the ICT-Unit as well as National Office at Islamabad.

4.6.3 Updated Progress of ME&IE Consultants Islamabad –Unit

Overall Progress:

The updated performance activities of the ME&IE consultants, Islamabad Unit portrayed in this section, they had completed the Baseline- I, II & III, as well as consolidation of baselines, 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).

On overall basis, ME & IE consultants' ICT-Unit have successfully covered up to 17% Sample of the targeted population in the entire ICT – Zone, particularly it constituted 5% sample in each district of AJK as well as Punjab Baranitract. The ICT unit has achieved significant milestones, notably at least reaching 5% sample size across the sampled districts. This accomplishment underscores the team's diligent efforts in conducting thorough investigation for compiling baseline-assessments, impact evaluations, and regular monitoring activities. Having covered successfully, the desired percentage of the targeted population accomplished in both of the AJK and the Punjab Barani tract. Resultantly, the project has laid a strong foundation for larger data base collection and analysis.

Updated Achievements:

During May 2024 The Muzaffarabad, Neelum, and Haveli districts of AJK were visited to conduct Baseline-III, Endline Impact Evaluation, regular monitoring, and spot checks. The activities included two WST schemes in Muzaffarabad District, one watercourse and two WST schemes in Haveli District, and two watercourse schemes in Neelum District of AJK.

During June 2024 two WST schemes in District Bagh and one WST scheme in Poonch District have been visited for baseline and impact surveys, along with regular monitoring and spot checks.

From inception to date, the ME&IE Consultants ICT field team conducted baseline vis-a' vis impact surveys of **46** watercourses in AJK (**39**) & ICT (**7**) as well as baseline vis-a'-vis impact surveys of **25** 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.

Baseline and Impact Assessments completed in all designated districts by achieving at least 5% target from the stipulated sampling frame. Regular Monitoring Visits were consistently conducted as per the informed and shared schedule amongst the ME&IE consultants, cooperating departments as well as the beneficiaries.

Data Collection:

Quality data and allied information were collected from all sampled districts of the project area, ensuring valid and reliable information to realize the impact assessments based on the respective baselines.

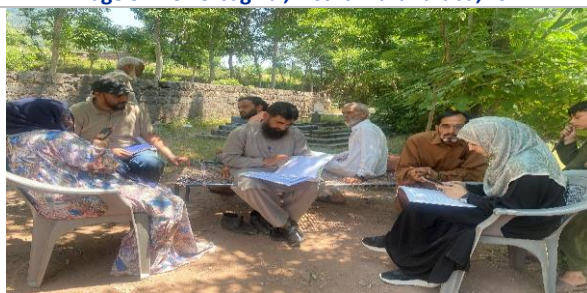
As the project draws towards its destination, the ME&IE consultants are looking forward to celebrate its successful culmination upon rendering diligent services/ efforts and steadfast dedications in to the blood stream of the project in hand. It is happened through meticulous planning, rigorous monitoring, and impactful assessments; the consultants' team has achieved the desired goals to fulfill the expected outcomes. The collaborative spirit and unwavering commitment of the team have ensured that every milestone was met with precision and excellence. As for as the project's journey concerned, one can take pride through envisioning the positive impact created and lessons learned, paving the way for rectifying the future course of endeavors with confidence and expertise.

FIELD VISITS TO AJK

Date of Visit:	27-05-2024
Scheme:	Water Storage Tank
WUA Chairman Name:	Ehtesham Yagub
Name of village:	Jagwal
District :	Muzaffrabad
Union council	Thotha Langrpura
Source of irrigation:	Spring
Shape of WST	Square
Length,width	14X14 Sq feet
Command area of WSP	13 Acres
No of beneficiaries:	11
Reduction in water disputes/thefts	No problems related to water theft



Image of WST of Jagwal, Distric Muzaffarabd, AJK



ME&IE field team with beneficiaries, collecting data on Andriod app

WST Lower Subri ME&IE consultants' field team visited AJK to compensate missing data baseline, impact assessment and monitoring surveys, respectively.

WST of Jagwal

The water storage tank, Jagwal was monitored and observed to be well maintained. The field team monitored WST which was filled with water thus no leakage/ damage found anywhere. In Total, 11 farmers' land was getting benefitted through this intervention. Before the intervention, only few crops were cultivated by most of the farmers and the yield

of the crops were also at minimum level, however, after this intervention number of crops cultivated increased, i.e., mainly seasonal vegetables, also increase in yield found in wheat and maize crops. Thereafter, before the intervention most of the cultivable land was not been used for cultivation due to shortage of irrigation water but after the construction of the WST enough water was available for extensive cultivating of more crops.

During the field team's visit, meticulous observations were made regarding the structural integrity, water quality, and operational efficiency of the WST.

Moreover, the impact survey yielded the tangible benefits derived from the water storage tank, such as increased access to clean water, improved agricultural productivity, and enhanced community resilience to water-related challenges. Through interviews and data collection, the report elucidates the transformative effects of the tank on cultivable land. According to the beneficiaries, the WST intervention facilitated in supplying a reliable and consistent flow of water, ensuring communities have the access to clean water even during dry spells or water scarcity periods.

Farmers were using water from storage tanks for irrigation, thereby, fetching improved crop yields, sustaining livestock rearing leading to supplement the livelihoods of the beneficiaries. Consequent upon the access to reliable water sources, farmers are in a position to diversify their crops by cultivating a wider range of multiple crops during the crop calendar in a year. This can also lead to increased income opportunities and food security for farming households

Surveillance Results of Monitoring

Inspected the physical condition of the tank, including monitoring of its walls, base, and any associated infrastructure such as pipelines or valves; thus, the monitoring team ensured, is there any sign of damage or deterioration that could compromise its functionality.

Before the onset of the project's intervention due to the improper irrigation system in place, farmers were constrained to practice a specific cropping cycle by cultivating only limited crops with conventional varieties and very limited diversification of crops being cultivated. Off-season cropping was impractical due to lack of technological knowhow as well as access, resulting

in underutilization of agricultural land resources that lead to yield minimum economic opportunities.

Farmers reported a significant increase in crop productivity after the construction of the water storage tank. This intervention ensured reliable access to water for irrigating the crops. Moreover, they have been able to cultivate different seasonal crops throughout the year, leading to higher yields and improved water profitability.

The availability of water from the storage tank has facilitated amongst the beneficiaries in crop diversification. Many farmers have adopted new crop varieties leading to more revenue generation as well as establishing the sustainability in arresting food secure agricultural system. The use of water from the storage tank for irrigation has contributed to improved crop quality and marketable surplus by ensuring the sure supply of water at the critical crop growth stages. After the adoption of the WST intervention, the Farmers have reported that they are harvesting good crops with fewer instances of wilting or stunted growth and shriveled seeds, leading to fetch good production with premium prices returns. However, access on sure supply of water from the storage tank has empowered farmers economically by increasing their incomes and reducing dependency on intermittent rainfall patterns. Consequently, many farmers have been able to invest in farm inputs, farm machinery and tools, as well as adoption of other good agricultural practices leading to improved standard of living.

WUA Chairman Name:	Pervez Iqbal
Name of village:	Lower Subri
District :	Muzaffarabad
Union council	Chathardomeel
Source of irrigation:	Spring
Shape of WST	Square
Length,width	14X14 Sq.feet
Command area of WSP	10.625 Acres
No of beneficiaries	11
Reduction in water disputes/thefts	<i>No problems related to water theft</i>



Image of WST at Lower Subri



Monitoring of WST at Lower Subri

WC Dhaki Nalla to Muhallah Ziyarat

ME&IE field team visited the project area, interviews were taken from 6 beneficiaries comprises of 2 each from head, middle and tail of the sampled WC schemes.

The WC was monitored by the monitoring team, length of the WC was measured and it was according to the sanctioned lining length. The WC was well maintained in terms of operations and management. The water in the WC was clean and was in flowing smoothly. The irrigation water source of the WC is Nalla.

Before the WC intervention, the farmers has difficulty in irrigating their crop lands as there was no proper system of irrigation as the area is hilly and they had to hardly manage to irrigate the crops.

After lining of the WC improvement, the farmers have the opportunity to irrigate the crops properly.

Farmers reported a significant increase in crop production since the improvement of the WC. As a result of reliable access to water for irrigation of the crops, the farmers have been able to cultivate seasonal crops consecutively, leading to higher crop yields with quality grains that fetched them higher marketing margins.

Date of Visit:	28-05-2024
Scheme:	Water course
WUA Chairman Name:	Nisaar Hussain
Name of village:	Salkhala
District :	Neelum
Union council:	Athmuqam
Source of irrigation:	Nalla
Type of WC:	Rectangular
Command area of WC	40 Acres
No of beneficiaries:	20



Image of Watercourse at village Salkhala



Standing Wheat crop at District Neelum Village Salkhala



Field team with OFWM staff at WC Salkhala, AJK

WC in Nalla Salkhala to Darbagu

ME&IE field team visited the sampled area of the project; interviews were taken from 6 beneficiaries represented 2 each from head, middle and tail of the WC. The WC was monitored by the monitoring team, length of the WC was measured and it was observed according to the sanctioned lining

length. The WC was well maintained through following the standard O&M protocols. The water flow in the WC was smooth with good quality status. The irrigation water source of the WC is Nalla.

Before the intervention of WC, the farmers were facing difficulty in irrigating their crop lands as there was no proper system of irrigation as the area is hilly and they had to hardly manage to irrigate the respective crops.

After lining of the WC improvement, the farmers were satisfied since they can irrigate the crops properly.

Farmers reported a significant increase in crop production after the construction of the water storage tank. Having reliable access to water for irrigating their crops, they have been able to cultivate crops throughout the year, leading to higher yields and improved profitability.

Farmers reported good crops with lesser probability of crop failure due to wilting or stunted growth, leading by fetching better prices at markets.

Access to water from the storage tank has provided good opportunity to the farmers in earning increased crop produce/ incomes and also facilitated in reducing exclusiveness dependency on rainfall water. Consequently, farmers have been able to invest more in farm inputs, equipment, and other good agricultural practices leading to yielding higher income from the crops, a catalyst towards improved standards of living amongst the beneficiaries.

Moreover, increase in crop production along with addition in number of cultivating crops was reported by the beneficiaries to the monitoring field consultants.

Date of Visit:	3-06-2024
Scheme:	Water Harvesting Structure
WUA Chairman Name:	Raja Manzoor Khan
Name of village:	Choor Chalari
District :	Bagh
Source of irrigation:	Rainfall
Shape of WST	Rectangular
Command area of WHS :	10.5 Acres



WHS District Bagh, AJK



ME&IE field team taking measurements of the Scheme



ICT field team with beneficiaries in AJK

FIELD VISITS TO AJK

Before Intervention:

Prior to the construction of the water harvesting structure, farmers' livelihoods on the agriculture farming where the crop productivity was significantly constrained to the unreliable water access. Farmers are dependent on erratic rainfall patterns led to seasonal fluctuations in yielding agricultural outputs, limiting income opportunities and food security. Crop diversification was restricted, thus the farmers were unable to cultivate high-value crops due to water scarcity against the desired delta of water requirements for the potential crops. The farmers were used to grow only maize crop and few seasonal vegetables. Before launching of the intervention, farmers used to keep 40% of the land as fallow due to non-availability of sufficient water supply, thus they could only manage crops cultivation up to 60% of the land.

After Intervention:

Consequent upon the introduction of the intervention through following the construction of the water harvesting structure, farmers experienced notable improvements in livelihoods through fetching the higher crop yields. For example, the maize crop yield was increased by 12 % (i.e., from 36 to 41maunds per acre). As a result of introduction of the intervention, availability of irrigation water enabled the farmers to plant diversified crops for their respective crop seasons. Moreover, the productivity of the crops also increased by applying the judicious water requirement to the potential crops. Farmers started cultivating high value crops including fruits and vegetables corresponding to the Rabi and Kharifcrop seasons. Farmers entered into the venture of cultivating of cash crops based on the market driven commodities that provided an opportunity for them to generateadditional income with higher profit margins. Enhanced access to water resources also facilitated to the farmers in rearing more livestock and raising agroforestry for producing fire and timber wood as well as fodder for animal feeding. It created an opportunity for the beneficiaries to further diversify livelihood options. Moreover, community members reported enhanced food security and reduced vulnerability to climate-related shocks/ threats, highlighting the transformative impact of the water harvesting structure on farmers' livelihood through enhancedagricultural productivity, and promoting sustainable land use.

MONITORING LOG:

Key Findings:

• Water Quantity:

The ChoorChalariwater harvesting structure has established successfully the capacity of 10 gallons of water, the depth of this WHS was 8 feet and its present status was fully filled with water. The water collected and stored was fulfilling the current crop needs.

The water was suitable for irrigating the crops and its source of water is only rainfall.

• Structural Integrity:

The WHS was according to the sanctioned design and was well maintained, no leakage or damage found anywhere in the WHS.

• Vegetation Management:

There was no vegetation/ weedsfound at the surrounding of the structure. Proper vegetation management is necessary to prevent obstruction of water flow and avoid potential structural damage.

• Overflow and Spillage:

The observation of the structure found to be effectively managing excess water without any instances of overflow or spillage during the M&E team visit.

• Water Usage:

Data regarding the utilization of harvested water indicates primarily being used for irrigation purposes but to a limited extent for domestic usage.

• Farmers' Feedback:

Feedback from the beneficiaries regarding the water harvesting structure was positive, however, they had been confronted difficulty in collecting the subsidy amount in time. The farmers on their own expenses constructed the WHS and then reimburse the expenses at very late period.

Date of Visit:	3-06-2024
Scheme:	Water Storage Tank
Name of village:	Ghazi Abad Kals
District :	Bagh
Source of irrigation:	Rainfall
Shape of WST	Square
No of beneficiaries:	-



WST Ghazi Abad kals in District Bagh, AJK



ME&IE team with beneficiaries, in District Bagh

4.6.4 ME&IE consultants Meetings and Trainings:

Meeting and lecturing to the trainees on May 23, 2024 about monitoring and evaluation (M&E) of the Project, NPIWC-II was a dynamic and insightful experience. Project, NPIWC-II, a critical initiative aimed at improving community infrastructure and welfare, requires meticulous tracking and assessment to ensure its success and sustainability. The session began with an introduction to the fundamental concepts of monitoring and evaluation, emphasizing their importance in project management. Dr.UsmanMustafa, Team Leader of the NPIWC-II, Project explained that monitoring involves the ongoing collection and analysis of data to ensure that the project activities are being implemented as against planned. This includes tracking progress, identifying any deviations, and making necessary adjustments to stay on predetermined course of activities. Evaluation, on the other hand, is the systematic assessment of a

project's design, implementation and outcomes against the stipulated targets and time frame. It aims at to determine the relevance, efficiency, effectiveness, impact, and sustainability of the project.



ME&IE Consultants Lecturing to the trainees

4.6.5 Participated in Pakistan Development Summit

Dr. Ikram Saeed, Deputy Team Leader, ICT-Zone, National Office, Islamabad accompanied with Dr. Usman Mustafa, Team Leader, NPIWC-II Project for the participation in Pakistan Development Summit. It was held on 15th May 2024 at Pak-China Friendship Centre, Islamabad and hosted by the Ministry of Planning Development & Special Initiatives. The main goal of this summit was hovering around 5Es. Whereas, 5Es are spelled out as under:

1. **Exports:** enterprise (s) & employment;
2. **Equity:** ethics & empowerment;
3. **Energy:** affordable & efficient;
4. **Environment:** water & food security; and
5. **E-Pakistan:** empowering youth

The deliberations on the above topics were carried out during whole day. The participants of this summit were representing the public and private organizations of the country. In brief, the federal minister of Planning Development and Special Initiatives, Prof. Ahsan Iqbal concluded that the success of any development plan is highly correlated with the following four pre-requisites:

- 1) Peace; 2) Political stability; 3) Continuity of policy; and 4) continuous reforms.



Chart of the Summit Illustrating Roadmap to a Trillion Dollar Economy by 2035

Following Lectures were delivered by the ME&IE consultant of the project during the month of April-2024:

4.6.6 Monitoring & Evaluation (M&E) and Smart Indicators

Dr. Usman Mustafa, Team Leader, ME&IE Consultant delivered a lecture at Project Planning and Management Institute (PPMI), Ministry of Planning and Development, Government of Pakistan, Islamabad entitled, **“Monitoring & Evaluation (M&E) and Smart Indicators”** on April 17, 2024. The lecture was attended by around 45 participants representing different public and private institutes throughout the country. The main topics covered by Dr. Mustafa were basic terminology under the topics: Definition and explanations of Monitoring and Evaluation (M&E). Differences between Monitoring & Evaluation; Definition of Indicators their types, benefits and selection criteria for good indicators with the help of examples in order to enhance the comprehension of the participants. What is a “Smart indicator”? The participants showed a lot of interest which was reflected during their interactive sessions of questions and answers, Case study of quantitative analysis related to “Childhood vaccination” was also presented in the training.



Images of the lecture Session at PPMI, Islamabad

4.6.7 Quantification/ Evaluation Methods: Cost-Benefit Analysis, Cost-Effectiveness Analysis

Dr. Usman Mustafa, Team Leader, ME&IE Consultant delivered a lecture at National Centre of Rural Development (NCRD), Islamabad entitled "Quantification Evaluation Methods: Cost-Benefit Analysis, Cost-Effectiveness Analysis" on April 19, 2024. The lectures were attended by 35 participants belonging throughout the country. Specifically, the participants were from different Federal and Provincial Government and Semi-government organizations and Institutes. The main topics covered by Dr. Mustafa were basic terminology exhibited under the topic. Usefulness of qualitative methods along with different approaches to qualitative research; What is qualitative data analysis?; and the Steps inclusive of benefits and challenges of doing qualitative data analysis. Besides the cost-effectiveness analysis that was also discussed during the training program. The participants showed a lot of interest which was reflected through their interactive sessions, feedback and questions rose. Case study of

quantitative analysis related to "Childhood vaccination" was also presented in the training.



Images of the lecture Session at NCRD, Islamabad

4.7 ACTIVITIES PUNJAB ZONE – DURING REPORTING QUARTER APRIL – JUNE 2024

During this quarter, impact field visits of LLLs were carried out by the ME&IE consultants field teams. The field teams also coordinated with OFWM Field Staff and other stakeholders in the project. The consultants performed the following activities of the project during this quarter is as under:

- i. Pre – Field Activities
- ii. Field activities
- iii. Post – Field Activities
- iv. Meeting with Stakeholders/Beneficiaries
- v. Internal Meetings/ Capacity Building Sessions

vi. Any other relevant assignment of the project.

The consultant's activity generally spined around the conduction of their usual functions as under:.

4.7.1 Pre Field-Activities

Deputy team leader had a number of meetings with the field team members and Agri, Economist (National Office), The main focus was on Remaining parts of the impact survey of provision of laser land levelers. Under the current scenario of the details discussions were held on the following points:

1. All ecological zone / District Should be Covered.
2. Due representation should be given to each ecological zone and district while drawing the sample from the remaining part to maintain the Balance.
3. Regarding views/perception of the respondents, particularly on farms community, be clearly observed and recorded.
4. Efforts are to be made to cover the desired sample size of water courses and Laser Land Leveler units in this quarter (April to June 2024)

Deputy team leader held several meetings with the field team members to review and scrutinize the accumulated data collected from the field and target for the remaining engine impact survey of the project interventions, viz., water courses, water storage tanks/ ponds and provision of LLL.

Before the Field Activities ICT Department, Mr. Shumail Provided Comprehensive Refresher course / Updated the ODK working system, it provided in-depth knowledge to the field team. The DTL and AE held meetings with Field teams in this regard.



A group of Participants of the Meeting held at the Punjab Zonal office in Lahore



DTL Discussing with Field team Members on Field Survey Strategies



Meeting of Deputy Team Leader with Agri Economist discussing the remaining-Impact Survey

They Initiated field Visits Immediately without any further delay they provided a complete rather comprehensive lecture on the upcoming field survey. The DTL provided in-depth knowledge starting from sampling methodology, data collection instruments, use of the Android-based system, and other ICT technologies.

The participants were fully satisfied. Toward the end of the training session, it is emphasized that the field team should highlight the Positive aspects of the project in upcoming Reports and Videos based on reality.

Keeping in view the hot weather conditions and available financial resources it was decided to confine the current field survey to the provision of laser land levelers intervention, The following strategy was developed for the upcoming survey.

The monitoring / Field survey pertained to the provision of laser land levelers during the month under review. The data collection activities for this intervention were carried out by two field teams under the supervision and guidance of the deputy team leader Punjab zone, Lahore.

The field activities were carried out as per the assigned targets. The field task was assigned to two teams. The composition of two teams along with the target was as under:

3.3.1 Field Activities

From inception to the reporting month, the ME&IE Consultants' Punjab field team conducted baseline vis-a-vis impact surveys on a total of **250** watercourses. In addition, they completed baseline and impact surveys for **80** water storage tanks (**61** by Punjab field team and **19** of Potohar Region by ICT Field team) and conducted impact assessments on **306** PLL interventions.

The following field visits were made in connection with the monitoring and collection of data relevant to land leveler usage from 26th May 2024 to 15th June 2024. The achievements of field teams were as under:

Sr. No.	Ecological Zone	District	Targets
1	Partial Irrigated Barani Zone	Bhakkar	5
		Mianwali	7
2	Irrigated (Rice Zone)	Gujranwala	5
		Lahore	6
		Hafizabad	5
		Kasur	8
		Nankana Sahib	2
		Narowal	7
3	Irrigated (Mixed Zone)	Faisalabad	3
		Pakpattan	11
		Jhang	11
		Chiniot	15
		Toba Tek Singh	1
4	Irrigated (Cotton Zone)	Rahim Yar Khan	13
		Rajanpur	6
		Bahawalnagar	4
		Bahawalpur	12
		Layyah	15
		Muzaffargarh	12
		Khanewal	2
		Mandi Bahauddin	8
Total			158

Team 1

Scheme 1.

Name of Service Provider	Liaqat Ali Khan
Father Name	Mooj khan
Tehsil & District	Lahore
Address	Kala Nawa, Manga Mandi
Area Owned Levelled	4.5 Acres
Others Land Levelled	400 Acres



Agri Economist Interviewing the service provider

Scheme 2.

Name of Service Provider	Abid Abbass
Father Name	Ghulam Shabir
Tehsil & District	Lahore
Address	Mohala Cha Raistian Wala Manga Hathar
Area Owned Levelled	5 Acres
Others Land Levelled	350 Acres



Interview in progress with the service provider

Scheme 3.

Name of Service Provider	Karamat Ali
Father Name	Muhammad Yasin
Tehsil & District	Lahore
Address	Jhugin Baloki Manga Hathar
Area Owned Levelled	7 Acres
Others Land Levelled	300 Acres



M&E Consultants Interviewing the service provider

Scheme 4.

Name of Service Provider	Asghar Ali
Father Name	Inayat Ali
Tehsil & District	Lahore
Address	Jhugin Baloki Manga Hathar
Area Owned Levelled	2 Acres
Others Land Levelled	100 Acres



Interview in progress with the service provider

Scheme 5.

Name of Service Provider	Muhammad Boota
Father Name	Hassan Muhammad
Tehsil & District	Lahore
Address	Batth Lodhary
Area Owned Levelled	5 Acres
Others Land Levelled	200 Acres



M&E Consultants interviewing the PLL Beneficiary

Scheme 6.

Name of Service Provider	Faqeer Hussain
Father Name	Muhammad Ismail
Tehsil & District	Lahore
Address	Warah Abdullah Manga Hathar
Area Owned Levelled	4 Acres
Others Land Levelled	100 Acres



M&E Consultants interviewing the Beneficiary of PLL

Scheme 7.

Name of Service Provider	Faizullah
Father Name	Allah Bukhsh
Tehsil & District	Kasur
Address	Bediyan Kalan
Area Owned Levelled	12.5 Acres
Others Land Levelled	300 Acres



Beneficiary of PLL with M&E Consultants

Scheme 8.

Name of Service Provider	Naeem Ullah
Father Name	Rehmat Ullah
Tehsil & District	Kasur
Address	Mahalam Kalan
Area Owned Levelled	25 Acres
Others Land Levelled	50 Acres



Beneficiary of PLL with M&E Consultants

Scheme 9.

Name of Service Provider	Abdul Raoof
Father Name	Muhammad Abdullah
Tehsil & District	Kasur
Address	Ghanda Singh Wala
Area Owned Levelled	12 Acres
Others Land Levelled	100 Acres



Interviewing M&E Consultants to the service provider

Scheme 10.

Name of Service Provider	Muhammad Rasheed
Father Name	Sardar Sooba
Tehsil & District	Kasur
Address	Chor Pura
Area Owned Levelled	8 Acres
Others Land Levelled	300 Acres



Interview by M&E Constants in progress with the service provider

Scheme 11.

Name of Service Provider	Liaqat Ali
Father Name	Abdul Razzaq
Tehsil & District	Kasur
Address	Tolo Wala
Area Owned Levelled	4 Acres
Others Land Levelled	200 Acres



Beneficiary of PLL with M&E Consultants

Scheme 12.

Name of Service Provider	Muhammad Israel
Father Name	Khillu khan
Tehsil & District	Kasur
Address	Nand Ka Takia
Area Owned Levelled	15 Acres
Others Land Levelled	5 Acres



Interview by M&E Constants in progress with the service provider

Scheme 13.

Name of Service Provider	Khalid Mehmood
Father Name	Muhammad Tufail
Tehsil & District	Narowal
Address	Mahees Booby Walo
Area Owned Levelled	8 Acres
Others Land Levelled	50 Acres



Service provider with M&E Consultant

Scheme 14.

Name of Service Provider	Muhammad Shabir
Father Name	Muhammad Ramzan
Tehsil & District	Narowal
Address	Bhatti Wali
Area Owned Levelled	3 Acres
Others Land Levelled	500 Acres



Service provider describing the Future of PLL

Scheme 15.

Name of Service Provider	Muhammad Arif
Father Name	Elam Din
Tehsil & District	Narowal
Address	Dhola
Area Owned Levelled	6 Acres
Others Land Levelled	90 Acres



Service provider with M&E Consultants

Scheme 16.

Name of Service Provider	Adil Hussain
Father Name	Riasat Ali
Tehsil & District	Narowal
Address	Dongian
Area Owned Levelled	5.5 Acres
Others Land Levelled	500 Acres



Interview to the service provider with M&E Consultants

Scheme 17.

Name of Service Provider	Abdul Majeed
Father Name	Chahat Khan
Tehsil & District	Narowal
Address	Dhamthal
Area Owned Levelled	10 Acres
Others Land Levelled	200 Acres



Interview in progress with the service provider

Scheme 18.

Name of Service Provider	Tanveer Ahmad
Father Name	Sardar
Tehsil & District	Narowal
Address	Maan
Area Owned Levelled	4 Acres
Others Land Levelled	100 Acres



Interview in progress with the service provider

Scheme 19.

Name of Service Provider	Nisar Ahmad
Father Name	Taj Din
Tehsil & District	Narowal
Address	Maan
Area Owned Levelled	6 Acres
Others Land Levelled	200 Acres

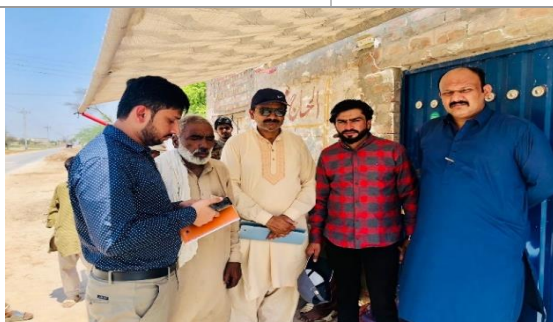


Interview in progress with the service provider

Team 02

Scheme 1.

Name of Service Provider	Faiz Ahmad
Father Name	Muhammad Fazal
Tehsil & District	Pakpattan
Address	Village 41/SP
Area Owned Levelled	8 Acres
Others Land Levelled	350 Acres



A Group photo of M&E Consultants with service provider

Scheme 2.

Name of Service Provider	Mushtaq Ahmad
Father Name	Muhammad Chirag
Tehsil & District	Pakpattan
Address	Tina Sher kot
Area Owned Levelled	1.25 Acres
Others Land Levelled	Acres



A View of Data Collection on ODK from Service provider at Site

Scheme 3.

Name of Service Provider	Qutab sattar
Father Name	Muhammad Jamal
Tehsil & District	Pakpattan
Address	Pakpattan
Area Owned Levelled	6 Acres
Others Land Levelled	400 Acres



A Glimpse of Site Visit of Field Team with the beneficiary of the PLL unit

Scheme 4.

Name of Service Provider	Hafiz Mahtab Ahmad
Father Name	Mushqat Ahmad
Tehsil & District	Arifwala & Pakpattan
Address	Chak Okana
Area Owned Levelled	11 Acres
Others Land Levelled	250 Acres



A View of Monitoring of PLL at Site

Scheme 5.

Name of Service Provider	Hafiz Talib Hussain
Father Name	Faiz Ahmad
Tehsil & District	Pakpattan
Address	Ferozpur Chistian
Area Owned Levelled	12 Acres
Others Land Levelled	300 Acres



Inspection of PLL with the service provider

Scheme 6.

Name of Service Provider	Muhammad Younas
Father Name	Anayat Muhammad
Tehsil & District	Pakpattan
Address	Chak Opana
Area Owned Levelled	12.5 Acres
Others Land Levelled	300 Acres



Service provider Sharing his views about PLL

Scheme 7.

Name of Service Provider	Muneer Ahmad Chishti
Father Name	Nazar Muhammad
Tehsil & District	Pakpattan
Address	Nabwal
Area Owned Levelled	12.5 Acres
Others Land Levelled	350 Acres



Interviewing Beneficiary by the Team of M&E Consultants

Scheme 8.

Name of Service Provider	Zakar Hussain
Father Name	Muhammad Iqbal
Tehsil & District	Pakpattan
Address	Basit Ghulam Fareed
Area Owned Levelled	11 Acres
Others Land Levelled	90 Acres



Service provider sharing his Consent about the benefits of PLL

Scheme 9.

Name of Service Provider	Rashid Rasheed
Father Name	Rasheed Ahmad
Tehsil & District	Pakpattan
Address	Chak No. 40/SP
Area Owned Levelled	11 Acres
Others Land Levelled	65 Acres



A view of Visit to PLL unit by M&E Consultants along with Service Provider

Scheme 10.

Name of Service Provider	Abid Hussain
Father Name	Muhammad Din
Tehsil & District	Pakpattan
Address	Kani Pur
Area Owned Levelled	20 Acres
Others Land Levelled	400 Acres



View of PLL unit at the sitewith Service provider

Scheme 11.

Name of Service Provider	Ghulam Shabbir
Father Name	Mehar Faqeer Muhammad
Tehsil & District	Chaubara & Layyah
Address	Chak no 126/TDA
Area Owned Levelled	12.5 Acres
Others Land Levelled	400 Acres



A View of Service provider with the PLL unit

Scheme 12.

Name of Service Provider	Ghulam Jaffar
Father Name	Ghulam Hussain
Tehsil & District	Chaubara & Layyah
Address	Mouza Chah Siwaj-wala
Area Owned Levelled	8 Acres
Others Land Levelled	200 Acres



A Glimpse of data Collection from PLL beneficiary

Scheme 13.

Name of Service Provider	Manzoor Hussain
Father Name	Waryam Khan
Tehsil & District	Chaubara & Layyah
Address	Mouza Nawan kot
Area Owned Levelled	250 Acres
Others Land Levelled	100 Acres



Service provider with the PLL unit along with Field Team

Scheme 14.

Name of Service Provider	Muhammad Imran
Father Name	Muhammad Ramzan
Tehsil & District	Chaubara & Layyah
Address	Chak No 275/TDA
Area Owned Levelled	10 Acres
Others Land Levelled	250 Acres



A view of PLL Unit with the service provider along with field Team

Scheme 15.

Name of Service Provider	Nasir Abbas Javed
Father Name	Lal Hussain Khan
Tehsil & District	Chaubara & Layyah
Address	-
Area Owned Levelled	250 Acres
Others Land Levelled	Nil



Beneficiary pictured with PLL along the field team

Scheme 16.

Name of Service Provider	Tariq Saeed
Father Name	Muhammad Saeed
Tehsil & District	Chaubara & Layyah
Address	Mouza Nawan Kot
Area Owned Levelled	5 Acres
Others Land Levelled	300 Acres



A View of Data Collection from Service provider along with OFWM officials

Scheme 17.

Name of Service Provider	Muhammad Asghar
Father Name	Malik Allah Baksh
Tehsil & District	Chaubara & Layyah
Address	Chaubara
Area Owned Levelled	5 Acres
Others Land Levelled	250 Acres



A view of M&E Team Conducting interview of Service provider

Scheme 18.

Name of Service Provider	Allah Ditta
Father Name	Ali Muhammad
Tehsil & District	Chaubara & Layyah
Address	Mouza Nawan Kot
Area Owned Levelled	5 Acres
Others Land Levelled	200 Acres



A Group Photo of Field Team while conducting interview of Service provider

Scheme 19.

Name of Service Provider	Muhammad Aslam
Father Name	Ghulam Akbar
Tehsil & District	Chaubara & Layyah
Address	Village 365/TDA
Area Owned Levelled	4 Acres
Others Land Levelled	300 Acres



A Glimpse of data Collection of field Team from Service provider

Scheme 20.

Name of Service Provider	Muhammad Amir
Father Name	Muhammad Ramzan
Tehsil & District	Chaubara & Layyah
Address	Chaubara & Layyah
Area Owned Levelled	12 Acres
Others Land Levelled	200 Acres



A view of PLL unit at Site

Scheme 21.

Name of Service Provider	Tahir Jameel
Father Name	Mubarik Ali
Tehsil & District	Chaubara & Layyah
Address	Chaubara
Area Owned Levelled	5.5 Acres
Others Land Levelled	600 Acres



Beneficiary pictured with PLL along the field team

Scheme 22.

Name of Service Provider	Muhammad Ashraf
Father Name	Muhammad Inayat
Tehsil & District	Chaubara & Layyah
Address	Village 444/TDA
Area Owned Levelled	10 Acres

Others Land Levelled

400 Acres



A view of Monitoring of PLL at Site

Scheme 23.

Name of Service Provider	Muhammad Tufail
Father Name	Noor Muhammad
Tehsil & District	Chaubara & Layyah
Address	Chak No. 314/Tda
Area Owned Levelled	6 Acres
Others Land Levelled	400 Acres



A discussion of M&E Team with beneficiary about the impact of PLL at his site

Scheme 24.

Name of Service Provider	Khizar Hayat Khan
Father Name	Haji Faiz Ullah Khan
Tehsil & District	Chaubara & Layyah
Address	Patti kavera
Area Owned Levelled	12.5 Acres
Others Land Levelled	Nil



A general discussion of M&E Team with service Provider of PLL impact at his site

Scheme 25.

Name of Service Provider	Muhammad Afzal
Father Name	Falak Sher
Tehsil & District	Chaubara & Layyah
Address	Village Pati kavera
Area Owned Levelled	12.5 Acres
Others Land Levelled	2000 Acres



The service provider giving interview to the field team

Scheme 26.

Name of Service Provider	Imtiaz Hanif
Father Name	Zulfqar Ahmed
Tehsil & District	Jhang
Address	Chak No. 450-Jb
Area Owned Levelled	12.5 Acres
Others Land Levelled	500 Acres



The service provider giving interview to the field team

Scheme 27.

Name of Service Provider	Ali Muhammad
Father Name	Ghulam Muhammad
Tehsil & District	Jhang
Address	-
Area Owned Levelled	8 Acres
Others Land Levelled	300 Acres



A general discussion of M&E Team with beneficiary of PLL at site about its Impact

Scheme 28.

Name of Service Provider	Muhammad Shafi
Father Name	Jeewan
Tehsil & District	Jhang
Address	Chah Kumhar Wala Balo Shahbal
Area Owned Levelled	6.75 Acres
Others Land Levelled	600 Acres



A Glimpse of Site Visit of M&E Team along With ADA OFWM Jhang for Monitoring of PLL

Scheme 29.

Name of Service Provider	Noor Muhammad
Father Name	Khan
Tehsil & District	Jhang
Address	Chak Kordyana Shomali
Area Owned Levelled	12 Acres
Others Land Levelled	75 Acres



A View of PLL Unit Site Visit by M&E Team

Scheme 30.

Name of Service Provider	Sarfarz khan
Father Name	Muhammad Ameer
Tehsil & District	Jhang
Address	Chak Kordyana Shomali
Area Owned Levelled	8.5 Acres
Others Land Levelled	50 Acres



A Glimpse of data Collection by M&E Team from the PLL's beneficiary accompanying ADA. OFWM Jhang

Scheme 31.

Name of Service Provider	Ghazanfar Ali Shah
Father Name	Haji Muhammad Ali
Tehsil & District	Jhang
Address	Moojdarya
Area Owned Levelled	12.5 Acres
Others Land Levelled	50 Acres



The Service provider giving interview regarding PLL

Scheme 32.

Name of Service Provider	Bilal Hussain
Father Name	Muhammad Ashraf
Tehsil & District	Jhang
Address	Mouza Nankana P/O Pakky Wala
Area Owned Levelled	1.5 Acres
Others Land Levelled	200 Acres



The service provider giving interview to the field team

Scheme 33.

Name of Service Provider	Nazar Abbas
Father Name	Lal
Tehsil & District	Jhang
Address	Chak No 449 J.B.
Area Owned Levelled	5 Acres
Others Land Levelled	300 Acres



The PLL unit at the site along with Service provider

Scheme 34.

Name of Service Provider	Muhammad Ameen
Father Name	Ali Bahader Khan
Tehsil & District	Jhang
Address	P/O Chak No. 715-Jb Chak No. 173-Jb
Area Owned Levelled	12.5 Acres
Others Land Levelled	500 Acres



The PLL unit at the site along with Service provider

Scheme 35.

Name of Service Provider	Abdul Ali
Father Name	Bashir Ahmad
Tehsil & District	Chiniot
Address	142/ JB
Area Owned Levelled	12.5 Acres
Others Land Levelled	200 Acres



M&E Consultants' Team along with ADA, OFWM Chiniot visiting the Service provider

Scheme 36.

Name of Service Provider	Riaz Ahmad
Father Name	Sher Muhammad
Tehsil & District	Chiniot
Address	Ahmad Abad
Area Owned Levelled	5 Acres
Others Land Levelled	100 Acres



A view of monitoring visit of PLL Unit with ADA, OFWM Chiniot along with Service provider

Scheme 37.

Name of Service Provider	Ijaz Hussain
Father Name	Riaz Hussain
Tehsil & District	Chiniot
Address	Rajoya
Area Owned Levelled	5.5 Acres
Others Land Levelled	200 Acres



General discussion of field Team with Service provider regarding Impact of PLL

Scheme 38.

Name of Service Provider	Shahid Imran
Father Name	Sikander Hayat
Tehsil & District	Chiniot
Address	Kot sher shah
Area Owned Levelled	4 Acres
Others Land Levelled	180 Acres



M&E Consultants along with ADA, OFWM visiting the Service provider

Scheme 39.

Name of Service Provider	Muhammad Ayub
Father Name	Gulzar Hussain
Tehsil & District	Chiniot
Address	Thata Thakar
Area Owned Levelled	12 Acres
Others Land Levelled	300 Acres



Field Team at PLL site accompanied with a female ADA, OFWM during the monitoring Visit

Scheme 40.

Name of Service Provider	Haq Nawaz
Father Name	Muhammad Mansha
Tehsil & District	Bawana and Chiniot
Address	249/JB Bawana
Area Owned Levelled	5 Acres
Others Land Levelled	250 Acres



The Service provider giving interview to the field team

Scheme 41.

Name of Service Provider	Thoba Khan
Father Name	Matal
Tehsil & District	Chiniot
Address	152/JB
Area Owned Levelled	10 Acres
Others Land Levelled	300 Acres



A view of PLL unit at the site along with Service provider

Scheme 42.

Name of Service Provider	Fazal Hussain Amir
Father Name	Shahadat Khan
Tehsil & District	Chiniot
Address	152/JB
Area Owned Levelled	8 Acres
Others Land Levelled	200 Acres



A Glimpse of Visit of M&E Team at PLL site along with a female, ADA OFWM, Chiniot

Scheme 43.

Name of Service Provider	Tariq Nawaz
Father Name	Muhammad Mansha
Tehsil & District	Chiniot
Address	145/JB
Area Owned Levelled	5 Acres
Others Land Levelled	200 Acres



A Glimpse of PPL unit with Service provider

Scheme 44.

Name of Service Provider	Muhammad Yousaf
Father Name	Gulzar Hussain
Tehsil & District	Chiniot
Address	Thata Thakar
Area Owned Levelled	12 Acres
Others Land Levelled	250 Acres



The PLL unit at the site along with Service provider and ADA, OFWM

Scheme 45.

Name of Service Provider	Sharafat Ali
Father Name	Allah Jiwaya
Tehsil & District	Chiniot
Address	Jhanb
Area Owned Levelled	25 Acres
Others Land Levelled	200 Acres



A Group photo of Service provider giving interview to the field team

Scheme 46.

Name of Service Provider	Sikander Hayat
Father Name	Sher Muhammad
Tehsil & District	Chiniot
Address	Kot Sher shah
Area Owned Levelled	8 Acres
Others Land Levelled	250 Acres



A Group photo of Service provider along with M&E team and ADA, OFWM, Chiniot

Scheme 47.

Name of Service Provider	Muhammad Riaz
Father Name	Sher Muhammad
Tehsil & District	Chiniot
Address	Guna Kalan, Tehsil Sialkot
Area Owned Levelled	9 acres
Others Land Levelled	100 acres



A Group photo of Service provider along with M&E team and ADA, OFWM, Chiniot

Scheme 48.

Name of Service Provider	Muhammad Ali
Father Name	Ahmad
Tehsil & District	Chiniot
Address	Thati Bala Raja
Area Owned Levelled	8 acres
Others Land Levelled	400 acres



An Anterior View of the Laser Unit at the site

Scheme 49.

Name of Service Provider	Gulzar Khan
Father Name	Mitha khan
Tehsil & District	Jhang
Address	Mauza Habib, Sargodha Road
Area Owned Levelled	8 Acres
Others Land Levelled	200 Acres



A Group photo of Service provider along with M&E team and ADA, OFWM, Jhang

Scheme 50.

Name of Service Provider	Irshad Hussain
Father Name	Muhammad Shah
Tehsil & District	Jhang
Address	-
Area Owned Levelled	5 Acres
Others Land Levelled	500 Acres



A Posterior View of the Laser Unit at the site

Scheme 51.

Name of Service Provider	Muhammad Nawaz
Father Name	Farid Khan
Tehsil & District	Chiniot
Address	132/JB
Area Owned Levelled	8.5 Acres
Others Land Levelled	350 Acres



The service provider giving interview to the field team

Main Findings of Survey regarding Monitoring Evaluation of the Precision Land Leveling

The field teams of ME&IE Consultants have certain observations. While monitoring/evaluating the operations of the intervention in the field. The observation regarding the "Impact assessment" of the intervention was the results of "before" and "after" the use of the laser land leveler in the field or a comparison of "with use" and "without use" of the laser unit on a farm of a user.

The main findings regarding monitoring of the intervention are:

1. Majority of service providers have started to rent out the laser units to fellow farms at their farms for leveling of fields. The rate for leveling is charged per acre and per hour varies depending upon the nature of the soil.
2. Most of the service providers for Laser Units keep no record for its usage. Majority of Farmers had no proper Logbook / record of renting lasers. For estimated the benefits of this intervention. They have to depend upon their memory.
3. It was also noticed that some Laser Companies were delaying the supply of laser units as per schedule to the farmers.
4. The service providers/farmers have certain complaints which need immediate attention of the OFWM department.

The service providing companies of laser land levelers are only performing the roles of supplying laser units ignoring the role of providing repair / maintenance services and spare parts.

For the purpose of maintenance / repairs farmers have to travel long distances to avail such facilities by the concerned company.

The important observations regarding impact assessment are:

- 1.Reduction in water losses during the field application was significant after the use of a laser.
- Time saving in irrigating the field before leveled and after leveled has been significantly found.
- 2.Reduction in labor utilization in sowing, cultural practices, irrigating fertilizers, harvesting has also been seen.
- 3.Easily sown and grown evenly seed linked with other practices provides a noticeable push for increase in yield per acre of major crops. Due to laser land leveler improving the uniformly in crop germination and maturity of crop. Income increases due to increase in yield per acre is expected to be higher than the cost of leveling the field.

Recommendations:

1. Laser supplying companies delay the delivery of Laser units to farmers due to extra booking of units. Booking of maximum numbers should be fixed in accordance to

their production capacity and allocate the area to companies for providing better after sale services.

2. After Sale service of laser supplying companies needs to be improved. Proper repair and maintenance should be provided at the doorstep of farmers / LLL Service providers or the district level.

3. Out of total payment, 10 % of Govt share which is paid to laser supplying companies should be withheld for two years for proper provision of after sale services. Warranty may also be extended from two to five years from delivery date for laser land leveler units

4. Farmers/LLL Service Providers should be trained for record keeping and a simple log book can be provided for this purpose.

4.7.2 Post Field Activities

The post field activities included Review of accumulated data and its validation. The activities were very limited. Such activities pertained to monitoring, baseline and Impact survey of the interventions.

4.7.3 Coordination / Meetings with Stakeholders / Beneficiaries.

The coordination meetings with stakeholders / beneficiaries of the project were necessary to update the field activities status, The ME&IE consultants coordinated with stakeholders / beneficiaries telephonically rather than in physical meetings. Such efforts were necessary to strengthen the relationship between consultants and stakeholders particularly the field staff of OFWM.

ME&IE consultants remained in regular contact with the Stakeholders / OFWM department regarding data collection and gathering information required for Regular Monitoring/Impact. Consultants conducted meetings with relevant offices of the OFWM and other stakeholders.

The following meetings were held during this month:

4.7.3.1 Meetings of ME&IE Consultants Punjab Zone with Stakeholders

1. Meeting at Director General OFWM Office

Date	May 10 ,2024
Venue	Director General OFWM Office Davis Road, Lahore
Participants	
1.	Mr. Tahir Mehmood
2.	Focal Person of DGA OFWM/ DDA Climate

Change (OFWM)

3. Dr. Muhammad Abdul Quddus
4. Agri Economist ME&IE Consultants National Office Islamabad
5. Mr. Muhammad Rizwan Suleman
6. Focal Person to DGA OFWM, ME&IE Consultants Punjab Zone Lahore

Meeting Agenda/Points Discussed:

1-As per the previous Meeting held at the DG office it comes to our knowledge that the PMIS Dashboard is not functional at D.G office. On request of Focal Person DGA OFWM login Credentials which were shared earlier vide letter no NPIWC II/ME&IE/NOISD/723-0269 dated July 19, 2023.

2-Focal Person of ME&IE Consultants have shared login Credentials again and the Dashboard is made operational at the DGA OFWM office Punjab. Moreover, a short briefing was given to the Focal person DGA OFWM on various aspects of the Dashboard. The focal Person to DGA OFWM office Punjab appreciates the efforts of ICT Specialist Mr. Rizwan Saleem regarding Dashboard and he further remarked that Mr. Rizwan Saleem has done a tremendous job regarding Dashboard and Emphasized that we need to speed up the process and update the data as soon as possible.

3-Focal Person to DGA OFWM made a Commitment that they will share data of all interventions of completed and ongoing schemes regarding the dashboard up to Feb 2024 by the Next week.

4-Focal Person of the DGA office, Mr. Tahir Masood, and the Focal Person of the ME&IE Consultant M. Rizwan Suleman have mutually decided that after one week of provision of data from the DGA Office ME&IE Consultant will incorporate this data on the Dashboard within the week and held a Meeting regarding Updated Data on Dashboard.

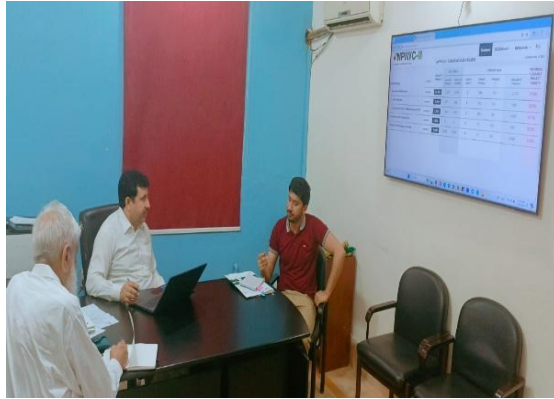
5-Focal Person of ME&IE Consultants M. Rizwan Suleman, briefed about the ongoing activities of consultants, and constraints & shared the overall performance and achievements. Moreover, the Focal Person of

ME&IE Consultants shared Ecological zone-wise lists of Achievements of all interventions Watercourses, Water Storage Tanks/Ponds, and Laser Land Levelling Units) of ME&IE Consultants. The focal Person of DGA OFWM appreciated the coordination of ME&IE Consultants.

6-Furthermore, for smooth operation Focal Person of ME&IE Consultants and the Focal Person of DGA OFWM have consensus that they will remain in

Close Coordination with each other.

7-Focal person of ME&IE Consultants shared their plan regarding the upcoming field Survey with the Focal Person of the DGA OFWM office. The focal Person of the DGA office assured full Cooperation to Field Teams from their good office.



Meeting with Focal Person to DGA (OFWM) Regarding PMIS Dashboard

2. Meeting with Assistant Director Agriculture OFWM Narowal

Date	30-05-2024
Venue	ADA (OFWM) Office Narowal
Participants	
1.	ADA Agri. (OFWM), Tehsil Narowal
2.	Mr. Muhammad Qasim.
3.	Umer Farooq Hammad FTE ME&IE Consultants
4.	Abd Ur Raoof Saad FTE ME&IE Consultants
5.	Muhammad Bilal Sohail FTE ME&IE Consultants
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Discussion regarding the progress of Laser Land Levelers in the Tehsil Narowal. The constraints were also highlighted in the meeting. 	



Meeting on the progress of Laser Land Levelers in the District & Tehsil Narowal.

3. Meeting with Deputy Director of Agriculture OFWM Jhang

Date	29-05-2024
Venue	DDA (OFWM) Office, Jhang
Participants	
1.	Tariq Mehmood Deputy Director of Agriculture (OFWM) District and Tehsil Jhang
2.	Amir Mehmood Assistant Director of Agriculture (OFWM) Tehsil Jhang
3.	Muhammad Rizwan Suleman FTI ME&IE Consultants NPIWC-II
4.	Sohail Ahmad FTE ME&IE Consultants NPIWC-II
Meeting Agenda/Points Discussed:	
<ul style="list-style-type: none"> Progress of the project activities. Basic Data Collection of PLL units Issue faced by the farmer regarding PLL 	



Meeting in progress of Laser Land Levelers in District & Tehsil Jhang

4. Meeting with Deputy Director Agriculture and ADA OFWM Chiniot

Date	30-05-2024
Venue	DDA & ADA (OFWM) Office Chiniot
Participants	
1.	Hameed Ullah Sharif Deputy Director of Agriculture (OFWM) Chiniot
2.	Tayyaba Seemab Assistant Director (OFWM), Chiniot
3.	Muhammad Rizwan Suleman FTI ME&IE Consultants NPIWC-II
4.	Sohail Ahmad FTE ME&IE Consultants NPIWC-II
Meeting Agenda/Points Discussed:	
<ul style="list-style-type: none"> Discussion regarding the progress of Laser Land Levelers in the district & Tehsil Chiniot Seek the cooperation/coordination of field staff 	



Meeting in Progress of Laser Land Levelers in District & Tehsil
Chiniot

4.7.3.2 Post Field Activities

The ME&IE consultants' teams remained busy in data collection/Validation of PLL data intervention on the PMIS Dashboard. Such data has been collected from various districts/divisions as under:

Table-1 List of Validated PLL Data on PMIS Dashboard

Division	District	Status
Lahore	Lahore	Complete
	Kasur	Complete
Faisalabad	Jhang	Complete
	Chiniot	Complete
Gujranwala	Narowal	Complete
Sahiwal	Pakpattan	Complete
D.G K	Layyah	Complete

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

During some months, ME&IE consultants could not held any physical meeting with field staff of OFWM except coordination through telephonic conversation.

A meeting at Director General Agri (OFWM) office was held with Focal person of D.G office and focal person of ME&IE Consultants.

1. Meeting Held at DG OFWM Lahore

Date	04-06-2024
Venue	Director General Agriculture HQ OFWM Davis Road Lahore
Participants	
i.	Tahir Mehmood, Focal Person DGA, OFWM/DDA Headquarter (OFWM) DDA climate change
ii.	Muhammad Yousaf Bhatti Deputy Team Leader

ME&IE Consultants

- iii. Muhammad Rizwan Suleman Field Team in Charge

Discussion & Decision:

1-As per Commitment Focal person of ME&IE Consultant gave presentation on dashboard data and share update on PLL data which is incorporated on Dashboard.

2-Moreover, Focal Person of ME&IE Consultant raise issues about missing and incorrect information in the data regarding PLL and Watercourse.

3-Focal Person to D.G office assigned task regarding Provision of PLL data to Dr. Moin Ahsan who will Contact with Focal Person of ME&IE Consultant and ensure Provision of Dashboard data till 14-June-2024 as per said Format.

4-During the meeting it was mutually decided that Focal Person of ME & IE Consultant will share all previous missing data to Focal Person to DGA office on immediate basis and data regarding dashboard will be provided as soon as possible.

5-Focal Person to DG office did Commitment that he will provide all data as per the format shared by Focal Person of ME&IE Consultant which was developed by mutual Consensus.

6-Focal person to DGA Office asked focal person of ME&IE Consultant to take PSC targets rather than PC-1 Targets because funds are issued on the basis of PSC targets not as per PC-1. So, this Comparison would not be feasible. Focal Person of ME&IE Consultant did Commitment that he will share his Consent after discussion with Management with Consultation of both focal persons, it was decided that Focal Person to DGA Office will Visit Punjab Zonal office on Thursday and Conduct meeting with Focal Person of ME&IE Consultant in presence of IT Team and address all the quarries regarding Dashboard.



Meeting of ME&IE Consultant with Focal Person to DG office,
Mr. Tahir Mahmood

4.7.4 Internal Meetings

1. Visit of Team Leader (National Office)

Dr. Usman Mustafa Team Leader, national office Islamabad visited Punjab zonal office Lahore on April 15, 2024.

The main objective of the visit was to review the performance of the zonal office and discussion on incoming field survey.

A meeting was held in DTL office in this regard. This meeting was attended by all the field team members and supporting staff

DTL Punjab zone briefed Team Leader about Progress and achievements of zonal office. The Team Leader has shown his satisfaction over the performance of Punjab Zonal office Lahore.

Meanwhile he also showed concerns over the delaying of reports on continuous basis. Team Leader gave Clear instructions to Data Controller for improving the situation, Moreover, Team leader said it is the responsibility of Data Controller and Concerned DTLs to submit report in time.

Further, Team Leader showed deep Concerns over the Non-Functioning of Dashboard at DG office and asked DTL Punjab to resolve this matter as soon as possible. The team leader also issued necessary guidelines during discussions on administrative and financial issues. During the detailed discussions the meeting session on upcoming field survey became a CAPACITY BUILDING SESSION when DTL Punjab highlighted the bottle necks of this task.

Then the Team Leader emphasized DTL Punjab to initiate field Visits Immediately without any further delay He provided a complete rather a comprehensive lecture on this upcoming field survey. He provided in depth knowledge starting from sampling methodology, data collection instruments, use of android based system and other ICT technologies.

The participants were fully satisfied. Towards the end, the Team Leader emphasized that field team should highlight the Positive aspects of the project in upcoming Reports and Videos based on reality.



Dr Usman Mustafa, Team Leader, National Office meeting in Zonal Office, Punjab Lahore



View of the meeting participants

• Case Study

Visit of PLL Village Balloshabal at Tehsil and District Jhang Farmer Name: Muhammad Shafi S/O Jewan

Total area of this Village is 360 Maraba (9000 Acre) and number of lasers delivered in this area are two which are quite insufficient to Level this land.

This Laser was Delivered in 2022 and till now it levelled an area of 2000 Acre. Owner has hired a driver who worked day and night in order to get fruitful Income. **Cost benefit Analysis of PLL:**

Total Cost of Laser Rs. 650,000 (Farmer share was Rs. 4 Lac and Govt share was Rs. 2.5 Lac)

Total Initial Farmer Investment: 4 lacs PKR

No of Hours laser operated in Field in 2 years= 1429 hours. **Profit Calculation for one Year:**

No of Hours laser operated in Field in one year = 714.5 hours

Cost of PLL operation = Rs. 3500/hour

Total Earning from PLL= 25,00750 Rs/Year

Diesel Cost/ oil Change/ = -8,33500 Rs/Year

Driver Salary Paid = -180,000 Rs/Year

Total Profit farmer got this year after Subtracting all his expenditures =

Total Profit= 1487,250 Rs / Year (Ecluding wear and tear costs)

Farmer recovered about 4 times of his investment in one Year

Recommendations of ME and IE Consultants

1-Laser quota should be fixed for each Company this will reduce burden on other Companies. (Companies should be bound to take orders as per Quota).

2-While investigating, it Comes in our Knowledge that last year Hanzala Traders booked 32 Lasers in tehsil Jhang. But due to high demand Company didn't deliver laser on time due to which farmers had to suffer.

3-Department should have powers and Penalty should be imposed, if the Companies do not deliver laser on Time.

4-The Provision of PLL at site should be increased

5-This will help farmers in order to Cater the Monopoly of a few Service Providers at Site. Because most of service providers demand their own price which have caused an extra burden to beneficiaries of Nearby Vicinity.



A View of Visit of ME&IE Team at PLL Site, ADA OFWM Jhang accompanied during the Visit



A view of PLL Meter operated in 2 years

2. Watercourse Success Stories

A Success Story of a Farmer at Tail of an Improve Watercourse

Gone are the days now when there were conflicts on water thefts and unequitable distribution of water. All the Farmers are now quite happy and satisfied with the parabolic water courses which have increased the irrigation rate of the lands and elevated the yields of the crops.

Changing Farmers' Lives "An Improved community Watercourse"

The problem of water scarcity and the need for efficient water management is not a recent phenomenon in Pakistan. This has been a major challenge since the creation of the country as fresh water resources have become scarce. Over the last decade and continues at an alarming rate. It is becoming clear that efficient water use management techniques are the need of the hour as more than 90% of water is being used for irrigation.

A watercourse is a community irrigation channel used for sharing water among shareholders through a weekly rotation system called "warabandi". Community watercourses are connected to farmers' fields through a complex system of channels and ditches. Water losses in watercourses are estimated at 40 percent, mainly through spillage, seepage, side leakage, evaporation, etc. which result in significant shortage of irrigation water at the farm level, particularly in tail reaches that compel the farmers to use groundwater for irrigation purpose.

As a matter of fact, the groundwater is not fit for irrigating crops in this area of the Punjab and causing degradation of productive/fertile soils. To minimize the water loss and improve the conveyance efficiency at the farm level, watercourse

lining becomes the most feasible solution as it helps to improve conveyance efficiency up to 80 percent along with other benefits.

Water Management wing of the Punjab Agriculture Department has introduced Precast Concrete Parabolic Segment (PCPS) technology to improve community watercourses for enhancing their conveyance efficiency.

The improvement of watercourses is a community-driven activity that is being undertaken through a participatory approach with the active involvement of Water Users Associations (WUAs), organized and registered on each watercourse. This community-based development model is helping the poor and small land holders to improve their living standards.

Here is a success story of a Chairman of Watercourse Mr. Abdul Jabbar a farmer having this land holding at the tail of watercourse.



Visit of Watercourse with Mr. Abdul Jabbar (Chairman of Watercourse)

Brief profile of Watercourse is given as under:

WC. ID	23400/L
Category	Additional
Year of Improvement	2021-22
*Already Lined	250 meters
New Lining	1341 meter (50%)
Name of Chairman	Abdul Jabbar
Contact No.	0304-5898750
Name of Treasure/Farmer	Abdul Jabbar
Minor/Distributary	Chinna Distty.
Contact No.	0304-5898750
Mouza/Qasba	Matta
Tehsil	Kot Radha Kishan
District	Kasur

*Improved during to 2015-2016 under various phases of PIPIP.

The community of Water Course # 23400/L, Village Matta, Tehsil Kot Radha Kishan, District Kasur were facing huge water loss problem due to seepage, side leakage and spillage since long and experiencing acute water shortage at their farms as they were unable to use groundwater because of its extremely poor quality for irrigation and very costly.

While searching for solution, the community learnt about the government facility for watercourse improvement and approached the OFWM staff for rescue. The OFWM staff suggested the farmers for re-organizing a water user association for improvement of the watercourse. The community availed the facility being provided by the Government which has changed their lives. This watercourse has more than 37 shareholders and irrigating the command area of about 345 acres.

Another member of the Water Users Association, Ch. Ibrahim shared excitedly that “our watercourse has improved during 2021-22 under the umbrella of National Program for improvement of watercourse (NPIWC-II). Before improvement, majority of the farmers of this village used to irrigate their lands the canal water with Tube well and they had to spend a lot of money to irrigate their crops. Now their input cost has been reduced and they are getting more net profit per acre”.



Chairman of the Water Users Association, Mr. Abdul Jabbar and other member recording their views about improved watercourse during site visit at village Matta, tehsil Kot Radha Kishan, District Kasur

According to Mr. Abdul Jabbar:

“Before the improvement of a watercourse, my whole land (100 Acres) was uncultivated because of my farm location at the tail, thus water shortage and

water theft was a common phenomenon. After improvement of the water course, now all of my land (100 Acres) is cultivated due to proper reach of water”

Mr. Abdul Jabbar, the shareholder of the watercourse and treasure of the WUA, shared the benefits of improved watercourse. He added that “conflicts/disputes have also been reduced significantly. Major conflicts among the farmers were due to water theft and side leakage of the water which used to damage the crops of other farmers having lands adjacent to the watercourse”.

In reply to the questions on benefits of such improvement of watercourse, he replied that improved watercourse enabled us to irrigate more land with the same quantity of water. It also helps us to save labor expenses as 5-10 workers were required for irrigation before the improvement of the watercourse. Now one worker is enough for the purpose. He further shared that “another major benefit is better cropped with canal water as groundwater is not fit for the growth of crops and causes lower yields. Before watercourse improvement, the shareholders quit growing sugarcane due to water shortage and the land of some farmers had become almost barren owing to shortage of water leading to use of poor-quality groundwater but now they have not only started to grow sugarcane but their wheat and other crops’ yield has also been doubled.

Mr. Abdul Jabbar face reflects the happiness about this intervention when asked how much benefits are expected, he claimed the benefits are defined but how much, time in near future will tells it.



Field Team interviewing the Chairman of WC # 23400/L Mr. Abdul Jabbar

“Mr. Abdul Jabbar says, we are very thankful to the government for this opportunity and advised other farmers to take full advantage of this scheme of the government.”

• WUA Success Stories

- I. Success Story of a Water user Association’s Intervention
- II. The Project National Program for Improvement of Water Courses (NPIEC-II) in Punjab
- III. Water Users Association “A Backbone of Water Course Improvement”

“Gone are the days now when there were conflicts on water thefts and unequitable distribution of water. All the Farmers are now quite happy and satisfied with the parabolic water courses which have increased the irrigation rate of the lands and elevated the yields of the crops.”

The Intervention

Establishment of a Water Users Association is a pre-requisite for another intervention that is improvement of the watercourse. Water user association allows the participation of farmers democratically and effective participation in the execution of the improvement of the watercourse as OFWM department provides technical support.

The Farmer said that improved watercourse enabled us to irrigate about 50 % more land with same quantity of water. It also helped us to save labor expenses as 10-15 more workers were required for irrigation purpose before improvement of watercourse. Now one worker is enough for the purpose. He further shared that “another major benefit is better crops with canal water as groundwater is not fit for the growth of crops and causes lower yields. Before watercourse improvement, the shareholders quit to grow sugarcane due to water shortage and the land of some farmers had become almost barren owing to shortage of water leading to use of poor-quality groundwater but now they have not only started to grow sugarcane, but their wheat and other crops’ yield has also been doubled.

Brief Profile of Watercourse and association

Brief profile of Watercourse is given as under:

WC. ID	1400/R
Category	Additional
Year of Improvement	2021-22

*Already Lined	300 meters
New Lining	2264 meter (50%)
Name of Chairman	Ali Muhammad Khan
Contact No.	0333-8124651
Name of Treasure/Farmer	Amjad
Minor/Distributary	Chinna Distry.
Contact No.	-
Mouza/Qasba	Raja Jang
Tehsil	Kasur
District	Kasur

The Water User Association was organized as per the procedure of the OFWM department. A description beneficiary of the association members is given as under.

They were facing a dilemma of water shortage due to water theft and the continuous rupture of katcha watercourse. This dilemma had a great impact on their yields and were not able to cultivate and irrigate the remaining part of their lands due to less share of water. Which also had an impact on their income.

The farmers in this predicament, relying on the golden rule "every man for himself" appointed some surveillance duties to the respective people. But this was also in vain, as the theft of water was still unfolded. While searching for solution, the community learnt about the government facility for watercourse improvement and approached the OFWM staff for rescue. The OFWM staff suggested the farmers to construct an elevated watercourse with PCPS for smooth flow of water to all the fields in the entire command. Given the severity of the issue, the community availed the facility being provided by the Punjab Government which has changed their lives.

Collaboration in Organization WUA

Under the umbrella of NPIWC-II, rehabilitation and construction of watercourses along with other interventions was started in Punjab. Mr. Amjad along with other fellow farmers got together and formed WUA mutually. OFWM guided that by using the (PCPS) watercourses, the theft of the watercourses is minimized by using concreted controlled structures and the flow of the watercourse is maximized.



Interviewing the Chairman and Fellows of WC # 1400/R

Impact of the Intervention

While searching for solution, the community learnt about the government facility for watercourse improvement and approached the OFWM staff for rescue. The OFWM staff suggested the farmers to construct an elevated watercourse with PCPS for smooth flow of water to all the fields in the entire command. Given the severity of the issue, the community availed the facility being provided by the Punjab Government which has changed their lives.

While interviewing the chairman and other beneficiaries of the water course all had same positive thoughts about the construction of the water course. The benefits mainly were that the flow had now increased and now was distributed in an equitable manner to the land which were long the head middle and tail of the water course. Land was now irrigated from 3 / 4 acres to 8 / 9 acres. The water theft issue had now been resolved.



A Pleasing view of Parabolic Watercourse show casing Impact view of watercourse

4.8 ACTIVITIES OF KP ZONE – DURING REPORTING QUARTER

4.8.1 Brief summary of the ME&IE Consultants' KP Zone activities for the Quarter of April – June 2024

The ME&IE consultants, KP Zonal office performed a number of activities during the quarter under discussion. The Consultants kept close 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 relevant officials. These contacts were made both physically as well as digitally. The ME&IE Consultants visited the OFWM Department, KP when and where required to update themselves about the schemes launched under the NPIWC-II project in the KP. Similarly, the officials of OFWM Department approached ME/IE Consultants when they needed the services of the ME&IE Consultants offered continuous guidance both through physical contacts as well as through telephonic calls to the concerned staff of OFWM Department KP official in uploading 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 different districts of KP. It is important to mention here that the OFWM Department always extend their full cooperation towards the ME/IE Consultants.

4.8.2 Achievements of the Current Quarter:

The following activities were carried out by ME&IE consultants during the quarter under discussion:

- ❖ Meetings with Client (Formal and Informal)
- ❖ Presentation to the New DG, OFWM, KP by the ME&IE Consultants regarding the Dashboard.
- ❖ Training to the OFWM Officials by the ME&IE Consultants
- ❖ Monitoring of data
- ❖ Data verification, cleaning and analysis of baseline and impact surveys
- ❖ Verification of WC and WSTs through Google Earth
- ❖ Close Coordination with OFWM focal person/district officers for the missing data on dashboard such as CNIC duplicates and Technical/ Social data, etc.
- ❖ Coordination with the OFWM Ddepartment, KP for Technical Sanction issued for new schemes.

- ❖ Collection, cleaning and entering of data for dashboard from OFWM.
- ❖ Internal Meeting of DTL with the Field Staff
- ❖ Refresher training of FTIs and FTEs
- ❖ Coordination meeting with PMU, KP
- ❖ Writing of MMRs for the month of March, April, and May 2024.

4.8.2.1 Overall Progress:

Field Activities:

The monitoring / Baseline pertains to Various interventions of the project viz., improvement of watercourses, water user associations, construction of water storage tanks and laser land levelers. Such surveys are carried out from time to time as a part of regular activity of ME&IE Consultants. Moreover, from inception to date the KP field team of ME&IE Consultants conducted baseline vis-a'-vis impact surveys of **205** watercourses in KP and **40** in GB. Moreover, the consultants completed baseline vis-a'-vis impact surveys of **79** water storage tanks in KP and **15** in GB. Impact assessment field visits of **05** PLL interventions were also carried out in KP.

Meetings:

The following meetings were carried out by ME&IE consultants during the quarter under deterrence.

The meetings were held on 1st, 17th, 18th and 22nd April in the response of 28th March meeting where it was requested by client to correct any ambiguity in data and dashboard and provide a refresher training for their field staff.

Coordination meetings were carried out with OFWM department of KP for the following points on **April 01, 2024**.

Venue: OFWM Office Peshawar

Participants: Mr. Hayat Khan, Mr. Jameel, Muhammad Bilal

1. Dashboard Data Update:

- Focal Person (FPKP) Discussed on the current status of dashboard data and the need for regular updates with timely and accurate data for decision-making purposes. However, it was emphasized that the data updating process is the responsibility of OFWM staff through Android application and G3 can assist in this process.
- To correct any errors or discrepancies in the existing data to maintain accuracy, reliability and significance of comprehensive data reflection for assessing performance and

identifying trends. It was assured that the relevant person from G3 will ensure to correct all data issues.

2. Availability of Full-Time Data Manager:
 - Discussion on the necessity of having dedicated support for data-related activities. It was informed that a full-time data manager is placed at Islamabad office, who moves to any station upon request for managing any shortcoming in data and dashboard. It was assured that the ICT specialist can come to Peshawar any time to address any technical data issues.
3. **Area-wise Refresher Training for OFWM Staff:**
 - Proposal to conduct refresher training sessions for OFWM (On Farm Water Management) staff on data entry procedures.
 - Recognition of the need to reinforce data entry skills among staff members to improve data quality.
4. Preparation of Key Training Personnel:
 - Discussion on identifying and preparing key personnel from Districts to serve as trainers for future training sessions.
 - Agreed to empower selected individuals with necessary skills and knowledge to conduct training sessions independently in the future.
5. Training for OFWM Technical Staff on Dashboard Operation:
 - Recognition of the importance of training technical staff members on operating the dashboard effectively.
 - It was agreed that technical support will be extended for technical staff in understanding Dashboard.



Meeting of ME&IE Consultants with Focal Person,
NPIWC-II of OFWM Department, KP

Meeting on 17th April

Venue: OFWM Office Peshawar

Participants: Hayat Khan, Muhammad Bilal, Mehboob and Jameel

The following points were discussed in the meeting:

1. Correction of Watercourse Coordinates:
 - Identified watercourses with coordinates outside boundaries on the GIS dashboard need correction. It was agreed to call upon the relevant person to ensure accurate representation of watercourse locations.
2. Reflecting Actual Field Values:
 - Emphasis on the need for dashboard data to reflect the actual and updated situation in the field.
 - It was updated that OFWM may devise strategies to update data entries to align with real-time observations and field values through their field offices.
3. Access for OFWM Technical Staff:
 - Support of OFWM technical staff with easy access to all entered data.
 - Decision to explore options for creating a downloadable link or platform for technical staff to access data efficiently.

Meeting 18th April,

Venue: OFWM Office Peshawar

Participants: Mr. Hayat Khan, Mr. Rizwan (AD Planning Division), Engr Ilyas (NESPAK), Mr. Mehboob, Mr. Jameel, Mr. Muhammad Bilal (FTI), Mr. Shumail (Data Analyst), Mr. Qaisar (FTI)

The following points discussed:

Reasons for Out of Boundary Coordinates:

- Discussion on the factors contributing to watercourse coordinates being outside the boundaries on the GIS dashboard. It was updated to the participating members that Android app is giving accurate support in data collection however, in start of project, initial data of already completed watercourses was entered by G3 staff in the office of OFWM instead its entry at field level. The data which was collected by OFWM staff on papers was in Degree:Minutes:Seconds, while Android app needed it in Degree Decimal system. It was an error of conversion as well collection of data at field level.
- It was agreed to devise a mechanism to solve these discrepancies and to prevent recurrence in the future. It was also suggested that this

data could be re-checked at Deputy Commissioners office GIS section with dedicated District staff, so they can make it within boundaries.

- It was also emphasized that all those watercourses which move within more than 1 District, may also be given some appropriate District location, so it could not be reported out of boundary.

1. Data Accuracy and Field Values:

- Inquiry into why the dashboard data does not accurately reflect the current situation in the field. It was shared that data collection is the sole responsibility of field staff of OFWM. If they may not enter any field, the data will always show as incomplete even the watercourse may be completed in field from all sections.
- Identifying the need for better coordination between field data collection and dashboard updates to ensure alignment. It was suggested that Computer Operators of relevant districts may also be given access to Android app and they will be able to access any incomplete data of any watercourse and may enter its details from the hard file being prepared by field engineers or water management officers.

2. Access to Data for OFWM Technical Staff:

- Acknowledgment of the necessity to provide OFWM technical staff with access to all entered data, so they can make any analysis and present it to any level.
- Decision to establish a downloadable link or platform for technical staff to access data promptly and efficiently.

3. Correction of Dashboard Data:

- Recognition of the importance of correcting inaccuracies in the dashboard data. It was shared that some values of watercourses and water storage tanks mismatch within the values of dashboard.
- Agreement to prioritize the correction of data discrepancies to enhance the reliability and usability of the dashboard.

4. Training of OFWM staff:

- It was decided that G3 team will sit with the staff of OFWM and make a workable plan for the training of OFWM staff in different Districts at some zonal areas. It was discussed that G3 team will come next day and finalize the training program with dates.



ME&IE Consultants Meeting with OFWM Department, KP



Mr. Hayat Khan (focal person), Mr. Rizwan (AD Planning Div), Mr. Asif (OFWM) and Mr Ilyas (NESPAK)



Members of ME&IE Consultants Muhammad Bilal, Qaisar Khan and Shumail Mehmood

Presentation to DG, OFWM, KP Peshawar on 22nd April 2024:

Venue: OFWM Office, Peshawar

Participants:

1. Mr. Naseeb ur Rahman (DG, OFWM)
2. Mr. Hayat Khan (FP, KP),
3. Usman Mustafa (Team Leader, NPIWC-II), Dr. Humayun Khan (Dy Team Lead, KP NPIWC-II),
4. Mr. Mehboob (GIS specialist),
5. Mr. Jameel (GIS analyst),
6. Mr. Muhammad Bilal (FTI),
7. Mr. Shumail (Data Analyst),
8. Mr. Qaisar (FOI)

The following points discussed:

1. Reasons for Out of Boundary Coordinates:

- Discussion on the factors contributing to watercourse coordinates being outside the boundaries on the GIS dashboard was discussed in further details. It was updated to the DG that all the data on Dashboard reflect the entries made by the staff of OFWM. It was further told him that any error or shortcoming in data is also at the part

of the team of OFWM. It was discussed that in the meeting of 18 April, a detailed strategy was discussed to overcome this issue and OFWM staff will manage it in coming days.

2. Addition of outcomes in Dashboard:

- DG, emphasized that Dashboard do not reflect information about; Farmers, their land holding, before and after intervention (GCA, CCA, water saving, timing of irrigation, and cropping intensities, etc.).
- It was informed to him that many of these parameters were added on the advice of Mr. Hayat Khan one year before and field teams of OFWM started to collect data on these parameters also. However, as it was included 1 year before, so previous all data which was entered by OFWM staff lacks this information. It was also told that this information is available with OFWM staff on their hard files and it could be entered by them in their respective apps any time.
- DG, advised Mr. Hayat Khan to write a letter to field office and ask them to enter this information at their earliest.

3. Training of OFWM staff:

- It was discussed by DG that G3 team will sit with the staff of OFWM and make a workable plan for the training of OFWM staff in different Districts at some zonal areas. It was discussed that G3 team may perform this activity at the earliest, however, Mr Hayat Khan updated him that they are devising this plan and as early it will be ready, it will be shared accordingly.



ME&IE Consultants Meeting with OFWM Department, KP



Mr. Naseeb Rehman (DG OFWM), Mr. Hayat Khan (focal person), Mr. Mehboob (GIS Specialist), Mr. Jameel (GIS Analyst) and Mr Haris.



Members of ME&IE Consultants, Dr. Usman Mustafa (Team Lead), Dr Humayun (DTL KP), Muhammad Bilal (FTI), Muhammad Waseem (Admin) Qaisar Khan (FTE)

During the month of June 2024 two courtesy visits were paid to the Focal person's office for general discussion about the on-going activities under the NPIW-II programme of the OFWM, Department.

During these visits 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.

REFRESHER TRAINING

Dates: April 29=30, 2024

Venue: Conference Room of OFWM Department:

Resource Persons: ME&IE Consultants-KP Zone:

Participants: PFWM Officials:

two days refresher training was imparted to the officials of OFWM Department by the ME&IE Consultants to the officials of the OFWM Department, KP on April 29-30, 2024. The purpose of the training to train the OFWM officials for entry data to the Dashboard. The ICT team of the G-3 consultants imparted this training to the client staff of the KP.

During the month of May, 2024, both formal and informal meetings were held with OFWM, Department KP. Apart from these, a coordination meeting was also attended by ME/IE Consultants called by Project Management Unit (PMU) KP on May 23, 2024.

1. Dashboard Data Update:

- During these meetings the emphasis of the Focal Person of NPIWC-II KP was mainly on the current status of dashboard data and the need for regular updates with timely and accurate data for decision-making purposes. The ME&IE Consultants KP reiterated their commitment towards all kind of support in this regard. However, it was emphasized that the data updating process is the responsibility of OFWM

- staff through Android application and G3 can assist in this process.
- To correct any errors or discrepancies in the existing data to maintain accuracy, reliability and significance of comprehensive data reflection for assessing performance and identifying trends. It was assured that the relevant person from ME&IE Consultants KP will ensure to correct all data issues.

2. Deputing of ICT Specialist for training of OFWM Staff:

3. Zone-wise Refresher Training to OFWM Staff:

During the meetings held in the previous month, it was decided that the ME&IE Consultants will depute an ICT Specialist to conduct refresher training sessions for OFWM (On Farm Water Management) staff on data entry procedures. The ME&IE Consultants honoured its commitment and imparted trainings in four zones of KP to the OFWM Department staff as follows:

- **Central Zone (Peshawar) April 29-30, 2024**
- **Southern Zone (DI Khan) May 2-3, 2024**
- **Abbottabad Zone (Abbottabad) May 7-8 2023**
- **Swat Zone. (Mingora) May 9-10, 2024.**

Participants of the refresher trainings

1. Mr. Shumail Mehmood- ICT specialist M&E Consultants (Resource Person)
 2. Mr. Kaiser Khan – Field Engineer M&E Consultants
 3. Mr. Muhammad Hayat – Focal Person OFWM NPIWC- II
 4. Mr. Muhammad Haris – Tech Support OFWM
 5. Mr. Mehboob Alam – GIS Specialist OFWM
 6. Respective Staff of Each Zone
- In all of the above mentioned four zones, the Resource Person (Mr. Shumail Mehmood) started the training with a detailed overview of the android application and went through each field to discuss how to enter the correct information/data in the Dashboard.
 - An interactive session was held with trainees and took a hands-on job approach to elaborate on the information input in the App.
 - As the training session came to an end, the individual progress of each district was discussed and districts staff and pointed out the pending schemes. In their respective zones

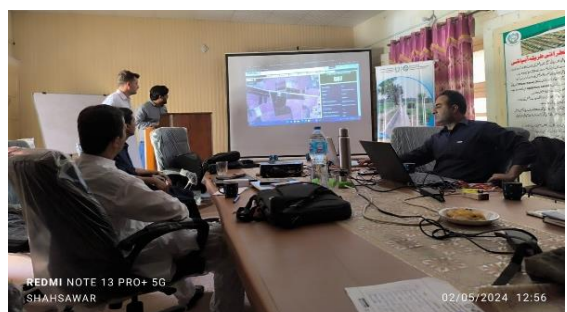
- Practical exercises were done by all participants to learn how to make data entry and to rectify and update the data in the App.
- Different queries from the participants were cleared on the spot.
- The same activity was kept continued with more focus on progress made by each district.
- Dashboard was demonstrated to the participants to give them a better idea of how their given data is reflected on several forums at Directorate as well as at National level



Training session by ME&IE Consultants in Peshawar



Training session by the ME&IE Consultants in Peshawar



Training session by the ME&IE Consultants KP in DI Khan



Training session by the ME&IE Consultants KP in DI Khan



Training session by ME&IE Consultants in Abbottabad



Training session by ME&IE Consultants in Mingora Swat



Training session by ME&IE Consultants in Mingora Swat

ASSISTING/GUIDANCE TO THE 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 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 paid a number of 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 the 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.

REFRESHER TRAINING OF FTIs AND FTEs

In pursuance to the internal meeting held on May 18, 2024 at the zonal office Peshawar, a refresher training for the field teams was arranged in the ME&IE Consultant's office Peshawar. It was realized that a refresher training on ODK is important for the field teams so that may not commit mistakes in the data collection in the field. To ensure this objective i.e., to minimize mistakes in the data collection services of Mr. Shomail, Data Analyst, National office Islamabad were acquired. Two sessions (morning and afternoon) were taken by the resource person with the field teams. During morning session, detailed presentation was made by the mentor while the afternoon session were mainly addressing the questions raised by the field teams.

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 the help of ICT team of KP. OFWM directorate extends their usual support and provided all the relevant information.

CAPACITY BUILDING OF ME&IE CONSULTANTS AND OFWM STAFF ON ANDROID APPLICATION:

During the reporting quarter, formal/in-formal support was provided to OFWM officials. However, continuous support was provided to OFWM officials on telephone for any issue while operating android system and/or data collection process.

KEY CHALLENGES & MITIGATION MEASURES ADOPTED

Some Limitations:

- Directorate remain involved in implementation of other funded projects with the NPIW-II. So they are not able to give much time to ME&IE Consultants

SUGGESTIONS:

- 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.

4.9 ACTIVITIES OF BALOCHISTAN ZONE – DURING REPORTING QUARTER

The report in hand, “Quarterly Monitoring and Evaluation Report for the period of 01st April 2024 to 30th June 2024” is comprising of different activities done by ME&IE Consultants, Balochistan as listed below:

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 timeframe. The team has worked diligently to ensure smooth execution and overcome any challenges that arose.

Over the last three months, our team conducted monitoring field visits of different components. These visits aimed to assess the on-ground situation, evaluate the effectiveness of implemented measures, and identify areas requiring further improvement. The field visits were instrumental in gaining valuable insights into the project's impact and understanding the needs and concerns of the local communities.

The ME&IE Consultants are delighted to share a success story, highlighting the significant farmer benefits achieved through our project, NPIWC-II. The NPIWC-II project has demonstrated its effectiveness in bringing tangible benefits to farmers. The success stories of improved irrigation infrastructure, enhanced crop yield and quality, increased income and livelihoods, and climate resilience serve as a testament to the transformative power of strategic interventions in the agricultural sector.

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.

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 (DDs). 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 towards 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 the project objectives.

4.9.1 Updated Progress Of Balochistan Zone

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 **351** sites were visited during the baseline surveys i.e., **203** Watercourses and **148** Water Storage Tanks. The ME&IEC, 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 2024 in which **351** sites (**203** Watercourses and **148** Water Storage Tanks) have been visited so far. Regular monitoring/spot-checking is another important activity of ME&IE Consultants in which more than **385** sites of different 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-3.1 District-wise Summary of M&E
Consultants Field visits till June 2024**

Sr. #	District	Baseline Survey		Impact Assessment Survey		Impact Survey (LLL)
		WC	WST	WC	WST	
1	Quetta	4	15	4	15	-
2	Pishin	10	9	10	9	-

Sr. #	District	Baseline Survey		Impact Assessment Survey		Impact Survey (LLL)
		WC	WST	WC	WST	
3	Killa Abdullah	5	3	5	3	-
4	Ziarat	4	4	4	4	-
5	Mastung	9	8	9	8	-
6	Nushki	6	3	6	3	-
7	Sibi	3	3	3	3	-
8	Jhal Magsi	2	4	2	4	-
9	Kachhi	5	10	5	10	-
10	Naseerabad	9	6	9	6	-
11	Jaffarabad	7	1	7	1	4
12	Sohbatpur	10	1	10	1	3
13	Loralai	17	7	17	7	-
14	Dukki	2	2	2	2	-
15	Zhob	4	4	4	4	-
16	Kila-Saifullah	12	6	12	6	-
17	Musa khel	11	2	11	2	-
18	Sherani	4	2	4	2	-
19	Khuzdar	8	7	8	7	-
20	Kalat	13	9	13	9	-
21	Pangur	8	8	8	8	-
22	Awaran	8	4	8	4	-
23	Barkhan	3	3	3	3	-
24	Chaghi	4	3	4	3	-
25	Dera Bugti	5	2	5	2	-
26	Gwadar	2	1	2	1	-
27	Harnai	2	1	2	1	-
28	Kech	6	5	6	5	-
29	Kharan	4	2	4	2	-
30	Kohlu	3	2	3	2	-
31	Lasbela	10	8	10	8	-
32	Surab	2	2	2	2	-

Sr. #	District	Baseline Survey		Impact Assessment Survey		Impact Survey (LLL)
		WC	WST	WC	WST	
33	Washuk	1	1	1	1	-
Sub-Total		203	148	203	148	7

Updated status of Dashboard of 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 On-Farm Water Management (OFWM) staff has been extremely supportive, demonstrating a commendable level of responsiveness. Their cooperation has been instrumental in providing the necessary data, covering the fiscal year 2020-21, comprehensively.

The significant data forwarded in achieving the objectives performed 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 to give the necessary directions to all DDs and concerned staff to upload the beneficiary data on "Dashboard, Balochistan" through the Android Based data application of the F.Y. 2022-23 and 2023-24.

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
Total		608	189	143	62	288	235	1039	486
Total (%)		31%		43%		82%		47%	
Loralai	Barkhan	61	0	0	0	3	0	64	0
Loralai	Duki	27	27	15	15	1	1	43	43
Loralai	Loralai	158	157	47	43	132	130	337	330
Loralai	Musakhail	100	99	86	44	1	0	187	143
Total		346	283	148	102	137	131	631	516
Total (%)		82%		69%		96%		82%	
Makran	Gwadar	12	0	11	0	0	0	23	0
Makran	Kech	68	68	20	20	44	44	132	132

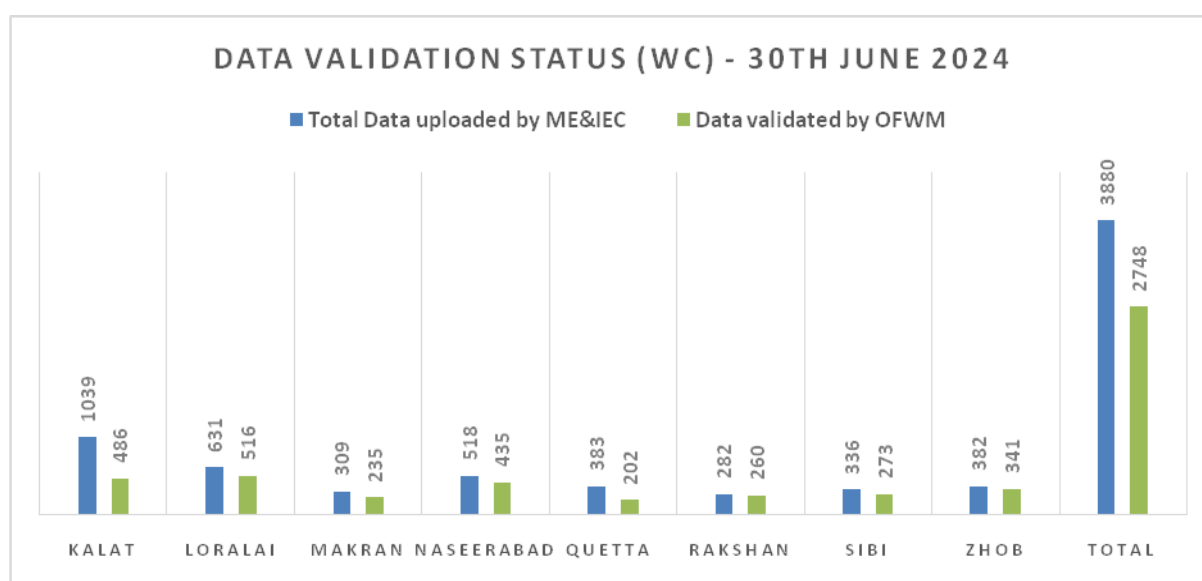
Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Makran	Panjgur	124	73	25	25	5	5	154	103
Total		204	141	56	45	49	49	309	235
(%)		69%		80%		100%		76%	
Nasirabad	Jaffarabad	53	53	32	32	56	56	141	141
Nasirabad	Jhal Magsi	16	0	6		5		27	0
Nasirabad	Kachi	81	81	18	18	3	3	102	102
Nasirabad	Nasirabad	52	0	35	35	82	82	169	117
Nasirabad	Sohbatpur	14	14	20	20	45	41	79	75
Total		216	148	111	105	191	182	518	435
(%)		69%		95%		95%		84%	
Quetta	Killa Abdullah	106	0	2	0	2	0	110	0
Quetta	Pishin	99	97	39	2	52	52	190	151
Quetta	Quetta	41	25	10		33	26	84	51
Total		246	122	51	2	87	78	384	202
(%)		50%		4%		90%		53%	
Rakhshan	Chaghi	49	49	28	28	0	0	77	77
Rakhshan	Kharan	23	23	3		55	55	81	78
Rakhshan	Nushki	38	38	25	25	40	39	103	102
Rakhshan	Washuk	18	0	2	2	0	0	20	2
Total		128	110	58	55	95	94	281	259
(%)		86%		95%		99%		92%	
Sibi	Dera Bugti	34	0	0	0	65	65	99	65
Sibi	Harnai	23	0	19	15	0	0	42	15
Sibi	Kohlu	41	41	17	17	0	0	58	58
Sibi	Sibi	33	33	6	6	25	25	64	64
Sibi	Ziarat	54	54	17	15	2	2	73	71
Total		185	128	59	53	92	92	336	273
(%)		69%		90%		100%		81%	
Zhob	Killa Saifullah	158	124	38	38	39	39	235	201
Zhob	Sherani	19	18	8	8	39	38	66	64
Zhob	Zhob	55	55	23	20	3	1	81	76
Total		232	197	69	66	81	78	382	341
(%)		85%		96%		96%		89%	
GRAND TOTAL		2165	1318	695	490	1020	939	3880	2747
(%)		61%		71%		92%		71%	

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

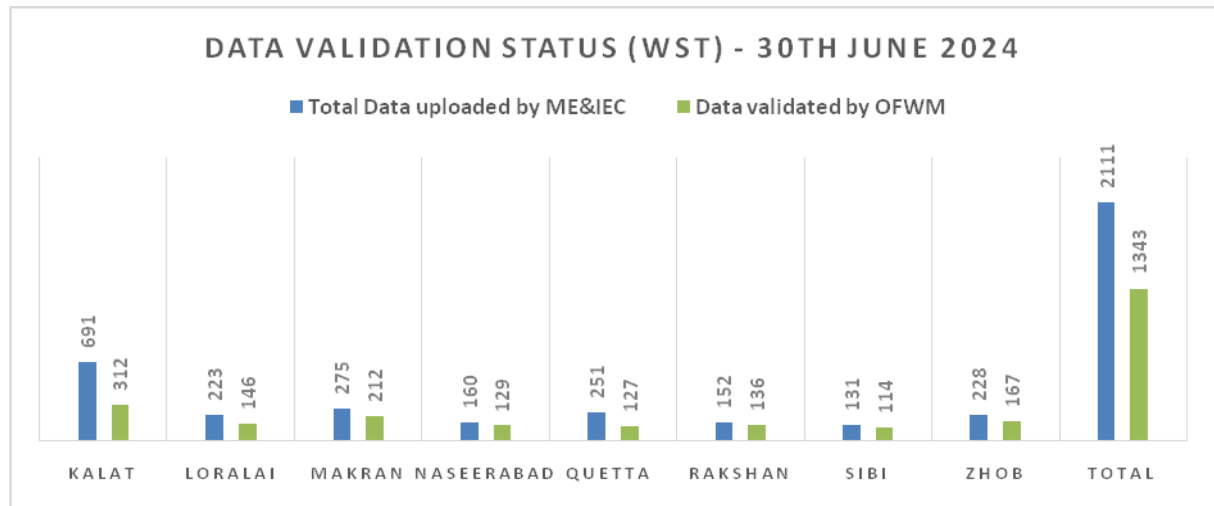
Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Kalat	Awaran	12	12	27	27	48	0	87	39
Kalat	Kalat	20	2	32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

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Nasirabad	Jaffarabad	0	0	8	8	9	9	17	17
Nasirabad	Jhal Magsi	7	0	0	0	23	0	30	0
Nasirabad	Kachi	18	18	24	24	40	40	82	82
Nasirabad	Nasirabad	0	0	8	8	9	9	17	17
Nasirabad	Sohbatpur	4	4	8	8	2	1	14	13
Total		29	22	48	48	83	59	160	129
(%)		76%		100%		71%		81%	
Quetta	Killa Abdullah	22	0	34	0	0	0	56	0
Quetta	Pishin	22	22	36	33	61	61	119	116
Quetta	Quetta	9	9	17		50	32	76	41
Total		53	31	87	33	111	93	251	127
(%)		58%		38%		84%		51%	
Rakhshan	Chaghi	10	10	23	23	14	14	47	47
Rakhshan	Kharan	3	3	12		14	14	29	17
Rakhshan	Nushki	9	9	23	23	30	30	62	62
Rakhshan	Washuk	4		10	10	0	0	14	10
Total		16	12	45	33	44	44	152	136
(%)		75%		73%		100%		89%	
Sibi	Dera Bugti	11	11	0	0	28	28	39	39
Sibi	Harnai	3	3	6	6	12	0	21	9
Sibi	Kohlu	9	9	18	18	0	0	27	27
Sibi	Sibi	8	8	5	5	10	5	23	18
Sibi	Ziarat	4	4	6	6	11	11	21	21
Total		35	35	35	35	61	44	131	114
(%)		100%		100%		72%		87%	
Zhob	Killa Saifullah	30	20	32	32	56	56	118	108
Zhob	Sherani	4	4	6	6	15	15	25	25
Zhob	Zhob	15	10	24	24	46		85	34
Total		49	34	62	62	117	71	228	167
(%)		69%		100%		61%		73%	
GRAND TOTAL		382	245	545	334	1137	747	2111	1343
(%)		64%		61%		66%		64%	

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



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



4.9.2 Meetings

Date	24 th April 2024
Venue	Village Abdul Rehman Bangulzai Dera Murad Jamali Naseerabad Lat. 28.549601 Long. 68.18352
Participants	
1. Mr. Mohammad Waris Farmer	
2. Mr. Saleem, FTI, ME&IEC, NPIWC-II.	
Meeting Agenda/Subject:	
Assessment of Water Storage Tank Impact	
<p>➤ Summary: -</p> <p>On March 24, 2024, a meeting was convened with Farmer Mr. Muhammad Waris to discuss the efficacy and impact of the water storage tank in our locality. Mr. Waris provided valuable insights regarding the transformation brought about by the installation of the water storage tank. Prior to its establishment, accessing to the clean water posed a significant challenge, necessitating us to travel a long journeys at distant locations for fetching it. However, with the tank, now operational, water procurement has become significantly more convenient, benefiting not only ourselves but also the surrounding community.</p> <p>➤ Current Challenges: -</p> <p>Despite the evident advantages, recent heavy rains have weakened the structural integrity of the tank walls. Consequently, the tank's capacity to store water has been compromised, hindering our ability to utilize this essential resource effectively.</p> <p>➤ Recommendations:</p> <p>It is imperative that immediate steps be taken to</p>	

repair the damaged sections of the water storage tank. By addressing these structural issues promptly, we can ensure the continued availability of clean water to our community for an extended period. Additionally, investing in regular maintenance measures will safeguard the longevity and functionality of the tanks, thereby enhancing its overall utility.

Conclusion: In conclusion, the water storage tank has undoubtedly been a valuable asset in addressing the water accessibility challenges faced by our community. However, proactive maintenance and repair efforts are essential to sustain its efficacy and ensure uninterrupted access to clean water in the future. Therefore, it is recommended that necessary actions be taken promptly to address the identified concerns and uphold the integrity of this vital resource.





Views of meeting participants with Mr. Mohammad Waris Farmer and Saleem Ahmed, NPIWC-II held at WST

Date	24th April 2024
Venue	Village Abdul Rehman Bangulzai Dera Murad Jamali Naseerabad Lat. 28.549601 Long. 68.18352
Participants	
<ol style="list-style-type: none"> 1. Mr. Mohammad Waris Farmer 2. Mr. Saleem Ahmed, FTI, ME&IE Consultants, NPIWC-II, Balochistan, Quetta. 	
Meeting Agenda/Subject:	
Impact of Water Course Improvements on Farming Efficiency and Income Generation	
<p>○ Summary:</p> <p>On March 24, Mr. Muhammad Waris, a local farmer, elucidated the transformative effects of water course enhancements on agricultural practices within the community. Previously, the utilization of older water courses necessitated considerable labor and time expenditures for irrigation purposes, resulting in inefficient land irrigation and water wastage. However, with the implementation of modernized water course systems, significant improvements have been observed. The upgraded water course infrastructure requires minimal effort for maintenance and operation, leading to enhanced land irrigation efficiency. Consequently, the cultivated land exhibits improved productivity, contributing to increased agricultural yields and subsequently higher income generation for farmers. The optimization of water resource utilization not only saves valuable time but also facilitates the expansion of cultivated land, thus bolstering overall profitability within the farming sector.</p>	



Views of meeting with Mr. Mohammad Waris, Farmer, held at Water course, Naseerabad

Date	24 th April 2024
Venue	Village Saffar Khan Jamali Dera Murad Jamali Naseerabad Lat. 28.553352 Long. 68.180936
Participants	
<ol style="list-style-type: none"> 1. Mr. Sher Mohammad Farmer, 2. Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta 	
Meeting Agenda/Subject:	
Impact Assessment of Water Course Upgrades Agricultural Efficiency and Economic Returns	
<p>➤ Summary:</p> <p>On March 24, Sher Mohammad, a prominent local farmer, provided insights into the transformative effects of recent water course improvements on agricultural operations in the community. Historically, the utilization of outdated water course infrastructure posed significant challenges, including labor-intensive maintenance requirements and suboptimal land irrigation, resulting in inefficiencies and resource wastage. However, the adoption of modernized water course systems has yielded notable benefits. The upgraded infrastructure demands minimal maintenance efforts and</p>	

operational inputs, leading to enhanced land irrigation efficiency. Consequently, cultivated land exhibits improved productivity, fostering higher agricultural yields and increased income generation for farmers. The optimization of water resource utilization not only saves valuable time but also enables the expansion of cultivated land, thereby enhancing overall profitability within the agricultural sector.



Views of meeting participant with Mr. Sher Mohammad Farmer held at Water course

Date	24 th April 2024
Venue	Village Ghulam Qadir Jamali Dera Murad Jamali Naseerabad Lat. 28.559743 Long. 68.156742

Participants

1. Mr. Khair Bux Farmer.
2. Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta

Meeting Agenda/Subject: -

impact of Enhanced Water Course Infrastructure on Agricultural Efficiency and Economic Performance

➤ Summary:

On March 24, Khair Bux, a respected figure in the local farming community shared valuable insights regarding the impact of recent water enhancements on agricultural practices. Historically, outdated water course systems presented formidable challenges, including labor-intensive maintenance and suboptimal land irrigation, resulting in inefficiencies and resource depletion. However, the implementation of modernized water course infrastructure has ushered in significant improvements. The upgraded systems require minimal maintenance efforts and operational inputs, leading to heightened land irrigation efficiency. As a result, cultivated land exhibits enhanced productivity, yielding higher agricultural outputs and bolstering income generation for farmers. The optimized utilization of water resources not only saves valuable time but also facilitates the expansion of cultivated land, thus enhancing overall profitability within the agricultural sector.



Views of meeting participant with Mr. Khair Bux Farmer held at Water course



operations is being bolstered, positioning farmers for continued success and resilience in the face of evolving environmental and economic challenges.



Views of meeting participants with Mr. Gullab Khan Farmer held at PLL Unit Site

Date	25 th April 2024
Venue	Village Gormani KotJhat Pat Dera Allah Yar Jaffarabad Lat. 28.365499 Long. 68.318836

Participants

1. Mr. Gullab Khan Farmer.
2. Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta

Meeting Agenda/Subject: -

Comprehensive Analysis of Laser Land Leveller Enhancing Agricultural Productivity and Farmer Prosperity

➤ Summary:

Gullab Khan, a respected authority within the agricultural sector, provided valuable insights on March 25 regarding the multifaceted impact of laser land leveller on farming practices. Emphasizing the efficacy of this technology, Khan underscored its pivotal role in efficiently smoothing land surfaces, thereby facilitating improved irrigation accessibility and enhanced agricultural productivity. Furthermore, the adoption of laser land leveller has streamlined land preparation processes, leading to optimized water distribution, minimized water wastage, and increased crop yields. Beyond the immediate benefits of improved harvest quality and quantity, the widespread integration of this technology is catalyzing a broader transformation within the farming community. Farmers are experiencing enhanced economic prosperity, driven by increased agricultural output, reduced input costs, and improved resource utilization. Moreover, the long-term sustainability of agricultural

Date	25 th April 2024
Venue	Village GormaniKotJhat Pat Dera Allah Yar Jaffarabad Lat. 28.375403 Long. 68.350953

Participants

1. Mr. Gull Bahar Farmer.
2. Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta.

Meeting Agenda/Subject: -

Impact Assessment of Laser Land Levelers on Agricultural Productivity and Farmer Prosperity

➤ Summary:

On March 25, Former Gul Bahar highlighted the transformative impact of laser land levelers on agricultural practices. He emphasized the machine's efficacy in efficiently smoothing land surfaces, which facilitates improved irrigation accessibility and enhances agricultural productivity. The utilization of laser land levelers has streamlined land preparation processes, resulting in optimized water distribution and increased crop yields. Consequently, farmers

are experiencing notable improvements in harvest quality and quantity, paving the way for enhanced prosperity within the agricultural community.



Views of meeting participant with Mr. Gull Bahar Farmer held at PLL Unit Site

are experiencing notable improvements in crop harvest quality and quantity, paving the way for enhanced prosperity within the agricultural community.



Views of Mrs. Saeeda BB about her family in the field



View of meeting participant with Mrs. Saeeda, Female Farmer held at PLL Unit Site

Date	27 th April 2024
Venue	Village GormanikotJhat Pat Dera Allah Yar Jaffarabad Lat. 28.375403, Long. 68.350953
Participants	
<ol style="list-style-type: none"> Mrs. Saeeda, Female Farmer. Mr. Saleem, M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta 	
Meeting Agenda/Subject: -	
Impact Assessment of Laser Land Levelers on Agricultural Productivity and Farmer Prosperity	
➤ Summary:	
On March 25, Buzgar Gul Bihar highlighted the transformative impact of laser land levelers on agricultural practices. He emphasized the machine's efficacy in efficiently smoothing land surfaces, which facilitates improved irrigation accessibility and enhances agricultural productivity. The utilization of laser land levelers has streamlined land preparation processes, resulting in optimized water distribution and increased crop yields. Consequently, farmers	

Date	19th April 2024
Venue	Village Chashma Achozai District: Quetta Tehsil: Baleli Chashma Achozai Farmer: Haji Shafique Ahmed Scope of Work: WST 30*30 FY:2022-2023 Command Area: 10 acres Cultivated Area: 08
Participants	
<ol style="list-style-type: none"> Mr Yaseen Khan Mr. Mohiz Khan Mr Basit Ahmed FTI ME&IE Consultants, NPIWC-II, Balochistan, Quetta 	
➤ Summary:	
Impact survey of scheme	



View of WST

Date	19 th April 2024
Venue	Village Chashma Achozai District: Quetta Tehsil: Baleli Chashma Achozai Farmer: Haji Nisar Ahmed Scope of Work: WST 50*50 FY:2022-2023 Command Area: 06 acres Cultivated Area: 06

Participants

1. Mr. Abdul Wadood Tenant.
2. Mr. Basit Ahmed M&E Officer, ME&IE Consultants, NPIWC-II, Balochistan, Quetta

➤ Summary: Impact survey



Different Snaps during the Visit of WST

4.9.3 Field Visits:

Mr. Naseeb Jan, FTI, Balochistan Zone

Date	19 th April 2024
Venue	Village: Asso Band UC: Maani Khwa District: Sherani Farmer Name: Akhtar Muhammad s/o Sher Muhammad Tenant Name: Niaz Muhammad Scope of Work: WST 60*60 Command Area: 10 acres Cultivated Area: 08 Acres Cultivated Crops: Wheat, Ginger Vegetable Coordinates Latitude .31.330004 Longitude. 69.581798

Participants

1. Mr. Abdullah Field Assistant, OFWM Sherani
2. Niaz Muhammad, Tenant
3. Mr. Naseeb Jan, FTI, ME&IEC, NPIWC-II, Balochistan.

Meeting Agenda/Subject:

Assessment of Water Storage Tank and its impacts on crops yield.

➤ Summary: -

with the establishment of such scheme, water conservation has become significantly more convenient, benefiting not only the farmers in irrigating their lands but also the surrounding community in terms of drinking, livestock.

As such schemes, proved in increasing crop yields and barren lands of farmers which ultimately boost National GDP as well as living standards of farmers, their tenants and the surrounding communities.



Different views of WST

Date	19 th April 2024
Venue	Village: Pir Muhammad UC: Kapip District: Sherani Farmer Name: Juma Rahim s/o Barkat Scope of Work: PVC 3" 1000Rft Command Area: 15 acres Cultivated Area: 05 Acres Cultivated Crops: Wheat rainfed Coordinates Latitude .31.330140 Longitude. 69.670408

Participants

1. Mr. Abdullah Field Assistant OFWM, Sherani
2. Mr. Naseeb Jan, FTI, ME&IEC, NPIWC-II, Balochistan.

Meeting Agenda/Subject:

Assessment of PVC Pipe and its impacts on crops yields.



Different Images of PVC Pipe

Date	19 th April 2024
Venue	Village: Khan Alam Kapip UC: Kapip District: Sherani Farmer Name: Muhammad Nazar s/o Abdul Wadood Scope of Work: PVC 4" 1000Rft Command Area: 15 acres Cultivated Area: 10 Acres Barren Land: 05 Cropping pattern: Intercropping Orchard: Apricot, Almond Coordinates Latitude .31.322896 Longitude. 69.638469
Participants	
<ol style="list-style-type: none"> 1. Mr. Abdullah Field Assistant of WM Sherani 2. Mr. Naseeb Jan, FTI, ME&IEC, NPIWC-II. Balochistan. 	
Meeting Agenda/Subject:	
Assessment of PVC Pipe and its impacts on crops yield.	



Impresseions of WST catchment areas

Date	19 th April 2024
Venue	Village: Khan Alam Kapip UC: Kapip District: Sherani Farmer Name: Baacho Khan s/o Taimour Shah Scope of Work: WST 60*60 Command Area: 20 acres Cultivated Area: 10 Acres Coordinates Latitude .31.333403 Longitude. 69.640407
Participants	
<ol style="list-style-type: none"> 1. Mr. Abdullah, Field Assistant, OFWM Sherani 2. Mr. Naseeb Jan, FTI, ME&IEC, NPIWC-II. Balochistan. 	
Meeting Agenda/Subject:	
Assessment of Water Storage Tank and its impacts on crops yield.	
<p>➤ Summary: -</p> <p>with the establishment of such scheme, water procurement has become significantly more convenient, benefiting not only ourselves in irrigating land but also the surrounding community in terms of drinking water as well as livestock.</p> <p>Crop yield increased with such interventions.</p>	

4.9.4 Meetings:

Date	20 th May 2024
Venue	ME & IE Zonal Office Quetta
Participants	
<ol style="list-style-type: none"> 1. Mr. Manzoor Ahmed (DTL Balochistan) 2. Mr. Saleem, FTI, ME&IEC, NPIWC-II. 3. Mr. Naseeb Jan FTI ME & IEC NPIWC-II 4. Mr. Shumail Master Trainer (IT Specialist) 5. Date of Training: - 20, 21, and 24th of May 	
Meeting Agenda/Subject:	
Training About ODK and MTs Overview.	
Training Objectives: -	
The training aimed to enhance the skills of existing (MTs) by introducing and elaborating on the usage of the ODK mobile application. The focus was on efficient data collection and management techniques using this technology.	
Day 1: 20th May 2024*	
<ul style="list-style-type: none"> ➤ Introduction to ODK Mobile Application* ➤ Overview of the application's interface and 	

functionalities.

- Importance of mobile data collection in field operations.

Practical Demonstration.

- Step-by-step guide on setting up the ODK application.
- Demonstration of form creation and data entry processes.

Hands-on Session

- Participants practiced creating and filling forms under supervision.

Day 2: 21st May 2024

Advanced Features of ODK

- Utilizing advanced data collection tools within the application.
- Customizing forms to suit specific data collection needs.

Data Management and Analysis.

- Techniques for efficient data management using ODK.
- Importing and exporting data for analysis.

Group Activities.

- Collaborative exercises to reinforce learning.
- Scenario-based problem-solving using ODK.

Day 3: 24th May 2024

Review and Q&A Session

- Recap of key points covered in the previous sessions.
- Addressing participants' queries and clarifications.

Case Studies:

- Discussion on real-world applications and success stories using ODK.

Evaluation and Feedback:

- Participants completed a practical test to assess their understanding.

Feedback session to gather participants' insights and suggestions for future training.

Participants' Feedback:

- Mr. Manzoor Ahmed (DTL Balochistan): Found the hands-on sessions particularly beneficial for understanding the practical applications of ODK.
- Mr. Naseeb Jan (FTI): Appreciated the detailed explanations and the opportunity to engage in collaborative problem-solving.
- Mr. Saleem Ahmed (FTI): Valued the advanced features segment, which will help in customizing data collection processes more effectively.

Conclusions:

- The training conducted by Mr. Shumail was

highly effective in enhancing the participants' skills in using the ODK mobile application. The elegant briefing and structured sessions ensured that the participants were able to grasp both basic and advanced functionalities of the application. The feedback from the participants was overwhelmingly positive, indicating the success of the training program.

Recommendations:

- Follow-up Training: To ensure continuous improvement, follow-up sessions could be organized focusing on specific challenges faced by the participants.

Resource Materials:

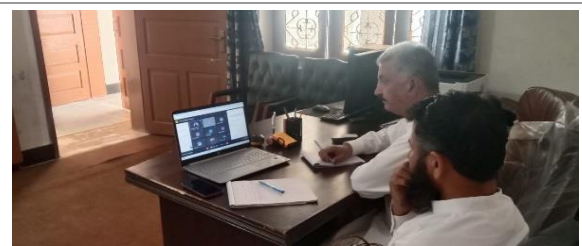
- Providing additional resource materials and guides for ODK could further aid participants in their ongoing use of the application.

Peer Learning Sessions:

- Encouraging participants to share their experiences and best practices with each other could foster a collaborative learning environment.



DTL, Bussy in Sharing wisdom with his colleagues



View of meeting participants with Mr. Shumail Mehmood Master trainer, Manzoor Ahmed DTL, Naseeb Jan, and Saleem Ahmed, NPIWC-II held in Office

Overview:

This report provides an update on the planned activities and the status of field operations for the month of June. Despite having a comprehensive field plan for June, the implementation of these activities has not been realized due to the unavailability of funds.

The inability to conduct any field activities in June due to financial constraints is a significant concern. Immediate action is required to secure the necessary funds to prevent a recurrence of such issues. Your prompt attention to this matter will ensure that the activities planned for the upcoming months are carried out successfully.

4.10 SOCIAL AND GENDER COMPONENT

To improve the National Program for Improvement of Water Courses Phase-II (NPIWC-II) for the betterment of women in future endeavors, consider the following steps and measures:

1. Gender-sensitive planning:
 - Conduct gender analysis and assessments to identify women's specific needs and challenges.
 - Involve women in planning and decision-making processes.
2. Capacity building and training:
 - Provide targeted training and capacity-building programs for women on water management, agriculture, and leadership.
 - Ensure women's participation in training programs.
3. Women's participation and leadership:
 - Ensure women's representation in water management committees and decision-making bodies.
 - Support women's leadership development and empowerment.
4. Addressing gender-specific challenges:
 - Ensure equal access to program benefits for women.
5. Monitoring and evaluation:
 - Establish gender-sensitive monitoring and evaluation indicators.
 - Track women's participation and benefits from the program.
 - Address gender-specific challenges and barriers in program implementation.
6. Community engagement and awareness:
 - Conduct community awareness campaigns to promote gender equality and women's empowerment.

- Engage men and women in community-based initiatives.
7. Institutional mechanisms:
 - Establish institutional mechanisms to address gender-related issues and concerns.
 - Ensure gender-sensitive policies and procedures.
 8. Partnerships and collaborations:
 - Collaborate with women's organizations and gender experts.
 - Leverage partnerships to support women's empowerment.
 9. Budget allocation:
 - Allocate dedicated budget for gender-related activities.
 - Ensure gender-sensitive budgeting.
 10. Documentation and knowledge sharing:
 - Document best practices and lessons learned on gender mainstreaming.
 - Share knowledge and experiences with other programs and stakeholders.

By implementing these measures, NPIWC-II project can better address the needs and challenges of women, promoting gender equality and empowerment in future endeavors.

Here's a sample impact report on the four-year Water Courses Program on women and landless farmers:

Title: Empowering Women and Landless Farmers through Water Courses Program: Four-Year Impact Report.

Executive Summary:

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

Impact on Women:

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

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

Impact on Landless Farmers:

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

Case Studies:

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

References:

1. Program beneficiary survey (2022)
2. Agricultural productivity survey (2022)
3. Income survey (2022)
4. Community survey (2022)
5. Land survey (2022)
6. Food security survey (2022)
7. "Empowering Women through Water Management" by UNESCO (2020)
8. "Gender and Water Management" by FAO (2019)

4.11 ICT TEAM ASSIGNMENTS

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

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

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

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

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

So far, Total **5844** PLL data have been received from Punjab zone and available live on GIS Dashboard. All PLL units have been delivered and currently there's

no under progress PLL unit as per received data.
Detailed Summary attached as **Annex-H**.

KP – WC Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Over all
Bajaur	3	18	23	17	12	73
Bannu	73	36	94	27	0	230
D.I Khan	446	10	110	9	11	586
Hazara	85	64	142	76	7	374
Khyber	6	13	0	1	20	40
Kohat	98	40	57	28	18	241
Kurram	3	5	5	0	0	13
Malakand	179	174	478	87	44	962
Mardan	105	64	88	26	25	308
Mohmand	4	42	17	30	0	93
N.W Agency	2	3	5	1	0	11
Orakzai	0	1	0	0	0	1
Peshawar	139	87	86	41	14	367
S.W Agency	3	12	15	7	0	37
Overall	1146	569	1120	350	151	3336

As of now, we've received a total of **3,336** watercourse datasets from the KP zone, all of which are live on the GIS Dashboard. Out of these, **3,240** watercourses have been lined, while work is underway for the remaining **44** watercourses at various stages, including 1st Milestone, 2nd Milestone, and after Work Order Issuance. Additionally, there are **52** watercourses awaiting approval for Work Orders. It's important to note that these figures have been revised due to data rectification (Detailed Summary attached as **Annex-I**).

KP – WST Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Over all
Bajaur	1	9	6	1	0	17
Bannu	12	10	23	2	0	47
D.I Khan	79	7	34	0	5	125
Hazara	28	45	76	20	1	170
Khyber	1	9	0	0	7	17
Kohat	27	17	32	14	0	90
Kurram	1	1	0	0	0	2
Malakand	74	95	188	20	13	390
Mardan	16	9	26	4	18	73
Mohmand	1	42	71	0	0	114
Orakzai	0	2	0	0	0	2
Peshawar	36	26	64	17	16	159
S.W Agency	0	15	15	2	0	32
N.W Agency	0	8	12	1	0	21
Overall	276	295	547	81	60	1259

In total, there have been **1,259** submissions of Water Storage Tank data. Among these, **1,225** Water Storage Tanks have been completed, and work is ongoing for **13** others. Additionally, **21** Water Storage Tanks have pending Work Orders. It's worth noting that these figures for Water Storage Tanks have been revised due to data rectification Detailed Summary attached as **Annex-J**.

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

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	37	666
Makran	204	56	49	0	309
Nasirabad	216	111	191	0	518
Quetta	244	50	87	0	381
Rakhshan	126	58	82	0	266
Sibi	184	59	88	0	331
Zhob	232	69	81	3	385
Overall	2147	694	1002	40	3883

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

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

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

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

Note: The Water Storage data from Balochistan Zone was last updated on October 24, 2023. However, since then, there has been no further data input received from Balochistan Zone enumerators via the Android Application. There is still a significant

amount of pending data on their end. That needs to be submitted promptly to address the backlog on the PMIS Dashboard.

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

So far, Total **34** 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	50	246
Poonch	33	32	30	8	48	151
Mirpur	37	96	72	21	74	300
Overall	100	212	155	58	172	697

A total of **697** Watercourse datasets have been received from the AJK zone. Among these, **570** Watercourses have been lined, while **17** are currently pending at the TS & Work Order Stage. Additionally, there are **110** watercourses currently under progress. It's important to note that these figures have been revised due to data rectification 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	29	190
Poonch	13	41	62	34	92	242
Mirpur	2	15	31	6	46	100
Overall	50	112	154	49	167	532

A total of **532** Water Storage Tank data has been received from AJK zone of which **406** Water Storage Tank have been lined, **17** Water Storage Tanks are pending at TS Stage, **109** Water Storage Tanks are under progress. It's important to note that these figures have been revised due to data rectification. 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 from ICT-Unit and available live on Dashboard. (Detailed Summary attached as **Annex-S**).

4.11.2 On-Going Data Validation & Cleaning

The data submission process is ongoing and will persist until the project concludes. Zonal Field Staff in KP and AJK are consistently inputting data via customized Android Application which has been provided and trained by the ICT team of ME&IE consultants. Concurrently, the ICT team is continuously engaged in cleaning and validating the received data, and any errors are promptly communicated to the respective 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

ANNEXURE-A: TENTATIVE WORK PLAN FOR THE 4th QUARTER OF 2024 (APR TO JUNE-2024)

TENTATIVE WORK PLANNED FOR THE QUARTER (April 2024 To June 2024)												Legend	
												Activity starts	↓
												Activity Ends	↓
												Activity Span	---
No.	ACTIVITIES	3 Months-Year 2024 (Weeks)											
		April				May				June			
		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 Trainings of Field Staff for Endline Impact Surveys												
2	Field Activities												
2.1	Regular Monitoring of Interventions in the field												
2.2	Data collection of the interventions in the field												
2.3	Field activities regarding Endline Impact surveys												
2.4	Online data entry in android-based application												
3	ICT Assignment												
3.1	Improvement/Updation of website of NPIWC-II												
3.2	Monitoring online data collection and data entry												
3.3	Monitoring Android based Mobile Application under implementation by field staff.												
3.4	Data collection of interventions in MIS/GIS database												
3.5	Capacity Building Trainings / Refresher of Departments												
3.6	Data entry, Data cleaning, Data processing & data analysis.												
4	Coordination												
4.1	Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues												
4.2	Meeting of DTLs with respective DTL of PC & concerned OFWM Departments												
4.3	ME&IE Consultants Internal Meetings												
5	Deliverable												
5.1	Monthly Monitoring Report	↓	↓			↓	↓			↓	↓		
5.2	Quarterly Monitoring & Evaluation Report (Jan-Mar 2024)	↓	↓										

ANNEXURE-B: MATRIX OF RESPONSIBILITIES

MATRIX OF RESPONSIBILITIES

LEGEND	
●	Primery Responsibility
⊙	Secndry Responsibility
○	Assistance

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

ANNEXURE-C: MONITORING LOG-FRAME

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

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

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

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

ANNEXURE-D: DELIVERABLES/REPORTING REQUIREMENTS

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

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

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

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

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

ANNEXURE F: PUNJAB - WATERCOURSE DATA SUBMISSION – SUMMARY

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

ANNEXURE G: PUNJAB - WSP DATA SUBMISSION – SUMMARY

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

ANNEXURE H: PUNJAB - PLL DATA SUBMISSION – SUMMARY

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

ANNEXURE I: KP - WATERCOURSE DATA SUBMISSION – SUMMARY

Division	District	Completed	Under Progress			Pending		Overall
			1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
Bajaur Agency	Bajaur	73	0	0	0	0	0	73
Bajaur Agency Total		73	0	0	0	0	0	73
Bannu	Bannu	108	0	0	0	0	0	108
Bannu	Lakki Marwat	122	0	0	0	0	0	122
Bannu Total		230	0	0	0	0	0	230
D.I. Khan	D.I. Khan	478	1	0	0	29	1	509
D.I. Khan	Tank	77	0	0	0	0	0	77
D.I. Khan Total		555	1	0	0	29	1	586
Hazara	Abbottabad	31	0	0	0	0	0	31
Hazara	Battagram	49	0	0	0	0	0	49
Hazara	Haripur	74	0	0	0	0	0	74
Hazara	Mansehra	138	0	5	0	0	0	143
Hazara	Torghar	37	0	0	0	0	0	37
Hazara	Kohistan	38	1	1	0	0	0	40
Hazara Total		367	1	6	0	0	0	374
Khyber Agency	Khyber	28	0	0	12	0	0	40
Khyber Agency Total		28	0	0	12	0	0	40
Kohat	Hangu	64	1	0	2	0	0	67
Kohat	Karak	82	0	0	0	0	0	82
Kohat	Kohat	92	0	0	0	0	0	92
Kohat Total		238	1	0	2	0	0	241
Kurram Agency	Kurram	13	0	0	0	0	0	13
Kurram Agency Total		13	0	0	0	0	0	13
Malakand	Buner	114	0	0	0	0	0	114
Malakand	Chitral	115	1	0	0	1	0	117
Malakand	Lower Dir	132	1	0	14	0	1	148
Malakand	Malakand	106	0	0	0	0	0	106
Malakand	Shangla	58	0	0	0	1	0	59
Malakand	Swat	290	1	1	0	2	0	294
Malakand	Upper Dir	124	0	0	0	0	0	124
Malakand Total		939	3	1	14	4	1	962
Mardan	Mardan	152	0	0	0	1	0	153
Mardan	Swabi	151	0	0	1	3	0	155
Mardan Total		303	0	0	1	4	0	308
M. Agency	Upper Mohmand	67	0	0	0	1	0	68
M. Agency	Lower Mohmand	25	0	0	0	0	0	25
M. Agency Total		92	0	0	0	1	0	93
Orakzai Agency	Orakzai	1	0	0	0	0	0	1
Orakzai Agency Total		1	0	0	0	0	0	1
Peshawar	Charsadda	145	1	0	1	6	0	153
Peshawar	Nowshera	136	0	0	0	0	0	136
Peshawar	Peshawar	78	0	0	0	0	0	78
Peshawar Total		359	1	0	1	6	0	367
S.W Agency	S.W Agency	37	0	0	0	0	0	37
S.W Agency Total		37	0	0	0	0	0	37
N.W Agency	N.W Agency	5	0	0	0	6	0	11
N.W Agency Total		5	0	0	0	6	0	11
Overall		3240	7	7	30	50	2	3336

ANNEXURE J: KP - WST 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	17	0	0	0	0	0	17
Bajaur Agency Total		17	0	0	0	0	0	17
Bannu	Bannu	12	0	0	0	0	0	12
Bannu	Lakki Marwat	35	0	0	0	0	0	35
Bannu Total		47	0	0	0	0	0	47
D.I Khan	D.I Khan	76	0	0	0	11	3	90
D.I Khan	Tank	35	0	0	0	0	0	35
Dera Ismail Khan Total		111	0	0	0	11	3	125
Hazara	Abbottabad	20	0	0	0	0	0	20
Hazara	Battagram	26	0	0	4	0	0	30
Hazara	Haripur	40	0	0	0	0	0	40
Hazara	Kohistan	18	0	0	0	0	0	18
Hazara	Mansehra	45	0	3	0	0	0	48
Hazara	Torghar	14	0	0	0	0	0	14
Hazara Total		163	0	3	4	0	0	170
Khyber Agency	Khyber	17	0	0	0	0	0	17
Khyber Agency Total		17	0	0	0	0	0	17
Kohat	Hangu	12	0	0	0	0	0	12
Kohat	Karak	73	0	0	0	0	0	73
Kohat	Kohat	5	0	0	0	0	0	5
Kohat Total		90	0	0	0	0	0	90
Kurram Agency	Kurram	2	0	0	0	0	0	2
Kurram Agency Total		2	0	0	0	0	0	2
Malakand	Buner	44	0	0	0	0	0	44
Malakand	Chitral	22	0	0	0	1	0	23
Malakand	Lower Dir	37	0	0	2	1	0	40
Malakand	Malakand	24	0	0	0	0	0	24
Malakand	Shangla	40	0	0	0	0	0	40
Malakand	Swat	168	0	0	0	0	1	169
Malakand	Upper Dir	50	0	0	0	0	0	50
Malakand Total		385	0	0	2	2	1	390
Mardan	Mardan	34	0	0	0	0	0	34
Mardan	Swabi	38	0	0	0	1	0	39
Mardan Total		72	0	0	0	1	0	73
Mohmand Agency	Lower Mohmand	32	0	0	0	0	0	32
Mohmand Agency	Upper Mohmand	82	0	0	0	0	0	82
Mohmand Agency Total		114	0	0	0	0	0	114
Orakzai Agency	Orakzai	2	0	0	0	0	0	2
Orakzai Agency Total		2	0	0	0	0	0	2
Peshawar	Charsadda	13	0	0	0	0	0	13
Peshawar	Nowshera	88	0	0	1	0	0	89
Peshawar	Peshawar	57	0	0	0	0	0	57
Peshawar Total		158	0	0	1	0	0	159
S.W Agency	S.W Agency	32	0	0	0	0	0	32
S.W Agency Total		32	0	0	0	0	0	32
N.W Agency	N.W Agency	15	0	0	3	2	1	21
N.W Agency Total		15	0	0	3	2	1	21
Overall		1225	0	3	10	16	5	1259

ANNEXURE K: KP - PLL DATA SUBMISSION – SUMMARY

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

ANNEXURE L: BALOCHISTAN - WATERCOURSE DATA SUBMISSION – SUMMARY

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

ANNEXURE M: BALOCHISTAN - WST DATA SUBMISSION – SUMMARY

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

ANNEXURE N: BALOCHISTAN - PLL DATA SUBMISSION – SUMMARY

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

ANNEXURE O: GB - WATERCOURSES DATA SUBMISSION – SUMMARY

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

ANNEXURE P: GB - WST DATA SUBMISSION – SUMMARY

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

ANNEXURE Q: AJK- WATERCOURSES DATA SUBMISSIONS – SUMMARY

Division	District	Completed	Under Progress			Pending		Overall
			1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MZD	MZD	103	0	0	13	7	0	123
	Jhelum	32	0	0	10	0	1	43
	Neelum	71	2	0	7	0	0	80
MZD Total		206	2	0	30	7	1	246
Poonch	Poonch	48	1	0	8	0	0	57
	Bagh	31	0	0	7	0	0	38
	Haveli	10	1	0	2	0	0	13
	Sudhnoti	24	1	0	16	0	2	43
Poonch Total		113	3	0	33	0	2	151
Mirpur	Mirpur	84	0	0	2	0	2	88
	Bhimber	125	0	0	32	0	0	157
	Kotli	42	0	0	8	0	5	55
Mirpur Total		251	0	0	42	0	7	300
Overall		570	5	0	105	7	10	697

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

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

ANNEXURE S: ICT - WATERCOURSE DATA SUBMISSION – SUMMARY

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