



Federal Project Management Unit (FPMU)
Ministry of National Food Security & Research, Islamabad

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

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

MONTHLY MONITORING REPORT
JUNE 2022

CONTENTS

EXECUTIVE SUMMARY	1
CHAPTER-1: PROJECT INTRODUCTION.....	3
1.1 PROJECT PROFILE	3
1.2 PROJECT DESCRIPTION	3
1.2.1 Project Development Objectives	3
1.2.2 Project Objectives – General & Quantitative	3
1.2.3 Project Beneficiaries	4
1.2.4 Project Components.....	4
1.2.5 Project Targets	5
CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS	7
2.1 OBJECTIVES OF CONSULTING SERVICES.....	7
2.2 SCOPE OF CONSULTING SERVICES.....	7
2.3 MONITORING STRATEGY OF CONSULTANTS.....	8
2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS.....	11
CHAPTER 3: CONSULTANTS' ACTIVITIES DURING THE REPORTING MONTH	12
3.1 SUBMISSION OF MONTHLY MONITORING REPORT (MMR).....	12
3.2 START OF BASELINE SURVEY PHASE-II.	12
3.3 REGULAR MONITORING / FIELD VISITS BY ME&IE CONSULTANTS.....	12
3.3.1 Regular Monitoring / Field Visits by Zonal Office Islamabad Capital Territory (ICT)	12
3.3.2 Regular Monitoring / Field Visits by Zonal Office Punjab.....	13
3.3.2.1 Field Visits / Monitoring of Intervention in District Bahawalnagar, Punjab.....	14
3.3.2.2 Field Visits / Monitoring of Watercourses Intervention in District Bhakkar, Punjab	22
3.3.2.3 Field Visits / Monitoring of Intervention in Barani Zone, District Rawalpindi, Punjab	26
3.1.1 Regular Monitoring / Field Visits by Zonal Office KP	29
3.1.1.1 Follow-up of the Data Collection from OFWM Department.....	41
3.1.2 Regular Monitoring / Field Visits by Zonal Office Balochistan.....	41
3.1.2.1 Districts Coverage.....	42

3.1.2.2	Targets, Sample Size and achieved Targets (BLS-I) - Balochistan	42
3.1.2.3	Critical Data of Baseline Survey Phase-II	42
3.1.2.4	General Profile and Observations of Monitored Sites - Baseline Survey Phase -II	44
3.1.2.5	Field Visits detail of Regular Monitoring / Sport Checking Baseline Survey, Phase-II - Balochistan Zone	44
3.1.2.6	Field Visits detail of Baseline Phase II Monitoring / Spot Checking – Balochistan Quetta and Khuzdar Zone	46
3.1.2.7	Field Visits detail of Baseline Phase II Monitoring / Spot Checking – Balochistan Naseerabad Zone	51
3.2	COORDINATION MEETINGS OF ME&IE CONSULTANTS	56
3.2.1	Meetings of ME&IE Consultants Punjab Zone with Stakeholders	56
3.2.2	Meetings of ME&IE Consultants Balochistan, Zone with Stakeholders	58
3.3	INTERNAL MEETINGS OF ME&IE CONSULTANTS	60
3.4	NATIONAL PROJECT COORDINATOR'S VISIT TO CONSULTANTS' ZONAL OFFICES	61
3.5	CHANGE IN KEY STAFF OF ME&IE CONSULTANTS	62
3.6	ICT ASSIGNMENT	62
3.6.1	Development of Website of NPIWC-II	63
3.6.2	Designing of Dashboard of Project Interventions	63
3.6.3	Data collection of interventions in MIS/GIS database	64
3.6.4	Implementation of MIS Dashboard	64
3.6.5	On-Going Data Validation & Cleaning	67
3.7	MONITORING / DATA COLLECTION ON SOCIAL AND GENDER COMPONENT	67
3.8	CASE STUDY ON WATER STORAGE TANK IN PUNJAB ZONE	73
CHAPTER 4: QUARTERLY WORK PLAN-ACTIVITIES (APR 2022 TO JUNE 2022)		76
CHAPTER 5: ISSUES / BOTTLENECKS		78

LIST OF TABLES

Table: -ES-1: Compliance Status of Tentative Work Plan during Reporting Period	2
Table 2.1: Monitoring Strategy for ME&IE Activities	8

LIST OF FIGURES

Figure 1.1: NPIWC-II Project WCs Improvement, WSTs, and LLL Targets in Pakistan.	5
Figure 1.2: Zone-Wise WCs Improvement, WSTs, and LLL Target	6

LIST OF ANNEXURES

ANNEX - A: TENTATIVE QUARTERLY WORK PLAN (JULY TO SEPTEMBER 2022)	81
ANNEX - B: MATRIX OF RESPONSIBILITIES	82
ANNEX - C: MONITORING LOG-FRAME	84
ANNEX - D: DELIVERABLES/REPORTING REQUIREMENTS	90
ANNEX - E: MINUTES OF NPC MEETING IN QUETTA OFFICE DURING HIS VISIT	91
ANNEX - F: MINUTES OF NPC MEETING HELD IN ZONAL OFFICE LAHORE	96
ANNEX - G: MINUTES OF NPC MEETING HELD IN NATIONAL OFFICE ISLAMABAD	98
ANNEX - H: MINUTES OF 4 TH BOM MEETING HELD IN NPC OFFICE	99
ANNEX - I: WATERCOURSE DATA SUBMISSION SUMMARY OF AJK ZONE	101
ANNEX - J: WATER STORAGE TANK DATA SUBMISSION SUMMARY OF AJK ZONE	101
ANNEX - K: WATERCOURSE DATA SUBMISSION SUMMARY OF KP ZONE	103
ANNEX - L: WATER STORAGE TANK DATA SUBMISSION SUMMARY OF KP ZONE	105

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 “Monitoring Report for the month of June 2022” comprises five chapters:

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

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

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

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

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

Chapter-3 explains purpose of Monthly Monitoring Report (MMR). This current MMR covers the period from 1st June 2022 to 30th June 2022.

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

- Submission of MMR for the previous Month (May 2022)
- Preparation for the 2nd Phase of Baseline Survey
- Training of Field Staff for 2nd Phase of Baseline Survey
- Preparation of baseline survey field visits plan
- Regular Monitoring of Interventions in the Field
- Data Collection of the Interventions in the Field
- Data acquisition from Client, Data entry, Data cleaning, Data processing and analysis
- Meetings of ME&IE Consultants with Stakeholders about Project Progress / Issues
- Data collection of interventions for MIS/GIS database
- Dashboard data collection and data entry

Chapter-4 highlights the quarterly work plan for the period of 1st July 2022, to 30th September 2022. The work plan is consisting of following activities:

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

The detail time span for 3rd Quarter of year 2022 is provided in the Tentative Work Plan **Annex-A**.

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

Table: -ES-1: Compliance Status of Tentative Work Plan during Reporting Period

No.	Activities Planned for the Reporting Quarter		Status	
1	Pre-Field Activities			
	1.1	Preparation for 2 nd Phase Baseline Survey	Complied	
	1.2	Internal Meetings of ME&IE Consultants	Complied	
	1.3	Training of Field Staff for 2 nd Baseline Survey	Complied	
2	Field Activities:			
	2.1	Regular Monitoring of Interventions in the Field	Complied	
	2.2	Data collection of the interventions in the field	Complied	
	2.3	Baseline Survey Phase-II	In progress	
	2.4	Online data entry in android-based application	Complied	
3	ICT Assignment:			
	3.1	Development / Improvement of website of NPIWC-II	Complied	
	3.2	Monitoring online data collection and Data entry	Complied	
	3.3	Monitoring Android based Mobile Application under implementation by field staff.	Complied	
	3.4	Data collection of interventions in MIS/GIS database	Complied	
	3.5	Data cleaning for Dashboard for Project Interventions	Complied	
4	Coordination			
	4.1	Meetings of TL ME&IE Consultants with NPC regarding Project Progress / Issues	Meetings conducted on regular basis	
	4.2	Meeting of DTLs with respective DTL of NWMC	Meetings conducted on regular basis	
	4.3	Internal Meetings of ME&IE Consultants	Weekly meetings conducted on regular basis	
5	Deliverables:			
	5.1	Monthly Monitoring Reports (MMRs)	16 th MMR (Apr. 2022)	Submitted
			17 th MMR (May. 2022)	Submitted
			18 th MMR (Jun. 2022)	To be submitted in stipulated time
	5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jan-Mar 2022	Submitted
			QM&ER Apr-June 2022	To be submitted in stipulated time
	5.3	2 nd Annual Monitoring & Evaluation Report	(July 2021 – June 2022)	To be submitted in stipulated time
	5.4	Baseline Survey Report Ph-II (Draft)	Data collecting in field in progress. Report will be submitted in stipulated time	

CHAPTER-1: PROJECT INTRODUCTION

1.1 PROJECT PROFILE

This section covers the following detail of the project:

Project Name:	National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)
Project Areas:	Punjab, Khyber Pakhtunkhwa, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir, and Islamabad Capital Territory (ICT)
Sponsoring Agency	Ministry of National Food Security & Research
Executing Agencies (EAs):	Following are different EAs: Federal Project Management Unit (FPMU), <ul style="list-style-type: none"> i. DGA OFWM Punjab ii. DG OFWM KP iii. DGA OFWM Balochistan iv. Director Irrigation and Small Dams, AJ&K v. Director WM, GB vi. Director Agriculture Extension Services (AES) ICT
Project Period:	5 Year (2019-2024)
Total Project Cost:	Rs. 154,542.355 million (Umbrella PC-1, including Sindh)
ME&IE Consultancy Period:	4 years
ME&IE Consultant:	JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering services (Pvt.) Ltd., Centre for Social Research and Development (CSR), ADA Consultants Inc. Canada, and S&S Associates.
ME&IE Consultant Mobilized:	November 20, 2020

1.2 PROJECT DESCRIPTION

Project description includes followings i.e., the project development objectives, project objectives, project benefits, and project components, etc.

1.2.1 Project Development Objectives

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

1.2.2 Project Objectives – General & Quantitative

Following are the project general and quantitative:

1) General Objectives:

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

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

2) Quantitative Objectives' Outputs and Impacts:

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

Project outputs

- i) Mobilization through capacity building of Water Users Associations/Farmers Organizations in improved water management techniques and their registration under On-Farm Water Management and Water User Associations Ordinance [Act] 1981 and organization of 47,278 WUAs.
- ii) Reconstruction/renovation and remodeling of 47,278 watercourses, involving complete earthen renovation, partial lining of critical reaches (50% of the total watercourse length

as decided in the high-level meeting), and installation of water control structures. It is expected to save around 5.82 MAF per annum (approx. saving of 123 acre-feet (AF) per watercourse per annum).

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

Project impacts

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

Project indirect benefits to industry/economic activities

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

Awareness support to farmers

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

1.2.3 Project Beneficiaries

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

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

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

1.2.4 Project Components

The NPIWC-II project comprises four components.

C1: ORGANIZATION OF WATER USERS ASSOCIATIONS:

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

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

C2: WATERCOURSE IMPROVEMENTS:

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

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

C3: CONSTRUCTION OF WATER STORAGE TANKS:

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

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

1.2.5 Project Targets

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

C4: PROVISION OF LASER LAND LEVELING UNITS:

Provision of 11,610 Laser Land Leveling (LLL) units to the farmers; the component is strengthening LLL services in the country through provision of LLL Units to farmers / service providers on 50% subsidized rates.

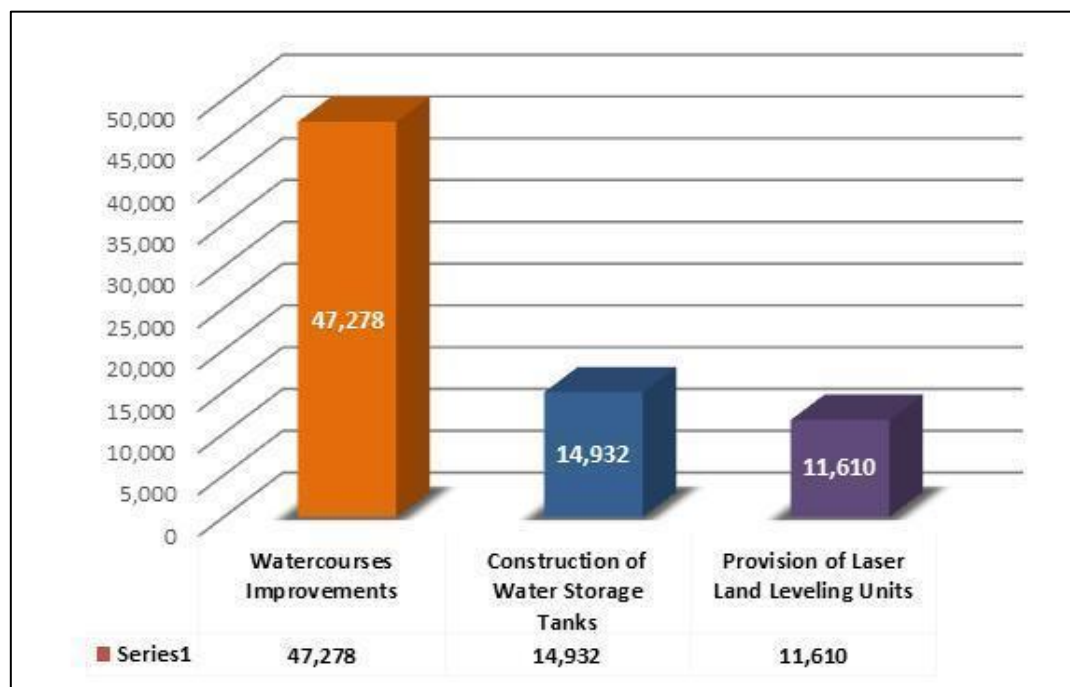


Figure 1.1: NPIWC-II Project WCs Improvement, WSTs, and LLL Targets in Pakistan.

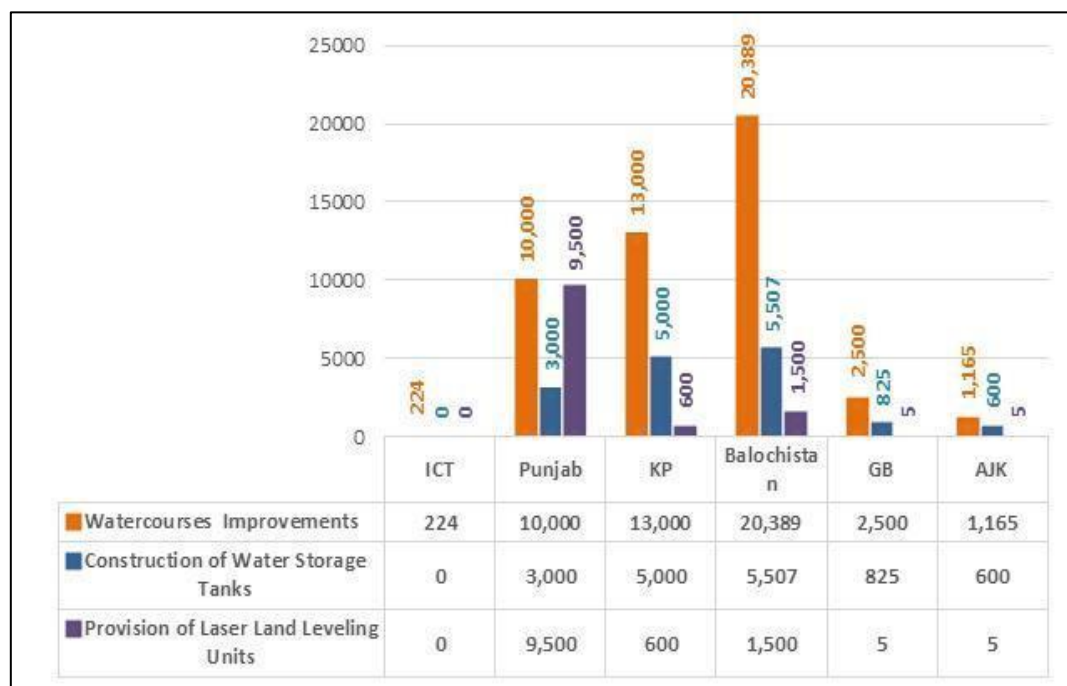


Figure 1.2: Zone-Wise WCs Improvement, WSTs, and LLL Target

CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS

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

2.1 OBJECTIVES OF CONSULTING SERVICES

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

2.2 SCOPE OF CONSULTING SERVICES

The ME&IE Consultants are responsible for monitoring, evaluation and impact evaluation (ME&IE), and in this context are carrying out the following activities:

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

- mobilization, financial and administrative sustainability of water users' associations and ensuring the maintenance of watercourses, water storage tanks and laser land Levelers,
- viii) Economic impact of project interventions,
- ix) Carry out the impact evaluation of the project intervention on the economy and stakeholders,
- x) Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks and laser Levelers database, etc. (while the project staff will maintain the website),
- xi) Provide technical support for the development of a custom-designed mobile application (Android Based) to capture on-site project progress and geo-tagged photos. It should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management.

The said requirement is based on the following functional features:

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

email, web-notifications) to the user on the non-conformance of project's key indicators; the application should have the provision to custom define alerts levels and desired notifications.

2.3 MONITORING STRATEGY OF CONSULTANTS

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in **Table-2.1**. However, detailed methodology and procedures to carry out the ME&IE of the project interventions were explained in Chapter 6 of Inception Report.

Table 2.1: 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 the 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

			<p>reach and tail reach.</p> <ul style="list-style-type: none"> • 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 savings will be reported per watercourse, per annum and aggregate for the project in LPS and Acre feet.
			<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 periodically 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 leveled: <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>
			Based on water savings on sample LLL units, total water savings will be estimated for all project LLL units. The savings will be reported per LLL unit, per annum and aggregate for the project in LPS and in Acre feet.
4	Community mobilization	Social and Gender Specialist and Socio-Economic Expert	<p>The extent of community mobilization will be assessed by investigating whether:</p> <ul style="list-style-type: none"> • 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

		Socio-Economic Expert	<p>estimated. It is benefitted towards food security</p> <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 and 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 land leveling units, the interventions will be spot checked for quality of construction, material, functioning and beneficiaries' satisfaction etc.
9	Process monitoring	Field Teams of Agriculture Deptt., Project Consultants, ME&IE Consultants & ICT/Technology Specialist	<ul style="list-style-type: none"> 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 are further being enhanced and refined in consultation with the client as well as the stakeholders.

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

CHAPTER 3: CONSULTANTS' ACTIVITIES DURING THE REPORTING MONTH

As a regular part of the ME&IE assignment, routine field visits & monitoring of project interventions in the field remained continued by ME&IE consultants, during the reporting month. Consultants also carried out different in-house activities related to ME&IE assignment:

3.1 SUBMISSION OF MONTHLY MONITORING REPORT (MMR)

As per contractual obligation, consultants submitted seventeenth MMR for the month of May 2022 (1st May 2022 to 30th June 2022) during the current reporting.

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

3.2 START OF BASELINE SURVEY PHASE-II.

Consultants have mobilized provincial field monitoring teams to the field for data collection for 2nd Phase Baseline Survey. Along with Baseline Survey routine monitoring of project interventions also remained in progress. Before mobilizing the field team consultants have already improved / refined the monitoring tools in light of the lessons learnt during Baseline Survey Phase-I and also updated the android based application (ODK) for

data collection. Field Monitoring Team were also given training before moving to field. Data collected in the field is being entered in the ODK by the field monitoring teams and is regularly monitored by consultants' ICT team.

3.3 REGULAR MONITORING / FIELD VISITS BY ME&IE CONSULTANTS

Detail of data collection and regular field monitoring by field teams of Zonal Offices is given below:

3.3.1 Regular Monitoring / Field Visits by Zonal Office Islamabad Capital Territory (ICT)

Routine in-house activities of ICT Zone ME&IE team remained continued. The activities included planning for Baseline Survey-II and coordination with client regarding field visits.


ICT Zone field monitoring team conducted visit of listed below interventions in District Kotli, AJK, for Baseline Survey-II and routine field monitoring, on 10th June 2022.

S#	Watercourse Name/ ID	WST Name/ ID	District	Date of Visit
1	-	Kaghyali Kandhar	Kotli	10 th June 2022
2	Maira Nakyal	-		
3	Jandrot Kathar zereen	-		

Before site visit, ME&IE Team conducted a meeting with Water Management Officer of small dams and irrigation department Kotli, and collected basic data of watercourses and a WST to be visited.

The field visit was conducted in coordination with Assistant Director Agriculture Kotli, Mr. Muhammad Shafqat, who managed the visit locations. Assistant Directors of Line Departments supported the ME&IE team for conducting the visit. Detailed of sites visited is as under:

i) **Field Visit to Water Storage Tank Kaghyali
Kandhar Kotli, AJK, on 10 June 2022**

Scheme	Water storage Tank
Farmer Name	Muhammad Mouzam
Name of village:	Kaghyali Kandhar
Chairman WUA:	Muhammad Mouzam
District:	Kotli
Province	AJK
Source of irrigation:	Stream
Shape of WST	Square
Capacity of Water storage Pond	1568 cubic feet
Command area of WSP :	7.5 Acres
No of beneficiaries:	3
Reduction in water disputes/thefts	No problems related to water theft
	

Picture 3.1: Water Storage Tank Kaghyali


ii) **Field Visit to Watercourse Maira Nakyal,
AJK, on 10 June 2022**

Scheme	Water Course
Farmer Name	Muzaffar Hussain
Name of village:	Maira Nakyal
Chairman WUA:	Muzaffar Hussain
District:	Kotli
Province	AJK
Source of irrigation:	Stream/ Nullah
Type of watercourse:	PCC
Length of the watercourse:	1017 ft.
Command area of water Harvesting System:	8.125 Acres (65 Kanal)
No of beneficiaries:	4
Equity in water distribution increased	No Problems related to Equity in Water Distribution.
Reduction in water disputes/thefts	No problems related to water theft



Picture 3.2: ME&IE team with Beneficiaries of Maira Nakyal W.C. (L) ME&IE Team Measuring Maira Nakyal W.C (R)

iii) **Field Visit to Watercourse in Jandrot Kathar
Zereen, AJK, on 10 June 2022**

Scheme	Watercourse
Farmer Name	Muhammad Asghar
Name of village:	Jandrot Kathar Zereen
Chairman WUA:	Muhammad Asghar
District:	Kotli
Province	AJK
Source of irrigation:	Stream
Type of watercourse:	PCC
Length of the watercourse:	1610 ft.
Command area of watercourse:	7.5 Acres
No of beneficiaries:	4
Equity in water distribution increased	No Problems related to Equity in Water Distribution.
Reduction in water disputes/thefts	No problems related to water theft
	

Picture 3.3: Damaged part of WC (left), ME&IE team with beneficiaries of Jandrot WC (R)

3.3.2 **Regular Monitoring / Field Visits by Zonal Office Punjab**

The Monitoring/Baseline pertains to the intervention of the project viz of watercourse improvement, Water User Association, construction of Water Storage Tank and Laser Land Leveler. Such surveys are carried out from time to time as a part of regular activity of ME&IE Consultants. The activities relate to baselines

Survey, regular monitoring and impact wherever it is visible. The overall findings about unit of interventions visited by the field teams are reflected in the form of:

1. Field Visits of target intervention.
 - i. Improvement of Watercourses
 - ii. Construction of Water Storage Tank.
 - iii. Provision of Laser Land Leveler

2. Meetings with Field Officers and Staff of OFWM.
3. ME&IE Consultant observation.

Field visit during the month under review were carried out in irrigated cotton zone (Bahawalnagar district) and in partially Barani zone (Bhakkar district). The number of the various interventions visited are summarized in the table as Under

Table 3.1: No. of Interventions Monitored / Visited in Punjab, during the Month of June 2022

Cropping Zone	District	Unit of Watercourses Monitored / Visited			No. of Respondents	Unit of WST Visited / Monitored	No. of respondents	Unit of LLL Visited / Monitored	No. of Respondents
		Additional	Regular	Total					
Barani Zone	Rawalpindi	0	0	0	0	3	3	0	0
Partially Barani Zone	Bhakkar	2	1	3	18	5	5	5	5
Irrigated Cotton Zone	Bahawalpur	5	5	10	58	3	3	11	11
Total		7	6	13	76	11	11	16	16

Data were collected on the undermentioned aspects of an intervention.

- Brief profile of the various intervention site visited.
- Interaction with beneficiaries
- ME & IE Consultant Field Teams Observations views of beneficiaries / OFWM.

3.3.2.1 Field Visits / Monitoring of Intervention in District Bahawalnagar, Punjab

Field team visits / monitoring activities from 1st June 2022 to 4th June 2022 are as under.

A. Field Visit of Watercourse Improvement in Bahawalnagar, Punjab

Field Team-1 Composed of following members:

- Mr. Muhammad Zubair, Field Team In-Charge Team-3
- Mr. Misbah Ur Rehman, Field Team Engineer
- Mr. Umar Farooq Hammad, Field Team Engineer

Following are the sites visited by Field Team -1 during the month of June 2022:

i) Field Visit to Minchinabad, Bhawalnagar, Punjab, Watercourse No. 10666/R on 1st June 2022

Date	01-06-2022	
Watercourse No	10666/R	
Type of Watercourse	Regular	
Chak No/Village	Babul wala	
District and Tehsil	Bahawalnagar, Minchanabad	
Name of Distributary	Darbari	
Type of Moga	Pipe outlet	
Measured Discharge Before Improvement	Head	100 LPS
	Middle	80 LPS
	Tail	65 LPS
Sanctioned Discharge	80 LPS	
Tube well Discharge (if any)	20 LPS	
Designed Discharge	135 LPS	
Culturable Command area	247 Acres	
Total No of water users	17	
Estimated lining Length	1902 m	



Picture 3.4: A view of Lined Portion of Watercourse no 10666 R



Picture 3.5: ME&IE Field Team visiting and measuring Watercourse No. 59100-TR in the presence of Chairman WUA

Table 3.2: List of Farmers, their locations on WC & tenure status on WC 10666R-Punjab on 1st June 2022

Name of Farmer	Location of WC	Area (Acres)			
		Owned	Rented	Rented Out	Operated Area
Muhammad Ameer Shahid	Tail	18	0	0	18
Allah Yar	Tail	12.5	0	0	12.5
Muhammad Ishaq	Middle	4.0	0	0	4.0
Muhammad Hassan Shahzad	Middle	10.0	0	0	10.0
Hashim Ali	Middle	5.0	0	0	5.0
Roshan Din	Tail	7.5	0	0	7.5



Picture 3.6: Interview of Beneficiary at WC No. 10666 R

ii) Field Visit to Minchinabad, Bhawalnagar, Punjab, Watercourse No. 26066/L on 1st June 2022

Date	01-06-2022	
Watercourse No	26066/L	
Type of Watercourse	Regular	
Chak No/Village	Khuda Baksh	
District and Tehsil	Bahawalnagar. Minchanabad	
Name of Distributary	Darbari	
Type of Moga	AOSM	
Measured Discharge Before Improvement	Head	95 LPS
	Middle	85 LPS
	Tail	70 LPS
Sanctioned Discharge	80 LPS	
Tube well Discharge (if any)	20 LPS	
Designed Discharge	100 LPS	
Culturable Command area	230 Acres	
Total No of water users	20	
Estimated lining Length	2584 m	



Picture 3.7: A view of lined portion of watercourse no. 26066/L

Table 3.3: List of Farmers, their locations on WC & tenure status on WC 26066-L-Punjab on 1st June 2022

Name of Farmer	Location on WC	Area/Acres			
		Owned	Rented In	Rented Out	Operated Area
Muhammad Mansha	Tail	4.5	10.0	0	14.5
Muhammad Ikram	Middle	6.0	13.0	0	19.0
Mian Muhammad Zafar	Middle	24.5	0	0	24.5
Muhammad Yasin	Tail	16.0	0	0	16
Nazir Muhammad	Tail	3.0	0	0	3.0
Muhammad Abbas	Head	17	0	0	17



Picture 3.8: Interview of Beneficiary at WC No. 26066/L

iii) Field Visit to Haroonabad, Bhawalnagar, Punjab, WC No. 57890-L on 2nd June 2022

Date	02-06-2022	
Watercourse No	57890/L	
Type of Watercourse	Additional	
Chak No/Village	74-4R	
District and Tehsil	Haroon Abad Bahawalnagar	
Name of Distributary	4R	
Type of Moga	AOSM	
Measured Discharge Before Improvement	Head	110 LPS
	Middle	96 LPS
	Tail	90 LPS
Sanctioned Discharge	85 LPS	
Tube well Discharge (if any)	25 LPS	
Designed Discharge	135 LPS	
Culturable Command area	567 Acre	
Total No of water users	19	
Estimated lining Length	1020 M	



Picture 3.9: View of Lined Water Course No. 57890/L from the Mogah portion

Table 3.4: List of Farmers, their locations on WC & tenure status on WC 57890-L Punjab, on 2nd June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Jabbar Aslam	Tail	27	0	0	27
Bashir Ahmed	Tail	30	0	0	30
Jafir Hussain	Tail	1.5	0	0	1.5
Javed Ahmad	Tail	4.0	0	0	4.0
Nazir Hussain	Head	6.5	0	0	6.5
Muhammad Sharif	Tail	0	8.5	0	8.5



Picture 3.10: Interview of Beneficiary at WC No. 57890/L

iv) **Field Visit to Haroonabad, Bhawalnagar, Punjab, WC No. 56830-L on 2nd June 2022**

Date	02-06-2022	
Watercourse No	56830/L	
Type of Watercourse	Additional	
Chak No/Village	Bhakrana	
District and Tehsil	Haroon Abad, Bahawalnagar	
Name of Distributary	1L	
Type of Moga	AOSM	
Measured Discharge Before Improvement	Head	120 LPS
	Middle	100 LPS
	Tail	80 LPS
Sanctioned Discharge	100 LPS	
Tube well Discharge (if any)	25 LPS	
Designed Discharge	150 LPS	
Culturable Command area	469 Acre	

Total No of water users	31
Estimated lining Length	1000 M
Pictorial view of visit is given in Picture 3.11.	



Picture 3.11: View of Lined Water Course No. 56830/ L

Table 3.5: List of Farmers, their locations on WC & tenure status on WC 56830-L Punjab, on 2nd June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Habib Ullah	Tail	5.0	0	0	5.0
Muhammad Hussain	Middle	7.0	0	0	7.0
Muhammad Ramzan	Tail	3.5	0	0	3.5
Noor Ahmad	Tail	16	50.0	0	66.0
Riasat Ali	Tail	0	7	0	7



Picture 3.12: Interview of Beneficiary at WC No. 56830/L

v) **Field Visit to Chishtian, Bhawalnagar, Punjab, WC No. 55980-L on 3rd June 2022**

Date	03-06-2022	
Watercourse No	55980/L	
Type of Watercourse	Additional	
Chak No/Village	Ghazi Wala Moza Nathu Dhaka	
District and Tehsil	Chishtian, Bahawalnagar	
Name of Distributary	Bahadar wah	
Type of Moga	AOSM	
Measured Discharge Before Improvement	Head	75 LPS
	Middle	60 LPS
	Tail	50 LPS
Sanctioned Discharge	70 LPS	

Tube well Discharge (if any)	10 LPS
Designed Discharge	90 LPS
Culturable Command area	336 Acres
Total No of water users	66
Estimated lining Length	1285



Picture 3.13: View of Lined Water Course No. 55980/L

Table 3.6: List of Farmers, their locations on WC & tenure status on WC 55980-L Punjab, on 3rd June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Ghafoor Ahmad	Tail	1	0	0	1
Fiaz Ahmad	Tail	4.75	0	0	4.75
Muhammad Amin	Tail	4	0	0	4
Ghulam Mustafa	Tail	20	0	0	20
Ahmad Ali	Tail	4.75	0	0	4.75
Muhammad Ashiq	Tail	1.1	0	0	1.1



Picture 3.14: Interview of Beneficiary at WC No. 55980/L

B. Field Visits / Monitoring of Water Storage Tanks (WST) Intervention, in Bahawalnagar, Punjab

i) Field Visit to Chishtian, Bhawalnagar, Punjab, WST of Mr. M. Rizwan on 2nd June 2022

Date	02-06-2022
WST Owner:	Muhamamd Rizwan
Name of village:	36/3R
Tehsil & District:	Haroon Abad, Bahawalnagar
Source of irrigation:	Canal + Tube well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	25.6x30.5 M
Depth of WST:	1.85 M
Command area of water storage tank:	15
No of beneficiaries:	1
Name of the Orchard	Citrus



Picture 3.15: A view of water storage tank of Muhamamd Rizwan

ii) Field Visit to Chishtian, Bhawalnagar, Punjab, WST of Mr. Saifullah on 3rd June 2022

Date	03-06-2022
WST Owner:	Saifullah
Name of village:	430/6R
Tehsil & District:	Haroonabad, Bahawalnagar
Source of irrigation:	Canal + Tube Well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	25.6 x 30
Depth of WST:	1.85 M

Command area of water storage tank:	10 Acre
No of beneficiaries:	1
Name of the Orchard	Citrus



Picture 3.16: Pumping water from WST Saifullah

iii) **Field Visit to Chishtian, Bahawalnagar, Punjab, WST of Mr. Abdul Waheed on 3rd June 2022**

Date	03-06-2022
WST Owner:	Abdul Waheed
Name of village:	99/F
Tehsil & District:	Chishtian, Bahawalnagar
Source of irrigation:	Canal + Tube well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	25.6 x 30
Depth of WST:	1.5 M
Command area of water storage tank:	3
No of beneficiaries:	1
Name of the Orchard	Wheat, Sugarcane

Picture of field visit is given in Picture 3.15.



Picture 3.17: A view of water storage tank of Mr. Abdul Waheed

C. Field Visits / Monitoring of Laser Land Levelers Intervention, in Bahawalnagar, Punjab

i) **Field Visit to Laser Land Leveler of Mr. Muhammad Aslam, in Bahawalnagar, Punjab, on 28th May 2022**

Owner of LLL	M. Aslam
District	Bahawalnagar
Tehsil	Bahawalnagar
Quality Of ground Water	Brackish
Major Crops	Wheat, Rice



Picture 3.18: View of Laser Land Leveler

ii) **Field Visit to Laser Land Leveler of Mr. Muhammad Sarwar in Haroonabad, Bahawalnagar, Punjab, on 30th May 2022**

Owner of LLL	M Sarwar
District	Bahawalnagar
Tehsil	Haroonabad
Quality Of ground Water	Brackish
Major Crops	Wheat, Rice



Picture 3.19: View of Laser Land Leveler

iii) **Field Visit to Laser Land Leveler of Mr. Muhammad Sharif in Bahawalnagar, Punjab, on 30th June 2022**

Owner of LLL	Muhammad Sharif
District	Bahawalnagar
Tehsil	Haroonabad

Quality Of ground Water	Brackish
Major Crops	Wheat, Rice



Picture 3.20: ME&IE Team in Interview with Beneficiary of LLL

- iv) Field Visit to Laser Land Leveler of Mr. Zahoor Ahmed in Haroonabad, Bahawalnagar, Punjab, on 31st May 2022

Owner of LLL	Ahsan Zahoor
District	Bahawalnagar
Tehsil	Haroonabad
Quality Of ground Water	Saline
Major Crops	Wheat, Rice



Picture 3.21: ME&IE Team in Interview with Beneficiary of LLL

- v) Field Visit to Laser Land Leveler of Mr. Dildar Hussain in Haroonabad, Bahawalnagar, Punjab, on 31st May 2022

Owner of LLL	Dildar Hussain
District	Bahawalnagar
Tehsil	Haroonabad
Quality Of ground Water	Saline
Major Crops	Wheat, Sugar Cane



Picture 3.22: View of Laser Land Leveler

- vi) Field Visit to Laser Land Leveler of Mr. Muhamad Hussain in Minchinabad, Bahawalnagar, Punjab, on 02nd June 2022

Owner of LLL	M. Hussain
District	Bahawalnagar
Tehsil	Minchinabad
Quality Of ground Water	Brackish
Major Crops	Wheat, Cotton



Picture 3.23: View of Laser Land Leveler

- vii) Field Visit to Laser Land Leveler of Mr. Saif Ur Rehman, Minchinabad, Bahawalnagar, Punjab on 2nd June 2022

Owner of LLL	M. Saif Ur Rehman
District	Bahawalnagar
Tehsil	Minchinabad
Quality Of ground Water	Sweet
Major Crops	Wheat, Rice, Sugar Cane



Picture 3.24: Discussion / data collection from Beneficiary of Laser Land Leveler

- viii) Field Visit to Laser Land Leveler of Mr. Noor Ahmed in Bahawalnagar, Punjab, on 2nd June 2022

Owner of LLL	Noor Ahmad
District	Bahawalnagar
Tehsil	Minchinabad
Quality Of ground Water	Brackish



ix) **Field Visit to Laser Land Leveler of Mr. Muhammad Sohna, Bahawalnagar, Punjab on 2nd June 2022**

Owner of LLL	M. Sohna
District	Bahawalnagar
Tehsil	Minchinabad
Quality Of ground Water	Sweet
Major Crops	Wheat, Rice, Sugar Cane



Picture 3.26: View of Laser Land Leveler

x) **Field Visit to Laser Land Leveler of Mr. Abdul Ghafoor, Bahawalnagar, Punjab on 4th June 2022 - Punjab**

Owner of LLL	Abdul Ghafoor
District	Bahawalnagar
Tehsil	Chistian
Quality Of ground Water	Saline
Major Crops	Wheat, Rice



Picture 3.27: A view of Laser Land Leveler

xi) **Field Visit to Laser Land Leveler of Mr. Sultan Mehmood, Bahawalnagar, Punjab on 4th June 2022**

Owner of LLL	Sultan Mehmood
District	Bahawalnagar
Tehsil	Chistian
Quality Of ground Water	Saline
Major Crops	Wheat, Rice



Picture 3.28: ME&IE Team In Interview with beneficiary of LLL

D. Field Observation of ME&IE Team during Field Visit of District Bahawalnagar

During field visit of District Bahawalnagar, six farmers/ beneficiaries were interviewed at each sampled watercourse (2 Head, 2 Middle, and 2 at Tail). Some of these farmers were located near the border area.

In general, the land of the area is unfit for irrigation. Farmers are dependent on canal water and face shortage of water for irrigation. They mix tube well-water with canal water to meet the emergency needs of water for irriation.

The main findings/observation about Bahawalnagar district are as under:

- Main canals in Bahawalnagar are Fordwa canal (non-perineal canal) and Sadqain (perineal canal)
- Main Crops in Bahawalnagar are Wheat, Cotton, and Rice
- The average yield of wheat per acre about 30 to 35 maund has increase to 40 to 45 maund after improvement of watercourse
- The yield of cotton was 25 to 27 acre before improvement watercourse whereas now it is

about more than 30 maund after improvement as increase in water supply.

- Salinity and waterlogging observed in some area up to 40%
- The water quality is generally brackish in some areas

3.3.2.2 Field Visits / Monitoring of Watercourses Intervention in District Bhakkar, Punjab

Field team's monitoring from 14th June 2022 to 19th June 2022

A. Field Visits / Monitoring of Watercourse Intervention in District Bhakkar, Punjab

Field Team-1 composition for this visit was as under:

- Mr. Muhammad Zubair, Field Team In-Charge Team-3
- Mr. Misbah Ur Rehman, Field Team Engineer
- Mr. Umar Farooq Hammad, Field Team Engineer

i) Field Visit to District Bhakkar, Punjab, WC No. 74750-R on 15th June 2022

Date	15-06-2022	
Watercourse No	74750/R	
Type of Watercourse	Additional	
Chak No/Village	Mamdowala	
District and Tehsil	Bhakkar, Bhakkar	
Name of Distributary	Mehmood	
Type of Moga	AOSM	
Measured Discharge Before Improvement	Head	90 LPS
	Middle	85 LPS
	Tail	70 LPS
Sanctioned Discharge	90 LPS	
Tube well Discharge (if any)	100 LPS	
Designed Discharge	90 LPS	
Culturable Command area	622 Acre	
Total No of water users	60	
Estimated lining Length	2265 M	



Picture 3.29: View of lined WC No. 74750/R

Table 3.7: List of Farmers, their locations on WC & tenure status on WC 55980-L Punjab, on 15th June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Sultan Khan	Tail	6.5	0	0	6.5
Abdul Ghafar	Tail	29	0	0	29
Bashir Hussain	Tail	14	0	0	14
Zulfiqar	Tail	20	0	0	20
Muhammad Hussain	Tail	4	0	0	4
Ghulam Abbas	Tail	11	0	0	11



Picture 3.30: Interview of Beneficiary at WC No. 74750/R

ii) Field Visit to District Bhakkar, Punjab, WC No. 26750/L on 16th June 2022

Date	16-06-2022
Watercourse No	26750/L
Type of Watercourse	Additional
Chak No/Village	Khanpur Janoobi
District and Tehsil	Darya Khan, Bhakkar
Name of Distributary	Fateh Major

Type of Moga	Open Outlet	
Measured Discharge Before Improvement	Head	70 LPS
	Middle	60 LPS
	Tail	40 LPS
Sanctioned Discharge	75 LPS	
Tube well Discharge (if any)	30 LPS	
Designed Discharge	100 LPS	

Culturable Command area	385 acres
Total No of water users	12
Estimated lining Length	660 m



Picture 3.31: Measurement of Discharge by Pygmy Meter at WC No. 26750/L

Table 3.8: List of Farmers, their locations on WC & tenure status on WC 26750/L, Punjab, on 16th June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Mulazim Hussain	Tail	8.5	0	0	8.5
Masroor Alam	Middle	12.5	0	0	12.5
Ihsan ul Haq	Tail	18.5	0	0	18.5
Hafiz Ullah Khan	Tail	15	0	0	15
Haji Muhammad Afzal Khan	Tail	50	0	0	50
Akhtar Abbas	Tail	15	0	0	15



Picture 3.32: Beneficiaries along with Field Team Incharge and Members at WC No. 26750/L

iii) **Field Visit to District Bhakkar, Punjab, WC No. 34000 TL on 17th June 2022**

Date	17-06-2022	
Watercourse No	34000 TL	
Type of Watercourse	Regular	
Chak No/Village	Bakawala	
District and Tehsil	Kaloor Kot, Bhakkar	
Name of Distributary	Sardar	
Type of Moga	Open Outlet	
Measured Discharge Before Improvement	Head	53 LPS
	Middle	39 LPS
	Tail	30 LPS
Sanctioned Discharge	41 LPS	
Tube well Discharge (if any)	37 LPS	
Designed Discharge	90 LPS	

Culturable Command area	460 Acre
Total No of water users	27
Estimated lining Length	930 M



Picture 3.33: WC No. 34000 TL under construction

Table 3.9: List of Farmers, their locations on WC & tenure status on WC 34000-TL, Punjab, on 17th June 2022

Name of Farmer	Location on WC	Area/Acres			Operated Area
		Owned	Rented In	Rented Out	
Muhammad Yunus	Middle	25	0	0	25
Qaiser Mawaz	Middle	15	0	0	15
Iftakhar Ahmed	Tail	20	0	0	20
Muhammad Tariq	Tail	25	0	0	25
Abdul Jabbar	Tail	25	0	0	25
Ijaz Hussain	Tail	12	0	0	12



Picture 3.34: Me&IE Tea in Interview with Beneficiaries of WC No. 34000 TL

B. Field Visits / Monitoring of Water Storage Tanks (WST) Intervention in District Bhakkar

i) Field Visit to District Bhakkar, Punjab, WST of Mr. Muhammad Shahid on 15th June 2022

Date	15-06-2022
WST Owner:	Muhammad Shahid
Name of village:	Khansar
Tehsil & District:	Bhakkar
Source of irrigation:	Tubewell+Canal
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	34.6 x 26 M
Depth of WST:	1.5 M
Command area of water storage tank:	12.5
No of beneficiaries:	1
Name of the Orchard	Wheat, Citrus



Picture 3.35: View of Concrete WST of Muhammad Shahid

ii) Field Visit to District Bhakkar, Punjab, WST of Mian REhmat on 16th June 2022

Date	16-06-2022
WST Owner:	Mian Rehmat Ullah
Name of village:	Gadai
Tehsil & District:	Darya Khan, Bhakkar
Source of irrigation:	Tubewell+Canal
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	32.6 x 28.5 M
Depth of WST:	1.5 M
Command area of water storage tank:	9
No of beneficiaries:	1
Name of the Orchard	Citrus



Picture 3.36: View of WST of Mian Rehmat ullah

iii) Field Visit to District Bhakkar, Punjab, WST of Mr. Ahmad Nawaz on 17th June 2022

Date	17-06-2022
WST Owner:	Ahmad Nawaz
Name of village:	6RH
Tehsil & District:	Kaloor Kot, Bhakkar
Source of irrigation:	Tube well

The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	34.6x30.4 M
Depth of WST:	1.52 M
Command area of water storage tank:	9.5
No of beneficiaries:	1
Name of the Orchard	Citrus



Picture 3.37: Measurement of WST of Ahmad Nawaz

Source of irrigation:	Tube well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	34.6 x 22.3 M
Depth of WST:	1.5 M
Command area of water storage tank:	12.5
No of beneficiaries:	1
Name of the Orchard	Citrus



Picture 3.39: View of WST of Nazir Ahmad

iv) **Field Visit to District Bhakkar, Punjab, WST of Mr. Muhammad Riaz on 18th June 2022**

Date	18-06-2022
WST Owner:	Muhammad Riaz
Name of village:	Mankera
Tehsil & District:	Mankera, Bhakkar
Source of irrigation:	Tube well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	37.7 x 30 M
Depth of WST:	1.52 M
Command area of water storage tank:	12
No of beneficiaries:	1
Name of the Orchard	Fodder, Wheat



Picture 3.38: ME&IE Team in Interview with the owner of WST Muhammad Riaz

v) **Field Visit to District Bhakkar, Punjab, WST of Mr. Naseer Ahmad on 18th June 2022**

Date	18-06-2022
WST Owner:	Nazeer Ahmad
Name of village:	Mankera
Tehsil & District:	Mankera, Bhakkar

C. **Field Visits / Monitoring of Water Lase Land Levelers (LLL) Intervention in District Bhakkar**

i) **Field Visit to Laser Land Leveler of Mr. Muhammad Shahid, District Bhakkar, Punjab on 15th June 2022**

Owner of LLL	Muhammad Shahid
District	Bhakkar
Tehsil	Bhakkar
Quality Of ground Water	Fit for Irrigation
Major Crops	Wheat, Citrus



Picture 3.40: View of LLL of Muhammad Shahid

ii) **Field Visit to Laser Land Leveler of Mr. Ameer Iqbal Asif, District Bhakkar, Punjab on 16th June 2022**

Owner of LLL	Ameer Iqbal Asif
District	Bhakkar
Tehsil	Darya Khan
Quality Of ground Water	Fit for Irrigation
Major Crops	Gram (Channa), Cotton



Picture 3.41: Photo of Mr. Ameer Iqbal Asif with LLL

iii) **Field Visit to Laser Land Leveler of Mr. Hassan Abbas, District Bhakkar, Punjab on 17th June 2022**

Owner of LLL	Hassan Abbas
District	Bhakkar
Tehsil	Kaloor Kot
Quality Of ground Water	Fit for Irrigation
Major Crops	Wheat, Cotton



Picture 3.42: View of LLL of Hassan Abbas

iv) **Field Visit to Laser Land Leveler of Mr. Muhammad Younas, District Bhakkar, Punjab on 18th June 2022**

Owner of LLL	Muhammad Younas
District	Bhakkar
Tehsil	Mankera
Quality Of ground Water	Fit for Irrigation
Major Crops	Wheat, Cotton



Picture 3.43: View of LLL of Muhammad Younas

v) **Field Visit to Laser Land Leveler of Mr. Muhammad Asad, District Bhakkar, Punjab on 18th June 2022**

Owner of LLL	Muhammad Asad
District	Bhakkar
Tehsil	Mankera
Quality Of ground Water	Fit for Irrigation
Major Crops	Wheat, Cotton



Picture 3.44: View of LLL of Muhammad Asad

D. Observation of ME&IE Tem during Field Visit of District Bhakkar, Punjab

The soil district Bhakkar and most of its Tehsils is sandy. The Kaloor Kot and Mankera areas are facing acute water shortage. Major water sources in these areas are tube-wells and water storage tanks. Salinity and water logging was minimum in the area. The main crops are; Gram (Channa), wheat, sugar cane and fodder.

The farmers are generally satisfied with the interventions in their area.

A farmer located on water courses (26750-L) told that, the water reached the tail area rarely (after 54 years), and no water available for corps before this intervention. He considered this intervention of NPIWC-II to be a game changer to the crop production.

3.3.2.3 Field Visits / Monitoring of Intervention in Barani Zone, District Rawalpindi, Punjab

A visit was planned to Kalar Syedan district Rawalpindi on 21st June 2022. It was coordinated with Deputy Director Mrs. Farkhanda (OFWM Rawalpindi) who managed the visit locations. The social and

Gender Team along with ME&IE Team, Ms. Maryam and Ms. Sana Gul, also visited water storage tank.



Picture 3.45: Meeting with Mrs. Farkhanda A.D OFWM Rawalpindi at Agriculture office.

During an introductory meeting with OFWM department office in Rawalpindi, ME&IE team collected basic data on WST to be visited. Field team of OFWM also joined ME&IE team for this visit.

i) **Field Visit to WST of Raja Zulfiqar Ahmed at Kallar Sayedan, District Rawalpindi, Punjab, on 21st June 2022**

Date of Visit	21-06-2022
Scheme	Water storage Tank
Farmer Name	Raja Zulfiqar Ahmed
Name of village:	Mauza Maira Sangal
Tehsil	Kallar Saidan
Province	Punjab
Source of irrigation:	Bore
Shape of WST	Square
Length,width	25/25 feet
Command area of WSP :	3.65 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	No problems related to water theft



Picture 3.46: ME&IE on Visit to WST of Raja Zulfiqar Ahmed at Sangal Farm Kallar Kahar Rawalpindi

Observations Findings / of ME&IE Team:

- The former is well educated and is quite aware of all the agricultural practices. Before this intervention he used to grow maize and wheat, but after this intervention he started growing number of different vegetables (Lady finger, bitter gourd, cucumber, tomato, capsicum peas and cauliflower).
- The land holding by the farmer was 3.65 Acre, he has no livestock. The farmer used Urea and DAP as a major fertilizer, he was not using FYM as a fertilizer.
- The area is suitable for cultivation ordinary crops, however, the beneficiary shifted the system from ordinary cultivation towards vegetables. The land is fertile and also suitable for different crops.
- The farmer has agricultural land in non-canal area. The shape of the constructed water storage tank is square, the measured length and width of the four sides is 25/25, while the depth measured by the team was 5ft. Source of water used by the beneficiary for this WST is bore. The water source is near to the tank.
- The farmer told that he also got subsidy from the Government for drip irrigation system, but this system did not work properly during the excessive heat exposure days. As this year the temperature was quite high.

ii) **Field Visit to WST of Zameer Hussain at Mouza Shah Bagh, District Rawalpindi, Punjab, on 21st June 2022**

Date	21-06-2022
Scheme	Water Storage Tank
Farmer Name	Zameer Hussain
Name of village:	Mouza Shah Bagh
District:	Rawalpindi
Province	Punjab
Source of irrigation:	Bore
Type of WST:	Square
Length and width of the WST:	25/25
Command area of WST:	3 Acres
No of beneficiaries:	1
Equity in water distribution increased	<i>No Problems related to Equity in Water Distribution.</i>
Reduction in water disputes/thefts	<i>No problems related to water theft</i>



Picture 3.47: During Field Visit, ME&IE with Owner of WST, Mr. Zameer Husain at Mouza Shah Bagh, Rawalpindi, Punjab

Observations Findings / of ME&IE Team:

- The length and width of WST is 25/25 and depth is 5ft. Beneficiary uses different types of fertilizer including DAP, urea, Zinc, SOP, Nitrates and FYM.
- Farmers grow different vegetables including cucumber, bitter gourd, tomato, green chili, capsicum, cauliflower and peas

- They do not hire labors for their farming activities, rather the farmers of the village help each other in farming activities.
- Female participation in farming activities is at the decision making level i.e. crop selection etc. however, they are not involved in any labor activities.
- Females are well aware of the crops and the land holding by them and are active in decision making regarding the sale & purchase of land.
- The beneficiary has livestock including a buffalo, cow and few goats.
- The farmer has no hired any permanent labors for farming activities, however he hires on daily wages on need basis
- Female participation in farming activities was at the level of decision making for crop selection etc., however, they were not involved in any labor activities.
- Females are well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase or tenancy condition etc.

iii) **Field Visit to WST of Mr. Muhammad Humayaun Shehzad, at Thatta Khalil, District Rawalpindi, Punjab, on 23rd June 2022**

Date	23-06-2022
Scheme	Water Storage tank
Farmer Name	Muhammad Humayoun Shehzad
Name of village:	Thatta Khalil
WST Owner:	Muhammad Hamayun
District:	Texila
Province	Punjab
Source of irrigation:	Bore
Type of water Storage Tank:	Square
Length and width of the WST:	25/25
Command area of watercourse:	4.625 acre
No of beneficiaries:	1
Equity in water distribution increased	<i>No Problems related to Equity in Water Distribution.</i>
Reduction in water disputes/thefts	<i>No problems related to water theft</i>



3.1.1 Regular Monitoring / Field Visits by Zonal Office KP

During the reporting period ME&IE consultants of KP Zone carried out different in-house activities as well as monitoring of the interventions in the field.

Two field teams were deputed, one each to the southern and the second to central zone for monitoring and baseline survey of the water courses and water storage tanks from the sample districts.

Moreover, digitally close coordination was made with the Project coordinator of NPIWC-II, and other District Directors of OFWM Department KP for acquiring the required data. The data pertained to the schemes of WCs and WSTs targets as per PC-1, targets achieved and other relevant information for the progress sheet 2022.

Following Interventions were visited / monitored by the KP Field teams during the reporting month:

Name of District	Team	Scheme Type		Total
		Water Course	Water Storage Tank	
Nowshera	Team – 1	07	04	11
D.I.Khan	Team - 2	08	04	12
Total		15	08	23

Detail of field visits of interventions by Team-1.

i) Field Visit to Watercourse, Zahir Shah, Umaray Kaly, Nowshera, KP, on 23rd June 2022

Name of Watercourse	Zahir Shah TWWC
Type of watercourse	PCPS

Category of water course	Regular (New)
Culturable Command Area (CCA) Acres	12 Acres
Coordinates	Long:33.57044087 Lat: 72.5508767
Total Length of Watercourse	596 m
Lining Length of Watercourse	298 m
No. of beneficiaries	1
District & The	Nowshera
Village	Umaray Kaly
Cropping pattern Rabi and Kharif	Rabi: Wheat Kharif: Maize
Water Logging & Salinity	Nil
Designed Discharge	Lps:10
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	21/12/2021
Financial Year	2021-22

Observations Findings / of ME&IE Team:

- The only crop on this land was orange only. Wheat production started last year after the improvement of water course however the farmer is preparing the land for maize crop for the coming season.
- There was only 1 beneficiary on the water course but according to FCR the number of beneficiaries are 8. There is properly managed WUA, therefore, there was no meeting of WUA during the last year.

ii) Field Visit to Watercourse, Faidd Gul, in Maraji, Nowshera, KP, on 27th June 2022

Name of Watercourse	Faidd Gul TWWC
Type of watercourse	PVC 4"
Category of water course	Regular (New)

Culturable Command Area (CCA) Acres	6 Acres
Coordinates	Long: 33.919866 Lat: 71.978475
Total Length of Watercourse	800 m
Lining Length of Watercourse	400 m
No. of beneficiaries	4
District & The	Nowshera
Village	Mara j i
Cropping pattern Rabi and Kharif	Rabi: Wheat, Oat Kharif: Oat
Water Logging & Salinity	Nil
Designed Discharge	Lps: 10
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	23/2/2022
Financial Year	2021-22
Status	Complete

Category of water course	Regular (New)
Culturable Command Area (CCA) Acres	40 Acres
Coordinates	Long: 34.08962 Lat: 71.96
Total Length of Watercourse	1170 m
Lining Length of Watercourse	582 m
No. of beneficiaries	15
District & Tehsil	Nowshera
Village	Bahram Kaly
Cropping pattern Rabi and Kharif	Rabi: Wheat Kharif: Maize
Water Logging & Salinity	Nil
Warabandi System	N/A
Designed Discharge	Lps: 35
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	21/12/2021
Financial Year	2021-22
Status	Complete

Observations Findings / of ME&IE Team:

- Total numbers of beneficiaries are 4 and they are cousins. They didn't divide the land, all work in same land and distribute the yield among them.
- It was noted that there was conflict in completion date of WC as the completion date on the FCR is 9 Jun 2022 while team was by the ONFWM engineer (Mr Malik Naeem) that the WC was completed in Apr 2022 and that the date on the FCR is incorrect.
- Total CCA mentioned in Feasibility is 14 Acre but according to farmer total land is 6 Acre.

iii) Field Visit to Watercourse of Kashif Rafique, Bahram Kaly, Nowshera, KP, on 24th June 2022

Name of Watercourse	Kashif Rafique TWWC
Type of watercourse	PCPS

Observations Findings / of ME&IE Team:

- The farmer has a very big dairy form of 2800 cows in front of the water course. The farmer uses total land to grow fodder for these cows.
- According to ONFWM there are 15 beneficiaries but in actual Mr. Kashif Rafique is the only beneficiary on site.

iv) Field Visit to Water Storage Tank, Irshad Ali at Jahangira, Nowshera, KP, on 23rd June 2022

Name of Water Storage Tank	Irshad Ali WST
Type of water Storage Tank	Square
Category of water	Regular (New)
Culturable Command Area (CCA) Acres	6 Acres

Coordinates	
Size Of Water Storage Tank	Length 1 : 9.8m Width 1 :9.8m Depth: 1.36 Length 2 : 9.8m Width 2 :9.8m
No. of beneficiaries	10
District	Nowshera
Tehsil	Jahangira
Village	Umaray Kaly
Cropping pattern Rabi and Kharif	Rabi: Vegetables Kharif: Vegetables
Water Logging & Salinity	Nil
Designed Discharge	6 Lps
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	22/11/2021
Financial Year	2021-22
Sanctioned Cost	Rs. 420,000
Status	Complete

Observations Findings / of ME&IE Team:

Main crops of the farmer are vegetables. According to the farmer vegetables production increased by 25-30% after the WST

v) Field Visit to Water Storage Tank, Zia Ullah at Manki Shareef, Nowshera, KP, on 27th June 2022

Name of Water Storage Tank	Zia Ullah WST
Type of water Storage Tank	Square
Category of water	Regular (New)
Culturable Command Area (CCA) Acres	17 Acre
Coordinates	
Size Of Water Storage Tank	Length 1 : 9.8m Width 1 :9.8m Depth: 1.36 Length 2 : 9.8m Width 2 :9.8m
No. of beneficiaries	1
District & The	Nowshera

Village	Manki Shareef
Cropping pattern Rabi and Kharif	Rabi: Wheat Kharif: Maize
Water Logging & Salinity	Nil
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	21/12/2021
Financial Year	2021-22
Sanctioned Cost	Rs.420,000
Status	Complete

Observations Findings / of ME&IE Team:

- Initially there were 1200 plant of lemon and some orange plants on the land. The farmer has planted further 2000 lemon plants after the water course improvements.
- There are also 2300 orange plants but the orange production not started yet.
- According to FCR number of beneficiaries are 10 but in actual there is only 1 beneficiary. No farming activities by females at all.
- Approved size of the WST is 32 feet but actual size our team measured is 45 feet. On questioning this the ONFWM engineer told our team that the farmer wanted to increase the size of WST and that the farmer spent his own money for the extra 13 feet space.

vi) Field Visit to Water Storage Tank, Abdullah at Ghanderi, Nowshera, KP, on 24th June 2022

Name of Water Storage Tank	Abdullah WST
Type of water Storage Tank	Square
Category of water	Regular (New)
Culturable Command Area (CCA) Acres	5.5 Acre
Coordinates	
Size Of Water Storage Tank	Length 1 : 9.8m Width 1 :9.8m Depth: 1.36 Length 2 : 9.8m Width 2 :9.8m
No. of beneficiaries	7

District & The Village	Nowshera Ghanderi
Cropping pattern Rabi and Kharif	Rabi: Wheat, sugarcane, Vegetable Kharif: Maize
Water Logging & Salinity	Nil
Designed Discharge	6 LPS
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	27/2/2021
Financial Year	2021-22
Sanctioned Cost	Rs.420,000
Status	Complete

Observations Findings / of ME&IE Team:

- The WST is maintained very well but back filling needed.
- Farmer has also kept fish in the WST. The farmer put 1200 fish initially bought @ Rs 4.0 per fish. Today each fish reached to 1 – 1.5 kg.
- The beneficiaries in the file are 7 but actual beneficiary on ground is only

vii) Field Visit to Watercourse Shehzad Khan at Maraji, Nowshera, KP, on 28th June 2022

Name of Watercourse	Shehzad Khan TWWC
Type of watercourse	PCPS
Category of water course	Regular (New)
Culturable Command Area (CCA) Acres	6 Acres
Total Length of Watercourse	1300 m
Lining Length of Watercourse	579 m
No. of beneficiaries	1
District & Tehsil	Nowshera
Village	Maraji
Cropping pattern Rabi and Kharif	Rabi: Orange Kharif: Orange
Water Logging & Salinity	Nil
Designed Discharge	6 Lps:
Main Source of water	Tube well

Additional Source of water	Nil
Date of Technical Sanction	23 Feb 2022
Financial Year	2021-22
Status	Complete

Observations Findings / of ME&IE Team:

- The watercourse under construction and is not completed yet. The only crop is orange.
- The orange crop is almost 30 years old.
- WUA formed as a formality. There was no meeting of WUA during the last year

viii) Field Visit to Watercourse Khadim Ali, at Manki Sharif, Nowshera, KP, on 28th June 2022

Name of Watercourse	Khadim Ali TWWC
Type of watercourse	PCPS
Category of water course	Regular (New)
Culturable Command Area (CCA) Acres	12 Acres
Total Length of Watercourse	1500 m
Lining Length of Watercourse	700 m
No. of beneficiaries	1
District & Tehsil	Nowshera
Village	Manki Sharif
Cropping pattern Rabi and Kharif	Rabi: Orange Kharif: Orange
Water Logging & Salinity	Nil
Designed Discharge	6 Lps:
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	9 Apr 2022
Financial Year	2021-22
Status	Complete

Observations Findings / of ME&IE Team:

- The construction of water course is in progress.
- The only crop is orange.
- The water source is tube well.
- The scheme is approved for a single person. WUA list is in the file but it is not functional.

- The farmer also cultivates wheat on 5 acres of orchard land.
- WUA is existing as according to farmer there were 3-4 WUA meeting during the last year.

Observations / Findings of ME&IE Team:

ix) Field Visit to Watercourse Afraz Khan, at Bahram Kaly, Nowshera, KP, on 28th June 2022

Name of Watercourse	Afraz Khan TWWC
Type of watercourse	PCPS
Category of water course	Regular (New)
Culturable Command Area (CCA) Acres	10 Acres
Coordinates	Long: 33.97986 Lat: 72.0755
Total Length of Watercourse	1210 m
Lining Length of Watercourse	605 m
No. of beneficiaries	1
District & Tehsil	Nowshera
Village	Bahram Kaly
Cropping pattern Rabi and Kharif	Rabi: Wheat Kharif: Orange
Water Logging & Salinity	Nil
Warabandi System	N/A
Designed Discharge	Lps: 6
Main Source of water	Tube well
Additional Source of water	Nil
Date of Technical Sanction	9 Apr 2022
Financial Year	2021-22
Status	Complete

Observations / Findings of ME&IE Team:

- This is an ongoing scheme and work is in progress.
- There are 900 orange plants on 10 acres.

x) Field Visit to Watercourse Malik Habib Ullah, at Qazi Khokaer, D.I. Khan on 27th June 2022

Name of Watercourse/WST	Malik Habib Ullah TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acres	13.41
Coordinates	32.0208515 71.0141491
Sanctioned Length of Watercourse	540
Measured Length of Watercourse	620
No. of beneficiaries	12
District	D.I.Khan
Tehsil	Pahar Pur
Village	Qazi Koker
Cropping pattern Rabi and Kharif	Rabi: Wheat , Kharif: Maize, Beet Sugar Cane
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	32 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	09/11/2020
Sanctioned Cost	Rs: 824,517
Demographic information	
Name	Habib Ullah
Age	50
Family size	12
Education	0

Tenurial status	Owner
Area owned	13.41
Cultivable land	11
Fallow land	2.5

Observations / Findings of ME&IE Team:

- Water user association was formed but is not functional and there was not record of meeting and problem solving.
- The former was owner of the land and they prepared land in Kachha of Indus river side. According to former water was not reaching till end before construction of WC. Now he is getting water at tail reach.
- Former and WUA was unaware from the actual coast of scheme and the department take sign on blank check.
- Females were neither member of water user association nor actively involved in farm activities. However, they are involved in farm activities during harvesting season only.
- Majority of females were working as Housewives and supporting their family males in farm activities; like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children.
- Female folk of farm households are also engaged in making Handicrafts, embroidery works and stitching etc.

xi) Field Visit to Watercourse Abbas, at Yarik, D.I. Khan on 22nd June 2022

Name of Watercourse/WST	Abbas TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acres	10
Coordinates	32.0945329 70.812669
Sanctioned Length of Watercourse	453
Measured Length of Watercourse	453
No. of beneficiaries	11

District	D.I.Khan
Tehsil	D.I.Khan
Village	Yarik
Cropping pattern Rabi and Kharif	Rabi: Wheat ,Grain Kharif: Maize,Millet
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	16 LPS
Main Source of water	Tube Well
Additional Source of water	Barani & Rodh Kohi
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,517
Demographic information	
Name	Abass
Age	57
Family size	11
Education	0
Tenurial status	Owner
Area owned	16
Cultivable land	10
Fallow land	6

Observations / Findings of ME&IE Team:

- There are two beneficiaries of the watercourse, Mr. Abbas and Mr. Mati Ullah.
- Water user association was formed but is not functional and just a formality. There is no record of meetings and problem solving
- The total cost of the scheme was RS. 940,569 out which material cost was RS. 705,426 and farmer shared in land RS 235,142. First installment was released RS 329,695 from the financial years 2021-2022 while 2nd installment is still pending which will be released in 2021-2022.
- According to FCR from material cost PCPS 498 demanding while actually 516 segment was on ground where there was a difference of 18 number of segments.

- The farmer (Mr. Abass) was not willing to provide gender related information regarding their female due to cultural constrain.
- Female are not the part of water user association and are not actively involved in farm activities. However, they are rarely involved in decision making regarding farm activities. Majority of female are working as housewives while supporting their family, like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children.

Name	Ghulam Rabbani
Age	49
Family size	26
Education	Matric
Tenurial status	Owner
Area owned	25
Cultivable land	23
Fallow land	2

xii) **Field Visit to Watercourse Ghulam Rabbani, at Rodi Khel, D.I. Khan on 28th June 2022**

Name of Watercourse/WST	Ghulam Rabbani TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acers	25
Coordinates	32.0701579 70.8054826
Sanctioned Length of Watercourse	528
Measured Length of Watercourse	528
No. of beneficiaries	12
District	D.I.Khan
Tehsil	Paharpur
Village	Rodi Khel
Cropping pattern Rabi and Kharif	Rabi: Wheat ,Grain Kharif: Maize,Millet
Water Logging & Salinity	Yes
Warabandi System	No
Designed Discharge	18 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,742
Demographic information	

Observations / Findings of ME&IE Team:

- Water user association was formed and is functional up to some extent. However, there is no record of meetings and problem solving by WUA.
- The farmers are cooperative with each other in farming issues. The total cost of the scheme was RS 824,742. First installment of 40% was released RS 329,695 from the financial years 2021-2022 while 2nd installment is still pending which will be released in 2022-2023.
- There is no female member of WUA. Females are not actively involved in farming activities. They are rarely involved in decision making regarding farm related activities.
- Majority of females are working as housewives while supporting their family in keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children.
- Female take interest in handicraft and stitching.

xiii) **Field Visit to Watercourse Sabir Hussain, at Sheik Rajo, D.I. Khan on 24th June 2022**

Name of Watercourse/WST	Sabir Hussain TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acers	7.625
Coordinates	31.758583 70.8944304
Sanctioned Length of Watercourse	442

Measured Length of Watercourse	431
No. of beneficiaries	10
District	D.I.Khan
Tehsil	D.I.Khan
Village	Sheikh Rajo
Cropping pattern Rabi and Kharif	Rabi: Wheat , Kharif: Maize,
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	18 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,517
Demographic information	
Name	Sabir Hussain
Age	50
Family size	5
Education	Middle
Tenurial status	Owner
Area owned	7.6
Cultivable land	6
Fallow land	1.6

Observations / Findings of ME&IE Team:

- Water user association was formed but is not functional.
- There was no record of meetings and problem solving by WUA.
- The former Mr. Sabir Hussain is the only beneficiary of WC. He is owner of the land, prepared in Kachha of Indus river side.
- According to former water did not reach at tail reach before construction of WC. However, now he is getting water at tail reach also. Now my water reached till end.
- The condition of WC is not good as no proper maintenance of is not carried out. Backfilling

is not done properly and vegetation is not removed properly.

- WUA is not taking care of the watercourse.
- Females are not member of WUA and not actively involved in farming activities.
- Majority of females are working as housewives while supporting their family in keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children.
- Female take interest in handicraft and stitching.

xiv) Field Visit to Watercourse Allah Dad, at Sheikh Rajo, D.I. Khan on 24th June 2022

Name of Watercourse/WST	Allah Dad TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acers	19.13
Coordinates	32.0290014 71.0167323
Sanctioned Length of Watercourse	440
Measured Length of Watercourse	431
No. of beneficiaries	10
District	D.I. Khan
Tehsil	Pahar Pur
Village	Qazi Koker
Cropping pattern Rabi and Kharif	Rabi: Wheat , Kharif: Maize, Beet Sugar Cane
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	26 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	09/11/2020
Sanctioned Cost	Rs: 824,517
Demographic information	

Name	Allah Dad
Age	63
Family size	12
Education	Middle
Tenurial status	Owner
Area owned	19.12
Cultivable land	16.63
Fallow land	2.5

Observations / Findings of ME&IE Team:

- Water user association was formed but not functional.
- There was not record of meetings and problem solving by WUA.
- The former was owner of the land and he prepared land in Kachha of Indus river side.
- According to former our water was not reaching till end before construction of WC. Now my water reached till end.
- Females were not members of water user association and were not directly involved in farm practices. However, they took part in crop harvesting both in Rabi and Kharif season. Majority of female working as House Wife while supporting their family male like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children. Females were confined to household activities and Handicraft and stitching activities.

Measured Length of Watercourse	480
No. of beneficiaries	12
District	D.I.Khan
Tehsil	D.I.Khan
Village	Sheikh Rajo
Cropping pattern Rabi and Kharif	Rabi: Wheat , Kharif: Maize, Barly
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	14 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	09/11/2020
Sanctioned Cost	Rs: 420,000
Demographic information	
Name	Muhammad Imran
Age	40
Family size	12
Education	Bachelor
Tenurial status	Tenant
Area owned	0
Cultivable land	6
Fallow land	2

xv) Field Visit to Watercourse Ijaz Ud Din, at Sheikh Rajo, D.I. Khan, KP, on 25th June 2022

Name of Watercourse/WST	Ijaz Ud Din WC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acres	12.5
Coordinates	31.7621304 70.8913902
Sanctioned Length of Watercourse	404

Observations / Findings of ME&IE Team:

- Water user association was formed but not functional. Record of water user association of meeting and problem solving was not found.
- The former was tenant. According to former our water was not reaching till end before construction of WC. Now my water reached till end.
- No female was found to be a member of water user association and was not actively involved in farm activities. Females were only involved in harvesting season. Majority of females working as House Wife and supporting their family male like keeping livestock, milking

animal, food preparation, washing clothes and caring of their family elders and children. Female of formers associated to Handicraft and stitching.

xvi) Field Visit to Watercourse, Saif Ur Rehman, at Dhap Chabak, D.I. Khan, KP, on 23rd June 2022

Name of Watercourse/WST	Saif Ur Rehman TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acres	20.25
Coordinates	31.7621304 70.8913902
Sanctioned Length of Watercourse	450
Measured Length of Watercourse	451
No. of beneficiaries	10
District	D.I.Khan
Tehsil	D.I.Khan
Village	Dhap Chabak
Cropping pattern Rabi and Kharif	Rabi: Wheat, Kharif: Maize, Sugar Cane
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	22 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,517
Demographic information	
Name	Saif Ur Rehman
Age	53
Family size	12
Education	Middle
Tenurial status	Owner
Area owned	20.25

Cultivable land	19
Fallow land	1.25

Observations / Findings of ME&IE Team:

- Water user association was formed but not functional. Record of water user association of meeting and problem solving was not found.
- The former was owner of the land and they prepared land in Kachha of Indus river side. According to former our water was not reaching till end before construction of WC. Now my water reached till end. Forming able him to do business of agriculture products and fuel agency in the land where Water Course was installed.
- Female involvement in farm practices was not significant. However, during crop harvesting they were found participating in harvesting. No female was member of water user association. Majority of female working as House Wife while supporting their family male like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children. Female of formers associated to Handicraft and stitching.

xvii) Field Visit to Watercourse, Ghulam Rabbani, at Rodi Khel, D.I. Khan, KP, on 28th June 2022

Name of Watercourse/WST	Ghulam Rabbani TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acres	25
Coordinates	32.0701579 70.8054826
Sanctioned Length of Watercourse	528
Measured Length of Watercourse	528
No. of beneficiaries	12
District	D.I.Khan
Tehsil	Paharpur
Village	Rodi Khel

Cropping pattern Rabi and Kharif	Rabi: Wheat ,Grain Kharif: Maize, Barly
Water Logging & Salinity	Yes
Warabandi System	No
Designed Discharge	18 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,742
Demographic information	
Name	Ghulam Rabbani
Age	49
Family size	26
Education	Matric
Tenurial status	Owner
Area owned	25
Cultivable land	23
Fallow land	2

xviii) Field Visit to Watercourse, Malik Habibullah, at Qazi Koker, D.I. Khan, KP, on 27th June 2022

Name of Watercourse/WST	Malik Habib Ullah TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acers	13.41
Coordinates	32.0208515 71.0141491
Sanctioned Length of Watercourse	540
Measured Length of Watercourse	620
No. of beneficiaries	12
District	D.I.Khan
Tehsil	Pahar Pur
Village	Qazi Koker
Cropping pattern Rabi and Kharif	Rabi: Wheat , Kharif: Maize, Beet Sugar Cane
Water Logging & Salinity	No
Warabandi System	No
Designed Discharge	32 LPS
Main Source of water	Tube Well
Additional Source of water	Barani
Date of Technical Sanction	09/11/2020
Sanctioned Cost	Rs: 824,517
Demographic information	
Name	Habib Ullah
Age	50
Family size	12
Education	0
Tenurial status	Owner
Area owned	13.41
Cultivable land	11
Fallow land	2.5

Observations / Findings of ME&IE Team:

- Water user association was formed and functional up to some extent. Record of water user association of meeting and problem solving was not found. The formers were cooperative with one another.
- The total cost of the scheme was RS 824,742. First installment of 40% was released RS 329,695 from the financial years 2021-2022 while 2nd installment is still pending which will be released in 2022-2023.
- No female was part of water user association and was not actively involved in farming activities. They were rarely involved in decision making regarding forming related activities. Majority of female working as House Wife while supporting their family male like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children. Female of formers associated to Handicraft and stitching.

Observations / Findings of ME&IE Team:

- Water user association was formed but not functional. Record of water user association of meeting and problem solving was not found. The former was owner of the land and they prepared land in Kachha of Indus river side. According to former our water was not reaching till end before construction of WC. Now my water reached till end.
- Former and WUA was unaware from the actual coast of scheme and the department take sign on blank check.
- Females' involvement in farm activity was confined to household boundaries. These activities include; crop produce cleaning, animal watering, animals shed cleaning, milking, taking of meals to the fields for the males etc. However, they helped their males in crop harvesting.

Main Source of water	Tube Well
Additional Source of water	Barani & Rodh Kohi
Date of Technical Sanction	23/12/2021
Sanctioned Cost	Rs: 824,742
Demographic information	
Name	Sana Ullah
Age	47
Family size	15
Education	Bachelor
Tenurial status	Owner
Area owned	6.25
Cultivable land	5
Fallow land	1.25

xix) Field Visit to Watercourse, Sana Ullah, at Yarik, D.I. Khan, KP, on 28th June 2022

Name of Watercourse/WST	Sana Ullah TWWC
Type of watercourse/WST	PCPS
Category of water course	Tube Well
Culturable Command Area (CCA) Acers	60
Coordinates	32.0971518 70.7768866
Sanctioned Length of Watercourse	532
Measured Length of Watercourse	532
No. of beneficiaries	10
District	D.I.Khan
Tehsil	D.I.Khan
Village	Yarik
Cropping pattern Rabi and Kharif	Rabi: Wheat ,Grain Kharif: Maize, Millet
Water Logging & Salinity	Yes
Warabandi System	No
Designed Discharge	16 LPS

Observations / Findings of ME&IE Team:

- Water user association was formed and was functional up to some extent. Record of water user association of meeting and problem solving was not found.
- The formers were cooperative with one another. The total cost of the scheme was RS 824,742. First installment of 40% was released RS 329,695 from the financial years 2021-2022 while 2nd installment is still pending which will be released in 2021-2022.
- Females' involvement was very small in farm practices. None of the female was found as member of the Water User Association or involved in decision making regarding farm activities. Majority of female working as House Wife while supporting their family male like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children. Females have no role in farming except animal rearing at home. Some of the females are associated to Handicraft and stitching.
- Female was not the part of water user association and was not actively involved in forming activities. Female are only involved during harvesting session. Majority of female working as House Wife while supporting their family male like keeping livestock, milking

animal, food preparation, washing clothes and caring of their family elders and children. Female of formers associated to Handicraft and stitching.

- Female involved in harvesting season in farming.
- Female was not the part of water user association and was not actively involved in forming activities. They are rarely involved in decision making regarding forming related activities. Majority of female working as House Wife while supporting their family male like keeping livestock, milking animal, food preparation, washing clothes and caring of their family elders and children. Female of formers associated to Handicraft and stitching.

3.1.1.1 Follow-up of the Data Collection from OFWM Department

The ICT team has trained the officials of the OFWM Department on direct entry to the Dashboard. Now they have started entering the data of WCs and WSTs Schemes directly to the Dashboard and the KP ICT team regularly monitoring this process. Where there is any discrepancy find the ICT team point out that to the OFWM Department and they make correction accordingly. Moreover, we keep close coordination about the progress of data entry to the Dashboard by the OFWM Department.

3.1.2 Regular Monitoring / Field Visits by Zonal Office Balochistan

The activities done by the Balochistan zone in the reporting month are listed below:

- Updated Progress of ME&IE Consultants, Balochistan Zone.
- Targets, Planned/Sample Size, Achieved.
- Critical Data of Baseline Phase-II
- General Profile / Observation of Baseline Phase – II activities
- Meetings
- Quarterly Work Plan (July to September 2022) – Balochistan Zone.

The ME&IE Consultants, Balochistan has monitored 17 Watercourses and 50 Water Storage Tanks in

“First Baseline Survey” activities. Total benchmarked sites in First Baseline Survey were 67 tills to date.

The works of F.Y. 2022-23 will be initiated after 30th June 2022 by OFWM. As soon as OFWM initiated the works on F.Y. 2022-23 and finalize the beneficiaries’ lists, the ME&IEC, Balochistan will start the “Second Baseline” activates accordingly. However, ME&IE Consultants are going to start “First Midline” activities from July 2022 accordingly.

The Balochistan field teams are also conducting regular monitoring of on-going / completed sites covering all financial years i.e. 2019-20, 2020-21 and 2021-22 on a monthly basis. The Balochistan field teams has so far monitored 75 watercourses and 65 Water Storage Tanks. Total 140 sites have been monitored till to date. Updated status of monitoring is given in Table 3.10 below.

Table 3.10: Updated Status of Field Visits of Balochistan Team

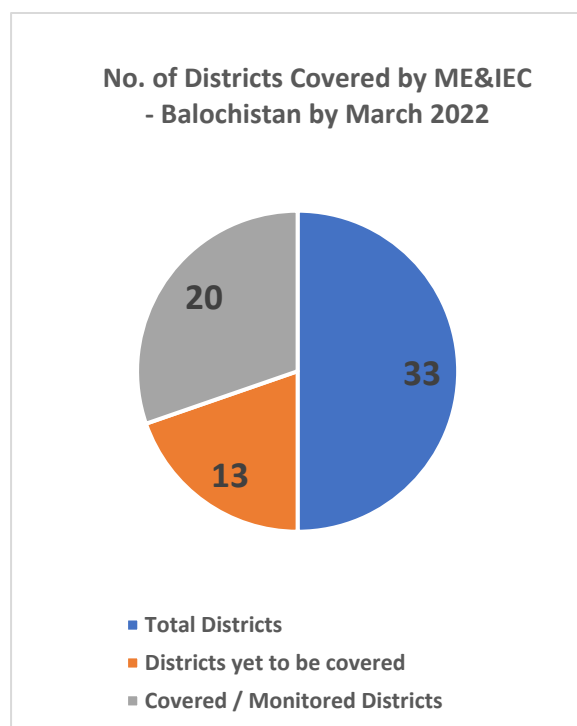
Sr. #	District	Baseline / Bench Marked		Regular Monitoring / Spot Checking		Total
		WC	WST	WC	WST	
1	Quetta	-	6	10	11	27
2	Pishin	-	7	4	13	24
3	Killa Abdullah	1	1	3	2	7
4	Ziarat	-	3	2	4	9
5	Mastung	1	5	6	7	19
6	Nushki	-	-	2	1	3
7	Sibi	-	-	1	3	4
8	Jhal Magsi	1	4	1	2	8
9	Kachhi	-	8	1	2	11
10	Naseerabad	2	4	12	5	23
11	Jaffarabad	-	-	4	1	5
12	Sohbatpur	7	-	11	-	18
13	Loralai	1	2	1	2	6
14	Duki	-	-	2	1	3
15	Zhob	-	-	3	2	5
16	Kila-Saifullah	2	1	4	1	8
17	Musa khel	-	-	1	1	2

18	Sherani	-	-	2	2	4
19	Khuzdar	1	6	1	1	9
20	Kalat	1	3	4	4	12
Sub-Total		17	50	75	65	207

3.1.2.1 Districts Coverage

There are 33 districts in Balochistan, 02 more districts have been notified but their administrative setup yet to be functional. The Balochistan Team has planned to cover all Balochistan as each district has different agriculture setup. All districts have different crops, vegetable, fruits based on their different climate and soil types. Some districts i.e., Quetta, Ziarat, Kalat, Muslim Bagh have extreme cold weather while some districts i.e., Sibi, Naseerabad, Jaffarabad, Sohbatpur, Lasbella lies in extreme hot weather. Due to this reason ME&IEC, Balochistan have planned to cover all Balochistan to give a complete picture of cropping pattern and its intensity, social and gender data, water situation, cost production etc. to make more authentic data.

Balochistan has monitored the sites of 20 districts of 33, the remaining 13 districts to be covered in upcoming months.



3.1.2.2 Targets, Sample Size and achieved Targets (BLS-I) - Balochistan

The targets as per PC-1 / Inception Report, targets given by the OFWM, Balochistan, Sampling size by ME&IE Consultants, Balochistan and achieved the targets of First Baseline Survey is given in Table 3.11, below.

Table 3.11: Targets achieved for Baseline Survey-I

Component	PC1 Targets (2 Years)	Total Targets received from OFWM, Balochistan (FY 2020-21 & 2021-22)	Sampling Size 3%	Achieved
WC	10,780	437	13	17
WST	2,510	1,629	49	50
Total	13,290	2,066	62	67

3.1.2.3 Critical Data of Baseline Survey Phase-II

As per monitoring criteria, the Balochistan, M&E teams prepared a list of shareholders / beneficiaries on the selected water courses and water storage tanks for sampling. These lists helped as sampling frames for the selection of farm households. For the sampling sites of watercourses all the listed shareholders/ beneficiaries were divided into three groups, i.e., head, middle and tail in Canal areas other districts belong to Barani areas where the source of water was canal. Hence, in canal areas two households were selected at random for each watercourse. Thus, a total 08 number of farmers were selected at random. However, during this selection, due consideration was given to the representation of farm sizes. Since the M&E teams have to visit each of the selected household possibly for three times (i.e., baseline, mid-term or end-term), the availability of the beneficiary/farmer at the command area/farm was also ensured with the support of OFWM staff while taking the data at site.

The ME&IEC Balochistan has taken the Baseline data of benchmarked sites. The critical data obtained during Baseline Survey Phase-II is being reported in following Tables. (Table 3.12 to 3.18).

Table 3.12: Education and Farming Experience:

S. #	Scheme/Farmer Name	Scheme	District	Education of Beneficiary (years)	Farming Experience (years)
1	Qudratullah	WST	Mastung	14	2
2	Sahib Khan	WST	Mastung	10	11
3	Abdul Baki	WST	Mastung	3	15
4	Aminullah	WST	Pishin	0	4
5	Abdul Qadir	WST	Pishin	10	20
6	Malak Habib	WST	Pishin	0	27
7	Syed Meer Muhammad	WST	Ziarat	12	40
8	Farid Khan / Haji Noor Muhammad	WST	Ziarat	0	40
9	Nasibullah	WST	Ziarat	10	40
10	Aman ullah	WST	Ziarat	5	50
11	Abdul Hameed	WST	Ziarat	8	30
12	Rahimdad	WC	Sohbat Pur	10	20
13	Mohammad Ali	WC	Sohbat Pur	10	11
14	Shafi Mohammad	WC	Sohbat Pur	12	10
15	Miss Taiba	WC	Sohbat Pur	10	30

Table 3.13: Area Owned/Command Area and Area Cultivated:

S. #	Scheme/Farmer Name	Scheme	District	Area Owned (acres)	Area Cultivated (acres)
1	Qudratullah	WST	Mastung	70	12
2	Sahib Khan	WST	Mastung	30	7
3	Abdul Baki	WST	Mastung	17	8
4	Aminullah	WST	Pishin	30	24
5	Abdul Qadir	WST	Pishin	25	25
6	Malak Habib	WST	Pishin	32	16
7	Syed Meer Muhammad	WST	Ziarat	10	5
8	Farid Khan / Haji Noor Muhammad	WST	Ziarat	22	18
9	Nasibullah	WST	Ziarat	5	3
10	Aman ullah	WST	Ziarat	120	50
11	Abdul Hameed	WST	Ziarat	45	15
12	Rahimdad	WC	Sohbat Pur	60	60
13	Mohammad Ali	WC	Sohbat Pur	70	60
14	Shafi Mohammad	WC	Sohbat Pur	140	120
15	Miss Taiba	WC	Sohbat Pur	180	165

Table 3.14: Cultivated Wasteland and Area Planted in both Seasons:

S. #	Scheme/Farmer Name	Scheme	District	Cultivable Wasteland (acres)	Area Planted in both seasons (acres)
1	Qudratullah	WST	Mastung	57	0
2	Sahib Khan	WST	Mastung	22	2
3	Abdul Baki	WST	Mastung	7	0
4	Aminullah	WST	Pishin	4	0
5	Abdul Qadir	WST	Pishin	0	20
6	Malak Habib	WST	Pishin	12	5
7	Syed Meer Muhammad	WST	Ziarat	2	5

S. #	Scheme/Farmer Name	Scheme	District	Cultivable Wasteland (acres)	Area Planted in both seasons (acres)
8	Farid Khan / Haji Noor Muhammad	WST	Ziarat	4	18
9	Nasibullah	WST	Ziarat	2	3
10	Aman ullah	WST	Ziarat	70	50
11	Abdul Hameed	WST	Ziarat	30	15
12	Rahimdad	WC	Sohbat Pur	0	60
13	Mohammad Ali	WC	Sohbat Pur	0	60
14	Shafi Mohammad	WC	Sohbat Pur	10	120
15	Miss Taiba	WC	Sohbat Pur	10	165

Table 3.15: Status of Water Table Level and Waterlogging or Salinity:

S. #	Scheme/Farmer Name	Scheme	District	Depth of Water Table (ft.)	Waterlogging or Salinity
1	Qudratullah	WST	Mastung	700	No
2	Sahib Khan	WST	Mastung	720	No
3	Abdul Baki	WST	Mastung	850	No
4	Aminullah	WST	Pishin	220	No
5	Abdul Qadir	WST	Pishin	750	No
6	Malak Habib	WST	Pishin	610	No
7	Syed Meer Muhammad	WST	Ziarat	600	No
8	Farid Khan / Haji Noor Muhammad	WST	Ziarat	750	No
9	Nasibullah	WST	Ziarat	700	No
10	Aman ullah	WST	Ziarat	400	No
11	Abdul Hameed	WST	Ziarat	400	No
12	Rahimdad	WC	Sohbat Pur	0	No
13	Mohammad Ali	WC	Sohbat Pur	0	No
14	Shafi Mohammad	WC	Sohbat Pur	0	No
15	Miss Taiba	WC	Sohbat Pur	0	No

Table 3.16: Permanent Hired Labour, Casual Hired Labour and Status of Livestock:

S. #	Scheme/Farmer Name	Scheme	District	Permanent Hired Labor	Casual Hired Labor	Total Livestock
1	Qudratullah	WST	Mastung	6	5	0
2	Sahib Khan	WST	Mastung	4	2	0
3	Abdul Baki	WST	Mastung	10	3	1
4	Aminullah	WST	Pishin	12	8	15
5	Abdul Qadir	WST	Pishin	18	0	9
6	Malak Habib	WST	Pishin	4	7	8
7	Syed Meer	WST	Ziarat	6	4	0

S. #	Scheme/ Farmer Name	Scheme	District	Permanent Hired Labor	Casual Hired Labor	Total Livestock
	Muhamad					
8	Farid Khan / Haji Noor Muhamad	WST	Ziarat	3	2	0
9	Nasibullah	WST	Ziarat	0	3	6
10	Amanullah	WST	Ziarat	7	4	23
11	Abdul Hameed	WST	Ziarat	3	4	30
12	Rahimda	WC	Sohbat Pur	3	0	24
13	Mohamad Ali	WC	Sohbat Pur	5	0	30
14	Shafi Mohamad	WC	Sohbat Pur	6	0	9
15	Miss Taiba	WC	Sohbat Pur	7	0	20

Table 3.17: Status of Water Users Associations and Female Participation:

S. #	Scheme/ Farmer Name	Scheme	District	WUA formed	WUA Functional	Female Participation in WUA
1	Qudratullah	WST	Mastung	Yes	No	No
2	Sahib Khan	WST	Mastung	Yes	No	No
3	Abdul Baki	WST	Mastung	Yes	No	No
4	Aminullah	WST	Pishin	Yes	No	No
5	Abdul Qadir	WST	Pishin	Yes	No	No
6	Malak Habib	WST	Pishin	Yes	No	No
7	Syed Meer Muhammad	WST	Ziarat	Yes	No	No
8	Farid Khan / Haji Noor Muhamad	WST	Ziarat	Yes	No	No
9	Nasibullah	WST	Ziarat	Yes	No	No
10	Amanullah	WST	Ziarat	Yes	No	No
11	Abdul Hameed	WST	Ziarat	Yes	No	No
12	Rahimda	WC	Sohbat Pur	Yes	No	No
13	Mohamad Ali	WC	Sohbat Pur	Yes	No	No
14	Shafi Mohamad	WC	Sohbat Pur	Yes	No	No
15	Miss Taiba	WC	Sohbat Pur	Yes	No	No

Table 3.18: Cropping Pattern and Cost of Production:

S. #	Scheme/Farmer Name	Scheme	District	Cropping Pattern	Cost of Production per Acre (PKR)
1	Qudratullah	WST	Mastung	Tomato, Grape	170,000 and 250,000
2	Abdul Qadir	WST	Pishin	Grape	190,000
3	Syed Meer Muhammad	WST	Ziarat	Tomato	120,000
4	Farid Khan / Haji Noor Muhammad	WST	Ziarat	Apple	645,000
5	Nasibullah	WST	Ziarat	Apple	725,000
6	Amanullah	WST	Ziarat	Grapes	196,000
7	Abdul Hameed	WST	Ziarat	Grapes	190,000

3.1.2.4 General Profile and Observations of Monitored Sites - Baseline Survey Phase -II

The ME&IEC refined the MTs in light of experiences gained in Baseline Survey Phase-I and Regular Monitoring / Spot Checking. As the agriculture practices are different in all provinces, hence it was decided that all provinces would give their opinion/feedback on refined MTs according to their respective zones. After having lengthy discussions over these MTs among Core Team Members and DTLs/Provincial Head all MTs got finalized in the first week of May 2022. The Second step was to upload these MTs into the ODK for data collection. To complete this task an online session was conducted by the ICT Department for Balochistan Zone on 10th May 2022 in which all indicators of MTs were discussed and finalized.

Sites Monitored / Visited during Visit of Dr. Usman Mustafa along with Team Leader, Rizwan Ahmed, Deputy Team Leader Balochistan.

Team – 1: Manzoor Ahmed Kasi, M&E Expert & Hamza H. Qureshi, M&E Officer.

3.1.2.5 Field Visits detail of Regular Monitoring / Sport Checking Baseline Survey, Phase-II - Balochistan Zone

i) Field Visit Date – 11th June, 2022

Scheme	Water Storage Tank
--------	--------------------

Farmer Name	Muhammad Akbar
Name of village:	New Mulkiyar
Union council:	Haji Abdul Qadir
Chairman WUA:	Muhammad Akbar
District:	Pishin
Tehsil	Pishin
Coordinates	N 30.67243 E 67.13001
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	60x60 ft.
Depth of WST:	4.75 ft.
Command area of water storage tank:	60 Acres
No of beneficiaries:	1
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	Yes
Reduction in water disputes/thefts	Not reported
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is pick up.	Yes
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer suggested that if such schemes are provided in future, it will help many farmers. Cultivated area increased 50%. Farmer has eliminated the Apple orchards in the past due to shortage of water, and now he informed us that he has planned to

	replant the Apples orchard
General Observations	<ul style="list-style-type: none"> The ME&IE team observed that there were 2 more WSTs side by side with this WST. They were interconnected through PVC pipes. As per OFWM Officials all these WSTs were constructed in the same financial year and their beneficiaries are brothers. The OFWM look in to the matter that side by side 03 WST are feasible.



Picture 3.49: View of WSTs



Picture 3.50: Group Photo of TL, DTL, FTI and M&E Officer of ME&IE Consultants along with Director OFWM, Balochistan, DDA OFWM, Pishin with his team and Beneficiary

ii) Field Visit Date – 11th June, 2022

Scheme:	Watercourse
Name of Farmer:	Syed Hakeem Shah

Name of village:	Pishin
Union council:	Killi Syedaan
Chairman WUA:	Syed Hakeem Shah
District:	Pishin
Tehsil	Pishin
Source of irrigation:	Tube Well
Total length of watercourse:	2000ft.
Estimated length of lining:	2000ft.
Command area of watercourse:	12 Acres
No of beneficiaries:	1
Quality of Work	Satisfactory

Overall feedback of Farmer / Beneficiary

- Due to this intervention Farmer was planning to increase his cultivated area up to 5 acres more

General Observations

- The farmer shifted his grape orchard from planking the plants to terracing system.
- Farmer was well aware about the cropping pattern of his district and also constructed a Cold Storage on his land.
- Water saving caused by this WC, he had shifted few acres of grape orchards to drip irrigation system.
- He further shifted his tunnel farming and grape nursery of improved variety on drip irrigation as well.



Picture 3.51: The TL is taking information from farmer and monitoring the activity.

3.1.2.6 Field Visits detail of Baseline Phase II Monitoring / Spot Checking – Balochistan Quetta and Khuzdar Zone

i) Field Visit Date – 22nd June, 2022

Scheme	Water Storage Tank
Farmer Name	Qudratullah Khan
Name of village:	Paringabad
Union council:	Paringabad
Chairman WUA:	Qudratullah Khan
District:	Mastung
Tehsil	Mastung
Coordinates	N 29.89778 E 66.86809
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	60x60ft.
Depth of WST:	4.75ft.
Command area of water storage tank:	12 Acres
No of beneficiaries:	1
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> The Farmer had only 4 acres of cultivable land prior to the provision of WST, after the construction of this WST, farmer has

	<p>increased cultivable land by 8 acres.</p> <ul style="list-style-type: none"> The Farmer told the team that he has 57 acres of cultivable wasteland. He was demanding more schemes so that he could further increase his cultivable land. According to him, the 25% share is too much and he was demanding that it should be reduced. He further suggested that with the provision of WST, WC or HEIS should also be provided to the farmer, so that they may maximize the benefits of scheme.
General Observations	<ul style="list-style-type: none"> Some cracks found in overflow structure. It would be harm for Scheme. Scheme board was not available. File of scheme was in completed; maximum required data were missing. The ME&IE Consultants suggested that awareness session regarding schemes benefits, role and responsibilities of the Farmers, Ownership and involvement of the Farmers may be conducted by the Department.



Picture 3.52:ME&IE team with OFWM staff and Beneficiary ii). View of overflow structure installed

ii) Field Visit Date – 22nd June, 2022

Scheme	Water Storage Tank
Farmer Name	Sahib Khan
Name of village:	Umer Dor
Union council:	Umer Dor
Chairman WUA:	Sahib Khan
District:	Mastung
Tehsil	Dasht
Coordinates	N 29.83140 E 66.99433
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	50.5x50.3ft.
Depth of WST:	4.75ft.
Command area of water storage tank:	7 Acres
No of beneficiaries:	1
Quality of work	Satisfactory
General Observations	<ul style="list-style-type: none"> Backfilling was not properly done

	<ul style="list-style-type: none"> • Scheme board was not available. • File of scheme was in completed. • The ME&IE Consultants suggested that awareness session regarding schemes benefits, role and responsibilities of the Farmers, Ownership and involvement of the Farmers may be conducted by the Department.
--	--



Picture 3.53: i). View of WST ii). ME&IE team with OFWM staff and Beneficiary

District:	Mastung
Tehsil	Khad Koocha
Coordinates	N 29.89780 E 66.86808
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	40.3x40.3ft.
Depth of WST:	4.75ft.
Command area of water storage tank:	8 Acres
No of beneficiaries:	1
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • Farmer was demanding a PVC pipe scheme because his command area was located very far from the WST and the land topography was not plain due to which a katcha WC is not feasible and cause of wasting of water. • Farmer was demanding that the government must help the farmers to provided solar energy system for their tube wells and also provide HEIS.
General Observations	<ul style="list-style-type: none"> • Back filling was done properly. • Outflow and overflow structures were not proper. • Scheme board was not available.

iii) Field Visit Date – 22nd June, 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Baki
Name of village:	Gaith
Union council:	Khad Koocha
Chairman WUA:	Abdul Baki



Picture 3.54: i). Back filling not done properly ii). ME&IE team with OFWM staff and Beneficiary

iv) Field Visit Date – 23rd June, 2022

Scheme	Water Storage Tank
Farmer Name	Aminullah Khan
Name of village:	Hikalzai
Union council:	Hikalzai
Chairman WUA:	Aminullah Khan
District:	Pishin
Tehsil	Pishin
Coordinates	N 30.65011 E 66.93002
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	60x60ft.
Depth of WST:	4.5ft.
Command area of water storage tank:	24 Acres
No of beneficiaries:	1
Quality of work	Satisfactory

General Observations

- The inside stairs away from outflow pipe.
- Scheme board was not available.
- The ME&IE Consultants suggested that awareness session regarding schemes benefits, role and responsibilities of the Farmers, Ownership and involvement of the Farmers may be conducted by the Department.



Picture 3.55: i). ME&IE team with OFWM staff and Beneficiary ii). View of WST

v) Field Visit Date – 23rd June, 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Qadir
Name of village:	Dub Khanzai
Union council:	Dub Khanzai

Chairman WUA:	Abdul Qadir
District:	Pishin
Tehsil	Pishin
Coordinates	N 30.72658 E 67.07180
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	49.6x51ft.
Depth of WST:	4.75ft.
Command area of water storage tank:	25 Acres
No of beneficiaries:	1
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was planning to increase his cultivable area and cropping pattern after the intervention of WST
General Observations	<ul style="list-style-type: none"> The inside stairs away from outflow pipe. The back filling of one side of WST was not done properly The farmer made a water pond adjacent the WST for animals. The ME&IE team advised the farmer to shift this pond on another place as it may collapse the WST. The ME&IE Consultants suggested that awareness session regarding schemes benefits, role and responsibilities of the Farmers, Ownership and involvement of the Farmers may be

	<p>conducted by the Department.</p> <ul style="list-style-type: none"> Scheme board was not available.
	
	
<p>Picture 3.56: i). View of WST and the pond of water for animals ii). ME&IE team with OFWM staff and Beneficiary, interviewing the beneficiary</p>	

vi) Field Visit Date – 23rd June, 2022

Scheme	Water Storage Tank
Farmer Name	Malak Habib
Name of village:	New Mulkiyar
Union council:	Sar Khanzai
Chairman WUA:	Malak Habib
District:	Pishin
Tehsil	Pishin
Coordinates	N 30.73039 E 67.11819
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	60.1x60ft.
Depth of WST:	4.75ft.
Command area of water storage tank:	16 Acres

No of beneficiaries:	1
Quality of work	Satisfactory
General Observations	<ul style="list-style-type: none"> The farmer was facing electricity shortage problems. Electricity is available 4 hours per day only. If the Government provide solar energy system to the farmers for their tube wells, it would help them a lot, especially in peak season. Scheme board was not available.



Picture 3.57: i). ME&IE team with OFWM staff and Beneficiary ii). View of WST

3.1.2.7 Field Visits detail of Baseline Phase II Monitoring / Spot Checking – Balochistan Naseerabad Zone

Team – 2: Monitored by Mohammad Tariq, M&E Expert and Saleem Ahmed, M&E Officer

i) Field Visit Date –23/06/22

Scheme:	Watercourse
Name of Farmer:	Rahimdad
Name of village:	Meher Ali
Union council:	Roopa

Chairman WUA:	Rahimdad
District:	Sohbat Pur
Tehsil	Faridabd
Coordinates	28.5494357 68.4139385
Source of irrigation:	Patfeder Canal
Total length of watercourse:	404 meters
Estimated length of lining:	404 meters
Command area of watercourse:	60 Acre
No of beneficiaries:	3
Cost of Construction of WC:	2,825,815/=
Quality of Work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> The farmer was satisfied and got benefit in order to savage appropriate water
General Observations	<ul style="list-style-type: none"> Files of schemes were not available.



Picture 3.58: Scheme Name Rahimdad UC Roopa

ii) Field Visit Date – 24/06/22

Scheme:	Watercourse
Name of Farmer:	Mohammad Ali
Name of village:	Mohammad Ali Khosa
Union council:	Ghuri
Chairman WUA:	Mohammad Ali
District:	Sohbat Pur
Tehsil	Faridabad

Coordinates	24.463126 68.432325
Source of irrigation:	Pat Feder Canal
Total length of watercourse:	393 meters
Estimated length of lining:	393 meters
Command area of watercourse:	100 Acre
No of beneficiaries:	06
Cost of Construction of WC:	2,825,815/=
Quality of Work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> The farmer was satisfied and got benefit in order to savage appropriate water
General Observations	<ul style="list-style-type: none"> Back filling was not done properly File of scheme was not available.



Picture 3.59: Interviewing of the farmers and view of WC, District Sohbatpur

Total length of watercourse:	341 meters
Estimated length of lining:	341 meters
Command area of watercourse:	70 Acre
No of beneficiaries:	05
Cost of Construction of WC:	2,825,815/=
Quality of Work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy with this intervention.
General Observations	<ul style="list-style-type: none"> Water curing was not properly done due to this some damages were noticed The Naccas were not properly installed



Picture 3.60: View of Watercourse Scheme

iii) Field Visit Date – 24/06/22

Scheme:	Watercourse
Name of Farmer:	Shafi Mohammad
Name of village:	Mohammad Ali Khosa
Union council:	Ghuri
Chairman WUA:	Shafi Mohammad
District:	Sohbat Pur
Tehsil	Faridabad
Coordinates	28.455896 68.438100
Source of irrigation:	Pat Feder Canal

iv) Field Visit Date –25/06/22

Scheme:	Watercourse
Name of Farmer:	Miss Taiba
Name of village:	Sakhi Sikander
Union council:	Dandha
Chairman WUA:	Miss Taiba
District:	Sohbat Pur
Tehsil	Sohbat Pur
Coordinates	28.6126967 68.4877354
Source of irrigation:	Pat Feder Canal
Total length of watercourse:	405 meters

Estimated length of lining:	394 meters
Command area of watercourse:	165 Acre
No of beneficiaries:	7
Cost of Construction of WC:	2,825,815/=
Quality of Work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy with this intervention.
General Observations	<ul style="list-style-type: none"> Water curing was not properly done due to this some damages were noticed



Picture 3.61: View of scheme, District Sohbatpur

Team – 3: Monitored by Naseeb Jan M&E Expert and Abdul Basit M&E Officer and Qaisar Khan.

i) Field Visit Date –27/06/2022

Scheme	Water Storage Tank
Farmer Name	Syed Amir Muhammad
Name of village:	Ibraimaan
Union council:	Kach
Chairman WUA:	Syed Amir Muhammad
District:	Ziarat
Tehsil	Ziarat
Coordinates	N 30.45417 E 67.30218
Source of irrigation:	Tube Well

Shape of water storage tank:	Square
Size of water storage tank:	40.3X40 ft.
Depth of WST:	4.6 ft.
Command area of water storage tank:	5 Acres
Quality of work	Unsatisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was satisfied with scheme and he was demanding PVC scheme.
General Observations	<ul style="list-style-type: none"> The farmer spent out 150,000/= on PVC from his own expenses aa motivated by the OFWM staff. Quality of plaster work was not good. Brick masonry work was not good, Back filling of one side was not done properly. Scheme board was not available at site. File of scheme was not available with OFWM staff. Gate volve was damaged.



Picture 3.62: View of WST, District Ziarat

ii) Field Visit Date –27/06/2022

Scheme	Water Storage Tank
Farmer Name	Farid Khan
Name of village:	Varchom
Union council:	Spezindai
Chairman WUA:	Noor Mohammad
District:	Ziarat
Tehsil	Ziarat
Coordinates	30.402763 67.327218
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50 x 50 ft
Depth of WST:	4.5 ft
Command area of water storage tank:	20 Acre
No of beneficiaries:	6
Starting date:	NA
Completion date:	NA
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was Satisfied
General Observations	<ul style="list-style-type: none"> File of site was not available with OFWM staff Scheme board was not available



Picture 3.63: View of WST, District Ziarat

iii) Field Visit Date –27/06/2022

Scheme	Water Storage Tank
Farmer Name	Naseeb Ullah
Name of village:	Lailghat
Union council:	Spazindai

Chairman WUA:	Naseeb Ullah
District:	Ziarat
Tehsil	Ziarat
Coordinates	30.5252439
Source of irrigation:	67.6465689
Shape of water storage tank:	Square
Size of water storage tank:	30 x 30 ft
Depth of WST:	4.5 ft
Command area of water storage tank:	5 Acre
No of beneficiaries:	4
Starting date:	NA
Completion date:	NA
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was Satisfied
General Observations	<ul style="list-style-type: none"> File of site was not available with OFWM staff Scheme board was not available



Picture 3.64: View of WST, District Ziarat

iv) Field Visit Date –28/06/2022

Scheme	Water Storage Tank
Farmer Name	Aman Ullah
Name of village:	Abdulzai
Union council:	Aghbarg
Chairman WUA:	Aman Ullah
District:	Quetta
Tehsil	Chiltan
Coordinates	30.1476093 66.7939709
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50 x 50 ft
Depth of WST:	4.73 ft
Command area of water storage tank:	50 Acre
No of beneficiaries:	5
Starting date:	9-3-2022
Completion date:	18-3-2022
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy with this intervention.
General Observations	<ul style="list-style-type: none"> File of scheme was not available with OFWM staff Back filling was not properly done. Sign board was not available at site.



Picture 3.65: View of WST, District Quetta

v) Field Visit Date –28/06/2022

Scheme	Water Storage Tank
Farmer Name	Abdul Hameed
Name of village:	HalimZai
Union council:	Aghbarg
Chairman WUA:	Abdus Salam
District:	Quetta
Tehsil	Chiltan
Coordinates	30.1818334 66.7791322
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	40 x 40 ft
Depth of WST:	4.11 ft
Command area of water storage tank:	10 Acre
No of beneficiaries:	4
Starting date:	16-3-2022
Completion date:	23-3-2022
Construction Cost of watercourse:	Not provided
Quality of work	Satisfactory
Overall feedback of Farmer / Beneficiary	Farmer was satisfied with this intervention.
General Observations	<ul style="list-style-type: none"> File of scheme was not provided. Sign board was displayed.



Picture 3.66: Me&IE Team Measuring WST, District Quetta

3.2 COORDINATION MEETINGS OF ME&IE CONSULTANTS

3.2.1 Meetings of ME&IE Consultants Punjab Zone with Stakeholders

It is one of the main components of field activities for ME&IE Consultants to meet and coordinate with stakeholders of the project especially the OFWM Field staff. The consultants were regularly in touch with field staff for getting information/data for the respective officer's area. During the month under review following meetings were held:

Date	01-06-2022
Venue	Assistant Director Agriculture OFWM Haroon Abad
Participants	
i. Mr. Mazhar Ilyas Assistant Director of Agriculture (OFWM) Haroon Abad	
ii. Mr. Muhammad Zubair Field Team In Charge Team-3	
iii. Mr. Misbah Ur Rehman Field Team Engineer	
iv. Mr. Umar Farooq Hammad Field Team Engineer	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Briefing of ME & IE Consultants on project activities. To review the progress of project in the respective area and basic data sampled interventions. Seek the cooperation/coordination of field staff 	



Picture 3.67: Had a Meeting with AD Agriculture (OFWM) Haroon Abad Mr. Mazhar Ilyas regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	03-06-2022
Venue	Assistant Director Agriculture OFWM Minchin Abad
Participants	
i. Mr. Fiaz Ahmad Assistant Director of Agriculture (OFWM) Minchin Abad	
ii. Mr. Muhammad Zubair Field Team In Charge	
iii. Mr. Misbah Ur Rehman Field Team Engineer	
iv. Mr. Umar Farooq Hammad Field Team Engineer	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Briefing of ME & IE Consultants on project activities. To review the progress of project in the respective area and basic data sampled interventions. Seek the cooperation/coordination of field staff 	



Picture 3.68: Had a Meeting with AD Agriculture (OFWM) Minchin Abad Fiaz Ahmad regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	04-06-2022
Venue	Assistant Director Agriculture OFWM Chistian
Participants	
i. Mr. Naeem Razzaq Assistant Director of Agriculture (OFWM) Chistian	
ii. Mr. Muhammad Zubair Field Team In Charge	
iii. Mr. Misbah Ur Rehman Field Team Engineer	
iv. Mr. Umar Farooq Hammad Field Team Engineer	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Briefing of ME & IE Consultants on project activities. To review the progress of project in the respective area and basic data sampled interventions. 	

- Seek the cooperation/coordination of field staff



Picture 3.69: Meeting with AD Agri. (OFWM) Chistian Naeem Razzaq regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	21-06-2022
Venue	Office of Deputy Director Agriculture (OFWM) Rawalpindi

Participants

- Mrs. Farkhanda Deputy Director OFWM Agri. Rawalpindi
- Ms. Syeda Sana Gull ME & IE Officer, Islamabad
- Ms. Hafiza Maryam Iqbal ME & IE Officers, Islamabad
- Ms. Abida Munir Social Gender and Specialist (Punjab)

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants in Rawalpindi Division
- Collection of basic data on WSTs and guideline for visiting sites of WSTs
- The OFWM office guided well and accompanied ME&IE consultants team in concerned sites during their visits



Picture 3.70: Meeting Mrs. Farkhanda Deputy Director OFWM Agri. Rawalpindi regarding the Baseline Survey / Monitoring / Impact Survey of WST

Date	15-06-2022
Venue	Deputy Director Agriculture OFWM Bhakkar

Participants

- Mr. Dr. Imtiaz Deputy Director of Agriculture (OFWM) Bhakkar
- Mr. Muhammad Zubair Field Team In Charge
- Mr. Misbah Ur Rehman Field Team Engineer
- Mr. Umar Farooq Hammad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities.
- To review the progress of project in the respective area and basic data sampled interventions.
- Seek the cooperation/coordination of field staff



Picture 3.71: Meeting with DD Agriculture (OFWM) Bhakkar Dr. Imtiaz regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	15-06-2022
Venue	Assistant Director Agriculture OFWM Bhakkar

Participants

- Mr. Shakeel Abbas Assistant Director of Agriculture (OFWM) Bhakkar
- Mr. Muhammad Zubair Field Team In Charge
- Mr. Misbah Ur Rehman Field Team Engineer
- Mr. Umar Farooq Hammad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities.
- To review the progress of project in the respective area and basic data sampled interventions.
- Seek the cooperation/coordination of field staff



Picture 3.72: Meeting with Assistant Director Agriculture (OFWM) Bhakkar Mr. Shakeel Abbas regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	17-06-2022
Venue	Assistant Director Agriculture OFWM Kaloor Kot

Participants

- Mr. Alam Sher Assistant Director of Agriculture (OFWM) Kaloor Kot
- Mr. Muhammad Zubair Field Team In Charge
- Mr. Misbah Ur Rehman Field Team Engineer
- Mr. Umar Farooq Hammad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities.
- To review the progress of project in the respective area and basic data sampled interventions.
- Seek the cooperation/coordination of field staff



Picture 3.73: Meeting with Assistant Director Agriculture (OFWM) Bhakkar Mr. Alam Sher regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

Date	18-06-2022
Venue	Assistant Director Agriculture OFWM Mankera

Participants

- Mr. Riaz Ahmad Kalasara Assistant Director of Agriculture (OFWM) Mankera
- Mr. Muhammad Zubair Field Team In Charge
- Mr. Misbah Ur Rehman Field Team Engineer
- Mr. Umar Farooq Hammad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities.
- To review the progress of project in the respective area and basic data sampled interventions.
- Seek the cooperation/coordination of field staff



Picture 3.74: Meeting with Assistant Director Agriculture (OFWM) Bhakkar Mr. Riaz Ahmad Kalasara regarding the Baseline Survey / Monitoring / Impact Survey of Watercourse / WST

3.2.2 Meetings of ME&IE Consultants Balochistan, Zone with Stakeholders

Date	10 th June 2022
Venue	OFWM, Agriculture Department, Rani Bagh, Sariab Road, Quetta

Participants

- Mr. Bashir Agha, Director, Water Management, Agriculture Department, Balochistan, Quetta
- Dr. Usman Mustafa, Team Leader, ME&IE Consultants, National Office, Islamabad.
- Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan.
- Mr. Manzoor Kasi, FTI/M&E Expert

Meeting Agenda/Points discussed:

- The role of ME&IE Consultants was discussed
- Updated progress of ME&IE Consultants shared by Team Lead.

- Finalize the field visit plan of District Pishin



Picture 3.75: ME&IE Consultants alongwith TLin Meeting with Mr. Bashir Agha, Deputy Director, Director Water Management in OFWM Office, Quetta.

Date	10 th June 2022
Venue	Project Consultants Office, Quetta
Participants	

- Dr. Usman Mustafa, Team Leader, ME&IE Consultants, National Office, Islamabad.
- Mr. Khalid Mehmood, DTL, Project Consultants, Balochistan
- Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan.
- Mr. Manzoor Kasi, FTI/M&E Expert

Meeting Agenda/Points discussed:

- Progress of project discussed
- Shared way of working and administrative setup both sides
- Project related problems/issues were discussed.
- Both consultants assured each other for their best cooperation at all times.



Picture 3.76: Meeting held with Mr. Khalid Mehmood, DTL, Project Consultants, NPIWC-II in his Office, Quetta.

Date	23 rd June, 2022
Venue	Office of the DDA OFWM, Pishin
Participants	
	i. Mr. Faizullah Shah, DDA OFWM, Pishin

- Mr. Naeem Tareen, WMO
- Mr. Imran Hassan, WMO
- Mr. Syed Usman Shah, Sub Engineer
- Mr. Syed Ahsanullah, Sub Engineer
- Mr. Manzoor Ahmed Kasi, M&EE/FTI
- Ms. Mah Gul Noor, M&EO
- Mr. Basit Ahmed, M&EO
- Mr. Hamza H. Qureshi, M&EO

Meeting Agenda/Points discussed:

- Shared field visit plan
- Discuss the issue of non-availability of scheme files.
- Discussed the sites related issues.



Picture 3.77: Meeting held in the office with DDA OFWM, Pishin and his Staff

Date	25 th June 2022
Venue	Office of Deputy Director, Sohbatpur

Participants

- Mr. Imdad Ali Khosa, Deputy Director, OFWM, Agriculture Department, District Sohbatpur
- Mr. Muhammad Tariq, Monitoring & Evaluation Expert, ME&IE Consultants, Balochistan
- Mr. Saleem Ahmed Abro, M&E Officer, ME&IE Consultants, Balochistan

Meeting Agenda/Points discussed:

- Sharing of Field Visit Plan with DDA (OFWM)
- Conduct Baseline Survey Phase II
- Discuss updated progress of National Program Improvement of Watercourses Project.
- Engagement of farmers/beneficiaries during field visits.



Picture 3.78: Meeting with DD, OFWM, Sohbatpur and Farmers/Beneficiaries

Date	28 th June 2022
Venue	Deputy Director Office Quetta
Participants	
i.	Noor Ahmad DD OFWM Quetta
ii.	Abdul Rehman Sub Engineer OFWM
iii.	Qari Basit Engineer OFWM
iv.	Manzoor Ahmad M&E Expert ME&IE Consulting
v.	Naseeb Jan M&E Expert ME&IE Consulting
vi.	Qaisar Khan M&E Officer ME&IE Consulting
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> DD appreciated ME&IE's efforts in pointing out mishaps, findings and observations on ground level. DD extended his full support in meeting out monitoring findings as pointed out on field level. He gave ME&IE Team his Sub Engineer to get to field. DD on behalf of DG OFWM strictly forbid ME&IE Team from planning monitoring visits in the end of month. 	



Picture 3.79: Meeting with Deputy Director, Quetta

3.3 INTERNAL MEETINGS OF ME&IE CONSULTANTS

Date	21 st June 2022
Venue	National Office Islamabad
Participants	
i.	Ch. Saifullah Ejaz, Authorized Representative of JV of G3 Consultants
ii.	Dr. Usman Mustafa, Team Leader
iii.	Dr. Fazali Hakeem Khattak, Team Leader WCBA KP
iv.	Mr. Muhammad Irfan, Director CSRD
v.	Dr. Ikram Saeed, Proposed new Deputy Team Leader ICT Zone
vi.	Mr. M. Yousaf Bhatti, Deputy Team Leader Punjab Zone
vii.	Dr. Humayoun Khan, Deputy Team Leader Khyber Pakhtunkhwa Zone
viii.	Mr. Rizwan Ahmed, Deputy Team Leader Balochistan Zone
ix.	Dr. M. Abdul Quddus Malik, Agri. Economist
x.	Dr. Mansib Ali, Irrigation Agronomist
xi.	Waseem Ahmed Masood, Financial Management Specialist
xii.	Madam Muniza Tarar, Social & Gender Specialist
xiii.	Shumail Mahmood, ICT Expert
xiv.	Mr. Muhammad Bilal, Admin & Finance Officer National Office Islamabad
xv.	Muhammad Amjad Shakeel, Project & Documents Controller
Meeting Agenda/Points discussed:	
<p>Meeting was chaired Ch. Saifullah Ejaz Authorized Representative of G3 Consultants. The Chair inaugurated the meeting and it started with recitation of the Holy Quran by Team Leader, Dr. Usman Mustafa.</p> <p>Team Leader briefed on the status of project activities and status of progress. Ch. Saifullah Ejaz emphasized on the project progress.</p> <p>Detailed discussions were held with each DTL and decision were taken on issues faced by them.</p>	



Picture 3.80: Joint Meeting of all DTLs, Chaired by Saifullah Ejaz Chaudhry, Authorized Representative of G3JV

Date / Day	Every Monday
Venue	Zoom Meeting
Participants	
i.	Dr. Usman Mustafa, Team Leader, ME&IE Consultants, National Office, Islamabad.
ii.	Dr. Muhammad Abdul Quddus, Agricultural Economist, Lahore Office.
iii.	Dr. Umar Farooq, Deputy Team Leader, ME&IE Consultants, Islamabad.
iv.	Dr. Humayun, Deputy Team Leader, ME&IE Consultants, KPK.
v.	Mr. Yousaf Bhatti, Deputy Team Leader, ME&IE Consultants, Punjab.
vi.	Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan.
vii.	Mr. Rizwan Saleem, IT Specialist
viii.	Ms. Muniza Tarrar Social & Gender Specialist
Meeting Agenda/Points discussed:	
Consultants conduct progress review meeting every Monday to discuss the following	
<ul style="list-style-type: none"> Sharing updated progress in tangible form by all DTLs Discuss issues faced by the ME&IE consultants related to field visits / monitoring Baseline Survey Phase-II 	

3.4 NATIONAL PROJECT COORDINATOR'S VISIT TO CONSULTANTS' ZONAL OFFICES

During the current month National Project Coordinator (NPC) Mr. Muhammad Asif Kakar visited zonal offices of ME&IE Consultants NPIWC-II. The schedule of visits was as under.

Zonal Office	Date of Visit
Zonal Officer Balochistan	9 th June 2022
Zonal Office Punjab	23 rd June 2022
National Office Islamabad	28 th June 2022

NPC visited consultants' Zonal Office as per above schedule and conducted meetings in all the office. NPC met all the staff members of zonal offices and discussed project progress and issues faced by Consultants & staff.

4th Meeting of BOM was also held on 28th June 2022, in NPC Office. After concluded BOM Meeting NPC visited consultants' National Office Islamabad, where a short meeting was held and NPC met all the office staff.

Minutes of all the Meetings held in Zonal office and in National Office Islamabad are attached as **Annex-E to Annex-H**.



Picture 3.81: NPC, Mr. Muhamad Asif Kakar in Meeting with ME&IE Consultants in Zonal Office Balochistan, Quetta on 9th June 2022



Picture 3.82: Group Photo of NPC, Mr. Muhamad Asif Kakar in Meeting with ME&IE Consultants in Zonal Office Balochistan, Quetta on 9th June 2022



Picture 3.83: Team Leader Dr. Usman Mustafa and DTL, Muhammad Yousaf Bhatti Welcomed NPC, Mr. Muhammad Asif Kakar, at Zonal Office, Lahore on 23 June 2022



Picture 3.84: Team Leader, Dr. Usman Mustafa Welcomed NPC, Mr. Muhammad Asif Kakar in National Office Islamabad on 28th June 2022



Picture 3.87: NPC in Meeting with ME&IE Consultants in National Office Islamabad, on 28th June 2022

3.5 CHANGE IN KEY STAFF OF ME&IE CONSULTANTS

Deputy Team Leader ICT Zone, Dr. Umar Farooq resigned on 10th June 2022.

To fill this position credentials of Dr. Ikram Saeed have been submitted vide letter No. NPIWC-II/ME&IE/NOISD/0622-0136 dated June 17, 2022, to NPC for approval.

Dr. Umar Farooq was given a farewell party in Consultants' National Office Islamabad



Picture 3.85: Director CSRD, Mr. Irfan & CEO EASE PAK Welcomed NPC, Mr. Muhammad Asif Kakar at National Office Islamabad, on 28th June 2022



Picture 3.86: NPC, Mr. Muhammad Asif Kakar, Deputy NPC, Mr. Saiful Islam, Deputy NPC Mr. Muhammad Naeem, Deputy National Coordinator, Dr. Tahmina Iqbal, in discussion with Team Leader Dr. Usman Mustafa and Director CSRD, Mr. Irfan, on 28th June 2022



Picture 3.88: Farewell Party for Dr. Umar Farooq DTL ICT Zone

3.6 ICT ASSIGNMENT

The ICT Team remained engaged in different activities related to the ME&IE assignment including development of Android based application, data collection for Dashboard and training of client staff on Dashboard / MIS for the project. Upto June 2022 activities completed by ICT Team are summarized below.

3.6.1 Development of Website of NPIWC-II

The development of Website for NPIWC Phase-II was started by the month of February 2021. The following activities have been completed: -

- Held meetings with the Stakeholders to identify the project website requirements
- Website layout structure prepared
- Design & Development of website completed.

Three number presentations delivered in Client office at various times. As per instructions of Client Revision/up-dation made each time. The development of the Website has been completed in June 2021. The Revision/up-dation of the Project website has been presented to NPC office and got approval on all changes. Currently all changes have been incorporated accordingly as per requirements of the Client.

The final Beta version was demonstrated to NPC in his office by August 2021 while the final version presented to NPC on 15 September 2021.

In compliance of the decision made during the 3rd PBOM meeting dated 9th November 2021, the project website was migrated to live server from demo and is currently publicly available on the following link:

<https://npiw2.org/>



The compliance of this milestone has been done.

3.6.2 Designing of Dashboard of Project Interventions

The designing/development of the MIS/GIS system followed the software engineering methods. Thus, user requirements elicitation, requirements analysis,

system design, system implementation and maintenance were done in a circular fashion. Thereafter, evaluation will be done to test the efficacy, effectiveness, and efficiency of the management information system in the real environment. In the system development, both structured system analysis, design, object-oriented analysis, and design approaches were used.

The GIS based MIS will provide the means of:

- Comprehensively tracking the project inputs and outputs, using mainly the set of key performance indicators outlined under each component at frequent intervals.
- Monitoring of project outcome indicators.
- Robustly analyzing the relevant ME&IE data.
- Reporting progress on an open-access and regular basis, to support knowledge sharing, greater transparency, and improved project governance.

It is proposed that the Management Information System (MIS) for NPIWC be implemented using a phased approach although due to Agile Software Development Methodology few activities will interrelate between phases. The following 2 phases are considered:

Phase-I – MIS Development

Requirement & GAP Analysis – (Completed)

The ME&IE Consultants performed Requirement Analysis to review the project processes. A thorough assessment of any existing IT infrastructure.

- Perform needs assessment of the current IT capacity of individual stakeholder's and identify any infrastructure gaps and recommend necessary upgrades in IT infrastructure.
- Identify hardware and network infrastructure requirements and specification at the core, access, and distribution layers along with endpoint
- Determine the technical parameters of the solution based on the following:
 - Network topology, diagrams, and specifications of hardware of the proposed solution
 - Bandwidth requirement based on the total number of anticipated users with a redundancy plan.

GIS Integrated MIS Development – (Completed & Delivered)

Based on the requirements gathered, develop an application framework that includes user management, access control, security, and workflow for publishing information. This application framework should be based on Modular Architecture to enable modules to be added in the future and be able to share data with other applications. Test the application framework with the real users and gather feedback on the system.

Based on the feedback received from the testing by the real users, finalize the web-based/ mobile-friendly application.

<https://pmis.npiw2.org/>



MIS / Android Application Deployment and Testing (Completed)

The ME&IE Consultant deployed the MIS at the designated web server. The ME&IE Consultant also conducted functional and operational testing. A User Acceptance Test (UAT) is to be carried out (either as part of the deployment or after).

The ICT Technology Team of ME&IE Consultants NPIWC-II has developed Customized Android Based Applications for data collection. Data entry in this application is done directly by the field monitoring teams of all the zonal offices and is uploaded in the MIS system. The data is being observed and monitored by the ICT team of ME&IE Consultants.

In this regard, customized Android Based Applications have been developed, tested, and installed to Small Dams and Irrigation staff of AJK, Water Management Staff of ICT zone and On-Farm Water Management Staff KP zones.

3.6.3 Data collection of interventions in MIS/GIS database

The activity regarding data collection of Interventions in MIS/GIS database is in progress as its on-going process. The Dashboard has been implemented in AJK, ICT, and KP zones and the progress of Interventions is live on the Dashboard application.

This activity completed in AJK & ICT in the months of September to October. While in KP the activity completed in the months of November 2021 to January 2022.

Balochistan zone the ICT team is facing problems in data collection because a lot of data is missing which was required by the ICT team for the Implementation of MIS Dashboard.

Meetings have been conducted with Technical Team of OFWM department Punjab chaired by the system analyst OFWM department Punjab. (Meeting Picture attached as Annex-F-1) During the meetings ICT Technology Specialist has briefed them on development of Monitoring Tools, Implementation methodology, Development of customized Android based Application, Development, and Implementation of MIS Dashboard of Dashboard. Later, MIS Dashboard and customized Android based application has been demonstrated to the Technical Team. However, due to the non-provision of data from the OFWM department, the implementation phase in Punjab Province has not started yet / very slow.

3.6.4 Implementation of MIS Dashboard

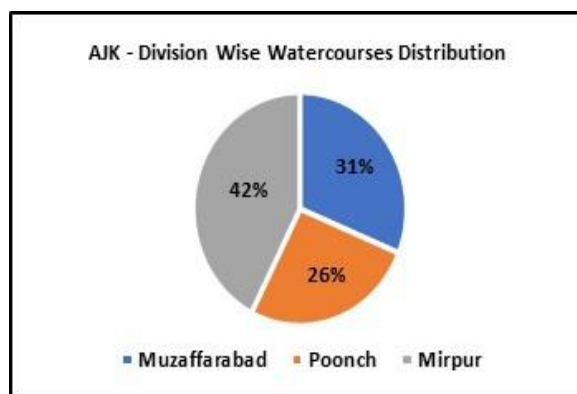
The Dashboard has been implemented in AJK, ICT and KP zones as detailed in table below:

Zone	Department	Date
AJK	Small Dam & Irrigation	November 4, 2021
ICT	Water Management	January 14, 2022
KP	On-Farm Water Management	March 11, 2022

The progress of Interventions is live on the Dashboard application.

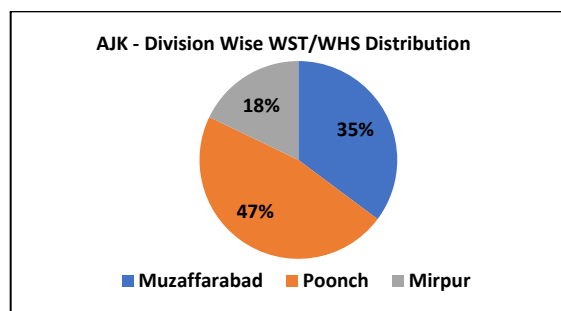
Division	2019-20	2020-21	2021-22	Overall
Muzaffarabad	32	94	52	178
Poonch	37	38	80	155
Mirpur	38	106	104	248
Overall	107	238	237	581

So far, Total **581** Watercourses data has been received from AJK zone and available live on GIS Dashboard. By which **255** Watercourses has been lined, **24** Watercourses Work Order Cancelled and remaining **302** watercourses are under progress on different levels like at 1st Milestone, at 2nd Milestone, at Work Order Issued Stage, and at Work Order Pending Stage (T.S Stage). Detailed Summary attached as **Annex-I**.



AJK Zone - WST/WSH Data Summary				
Division	2019-20	2020-21	2021-22	Overall
MZD	36	62	40	138
Poonch	15	42	127	184
Mirpur	2	15	53	70
Overall	53	119	220	392

Overall Water Storage Tank data submission is **392** Water Storage Tanks from which **178** WST has been completed and 102 are under progress. While **112** Water Storage Tanks Work Order Pending (T.S Stage). (Detailed Summary attached as **Annex-J**)



ICT Watercourse Data Summary	
Division	2020-21
ICT	20
Overall	20

ICT zone so far, only 20 watercourses data received on Dashboard and all 20 Watercourses are lined.

KP - Watercourse Data Submission - Summary				
Division	2019-20	2020-21	2021-22	Overall
Bajaur Agency	3	17	10	30
Bannu	74	40	0	114
Dera Ismail Khan	431	11	53	495
Hazara	83	57	7	147
Khyber Agency	6	13	0	19
Kohat	98	41	25	164
Kurram Agency	1	5	2	8
Malakand	177	169	34	380
Mardan	105	64	18	187
M. Agency	4	26	13	43
Orakzai Agency	0	1	0	1
Peshawar	141	85	3	229
S. W Agency	3	12	0	15
Overall	1126	541	165	1832

KP zone dashboard is also live, and data submitted so far, on the Dashboard is 1832 by which 1770 Watercourses have been lined and remaining **62** Watercourses are under progress on different stages. Detailed Summary attached as **Annex-K**.

KP - WST Data Submission - Summary				
Division	2019-20	2020-21	2021-22	Overall
Bajaur Agency	1	9	1	11
Bannu	12	18	0	30
Dera Ismail Khan	81	6	5	92
Hazara	28	43	4	75
Khyber Agency	1	9	0	10
Kohat	29	17	1	47
Kurram Agency	1	1	0	2
Malakand	75	92	15	182
Mardan	16	9	5	30
Mohmand Agency	1	36	4	41
Orakzai Agency	0	2	0	2
Peshawar	36	25	4	65
S.W Agency	0	15	0	15
Overall	281	282	39	602

KP zone Water Storage Tank Data received on Dashboard is 602 by which 583 Water Storage Tank has been completed and remaining 19 watercourses are Under progress. Detailed Summary attached as **Annex-L**.

The progress of Interventions is live on the Dashboard application for AJK, ICT & KP zones. As defined in the submitted working paper of dashboard implementation on 26 Aug 2021, three stages were defined.

Stage-I - Digitize and Migrate the Data

During this time, a lot of data has been generated, it can be in digital form or may be in hard copy form. The ME&IE Consultant digitized the hard copy data and migrated the complete data in the respective database forms.

- As ME&IE Consultants was not allowed for direct communication with any of Provincial Departmental Head and NWMC, so that the data for dashboard supposed to receive through FPMU. Despite lot of communication for providing data on required format which

was shared to FPMU, ME&IE Consultants did not receive positive response.

- Upon this bottleneck, ME&IE Consultants took initiative with the approval of NPC to digitize the field progress data of AJK, ICT and KP units, which was not defined in ME&IEC TORs.
- After study/assessment of files the data deficiencies/ missing data was conveyed to ADs. To facilitate the department and to fulfil the backlog of the last 2 years, the ICT team of ME&IE Consultants voluntarily took the responsibility of data entry on the approved forms and scanning of relevant files of all interventions to accommodate the implementation of Dashboard.
- The ICT team further worked on data validation to cross-check the database data compared to scanned data.
- However, ME&IE Consultants completed the task in AJK & ICT zones during September and October 2021 after that the same practice was adopted in KP zone and ICT team digitize KP zone data from November 2021 to January 2022 according to data provision by the OFWM Dept KP.
- On the completion of digitization of data, ME&IEC process the preliminary data cleaning and validation.
- After cleaning and validation, ME&IEC submitted the data to the concern PD for their review and comments.
- ME&IEC received comments and missing data which was updated accordingly to the MIS database.

Stage II – Meetings with all Stakeholders and Shortlist the Nominations

On the successful completion of Stage-I, ME&IEC held meetings with PD of AJK, Deputy Director Water Management ICT, and PD OFWM KP zones respectively to shortlist the nominations for data collection.

Stage III - Training and Capacity Building

With the consultation of PD of AJK and under the approval of NPC, ME&IEC held capacity building workshop from 2nd to 4th of Nov 2021.

An intensive 8-hour full day training workshop was held on first two days in Muzaffarabad. Small dams

and irrigation department's nominated staff participated in the workshop.

On the third day, there was dashboard presentation. The PD of AJK invited numerous Govt. officials to this event. In the end, Training Completion Certificates were distributed among those participants of the workshop who successfully complete the training.

After consultation with Deputy Director Water Management ICT zone the capacity building training was held at ICT Agriculture Complex on 14 January 2022.

An intensive 8-hour full day training workshop was held in Agriculture Complex Islamabad. Water Management nominated staff participated in the workshop. Three venues were provided by the OFWM department for the capacity-building training sessions by distributing relatively closed districts, where nominated staff got training on Android-Based Data Collection Application for data feeding on Dashboard.

- D.I. Khan
- Abbottabad
- Peshawar

An intensive 8-hour full day training workshop was held D.I. Khan, Abbottabad, and Peshawar. OFWM department nominated staff participated in the workshop.

Zone	Training Location	No. of Days	No. of Participants
AJK	Muzaffarabad	3	40
ICT	Islamabad	1	4
KP	D.I. Khan	1	10
	Abbottabad	1	14
	Peshawar	1	27
Overall		7	95

3.6.5 On-Going Data Validation & Cleaning

Data submission is an ongoing process & will continue till the end of the project. Field Staff of AJK Small Dam & Irrigation, Water Management ICT, and On-Farm Water Management Department KP is continuously feeding data through customized Android Application provided & trained by the ICT team of ME&IE consultants.

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

In February 2022 ICT team led by ICT Specialist held meeting with PD NPWC-II AJK Unit regarding the progress on data submission on MIS Dashboard. ICT team presented the three months' review report as having a great deficiency in data submissions. During this meeting ICT team of ME&IE agreed with PD NPIWC-II AJK Unit that ICT team will submit a fortnightly progress report, PD NPIWC-II AJK Unit nominated Deputy Directors of all divisions as the MIS Dashboard focal persons and issued a letter along with progress deficiencies.

ICT team held a meeting with all three Assistant Directors of the Muzaffarabad division and showed discrepancies and deficiencies in their submitted data and spent three days over there in the Muzaffarabad division for the sake of data correction

In the continuation of data correction, ICT team paid 2 days' visit to the Poonch division, where meet with Deputy Director, all Assistant Directors, Water Management officers, and Field Engineers. During this visit, ICT team led toward the correction and fulfillment of data deficiencies.

ICT team also visited the KP zone and held a meeting with the KP OFWM department nominated focal person Mr. Hameed Ullah Khan to review the data submission progress of field staff and data pendency on the PMIS Dashboard. The focal person OFWM assured his cooperation and agreed to clear the pendency in a short span of time.

3.7 MONITORING / DATA COLLECTION ON SOCIAL AND GENDER COMPONENT

In the month of JUNE 2022, meetings were held on every Monday to discuss progress of the project. During the meetings teams discussed field visits plans and all other ways to collect information from the fields to get clear picture of the situation. Gender and social specialist activities during June, 2022 were as under:

- Attended Project review meetings
- Participated in farmers' day at Taxila
- Visited Punjab field area in Rawalpindi and Attock

- Reports were finalized for further submission.
- Work plan for next quarter was submitted
- Agriculture issues were penned down based on the field observation

Field visit report of Punjab 21st to 29 June 2022.

i) Field Visit to Kalar Syedan, Rawalpindi, Punjab, on 21st June 2022

A visit was planned to Kalar Syedan district Rawalpindi on 21st June 2022. It was coordinated with Deputy Director Mrs. Farkhanda (OFWM Rawalpindi) who managed the visit locations. The social and Gender Team along with ME&IE Team (Ms. Maryam and Ms. Sana Gul) visited water courses.



Picture 3.89: Social & Gender Specialist and ME&IE Team in Meeting with Mrs. Farkhanda A.D OFWM Rawalpindi at Agriculture office

Field and Gender team visited the Water Storage Tanks of Rawalpindi

S#	WST Name/Id	District	Date Visit	of
1	Mouza Maira Sangal	RWP	21 ST June 2022	
2	Mouza Shah Bagh			

An introductory meeting was held between the field team and OFWM the department office in Rawalpindi. The team collected some basic data on WST to be visited. Also, the field team accompanied the OFWM team.

Following observation was found during the field visit.

- There are no WUAs because only one member was holding the land.
- Females were well aware of the crops but no participation.
- It was observed that females were not participating in farming activities.
- Women haven't owned a piece of land.
- Female family members' education level was primary.
- Females were not involved in decision-making.
- They have no knowledge about NPIWC-II Project.
- Household activities are mostly done by women.
- According to Raja Zulfiqar, there is no loss and no benefits during the cultivation period.



Picture 3.90: ME&IE Team interviewing the farmers at Mouza Maira Sangal Rawalpindi

ii) Field Visit to Thatta Kheel, Taxila, Rawalpindi Punjab, on 23rd June 2022

A visit was planned to Thatta Khaleel tehsil Taxila district Rawalpindi on 23rd June 2022. It was coordinated with Deputy Director Mrs. Farkhanda (OFWM Rawalpindi) who managed the visit locations. The social and Gender Team (Mrs. Munaza & Ms. Abida Munir along with ME&IE Team (Mr. Bilal, Ms. Maryam and Ms. Sana Gul)

Farmer's day was being celebrated on 23 June 2022 by the farmer's community in Taxila. Social and Gender Team along with ME&IE Team participated. More than 80 farmer participated in the event Mrs. Farkhanda Deputy Director (OFWM Rawalpindi) chaired the event. Mr. Ghulam Kumar Assistant Director (OFWM Rawalpindi) & Mr. Malik Waris Assistant Director (OFWM Rawalpindi) also gave their valuable inputs. Mrs. Munaza also gave her valuable

points during the sessions with farmer. It was observed that no female farmers participated in the event.

Following agenda points were discussed during the event.

- Water storage tank
- Impact of climate change
- Government subsidy/Role of Government
- Rainwater harvesting system
- Drip Irrigation system
- Difference between bore and Water Storage Tank



Picture 3.91: Farmers Day at Thatta Khaleel Taxila

ME&IE team (Mr. Bilal, Ms. Sana Gul and Ms. Maryam) & Social and Gender Team Mrs. Munaza and Abida Munir (Social & Gender Specialist) reached the village Thatta khalil on 23rd June 2022 along with Assistant. Director Chakwal. Team met with the beneficiary of this water storage tank Mr. Muhammad Hamayun, who helped the team to visit his farm land and water storage tank.

Following observation was found during field visit to Thatta Khalil.

- There is no WUAs because only one member was holding the land.
- Females were well aware of the crops but no participation in farming activities.
- It was observed that females were not participating in farming activities.
- Women haven't own a piece of land.
- Females were well aware of the crops but no participation in farming activities.
- Female family member education level was primary.
- Females were not involved in decision making.

- Females has no knowledge regarding NPIWC-II Project.
- Mostly women are doing household activities.
- Females were not involved in any labor activities.
- Females were well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase or tenancy condition etc.



Picture 3.92: Water Storage tank at Thatta Khaleel Tehsil Taxila

iii) Participation in Farmers' Day, on 23rd June 2022

On farm water management officer Malik Waris and (Deputy Director OFWM) Ms. Farkhandha arranged **Farmers day** at Thatta khaleel in tehsil Taxila, it was well organized function and more than 80 farmers participated, NPIWC Monitoring and Evaluation field team along with national and provincial gender and social expert participated Mr. Ghulam Qumar Assistant Director (OFWM Rawalpindi) & Mr. Malik Waris (Assistant Director OFWM Rawalpindi) also gave their valuable inputs. Social & Gender Specialist, Mrs. Muniza also discussed current issues of agriculture and discussed about climatic and agriculture issues which is affecting their yield. Her valuable points during the sessions with farmer. It was also observed the no female farmers were participated in the event.

Following agenda points were discussed during the event.

- Water storage tank
- Impact of climate change
- Government subsidy/Role of Government
- Rainwater harvesting system
- Drip Irrigation system

- Difference between bore and Water Storage Tank.

After informatory session by department question answer session was conducted, following questions were raised by farmers.

- Subsidy on seeds and electricity.
- Free of interest loans
- Subsidized solar system
- Flood irrigation
- Rain water harassing
- Small dams.
- Groundwater and drip irrigation
- Water tanks.
- Water courses improvement
- Laser land leveling
- High efficiency irrigation system

Gender and social experts discussed in detail on the ground situation actual female farmers' participation in local villages. Picture was not bleak they are participating in different ways in sowing, harvesting and storage. Monitoring and evaluation consultants explained all components of the project and how they can participate and reap the benefits of the project.



Picture 3.93: Mr. Malik Waris Assistant Director OFWM Rawalpindi chaired the event.

iv) Group Discussion with Landless Women, on 23rd June 2022

Social & Gender Specialist and ME&IE team also visited the Chakkri village. Team met with landless female farmers, they belong to District Lodhra and came Chakkri for farming activities.

Focus group discussion was done with 15 female farmers. All female farmers have no own land.



Picture 3.94: Social & Gender Specialist with Landless female farmers



Picture 3.95: Female farmers are working in cucumber farm Packing for market

v) Field Visit of Water Storage Tank at Mouza Haji Kund, Hasanabdal, District Attock Punjab, on 29th June 2022

A visit was planned to Hasan Abdal District Attock on 28th June 2022. It was coordinated with Assistant Director Engr. Mrs. Ambreen (OFWM Attock)

An introductory meeting was held between the field team, Social & Gender team and OFWM the department office in Hasanabdal.

Following points were thoroughly discussed.

- According to Mrs. Ambreen Eng. Assistance Director that Qureshi Company is running M1 land project (14000 canal) also baring the all expenses of project.
- They were in process of plantation of new Orchard over an area of 12.84acres at Land Project Burhan.

- Mrs. Ambreen Eng. Assistance Director explained that they are in process with the Government of Punjab for installation of drip irrigation system with 60% Government and 40% farmer share in scheme of on farm water management.
- Laser land leveling is not possible in Potohar region.
- They are promoting drip Irrigation system because said system didn't damage the land structure.
- Orchard and vegetables were cultivated.

The Social and Gender Team (Mrs. Munaza & Ms. Abida Munir) along with ME&IE Team (Mr. Bilal & Ms. Sana Gul) visited water storage tank intervention in Hasanabdal at Mouza Haji Kund.

Team collected some basic data on WST to be visited. Team met with the beneficiary of this water storage tank, who helped the team to visit his farm land and water storage tank. Following observation was found during the field visit.

- WUAs comprises of three members.
- Females were well aware of the crops.
- It was observed that females were not participating in farming activities.
- Women were owner of land.
- Education level was graduated.
- Females were involved in decision-making.
- They have no knowledge about NPIWC-II Project.
- Household activities are mostly done by women.



Picture 3.96: Meeting with OFWM Department at Hasanabdal, District Attock, Punjab



Picture 3.97: Water storage tank at Hasanabdal

vi) Current Issues of Agriculture in Pakistan 2022 social and gender perspective

Pakistan is an agriculturist country, Pakistan have diversity in, traditions, norms and culture across the regions. Agriculture sector in Pakistan plays a central role in the economy as it contributes major, portion in it., women and men both are participating in agricultural activities and directly and in directly contributing. Although the women are under representation in this sector due to societal norms. Government of Pakistan is a signatory of sustainable development goals and taking all steps to fulfill the commitments, NPIWC-II program is launched at national level.

Government invested a huge amount in this project which enables farmers to get the maximum output and in increase in crops yield and cropping intensity, poverty reduction is expected through employment generation. Agriculture sector is suffering and facing many issues. It constitutes major portion of labor force; the government acknowledges that the sector could not grow more than 2.77 per cent in the current year. The Agriculture sector is most important and key player involved in the Pakistan's financial system since independence. It was considered a dominant sector but due to some political, social, and local weather conditions output of agriculture production is not up to the mark.

Agriculture role in Pakistan economy can't be denied Following are some important contributions of agriculture;

- Major contribution in National Income
- Source of Food Supply
- Source of Raw Material
- Provision of Surplus Food

- Employment
- Source of Foreign Exchange for the Country
- Employment Opportunities for Rural People
- Role in domestic economy
- Poverty reduction

vii) Key Issues of Agriculture:

The agriculture sector is facing problems because of several issues such as a water shortage, shrinking of the area under cultivation and higher costs of inputs.

Following are the main issues that causes decline in agriculture:

- The agriculturalists are typically un-educated and lack technical knowledge. They are incapable to understand the modern scientific methods of agriculture and often remain ignorant of good means to protect and increase their yield.
- Due to lack of investment they cannot afford to purchase modern scientific implements, chemical manures, improved types of seeds etc., they cannot attain the required standards.
- Most of our farmers are still trapped to the deep-rooted traditions of their forefathers.
- Due to small holdings of land and poverty they are unable to use modern scientific methods. That is why their standard is lower than that of cultivators in developed countries. (Ref. Agriculture reports of lower Bari doab project)
- Salinity and water logging is also a major issue
- Traditional method of farming
- Law of inheritance affected, our farmers very severely infected &, land holding is becoming smaller.
- Our farmers have to face many issues due to scarcity of water which is one our major problems. Large tracts of land estimated to be about 22 million acres is lying uncultivated due to shortage of water. Rainfall is uncertain and the existing irrigation facilities in our country are quite insufficient and need to be improved
- The land tenure arrangement of Pakistan has shaped a chain of intermediaries in between the state and the tenants. The system, instead of being helpful to agricultural development, stands in the way of its progress.

- Due to lack of latest agricultural information about methods of modern time, our farmers cannot control the countless diseases of crops and attacks of pests and insects. The result is low yields.
- Most of our villages have no road or railway links with our markets. So, farmers have to face countless hardships to sell their products. It decreases farmer's interest in their profession and production suffers.
- Lack of credit facilities, the resources required for agricultural operation are land, layout, livestock, farm equipment, seeds, fertilizers, irrigation, transport etc. For the convenient and timely procurement of these resources the farmers must have easy access to credit.

Agriculture may not grow at a sustainable high rate unless the problem is addressed, prices shooting up every month, prices of agricultural inputs, including seeds and fertilizers, continue to increase.

Preparations to Overcome the Problems:

- Tube-wells should be installed in the affected areas to decrease the salinity.
- Beds of new canals should be made of concrete to avoid water-logging.
- Water courses should have constructed and maintained to save water and equal distribution, it will enable the farmers to reap the benefits. These measures should be taken on priority basis to avoid further deterioration of land. The primary issues in agriculture of Pakistan is shortage of water. It is necessary that the irrigation facilities be extended for increasing agricultural output.
- Land levelling should be done, it will enable to save water and time
- Agriculture extension department should educate farmers.
- Farmers should be informed by outreach staff of agriculture extension regarding fertilizer's and its proper use. The agricultural harvest can also be increased by using fertilizers. The use of manure should be introduced throughout the country. Poverty and illiteracy affected our farmers and they hesitate to purchase the fertilizers.
- The use of improved seeds, manures and modern implements is not possible without

adequate credit facilities for the farmers. The government has improved the existing credit facilities to a large extent. The commercial banks also grant loans to the farmers, but still there is a need for more facilities as our farmers are very poor. The farmers should be provided better quality seeds at the lowest price and at the right time. Better seeds will ultimately give better yield.

- Mechanization of agriculture refers to the use of various equipment's the different stages of cultivation
- Rural infrastructure should be given priority directly so the value chain system should be developed and farmers would have access to the market

Essential Guidelines, Approaches to improve agriculture:

- Improvement and adoption of new varieties
- Improved access to markets for inputs (seeds, fertilizers, farm mechanization, credit, water) and outputs
- Steps should be taken to reduce post-harvest losses
- Character of middle man should be eliminated.
- More investment in research, development and extension
- Improved quality and self-actualization of requirements for international markets.
- More diversification, especially minor but high value crops
- Farm input and produces pricing
- Demand related policies:
- Income, growth and development
- Education and knowledge
- Food price stabilization
- Market related policies:
- Policies to insulate local markets from global markets
- Access to local markets.

viii) Way forward

- More steps should be taken at government level to help agriculture sector to flourish by making farmer friendly policies.
- Credit facility at low rate or may be interest free it will help share croppers to get more profit which will reduce poverty in rural areas

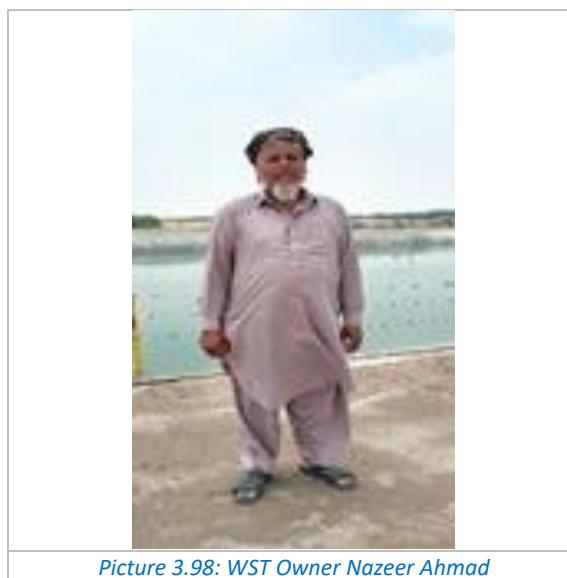
- Agriculture research institutes should be encouraged by providing grants to work on new varieties.
- While launching any program awareness campaign should be designed.
- Soft loans for female farmers should be sanctioned

3.8 CASE STUDY ON WATER STORAGE TANK IN PUNJAB ZONE

Success Story

Rehabilitation of Sandy Dunes of Thal Area in Bhakkar District by Water Storage Tank

If anybody has seen the dunes in Thal area, He can well imagine my position, before the construction of Water storage tank on my land during 2020-21. With the help of modern technology of construction of Water Storage Tank, I was able to cultivate the few areas of desolated land of mine.



Picture 3.98: WST Owner Nazeer Ahmad

Mankera is the tehsil of Bhakkar surrounded by the Thal dessert. Mankera is the main town of Mankera Tehsil, an administrative unit of Bhakkar District in Pakistan's Punjab province. Mankera's one third land

is covered with sand area characterized by huge sand dunes. People are largely dependent on agriculture of which the main crop is gram (Channa), which heavily rely on rain; as a result, they are poor. Education and health care services are also poor.



Picture 3.99: Deserted Area of Thal in Mankera

Nazeer Ahmad is a local farmer of Mankera who has land of 12.5 acres in the village of Dagar Kotli. Before the WST intervention, the land was sown with gram (Channa) which was solely dependent on the rainfall. According to Nazeer Ahmad, the rainfall pattern was changing following the years which had made effect on the crop production of gram. Either the production was very low or the crop would burn out. Nazeer was worried about the income that had facilitated his household.

Table 1 WST Beneficiary Details

WST Owner	Nazeer Ahmad
Tehsil & District	Mankera / Bhakkar
Culturable Command Area	12.5 Acres
Source of Irrigation	Tube Well
Quality of Under Ground water	Fit for Irrigation
Major Crops	Citrus (Shakri), Sunflower, Gram (Channa)
Financial Year	2020-21

As fate would have it, one day Nazeer Ahmad was reading a newspaper that had advertised of a subsidized project of provision of Water Storage Tank. He contacted the OFWM department of Mankera and filed an application for the construction of Water Storage Tank which was later on accepted

by the department. He was fully satisfied with the cooperation of the OFWM who guided him through at all the stages. The source of water through which the WST was filled via pumping through underground water which was fueled by solar panels.



Picture 3.100: View of WST in the midst of the deserted land along with the figure showing tube well pumping from ground water

A year has passed since the construction of the water storage tank, Nazeer Ahmad has sown citrus (shakri), sunflower, wheat and gram (channa). Before the intervention he was able to cultivate merely 2 to 3 acres but now when the problem of shortage of water has overcome, the cultivated has increased to 10 to 12.5 acres.



Picture 3.101: Cultivation of Plants Citrus (Shakri)



Picture 3.102: Cultivation of Sunflower

The intervention has resulted in irrigate cultivation. Now the farmer is growing orchard (Citrus) and Oil seed crops (Sunflower). It has increased in income of the farmer significantly besides increase in value and rent of land.

CHAPTER 4: QUARTERLY WORK PLAN- ACTIVITIES (APR 2022 TO JUNE 2022)

The ME&IE Consultants' activities initiating during the 2nd Quarter of year 2022 (April 1, 2022 to June 30, 2022) are listed below. A tentative Work Plan for 3rd Quarter of the year 2022 (1st July, 2022 to 30th September 2022) showing time span detail is given as **Annex-A**.

Pre Field Activities

- i) Preparation for 2nd-Phase Baseline Survey (Finalization of MTs)
- ii) Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 2nd Phase Baseline Survey
- iii) Training of Field Teams for 2nd Phase of Baseline Survey

Field Activities

- iv) Regular monitoring of Interventions in the field
- v) Data collection of the intervention in the field
- vi) Baseline Survey Stage-II
- vii) Online data entry I android based application

ICT Assignment

- i) Development/improvement of website of NPIWC-II
- ii) Monitoring Android based Mobile Application under implementation by field staff
- iii) Data collection of interventions in MIS/GIS database
- iv) Data Cleaning, Development & Launching of Dashboard for Client Offices

Coordination

- i) Meeting of TL with NPC and OFWM Department regarding Progress / Issues
- ii) Meetings of DTLs with respective DTL of PC & concerned OFWM Department
- iii) ME&IE Consultants' Internal Meeting

Deliverables

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

Document	Status
----------	--------

Draft Inception Report	Submitted
Final Inception Report	Submitted
Monthly Monitoring Report-First (DEC 2020-JAN 2021)	Submitted
Monthly Monitoring Report-Second (FEB 2021)	Submitted
Monthly Monitoring Report-Third (MAR 2021)	Submitted
Quarterly Monitoring & Evaluation Report-First (JAN-MAR 2021)	Submitted
Monthly Monitoring Report-Fourth (APR 2021)	Submitted
Monthly Monitoring Report-Fifth (MAY 2021)	Submitted
Monthly Monitoring Report-Sixth (JUNE 2021)	Submitted
Quarterly Monitoring & Evaluation Report-Second (APR-JUN 2021)	Submitted
Monthly Monitoring Report-Seventh (JULY)	Submitted
Monthly Monitoring Report-Eighth (AUGUST 2021)	Submitted
Annual Monitoring & Evaluation Report (1 st)	Submitted
Baseline Survey Report (Final Draft)	Submitted
Monthly Monitoring Report-Ninth (SEPTEMBER 2021)	Submitted
Quarterly Monitoring & Evaluation Report-Third (JULY - SEPTEMBER 2021)	Submitted
Special Reports submitted: 1) Monitoring Tools 2) Survey Manual 3) PAM 4) Working Paper on Technology and Methodology for Implementation of Android Based Field Progress Data Collection and GIS Based Progress Monitoring Analytical Dashboard.	Submitted
Monthly Monitoring Report-Tenth (OCTOBER 2021)	Submitted
Monthly Monitoring Report-Eleventh (NOVEMBER 2021)	Submitted
Monthly Monitoring Report-Twelfth (DECEMBER 2021)	Submitted

Quarterly Monitoring & Evaluation Report-Fourth Quarter year 2021 (OCTOBER – DECEMBER 2021)	Submitted
Monthly Monitoring Report-Thirteenth (JANUARY 2022)	submitted within stipulated time
Monthly Monitoring Report-Fourteenth (FEBRUARY 2022)	submitted within stipulated time
Monthly Monitoring Report-Fifteen (MARCH 2022)	submitted within stipulated time
Quarterly Monitoring & Evaluation Report-First Quarter year 2022 (JANUARY – MARCH 2022)	submitted within stipulated time
Monthly Monitoring Report-Sixteen (APRIL 2022)	submitted within stipulated time
Monthly Monitoring Report-Seventeenth (May 2022)	submitted within stipulated time
Monthly Monitoring Report-Eighteenth (June 2022)	Report in hand to be submitted within stipulated time
Quarterly Monitoring & Evaluation Report-First Quarter year 2022 (JANUARY – MARCH 2022)	To be submitted within stipulated time
Annual Monitoring & Evaluation Report (2 nd) Jul 2021-June 2022	To be submitted within stipulated time

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

Matrix of Responsibilities

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

CHAPTER 5: ISSUES / BOTTLENECKS
































































































































































The ME&IE Consultants are continuously following constraints for timely initiating the activities:

- Due to non-availability of NWMC (NESPAK) deliverables/reports, ME&IE Consultants are facing hurdles to evaluate working of NWMC. In this regard the cooperation of NWMC and respective Directorates is required.
- Non availability of Technical Sanctions of the watercourses required for baseline survey
- Non-availability of complete up-to-date inventory / data of all interventions from the Client, Provincial Agricultural Departments & NWMC (NESPAK) till to date.

ANNEXES A to I

ANNEX-A: TENTATIVE WORK PLAN

ANNEX - A: TENTATIVE QUARTERLY WORK PLAN (JULY TO SEPTEMBER 2022)

TENTATIVE WORK PLANNED FOR THE QUARTER (JULY TO SEPTEMBER 2022)												Legend	
												Activity starts	
												Activity Ends	
												Activity Span	
No.	ACTIVITIES	3 Months-Year 2022 (Weeks)											
		July				August				September			
		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	Field Activities												
	1.1 Regular Monitoring of Interventions in the Field												
	1.2 Data collection of the interventions in the field												
	1.3 Online data entry in android based application												
2	ICT Assignment												
	2.1 Development of website of NPIWC-II												
	2.2 Monitoring online data collection and Data entry												
	2.3 Monitoring Android based Mobile Application under implementation by field staff.												
	2.4 Data collection of interventions in MIS/GIS database												
	2.5 Designing of dashboard of Project Interventions												
3	Coordination												
	3.1 Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues												
	3.2 Meeting of DTLs with respective DTL of PC												
4	Deliverable												
	4.1 Monthly Monitoring Report												
	4.2 Quarterly Monitoring Report												
	4.3 Final Baseline Survey Report												

ANNEX - B: MATRIX OF RESPONSIBILITIES

MATRIX OF RESPONSIBILITIES

SR. NO.	DELIVERABLE / ACTIVITIES	LEGEND			
		● Primary Responsibility	○ Secondary Responsibility	○ Assistance	
		NPC-PPMU	Agriculture Dept. (OEIWW)	Project Consultants	ME&IE Consultants
1	Provision of Pre-requisite data of project components for starting of Field Activities: • Organization of Water Users Associations, • Watercourses Improvement, • Water Storage Tanks, • Laser Land Levelers,	○	●	-	-
2	Certification of operational documents of the project, • 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	-	-	-	●

ANNEX - C: MONITORING LOG-FRAME

Annex-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

C2: Watercourses Improvements	Improvement of 47,278 watercourses on cost sharing basis: 40% farmers in terms of labour, and 60% funded by project.	<p>a) Establishment of 47,278 Water users' associations (WUAs);</p> <p>b) Registration of 47,278 WUAs;</p> <p>c) Improvement and realignment of earthen section of 47,278 watercourses;</p> <p>d) Lining of up to 50% length of 47,278 watercourses either by:</p> <ul style="list-style-type: none"> ● Precast concrete parabolic lining (PCPL) segments, or ● Rectangular brick masonry, or any other method as approved by the project 	<p>a) 47,278 WCAs established;</p> <p>b) 47,278 WCAs registered;</p> <p>c) 47,278 watercourses improved and lined;</p>	<p>a) Conveyance losses for improved watercourses decreased by about 15 percentage points.</p> <p>b) 1.654 million households benefited from the activity;</p> <p>c) 11.347 million acres served with improved watercourses</p>	<p>a) Increase in cropping intensity on improved watercourses by 5-24%;</p> <p>b) Increase in crop yields.</p> <p>c) Increase in irrigated area</p> <p>d) Increase in agriculture output per unit of water by about 37%</p>	<p>a) Increase in farm income;</p> <p>b) Increase in employment for farm labour;</p> <p>c) Reduction in poverty;</p> <p>d) Enhanced food security for the country.</p>	<p>a) The water flow measurements will be carried out at before and after watercourse improvement on 2-5% sample basis;</p> <p>b) Agriculture survey before and after watercourse improvement on 2-5% sample basis;</p> <p>c) The survey will determine:</p> <ul style="list-style-type: none"> ● Cropping pattern before and after the improvement; ● Cropping intensities before and after improvement; ● Before and after crop yields;
--------------------------------------	--	---	--	---	---	--	--

							<ul style="list-style-type: none"> • Before and after employment; <p>d) The difference between before and after will be considered the result of the intervention after netting out the contribution of the growth pattern of the crop sector otherwise.</p>
C3: Construction of Water Storage Tanks (WSTs)	a) Construction of 14,932 water storage tanks	<p>a) 14,932 small farmers mobilized to construct water storage tanks for irrigation</p> <p>b) They agree to contribute 40% of the cost</p> <p>c) Agree to first construct the tank with his/her own funds and then</p>	<p>a) 14,932 WSTs constructed</p> <p>b) 14,932 WSTs operated and maintained</p>	<p>a) Water which was otherwise largely going to be wasted is saved</p> <p>b) Irrigation provided at critical stages of the crops</p> <p>c) Flexibility achieved for irrigation</p>	<p>a) More area irrigated</p> <p>b) Increased cropping intensities</p>	<p>a) Increased crop yields</p> <p>b) Increased total crop output quantum</p> <p>c) Increased farm income</p> <p>d) Increased farm employment</p>	<p>a) 2-5% sample of WSTs will be surveyed</p> <p>b) A data collection form will be designed to measure water saving due to WSTs</p> <p>c) The forms used for baseline and impact surveys in case of</p>

		received subsidy at 40% on issuance of FCR					watercourses will also be used for WSTs d) Same data analysis will be carried out here as in case of watercourses.
C4: Provision of Land Leveling Units	a) Provision of 11,610 laser land leveling units to farmers and service providers on a cost sharing basis: 50% by farmer / service provider and 50% by the project.	a) 11,610 laser units provided to farmers / service providers; b) Farmers trained in using the units.	a) 11,610 farmers / service providers received PLL units; b) Farmers / service providers received training in using the units.	a) Land leveled on Farmers' / service providers' farms; b) Land leveled on fellow farmers on rent; c) Total 3.483million acres levelled by 11,610 units.	a) Water application efficiency increased at field level; b) Even germination of seed. c) Field application losses reduced by 10 percentage points d) Water productivity increased by 24%	e) Increased area under irrigated crops; f) Enhanced crop yields g) Increased farm income	a) The land levelling is expected to save irrigation water and result in better and even germination of seeds which can enhance crop yields. The crop yields thus affected will be reflected in agriculture sample surveys. b) 2-4% sample units will be visited by ME&IE Consultants

							<p>teams after one years of delivery</p> <p>c) The unit will be verified</p> <p>d) Area treated during the year will be collected</p> <p>e) Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.</p>
--	--	--	--	--	--	--	---

ANNEX - D: DELIVERABLES/REPORTING REQUIREMENTS

Deliverables/Reporting Requirements

Sr. No.	Document	Copies	Due
1	Draft Inception Report	8	45 days after the effectiveness of the Consulting services Agreement.
2	Final Inception Report	15	One week after the issuance of comments by the Client on Draft Inception Report
3	Monthly Monitoring Report	10	10 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

ANNEX - E: MINUTES OF NPC MEETING IN QUETTA OFFICE DURING HIS VISIT

MINUTES OF MEETING

Meeting Date & Time	9 th June, 2022 (10:30 AM – 02:00 PM)	Meeting Venue	Zonal Office, ME&IEC, Quetta, Balochistan
Meeting Title	Meeting with the National Project Coordinator (NPC), NPIWC-II and Team Leader, NPIWC-II		
Meeting Chair	National Project Coordinator (NPC), NPIWC-II		

Participants:

Followings members of ME&IECs Team attended the meeting:

SR No.	Name	Designation - Department
1.	Mr. Muhammad Asif Kakar	National Project Coordinator (NPC), NPIWC-II, Islamabad
2.	Dr. Usman Mustafa	Team Leader (TL), ME&IECs for NPIWC-II, Islamabad
3.	Mr. Rizwan Ahmed	Deputy Team Leader, Balochistan (DTLB), ME&IECs. NPIWC-II, Quetta, Balochistan
4.	Mr. Manzoor Ahmed Kasi	Monitoring and Evaluation Expert/Field Team In charge (FTI)
5.	Mr. Tariq Khoso	Monitoring and Evaluation Expert/Field Team In charge
6.	Mr. Naseeb Jan	Monitoring and Evaluation Expert/Field Team In charge
7.	Ms. Mah Gul Noor	Monitoring and Evaluation Officer
8.	Mr. Basit Ahmed	Monitoring and Evaluation Officer
9.	Mr. Saleem Abro	Monitoring and Evaluation Officer
10.	Mr. Hamza H. Qureshi	Monitoring and Evaluation Officer
11.	Mr. Syed Abrar Hussain	Manager Admin and Accounts

A meeting was held on 9th June 2022 in the office of ME&IECs Zonal Office, Quetta, Balochistan. Meeting was chaired by Mr. Asif Kakar, National Project Coordinator (NPC), NPIWC-II. Following agenda points were discussed in the meeting:

Meeting Agenda:

- Introduction of Zonal office staff
- Field Progress.
- Office Administration.
- Issues, Problems and Gaps.

The meeting started with the recitation of the verses from the Holy Quran. The DTB welcomed the NPC, NPIWC-II and TL, ME&IE Consultants, NPIWC-II.

Following are the point of discussion, action taken, responsible person, and timeline:

SR#	Key Points	Discussion and Action Taken/Response	Responsible person / Department	Timeline
1.	Staff introduction and status	<ul style="list-style-type: none"> ME&IE zonal office field staff introduced themselves to NPC and TL. DTLB presented the staff details along with their camp offices. He further informed that in order to have better co-ordinations with line departments Mr. Manzoor Ahmad Kasi, FTI is performing as "Focal Person" for the representation of ME&IE, Balochistan Zone Office besides his own duties. In this connection NPC inquired about the official documentation. DTLB informed that there is no formal notification. NPC advised DTLB to have formal notification about this and circulate it with all stakeholders. 	DTLB	14/06/2022
2.	DTL presented progress of the Balochistan team from June, 2021 to June 9 th 2022.	<ul style="list-style-type: none"> NPC highlighted that the field activities are not up to the mark. Only one Baseline Survey (BLS) report has been submitted. TL informed NPC that Balochistan region progress is much higher as of other regions. Their contribution in BLS is more than 65%. DTLB also informed the NPC that baseline phase-II is continue and hopefully all targets will be achieved as per the work plan. Furthermore, TL ensured the NPC that there will be no further delays in field activities as resources are on the way. 	DTLB with the TL support.	30 th June, 2022
3.	NPC inquired about the progress of Dashboard in Balochistan.	<ul style="list-style-type: none"> DTLB briefed about Dashboard that there are many gaps in the data received from OFWM Balochistan due to which the Dashboard is pending. TL informed NPC that IT Specialist, should visit and discuss the issue with concerned staff of OFWM, Balochistan, and look for a solution 	IT Team	15 th July, 2022

SR#	Key Points	Discussion and Action Taken/Response	Responsible person / Department	Timeline
		regarding the Data completion and Dashboard.		
4.	Shifting of office building	<ul style="list-style-type: none"> DTL briefed that the new office building was selected as of your instruction during your last visit. Just waiting for final approval. TL advised DTL to send all requirements so this case got approval. 	DTLB	30 th June, 2022
5.	Vehicles status	<ul style="list-style-type: none"> DTLB briefed about the vehicles previously provided to the field teams. The field vehicles were not suitable for field activities because they were older models. He further briefed that the contract of those vehicles has been canceled and the vehicles returned to the contractor. TL instructed DTLB to follow rules for the acquisition of Vehicles. 	DTLB	30 th June, 2022
6.	Field equipment status	<ul style="list-style-type: none"> NPC inquired from the DTLB about the provision of proper field equipment; pygmy meter, measuring wheel, measuring tape, and android devices, to the field staff. DTLB informed that measuring wheels, measuring tape and one pygmy meter are available for field staff. However, android systems and 02 more pygmy meters are required. In this connection, TL responded that as the funds are now available, android devices will be provided accordingly. 	TL Accounts and Section	15 th July, 2022
7.	Status of Office Equipment	<ul style="list-style-type: none"> NPC inquired about DTLB's acquisition of office equipment; laptops, photocopier, scanner, printers, Projector, etc. DTLB stated that laptop, computers have been provided, however a photocopier/printer and projector are required. NPC made contact with Ch. Saif Sahib, G3EC and directed him to 	Team Leader and Accounts Section	15 th July, 2022

SR#	Key Points	Discussion and Action Taken/Response	Responsible person / Department	Timeline
		make sure that all these equipment to be provided as soon as possible.		
8.	Camp offices	<ul style="list-style-type: none"> DTLB briefed about the status of the position of the camp offices of Nasirabad and Zhob. There is no official office. NPC objected to the posting of FTIs in camp offices without establishing the field offices and directed for proper official field offices. 	DTL, Balochistan	15 th July, 2022
9.	Delay and deductions in salaries, and annual increments of employees	<ul style="list-style-type: none"> M&E officer complaints about not receiving timely salaries. Furthermore, in some cases their salaries are deducted on account of their entitled leaves and there is no annual increment. There was no deduction in salaries made on the end of the Client as NPC confirmed from his office. Therefore, there should not be any deduction from consultants' office and the deducted amount should be reimbursed to concerned officers accordingly. As of now salaries bill up to May 2022 and some other pending bills are cleared and paid to consultants. All employees must be paid their salaries up to May 2022 at the earliest by consultants and Consultants must follow Project Administration Manual (PAM). 	TL (NPIWC-II), DTL (Balochistan) and Accounts Section	30 th June, 2022
10.	TA/DA and hoteling policy	<ul style="list-style-type: none"> NPC informed by the participants that no clear TA/DA and hoteling policy was implemented. NPC instructed to follow Project Administration Manual (PAM) in true form and spirit. 	PBOMs of G3EC and EASE PAK	30 th June, 2022
11.	Yearly increment on the salaries of the ME&IECs Staff.	<ul style="list-style-type: none"> Participants highlighted that there is no yearly increment. Although it has been mentioned in the Project Administration Manual (PAM). (Page#41) (Ref.: Section 6.3: HR Policy Governing Charged Staff). NPC directed the TL and DTLB to follow the protocol mentioned in 	Accounts Section and TL&DTLB	30 th June, 2022

SR#	Key Points	Discussion and Action Taken/Response	Responsible person / Department	Timeline
		PAM regarding the annual Increment of Salaries.		
13.	.	<ul style="list-style-type: none"> ○ NPC ensured full cooperation and support by him and his team for the ME&IECs. ○ He also briefed the forum that all the funds have been released from the client office and instructed the TL and DTLB to make sure before July, all field related and administrative issues to be solved at the earliest and the PAM to be effectively implemented. ○ He reinsured TL and DTLB his commitment and availability for the implementation of today's meeting decisions ○ TL and DTLB ensured NPC that they will extend their utmost efforts for effective and efficient working of the project. 	NPC / Team Leader and DTLB	30 th June, 2022

The meeting adjourned with a vote of thanks from the Chair, NPIWC-II, at 02:00 PM.

Mr. Rizwan Ahmed

Deputy Team Leader, Balochistan
ME&IECs, NPIWC-II,
Quetta, Balochistan

ANNEX - F: MINUTES OF NPC MEETING HELD IN ZONAL OFFICE LAHORE

June 24, 2022

Subject: **Draft Minutes of Meeting with the National Project Coordinator Islamabad**

The meeting was held on June 23, 2022 in the DTL Punjab Zonal office at 11.50 a.m. The following attended.

- Muhammad Asif Kakar, In Chair
National Project Coordinator
NPIWC-II, Islamabad
- Rana Muhammad Usman NPC Islamabad
- Dr. Usman Mustafa
Team Leader-ME&IE Consultants Islamabad
- Dr. Muhammad Abdul Quddus
Agricultural Economist, National Office,
Islamabad
- Muhammad Yousaf Bhatti, DTL- Punjab Zonal
Office, Lahore
- Rizwan Saleem, ICT Specialist National office Islamabad

Dr. Usman Mustafa, TL along with the Punjab Zonal Office Team welcomed National Project Coordinator (NPC), Muhammad Asif Kakar. Dr. Muhammad Abdul Quddus recited a few verses from The holy Quran. The DTL Punjab presented the up-to-date progress / achievement along with the issues / problems faced regarding the data collection from the client and from the field.

The NPC comprehended the presentation and addressed the issues / problems faced by the Punjab Zonal office and field team members. The NPC said that last year we surrendered Rs. 4.5 billion but this year we not only spent all of the budget but also demanded more funds for the NPIWC-II project. The participants pointed out / informed the NPC about the present Punjab Zonal office's location which is far away from the client leading consultant's office. It has many other problems. The NPC directed the DTL, Punjab to rent another office (As per the rules) near to the client office along with all the accessories such as parking for the vehicles and office cum residential facility there. This new office should be functional by August 1, 2022 positively. NPC also showed his concern that no ghost employee will be acceptable.

Rana Usman asked about the development of Website, while the ICT specialist responded that the ICT team is working on the development of the website. As far as Dashboard of Punjab NPIWC-II is concerned, ICT specialists responded that Punjab DGA (OFWM) is not providing the Data for the development of the dashboard. ICT also informed him that he got the email from the DGA office and that email will be shared with the NPC.

The NPC also conducted an introduction session with the field team members and asked various technical questions from the field team members and each field team member responded satisfactorily.

After the deliberation the following decisions were taken.

Decisions

- Current office should be shifted near to the client office and this task may be completed by August 1, 2022, positively.
- Inventory of the Punjab Zonal Office be prepared and submit to the NPC office on priority.
- The dashboard task in Punjab should be developed by Mr. Rizwan Saleem ICT Specialist on priority basis. In this regard, he should request to the NPC so that NPC direct the DGA (OFWM) to provide the required data and relevant information needed for the Dashboard development and application. NPC also directed him to attend the meeting in Islamabad held on 28 - 06 – 2022.
- The TA / DA to the field staff members may be accorded as per the rules
- The salary to all ME&IE consultants staff members be given on the first date of each month.
- The data devices for the data collection should be procured for all field team members and handed over for smooth functioning of the data collection.

The meeting ended with a vote of thanks to the chair.

ANNEX - G: MINUTES OF NPC MEETING HELD IN NATIONAL OFFICE ISLAMABAD

June 28, 2022

Subject: **Draft Minutes of Meeting with the National Project Coordinator Islamabad**

After concluding BOM Meeting, NPC visited National Office Islamabad along with his staff. Team Leader and all the office staff welcomed NPC. A short meeting was also held. After meeting with consultants NPC met all the office staff listened their issues. Following attended the meeting.

- Muhammad Asif Kakar, In Chair
National Project Coordinator
NPIWC-II, Islamabad
- Mr. Saif ul Islam
Deputy National Program Coordinator, NPIWC-II
- Dr. Tahmena Iqbal
Deputy NC, NPIWC-II
- Mr. Muhammad Naeem
Deputy National Project Coordinator, WCBA KP
- Hafiz Abdul Rauf
CEO EASE PAK
- Dr. Usman Mustafa
Team Leader-ME&IE Consultants Islamabad
- Mr. Irfan
Director CSRD,

After a short meeting NPC met all the office staff and listened their issues

Decisions

- As payment pending payments has been made to consultants, salaries of all the staff should be paid upto June 2022
- The TA / DA to the field staff members may be accorded as per the rules
- The salary to all ME&IE consultants staff members be given on the first date of each month.
- The data devices for the data collection should be procured for all field team members and handed over for smooth functioning of the data collection.

The meeting ended with a vote of thanks to the chair.

ANNEX - H: MINUTES OF 4TH BOM MEETING HELD IN NPC OFFICE

July 05, 2022

Draft

**Subject: 4TH MEETING OF PROJECT BOARD OF MANAGEMENT (PBOM) OF ME&IE
CONSULTANTS UNDER THE PROJECTS TITLED "NPIWC-II"**

The Project Board of Management (PBOM) meeting was held on June 28, 2022 in the NPC office, Islamabad at 11.00 a.m. The following PBOM member attended the meeting:

- Eng. Muhammad Asif Kakar, In Chair
National Project Coordinator, NPIWC-II,
Ministry of National Food Security and Research
- Eng. Hafiz Abdul Rauf
CEO, EASE-PAK
- Dr. Usman Mustafa
Team Leader-ME&IE Consultants
- Eng. Abdul Hakeem Khan
Documentation Engineer,
National Water Management Consultant, Islamabad

Beside PBOM members following person also attended the meeting:

- Dr. Saiful Islam
DNC, FPMU (NPIWC-II)
Ministry of National Food Security and Research
- Dr. Tehmeena Iqbal
DNC, ME&IE Consultants
Ministry of National Food Security and Research
- Mr Muhammad Naeem
DNC, ME&IE Consultants
Ministry of National Food Security and Research
- Mr. Rizwan Saleem,
ICT Specialist, NPIWC-II Consultants
- Mr. Khurshid Gul
Account Officer, ME&IE Consultants

- Dr. Ikram Saeed
DTL, ME&IE Consultants (Nominated)

Eng. Muhammad Asif Kakar, NPC welcomed the participants in the 4th PBOM meeting. Hafiz Abdul Rauf recited a few verses from the holy Quran. The NPC and Dr. Iqbal showed their concerned about the progress of the project. NPC further highlighted that he tried his best and secured the release of the budget. Consultants have received their respected share and now it is time to deliver.

Mr. Rizwan Saleem, ICT Specialist, NPIWC-II Consultants briefly presented the Dashboard. He also highlighted the updated data issue particularly in Punjab. He further mentioned that dashboard is a continue project beside it is already handed over to Kashmir and KP province along with the training of their respective staff. The NPC comprehended the presentation and ensured his full cooperation to address the issues / problems faced by the ICT team in implementation and validation of Dashboard.

In this connection Eng. Hafiz Abdul Rauf, CEO, EASE-PAK ensured the delivery of all targeted activities. Following decisions were made:

No.	Item	Discussion/Person Responsible	Deadline
1	Dashboard	Updating of dashboard and letter for dashboard to Secretary, Agriculture, GoPunjab, Mr. Rizwan Saleem, ICT Specialist	05/07/22
2	Second Baseline Survey	Second baseline survey report and mid line report of first baseline survey is due on June 2022. Dr. Usman Mustafa, TL, NPIWC-II	08/08/22
3	Sampling Frame	Submit the recent sampling frame of Baseline survey to NPC. Dr. Usman Mustafa, TL, NPIWC-II	07/07/22
4	HR Policy	NPC inquired about HR policy, Hafiz Abdul Rauf informed it is already prepared and submitted to NPC office long ago.	
5	Staff list	Recent updated project staff list be provided to NPC. Dr. Usman Mustafa, TL, NPIWC-II.	07/07/22
6	Staff Salary	All project staff salaries should be cleared and be deposited in their respected account on first day of each month. Financial Advisor, NPIWC-II. NPIWC-II.	05/07/22

The meeting ended at with a vote of thanks to the chair.

ANNEX - I: WATERCOURSE DATA SUBMISSION SUMMARY OF AJK ZONE

AJK - Watercourses Data Submissions – Summary

Division	District	Completed	Work Order Cancelled	Under Progress				Overall
				1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
MZD	MZD	32	3	16	17	23	13	104
	Jhelum	13	0	2	3	2	11	31
	Neelum	8	1	12	5	17	0	43
Muzaffarabad Total		53	4	30	25	42	24	178
Poonch	Poonch	28	1	1	2	14	5	51
	Bagh	18	3	2	0	16	0	39
	Haveli	4	1	2	0	10	7	24
	Sudhnoti	13	4	2	0	16	6	41
Poonch Total		63	9	7	2	56	18	155
Mirpur	Mirpur	57	2	0	0	12	25	96
	Bhimber	65	0	4	1	4	27	101
	Kotli	17	9	6	0	1	18	51
Mirpur Total		139	11	10	1	17	70	248
Overall		255	24	47	28	115	112	581

ANNEX - J: WATER STORAGE TANK DATA SUBMISSION SUMMARY OF AJK ZONE

AJK - WST/WHS Data Submissions - Summary

Division	District	Completed	Work Order Cancelled	Under Progress		Overall
				Work Order Issued	Work Order Pending	
Muzaffarabad	Muzaffarabad	78	0	22	22	122
	Jhelum	5	0	3	8	16
Muzaffarabad Total		83	0	25	30	138
Poonch	Poonch	42	2	10	15	69
	Bagh	23	7	21	1	52
	Haveli	4	0	26	14	44
	Sudhnoti	8	0	11	9	28
Poonch Total		102	9	68	39	193
Mirpur	Mirpur	3	1	7	10	21
	Bhimber	3	0	1	25	29
	Kotli	12	1	1	8	22
Mirpur Total		18	2	9	43	72
Overall		178	11	102	112	403

ANNEX - K: WATERCOURSE DATA SUBMISSION SUMMARY OF KP ZONE

KP - Watercourse Data Submission - Summary							
Division	Admin District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bajaur Agency	Bajaur	22	0	0	0	8	30
Bajaur Agency Total		22	0	0	0	8	30
Bannu	Bannu	53	0	0	0	0	53
Bannu	Lakki Marwat	56	0	0	0	0	56
Bannu	N.W Agency	5	0	0	0	0	5
Bannu Total		114	0	0	0	0	114
D.I. Khan	D.I. Khan	441	2	0	11	2	456
	Tank	39	0	0	0	0	39
D.I. Khan Total		480	2	0	11	2	495
Hazara	Abbottabad	16	0	0	0	0	16
Hazara	Battagram	25	0	0	0	0	25
Hazara	Haripur	29	0	0	0	0	29
Hazara	Kohistan	18	0	0	0	0	18
Hazara	Mansehra	47	0	0	1	0	48
Hazara	Torghar	11	0	0	0	0	11
Hazara Total		146	0	0	1	0	147
Khyber Agency	Khyber	19	0	0	0	0	19
Khyber Agency Total		19	0	0	0	0	19
Kohat	Hangu	42	0	0	0	0	42
Kohat	Karak	36	0	0	0	0	36
Kohat	Kohat	86	0	0	0	0	86
Kohat Total		164	0	0	0	0	164
Kurram Agency	Kurram	8	0	0	0	0	8
Kurram Agency Total		8	0	0	0	0	8
Malakand	Buner	52	0	0	0	1	53
Malakand	Chitral	41	0	0	0	1	42
Malakand	Lower Dir	45	0	0	1	1	47
Malakand	Malakand	45	0	0	0	2	47
Malakand	Shangla	29	0	0	1	0	30

Malakand	Swat	125	0	1	0	8	134
Malakand	Upper Dir	27	0	0	0	0	27
Malakand Total		364	0	1	2	13	380
Mardan	Mardan	90	0	0	0	0	90
Mardan	Swabi	79	0	0	1	17	97
Mardan Total		169	0	0	1	17	187
Mohmand Agency	Mohmand	43	0	0	0	0	43
Mohmand Agency Total		43	0	0	0	0	43
Orakzai Agency	Orakzai	1	0	0	0	0	1
Orakzai Agency Total		1	0	0	0	0	1
Peshawar	Charsadda	96	0	0	0	0	96
Peshawar	Nowshera	70	0	0	1	1	72
Peshawar	Peshawar	59	0	0	0	2	61
Peshawar Total		225	0	0	1	3	229
S.W Agency	S.W Agency	15	0	0	0	0	15
S.W Agency Total		15	0	0	0	0	15
Overall		1770	2	1	16	43	1832

ANNEX - L: WATER STORAGE TANK DATA SUBMISSION SUMMARY OF KP ZONE

KP - WST Data Submission - Summary				
Division	District	Under Progress		Overall
		Completed	Work Order Pending	
Bajaur Agency	Bajaur	11	0	11
Bajaur Agency Total		11	0	11
Bannu	Bannu	4	0	4
Bannu	Lakki Marwat	18	0	18
Bannu	N.W Agency	8	0	8
Bannu Total		30	0	30
D.I. Khan	D.I. Khan	76	0	76
D.I. Khan	Tank	16	0	16
Dera Ismail Khan Total		92	0	92
Hazara	Abbottabad	0	1	1
Hazara	Abottabad	9	0	9
Hazara	Battagram	22	0	22
Hazara	Haripur	13	1	14
Hazara	Kohistan	9	0	9
Hazara	Mansehra	13	0	13
Hazara	Torghar	7	0	7
Hazara Total		73	2	75
Khyber Agency	Khyber	10	0	10
Khyber Agency Total		10	0	10
Kohat	Hangu	14	0	14
Kohat	Karak	29	0	29
Kohat	Kohat	4	0	4
Kohat Total		47	0	47
Kurram Agency	Kurram	2	0	2
Kurram Agency Total		2	0	2
Malakand	Buner	25	1	26
Malakand	Chitral	6	0	6
Malakand	Dir Lower	7	0	7
Malakand	Dir Upper	14	0	14
Malakand	Malakand	12	3	15

Malakand	Shangla	17	0	17
Malakand	Swat	93	4	97
Malakand Total		174	8	182
Mardan	Mardan	16	1	17
Mardan	Swabi	9	4	13
Mardan Total		25	5	30
Mohmand Agency	Mohmand	41	0	41
Mohmand Agency Total		41	0	41
Orakzai Agency	Orakzai	2	0	2
Orakzai Agency Total		2	0	2
Peshawar	Charsadda	13	0	13
Peshawar	Nowshera	31	0	31
Peshawar	Peshawar	17	4	21
Peshawar Total		61	4	65
S.W Agency	S.W Agency	15	0	15
S.W Agency Total		15	0	15
Grand Total		583	19	602