



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

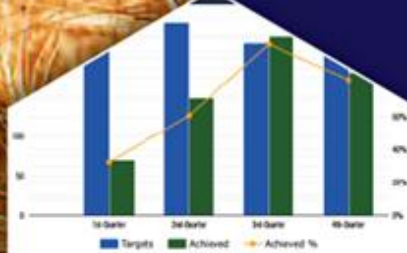
NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION
AND IMPACT EVALUATION
CONSULTANTS



MONTHLY MONITORING REPORT

DECEMBER 2022



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



EASE-PAK

ADA
Consultants Inc.

In Association with S&S Associates



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

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

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

MONTHLY MONITORING REPORT
DECEMBER 2022

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ACRONYMS

ADA	Assistant Director Agriculture
AES	Agriculture Extension Services
AF	Acre-Feet
AJK	Azad Jammu & Kashmir
AOSM	Adjustable Orifice Semi-Module
AWPB	Annual Work Plan and Budget
AWPs	Annual Work Plans
BCR	Benefit Cost Ratio
CFT	Cubic Feet
CMS	Content Management System
CSRD	Center for Social Research and Development
DAES	Director Agriculture Extension Services
DDA	Deputy Director Agriculture
DGA	Director General Agriculture
DTL	Deputy Team Leader
EAs	Executing Agencies
EIRR	Economic Internal Rate of Return
FCR	Financial Completion Report
FCRs	Final Completion Reports
FMFSR	Framework for Federal Financial Management System
FOs	Farmers Organizations
FPMU	Federal Project Management Unit
FWMC	Federal Water Management Cell
GAP	Gender Action Plan
GB	Gilgit Baltistan
G3EC	G3 Engineering Consultants
GIS	Geographic Information System
HEIS	High Efficiency Irrigation System
IAs	Implementing Agencies
ICR	Interim Completion Report
ICT	Islamabad Capital Territory
IRR	Internal Rate of Return
ICT	Information & Communication Technology
JV	Joint Venture
KP	Khyber Pakhtunkhwa
LLL	Laser Land Leveler
LPS	Liter per Second
M&E	Monitoring and Evaluation
MAF	Million Acre Feet
ME&IE	Monitoring, Evaluation and Impact Evaluation
MIS	Management Information System
MNFSR	Ministry of National Food Security and Research
MMR	Monthly Monitoring Report
MT	Monitoring Template
MTE	Mid-Term Evaluation
NESPAK	National Engineering Services Pakistan

NPC	National Project Coordinator
NPIWC	National Program for Improvement of Watercourses
NPV	Net Present Value
NWMC	National Water Management Consultants
ODK	Open Data Kit
OFWM	On-Farm Water Management
PC-1	Planning Commission-(Form-One)
PDO	Project Development Objectives
PIC	Project Implementation Committee
PIES	Project Impact Evaluation Study
PQC	Pre-Qualification Committee
QM&ER	Quarterly Monitoring and Evaluation Report
RBM	Results-Based Management
RFT	Running Feet
RWD	Responsive Web Design
SFT	Square Feet
SOPs	Standardized Operating Procedures
SPSS	Statistical Package for Social Sciences (Software)
SSCs	Supply and Service Companies
TABs	Tablets
TL	Team Leader
TOR	Terms of Reference
TPV	Third Party Validation
TWRD	Tail-Water Recovery Ditch
WG	Women Group
WST	Water Storage Tank
WUAs	Water Users Associations

EXECUTIVE SUMMARY

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

Chapter-1 describes the detailed introduction and description of the project. The Government of Pakistan is implementing a project entitled “National Program for Improvement of Watercourses in Pakistan Phase-II” (NPIWC-II) at a total cost of PKR 154,542.355 million (Umbrella PC-I including Sindh) over a period of 05 years. This project 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 December 2022 to 31st December 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 (November 2022)
- Regular Monitoring of Interventions in the Field
- Meetings of ME&IE Consultants with Stakeholders about Project Progress / Issues
- Development of Customized Android Based Applications
- Data collection of interventions in MIS/GIS database
- Implementation of MIS Dashboard
- Two days Training on Capacity Building of OFWM Field Staff (Android Based Data Collection Application), Balochistan Dashboard.
- Quarterly plan made for baseline- 3 has been revised.
- Impact survey of Baseline-I has been completed.
- Social & Gender specialist conduct impact survey
- Conducted Food security impact and food consumption pattern.
- Held regular meetings.
- Data entry of midline survey.
- Draft report write-up of Baseline-2 completed.
- Data entry, validation and reporting

Chapter-4 highlights the quarterly work plan for the period of 1st October 2022, to 31st December 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 2022-23 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 of 2nd-Phase Baseline Survey (Finalization of MTs)	Complied	
	1.2	Internal Meetings ME&IE Consultants' Zonal Offices for development of Methodology for Baseline Survey Phase-II.	Complied	
	1.3	Training of Field Staff for Baseline Survey Phase-II	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	Complied	
	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. Development & Launching of Dashboard for Client Offices	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)	21 st MMR (Sep. 2022)	Submitted	
		22 nd MMR (Oct. 2022)	Submitted	
		23 rd MMR (Nov. 2022)	Submitted	
		24 th MMR (Dec. 2022)	Report in hand, to be submitted in stipulated time	
5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jul-Sept 2022	Submitted	
		QM&ER Oct-Dec 2022	To be submitted in stipulated time	
5.3	Baseline Survey Report Phase-II (First Draft)	Submitted		
	Baseline Survey Report Phase-II (Updated version WC)	Submitted		
	Baseline Survey Report Phase-II (Draft version of WSTs)	Submitted		
5.4	Survey Manual (Final version) (Special Reports)	Submitted		

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, project components, etc.

1.2.1 Project Development Objectives

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

1.2.2 Project Objectives – General & Quantitative

Following is the project general and quantitative:

1) General Objectives:

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

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

2) Quantitative Objectives' Outputs and Impacts:

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

Project outputs

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

expected to save around 5.82 MAF per annum (approx. saving of 123 acre-feet (AF) per watercourse per annum).

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

Project impacts

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

Project indirect benefits to industry/economic activities

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

Awareness support to farmers

- xii) Motivating farmers through an awareness campaign for watercourse improvement.
- xiii) 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.

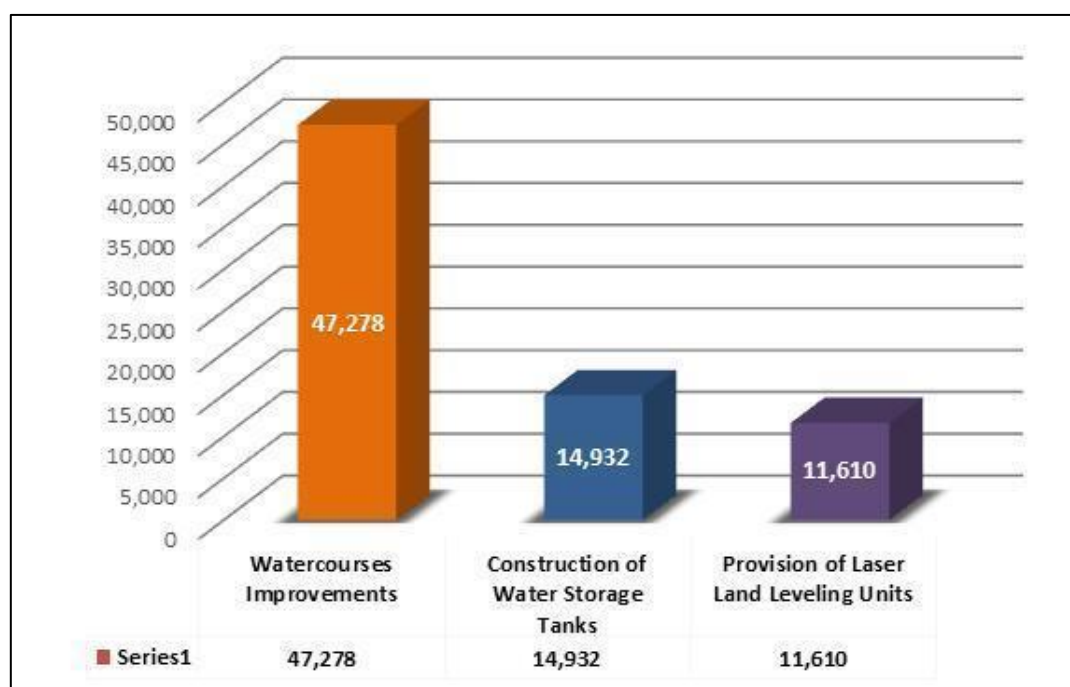


Figure 1.1: NPIWC-II Project WCs Improvement, WSTs, and LLL Targets in Pakistan.

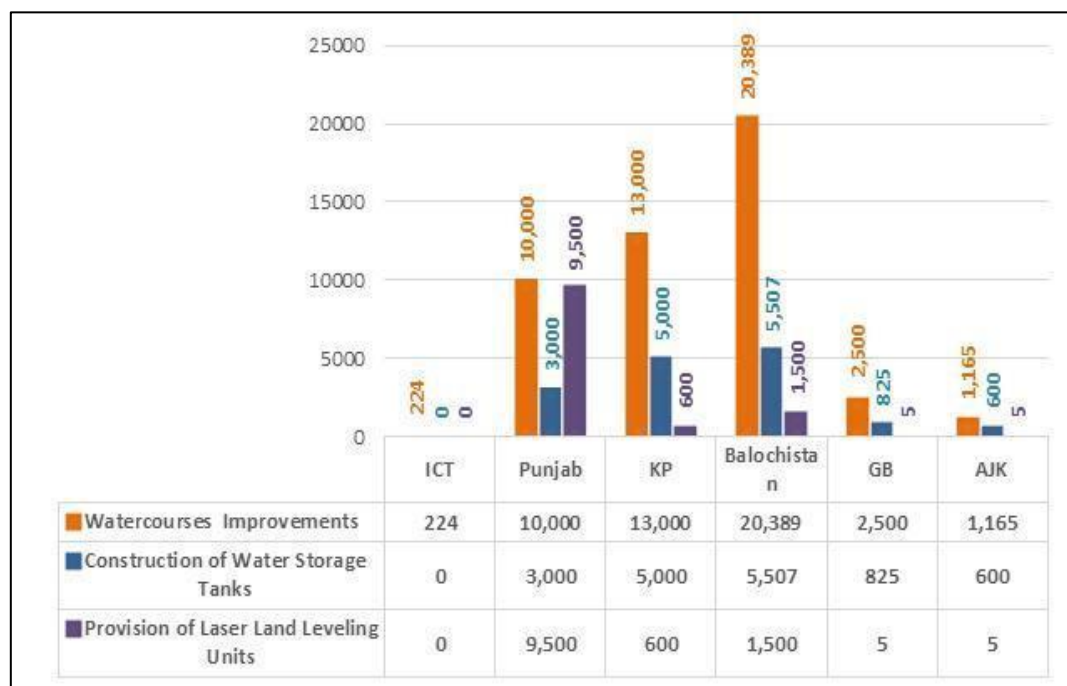


Figure 1.2: Zone-Wise WCs Improvement, WSTs, and LLL Target

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

- viii) mobilization, financial and administrative sustainability of water users' associations and ensuring the maintenance of watercourses, water storage tanks and laser land Levelers,
- ix) Economic impact of project interventions,
- x) Carry out the impact evaluation of the project intervention on the economy and stakeholders,
- xi) Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks and laser Levelers database, etc. (while the project's IT staff will maintain the website),
- xii) 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 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 launching of the interventions 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

			<p>watercourses: close to water outlet, head reach, middle 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>
			<p>Based on water savings on sample LLL units, total water savings will be estimated for all project LLL units. The savings will be reported per LLL unit, per annum and aggregate for the project in LPS and in Acre feet.</p>
4	Community mobilization	Social and Gender Specialist and Socio-Economic Expert	<p>The extent of community mobilization will be assessed by investigating whether:</p> <ul style="list-style-type: none"> WUAs is functional Holds regular meetings and keep record of them Makes decisions democratically The participation in the organization is voluntary It is financially and administratively sustainable Takes steps and ensures maintenance of watercourses, WSTs and laser land leveler
5	Economic benefits assessment for agriculture	Team Leader, Socio- Economist and Agricultural Economist	<ul style="list-style-type: none"> As indicated at serial No. 1, Agriculture data will be collected before (baseline) and after (impact) the watercourse improvement and WSTs construction. In both the surveys same forms will be used and same sampled farmers will be interviewed Data on variables such as crop yields, irrigated area, cropping pattern, cropping intensity, farm income and employment will be collected and analyzed The difference between before and after situations minus natural growth will be assumed as economic benefits to the agriculture

6	Impact evaluation-on the economy	Team Leader, Agricultural Economist and Socio-Economic Expert	<ul style="list-style-type: none"> The results of the baseline and impact surveys will be used to quantify impact on the economy Additional food produced due to the project will be estimated. It is benefitted towards food security 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, the consultants have submitted twenty third MMR (November 2022) on the 1st week of December 2022. While the twenty fourth MMR (the Report in hand) for the month of December 2022 (1st December 2022 to 31st December 2022) will be submitted in stipulated time i.e., in the 1st week of current month.

Monthly Monitoring Report (MMR) explains the understanding towards all activities to be carried out as per TORs of ME&IE consultants' assignment and their completion within stipulated time frame. The activities include but are not limited to pre-field/ in-house activities, field monitoring activities i.e., monitoring of project interventions, ICT assignments including monitoring of online data collection in the field, and development/ improvement of project dashboard and website etc. Consultants of ICT Team also remained in contact 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 SUBMISSION OF BASELINE SURVEY PHASE- II REPORT (UPDATE VERSION)

In the light of the comments of the Clients, the ME&IE Consultants have updated the Draft Report of Baseline Survey-II and submitted it along with annotated reply of comments on BLS-II and draft report on BLS-II to NPC on 21st of December 2022.

3.3 REGULAR MONITORING / FIELD VISITS BY ME&IE CONSULTANTS

Routine/regular monitoring of the interventions remained in progress during the reporting month. However, due to heavy rains and devastating floods in most of the regions of the Punjab, Balochistan and KP, the field activities were affected. Detail of data collection and regular field monitoring by field teams of Zonal Offices is given Zone wise as below:

3.4 ACTIVITIES ISLAMABAD ZONE – DECEMBER 2022

The summary of major activities conducted by ME&IE consultants during the current month were:

- Implementation on visit plans for impact survey of Baseline-1.
- Tentative plan was made for impact survey of baseline II.
- Quarterly plan made for baseline- 3 has been revised.
- Impact survey of Baseline-I has been completed.
- Social & Gender specialist conduct impact survey of two sites in district Mirpur.
- Also Conducted Food security impact and food consumption pattern.
- Held regular meetings.
- Data entry of midline survey.
- Draft report write-up of Baseline-2 completed and submitted to client for necessary processing.
- Data entry, validation and reporting

3.4.1 UPDATED PROGRESS OF ME&IE CONSULTANTS - ISLAMABAD

The ME&IE Consultants, Islamabad had carried out second baseline survey of 26 Watercourses and 15 WSTs. Impact survey of first baseline was conducted during the months of September, November and December 2022. These were a total of 8 interventions visited during first baseline while 41 total interventions were visited in second baseline.

As per TORs of ME&IE consultants they have to submit midline survey report against the completed baseline targets during the middle of the project. ME&IE Consultants have been carrying Midline Survey with effect from August through December 2022 on the basis of First Baseline Surveys. Baseline-I and Draft

Baseline-II reports have been submitted, the data set of the later report was validated by all zones/ units' consultants including ICT-Zone of the project. The field

activities for impact survey have already been started but had finished during the current month from all the targeted sites of AJK and ICT areas.

Table 3.2: Total Activities, District-wise

Sr. #	District	First Phase Baseline		Second Phase Baseline		Midline Survey		Regular Monitoring / Spot Checking		Total visits
		WC	WST	WC	WST	WC	WST	WC	WST	
1	Islamabad	2	-	5	-	4	-	5	-	16
2	Attock	-	-	-	7	-	2	-	5	14
3	Chakwal	-	1	-	-	-	1	-	-	2
4	Kalar Kahar	-	1	-	-	-	1	-	-	2
5	Kalar Saidan	-	-	-	2	-	2	-	2	6
6	Taxila	-	-	-	1	-	-	-	1	2
7	Bhimber	-	-	9	1	-	-	-	-	10
8	Kotli	-	-	3	-	-	-	-	1	4
9	Mirpur	2	-	6	-	2	-	2	-	12
10	MuzaffarAbad	2	-	3	4	2	-	5	4	20
Sub-Total		6	2	26	15	8	6	12	13	88

➤ Achievements against Outputs

Islamabad Zone team worked on data entry on android base application, ODK and reporting of field survey information during the last week of December 2022.

- Output 1: Baseline/Impact Survey of Watercourses and Water Storage Tanks**

During the current month, the data gathered by the field team regarding the watercourses pertaining to midline survey of the AJK division were entered in android application.

- Output 2: Monitoring of the selected watercourses.**

The field team also conducted regular monitoring of the targeted interventions during the visit of Mirpur area in the reporting month of December.

- Output 3: Coordination Meetings**

During the current reporting month of December 2022, coordination and meetings have been carried out with OFWM department of AJK. The purpose of the coordination with them was to share and collect information in respect of the midline survey. In line the schedule was prepared and the same plan was ensured and implemented in respect of their staff's availability while conducting Impact survey. The department of small dams and irrigation of Mirpur divisions showed their keen interest and co-operated

in sharing the information as well as facilitated in conducting the field survey.



Figure 3.3: Field Team meeting with OFWM officer at his Office, Mirpur (AJK)

- Output 4: Capacity Building of ME&IE Consultants and OFWM staff on Android Application**

The updated questionnaire (MTs) were practiced again by the field team officers as well as at the same time on the spot experiential learning was imparted amongst the member of the field team especially useful for the incoming new appointee, Field Team In Charge (FTI) of ICT-Zone.

i. FIELD VISIT OF MIRPUR: DEC-2022

Date of Visit	26-12-2022
Scheme	Water course
Farmer Name	Rashid Iqbal
Name of village:	New Sunain
Tehsil	Mirpur
Province	AJK

District	Mirpur
Source of irrigation:	Tube well
Shape of water course	PCP (Precast parabolic)
Command area of WC:	5 Acres
No of beneficiaries:	3
Reduction in water disputes/thefts	No problems related to water theft

According to the plan, Field team left the ICT on 26th of December 2022 at 6:00AM in order to visit the Mirpur areas Villages, **New sunain** and **Lehri-6**. Field Team reached at 08:45am in Mirpur OFWM office, OFWM officer was already present in his office. After greetings, field team reviewed the files of water course provided by OFWM officer. After discussion in the office, the team left for monitoring visit along with OFWM officer.

ME&IE field team visited village, **New Sunain** along with OFWM officer, Muhammad Ali. OFWM officer was very cooperative and provided all the relevant data required by the field team. The aim of this visit was midline survey to observe the impact of the project interventions. The beneficiary of **New Sunain** water course scheme was already available on the site.

➤ Brief Profile of WC / Owner---Non-canal Area



Figure 3.4: Depicting New Sunain WC (Mogha) in the presence of field team, beneficiary and OFWM, officer



Figure 3.5: Field team member with OFWM officer at New Sunain WC

During introductory talk with the farmer, he told about his family, the land occupied by him, and some information about his cultivated crops. He was educated and quite aware of all the agricultural practices.

The targeted Water course was clean and farmer told the team that he regularly maintained the cleanliness of water course. Farmer told the team that he has his own tube well.

There are three beneficiaries on this water course with only operational 5 acres of agriculture land. The beneficiaries of this water course were used to grow Wheat, Maize and Barseem (fodder) previously, while during the baseline-I the farmers on this water course told that they did not have enough water to produce different number of crops and also not fetching good yields. The beneficiaries were very happy as the number of crops increased and the yield also increased after the introduction of the targeted interventions.

The beneficiaries on this water course hired 2 permanent labors (PHL). They were monthly paid by the famer.

Coordinates were taken on spot by team and measurement of WC were taken by team. The field team visited the currently grown crops like wheat and barseem in field, as well as took picture along with beneficiary of the water course.

The farmer was using Urea and DAP fertilizer, he also used FYM as a fertilizer. The land occupied by him was fertile and was suitable for different crops.



Figure 3.6: Starting point of New Sunain WC (Mogha)



Figure 3.7: Lively group Photo of the NPIWC-II Consultants' Field team, OFWM officer and beneficiary at New Sunian WC Scheme



Figure 3.8: S&G Specialist interviewing female folks

➤ Social and Gender Aspects:

Basic Information:

Mrs. Sadiya Majid is 46 years' old, an educated women. Her husband is government officer. Mrs. Sadiya Majid has good knowledge of agriculture and crops. She has her own non-cultivated land, but she is unaware about how much area she owns. She has knowledge of NPIWC-II project but she didn't know about WUAs.

Her husband is a very supportive spouse who usually encourages his wife in making decisions for the family. She is not restricted by her spouse; therefore, she is allowed to travel alone.

Before Intervention

Mr Sadiya told that before the construction of watercourse they were not getting the enough water supply for crops. Water is main issue in their area.

The production of crops was not increased because of shortage of water. She described that they were purchasing wheat from market for their personal use. They were spending a large amount of money to buy wheat before this project's interventions. She told that the taste of naan was not good, children and husband always complained about the taste.

Impact of Intervention:

Mrs. Sadiya is very grateful to team and described that they are using wheat of their own farm which is healthier and taste was also good. It saved a lot of their money. Their workload has decreased in terms of visiting markets for purchasing Wheat.

ii. Brief Profile of WC / Owner --- Non-Canal Areas

Date	26-12-2022
Scheme	Water Course
Farmer Name	Allah Ditta
Name of village:	Lehri-6
District:	Mirpur
Province	AJK
Source of irrigation:	Tube well
SHAPE OF WC:	PCP
Command area of WC:	12.5 Acres
No of beneficiaries:	3
Equity in water distribution increased	No Problems related to Equity in Water Distribution.
Reduction in water disputes/thefts	No problems related to water theft

After the visit of village **New Sunian**, the team moved towards another village "**Lehri-6**" to record data of their targeted interventions. The team visited there for conducting midline survey, Team had already visited this area before for gathering baseline-1 information, but now the aim of this visit was only midline survey and to evaluate impact.

The farmer cultivated number of crops including maize, wheat and vegetables, i.e., turnip, radish, spinach and garlic. Before this intervention, he was growing few crops only. The farmer was very happy about the performance of the targeted interventions because it allowed him to grow number of vegetables which he used for his home consumption as well as sold for meeting cash needs.



Figure 3.9: Good intercropped Reddish Vegetable Crop at Lehri-6 WC

Field Team visited the targeted WC command area and noticed well maintained agricultural crops.

Farmer has one PHL. Who along with his wife was well aware of agricultural practices. The PHL, the beneficiary told that his owner has allowed him to grow vegetables for his own home consumption as well as share the income with the owner by selling the vegetables in the market.

During introduction the farmer told about his family, the land occupied by him, and some information about his cultivated crops. He was educated and was quite aware of all the agricultural practices.

The targeted Water course was clean and farmer told the team that he regularly maintained the cleaning of water course. Farmer told the team that he has his own tube well.

There are three beneficiaries on this water course and owning crop land to the extent of 12.5 acre.

The farmer was using Urea and DAP fertilizer, he also used FYM as a fertilizer. The land occupied by him was fertile and was suitable for different crops

Coordinates were taken on the spot by the team along with the measurement of the WC. Team visited the growing crops from the targeted interventional fields and also took picture along with beneficiary of the water course.

Farmer told that after this intervention, the income from the crops was increased due to increased crop yields to the extent of approximately 10-15 percent, before launching the intervention, the beneficiary did not grow such number of vegetables as he was growing different vegetables now.



Figure 3.10: Field team, beneficiary and OFWM Officer at Lehri-6 village.

Beneficiary told that the production of vegetables and wheat increased after the intervention.



Figure 3.11: FTI of ICT-Zone interviewing Beneficiary

➤ Social and Gender Aspects:

Permanent Hired labor (PHL) of Lehri_6 allowed his wife to give interview to S&G specialist.

Basic Information:

Akber Khan is a permanent hired labor, who is working on owner's land (Allah Ditta). His wife Mrs. Shazia is 35 year's old, who belongs from district Mardan. She is Pashtoon and her family migrated to Lehri 6 village about 3 years ago. Her husband didn't find a good opportunity of job in Mardan, so they decided to move from Mardan to Mirpur.

Mrs. Shazia is landless women. She told that in our culture, female are not given any piece of land from the descendants.

Before Intervention:

Mrs. Shazia and her husband, Mr. Akber khan both are illiterate. Mr Akbar and his family involved in farming activities. Mrs. Shazia is a very supportive wife who always support her husband in the chores of farming operations.

Mr. Akber khan has two wives and 11 children and not even a single child has enrolled in school/Madresa.

Before introduction of interventions only Mr. Akber was earning 25000/ per month which was very insufficient to fulfil their family needs.

Water scarcity is main issue in their area. The production of crops was not increased due to shortage of water. She added that before intervention they were spending a lot of money on purchasing vegetables and food grains from the market.

Impact of Intervention:

After launching of the interventions, she realized that they can grow more vegetables because there is no problem of availability of sufficient water to irrigate crops.

She gives majority of her time to farming activities starting from sowing to picking. Now, she is very happy because females from the neighboring villages have started visiting their home for buying fresh vegetables.

She told that previously she was very worried about her house expenditures, since she is second wife and her husband income is not sufficient to fulfil their needs. She is very gratifying on her role while contributing financially towards arresting the household expenditures.



Figure 3.12: S&G Specialist interviewing women folks at Lehri-6 Mirpur

Mrs. Shazia told that she was earning 500-700 PKR per day from selling the vegetables. She is very satisfied and confident after her contribution towards lessening in household expenditures.

Mrs. Shazia explains that they are consuming their own farm vegetables which saved their expenditures and time.

After increasing the income, she is planning to enroll their children in school. The addition in the income empowered them to buy the uniform, books and other school related stuff for their children. Thus, Mr. Akber appreciated that the project interventions have increased their farm income.

According to Mrs. Shazia, she is the role model for other women who interested to increase their income. Specially those women who are illiterate and wanted to do something in order to improve their living standers.



Figure 3.13: PHL is working on vegetable farm at Lehri 6 Mirpur

➤ Observations by the Field Team:

- i. Following were the general observations, as well as regular monitoring recorded during the survey of WCs: Both of the water courses ended up to the lining without any kacha portions;
- ii. In case of both of the WCs, the sources of water were Tube Well that was situated at the middle of the catchment area, the flow of water in the channels was through gravitational action due to nature of the terrain of WC command areas;
- iii. At both of the water courses Water User Association (WUAs) were fully functional and organized;
- iv. There was no dispute reported among the farmers due to the effective WUA bodies.
- v. Design and quality of material used for the construction of the WCs under the

- supervision of the WUAs were seen up to the mark;
- vi. Files containing all the official record and documents were properly maintained by the concerned Water Management Officer; and
 - vii. Both the interventions fall under non-canal --- Barani area of Pothuwar on the property of owner/tenant categories.



Figure 3.14: Discussion of field team members after holding of field visit to the targeted areas of AJK with DTL, ICT zone, at National Office to build unanimous consensus about the field observations as well as develop plan for the future project activities

3.5 ACTIVITIES PUNJAB ZONE – DECEMBER 2022

The ME&IE consultants have been engaged in different activities during the month i.e., December 2022 as under:

- Pre – Field Activities
- Field Activities
- ME&IE Consultants Meeting with Stakeholders

3.5.1 UPDATED PROGRESS OF ME&IE CONSULTANTS – PUNJAB

The ME&IE consultants' teams remained busy in data collection/Validation on previous year basic data for watercourse improvement interventions for this year 2019 – 20 and 2020 – 21. Such data has been collected from various district level/validated for PMIS Dashboard as under:

Table-3.2 Status of Data of PMIS Dashboard

Division	District	Status
Lahore	Lahore	Complete
	Sheikhupura	Complete
	Nankana Sahib	Complete
	Kasur	Complete
Faisalabad	Faisalabad	Complete
	Jhang	Complete
	Chiniot	Complete
	Toba Tek Singh	Complete
Gujranwala	Gujranwala	Complete
	Narowal	Complete
	Sialkot	Complete
Gujrat	Gujrat	Complete
	Hafizabad	Complete
	Mandi Bahu din	Complete
Sargodha	Sargodha	Complete
	Khushab	Complete
	Mainwali	Complete
	Bhakkar	Complete
Sahiwal	Okara	Complete
	Sahiwal	Under Process
	Pakpattan	Under Process
Bahawalpur	Bahawalpur	Under Process
	R.Y Khan	Under Process
	Bahawalnagar	Under Process
D.G Khan	D.G Khan	Under Process
	Muzaffargarh	Under Process
	Layyah	Under Process
	Rajanpur	Under Process
Multan	Multan	Under Process
	Lodhran	Under Process
	Khanewal	Under Process
	Vehari	Under Process

3.5.1.1. Regular Monitoring / Baseline / Impact Survey of Interventions

The monitoring / Baseline / Impact survey pertain to various interventions of the project viz improvement of watercourses, water user associations, construction of water storage tanks and laser land levelers. Such surveys are carried out from time to time as a part of regular activity of ME&IE Consultants. The data from the field about any activity of an intervention are collected by field teams of ME&IE Consultants on android-based system. Such data are directly submitted from the field on MIS/GIS system for further processing by ICT department.

3.5.1.2. Visit of National Social & Gender Specialist to Punjab Zonal Office Lahore

Date	30 th December 2022
Venue	Punjab Zonal Office Lahore
Participants	<ul style="list-style-type: none"> i. Muhammad Yousaf Bhatti Deputy Team Leader ME&IE Consultants ii. Dr. Muhammad Abdul Quddus Agri Economist National office Islamabad iii. Munaza Bashir Tarar National Social & Gender Specialist iv. Awais Jahangeer Field Team In Charge v. All Field Members
Meeting Agenda/Points discussed:	<p>National Specialist for Social & Gender visited Punjab zonal office and discussed the progress in her respective field.</p> <p>Interactive session has been conducted with all field team members and MT's & different indicators were discussed.</p> <p>She Appreciated the team work and desire to 10 to 20 respondents (females) should be interviewed phase – III Baseline Survey Miss Abida Munir social & Gender specialist will also accompany the team during field activities.</p>



Figure 3.15: Discussion with Deputy Team Leader and Agricultural Economist



Figure 3.16: Address the Field Team and Discussion on MTs about Social & Gender aspect.

3.5.1.3. Field Activities

The Field Team comprises of the following:

1. Muhammad Yousaf Bhatti DTL
2. Awais Jahangeer FTI
3. Muhamad Zubair FTI

Visit Watercourse No. 45136/L

Date	21-12-2022
Watercourse No	45136/L
Type of Watercourse	Additional
Chak No/Village	9-Faiz
District and Tehsil	Multan
Name of Distributary	Rana Minor
Type of Moga	AOSM
Designed Discharge	85 LPS
Culturable Command area	300 Acres
Total No of water users	31
Improved lining Length	3895 M
Total lining Length	7790 M



Figure 3.17: A view of the Lined Portion of Watercourse no 45136/L

Visited the watercourse No.45136-L site at Village 9-Faiz Tehsil Multan and a meeting with the Water

User Association for the complete study on the role of WUA and assess the impact of the lined watercourse.

The expected assessment as per farmers' perception were:

- The time for irrigation before intervention i.e., 3 hours/acre has been reduced to 2 ½ hrs. after improvement.
- Water losses have been significantly reduced. The water flow till the end was much better than before.
- The pumping of tube well water has been reduced significantly.
- A change in cropping pattern was observed i.e cotton was being replaced by maize but not only due to an increase in water supply but other factors like climate change.
- The average yield of the major crop was expected to increase by 14-28 %. (Maize 60 to 80% mound, wheat 35-40 mound and rice 35 – 45 mounds per acre)
- Labor for cleaning watercourses has been reduced from 3 times to 1 per annum.

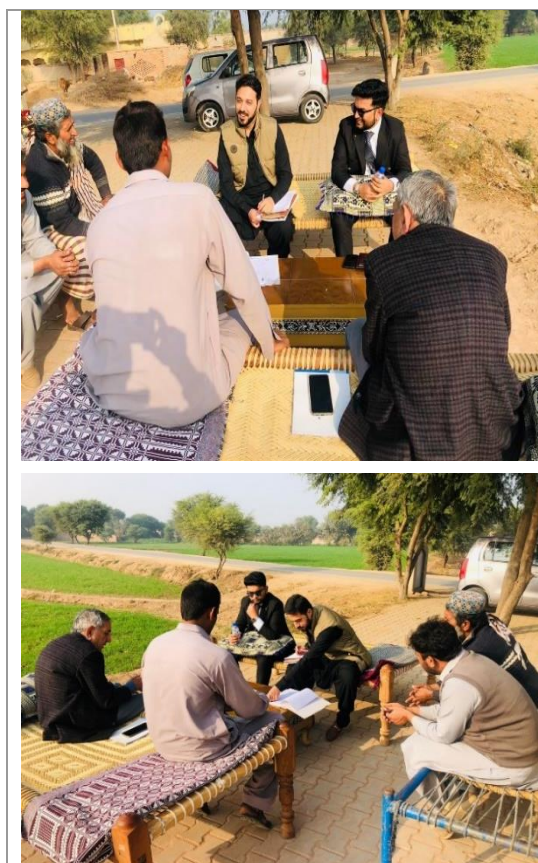


Figure 3.18: View of Meeting with Water User Associations

They raised an issue on the maintenance of the watercourse after its improvement, particularly towards the end of the watercourse i.e kacha portion. They asked for OFWM, assistance in this respect. The office bear (Mr. Mumtaz Ali, chairman, Riaz Hussain Treasure) were of the view that a fund should be raised from maintenance the early stage of organization of association.

Water Flow Measurement:

An exercise on actual measurement of water flow was carried out on the same watercourse at the head and mid of the watercourse. It was not possible to measure the water flow at the tail of the watercourse because of "warabandi". Following are the field observations of the measurement of Water Flow by using a pygmy current meter at Water Course No 45136/L. The measured actual; measurement and departmental OFWM measurement are given below.

Field Observations:

Sr. No	Design Discharge (Cusec)	Actual Discharge Measured (Cusec)
1	3	2.60
2	3	2.55

Average Discharge = 2.57 Cusses

Detail of methodology of measurement of water flow with pygmy meter and calculation of discharge are given in **Annexure F**.



Figure 3.19: View of measurement of water flow of watercourse no 45136/L Multan

According to the chairman of the Water User Association following are the benefits of the improvement of the watercourse.

- Farmer was happy because before the improvement of the watercourse huge amount of water was wasted in the field. As a result of the improvement of the watercourse (additional Lining), the farmer is getting an adequate water supply.
- Now the farmer is Cultivating 100% area under Kharif and Rabi crops. Prior to it, he was unable

to do so. Being at the tail is too happy with the WC improvement.

Visit Pak Punjab PCPL (Pre-Cast Concrete Parabolic Lining) Segment Yard Karor Pacca

Date 22-12-2021

The main features of the yard are:

1. Name - Pak Punjab Traders
2. Ownership – Muhammad Manzoor s/o Karim Baksh
3. Area – Approximate 5 acres without any wall
4. Address – Kehror Paka Mailsi Road District Lodhran

Visited the Pak Punjab PCPL Segment Yard at Tehsil Kahrur Pakka and met with the owners and technical staff. The visit aimed to assess the backward linkages under NPIWC-II, employment generation& industrial growth.

Total employment:

150 people for the production line

50 people for other purposes like loading unloading etc

Wages for Nacca Making: 180-250
Rs/Nacca/Person

Wages for Segment Making: 200-300
Rs/Segment/Person

Production capacity of Yard:

500-600 segments/Day

800 Nacca's/Day

Pak Punjab Traders own 5 yards in different areas of south Punjab with the approximately same capacity.

The labor employed belongs to the local area and does not require any specific experience or qualification. They learn to work in this trade gradually and become semi-skilled persons.

This factory also opens opportunities for various vendors and middlemen between the factory government and other private users of nakkas.



Figure 3.20: Pak Punjab PCPL Segment Yard Karor Pakka Visit and Meeting of ME&IE Consultants

Visit Laser Land Leveler Production Unit

Date 23-12-2021

The main features of the production unit are:

1. Name – Hanzala Traders and Laser Land Leveler
2. Ownership – Muhammad Zeeshan Aslam
3. Area – 1 Km Ludan Road Vehari

Visited the Hanzala Traders and Laser Land Service Providers (Registered firm) & interviewed the owner of the firm. The purpose of the visit was to learn about the manufacturing process related to LLL Units, employment generation, and industrial growth in this project.

Total Employment:

12 people Regular and 6 people on daily wages for the production line

3 technical people working like a sub-engineer.

Production capacity of Yard:

200-250 Units/Annum (Supply to government sector NPIWC-II and simultaneously to private farmers).

Hanzla Traders serve as 35 (sale, services and spare parts) also gives maintenance facilities to farmers for laser land levelers.

They manufacture locally more than 70% of parts of the laser in their factory.

Just the remaining electronic parts are imported from China, Germany, and USA.



Figure 3.21: Hanzala Traders and Laser Land Leveler Site Visit and Meeting of ME&IE Consultants

3.6 ACTIVITIES KP ZONE – DECEMBER 2022

Major activities conducted by ME&IE consultants KP Zone during the month of December includes:

- Meetings were arranged with KP OFWM Officers for collection of undergoing schemes. However, it was found that schemes were mostly completed under NPIW program.
- Prepared work plan and implemented for field visits but could not completed as per given schedule due to short of funds, however, it is planned to execute the activity in near future with the availability of funds.
- Data was collected and cleaned and entered for dashboard from OFWM.
- Drafted KP MMR report for the month of December

3.6.1 UPDATED PROGRESS OF ME&IE CONSULTANTS – KP ZONE

The ME&IE Consultants, KP had carried out first baseline survey of 17 Watercourses and 6 WST during the June 2021, while another 103 watercourses and 37 WST during baseline 2. These were total 163 WC/WST where the baseline surveys were carried out.

As per TORs, ME&IE consultants have to submit midline survey reports against the baseline targets during the middle of the project. During the course time ME&IE Consultants KP carried out the Midline Survey during August through September 2022 on the basis of First & Second Baseline Survey. The ME&IE has monitored a total of 32 interventions. Baseline-I and Baseline-II has been submitted and baseline-II has been validated by the team.

Table-3.3: Total activities, District-wise

S. No	District	First Phase Baseline		Second Phase Baseline		Midline Survey		Regular Monitoring / Spot Checking		Total
		WC	WST	WC	WST	WC	WST	WC	WST	
1	Abbot Abad	1		1		2				4
2	Bannu	1				1				2
3	Batagram	1				1				2
4	Bunir			6	2					8
5	Charsadda	1	1	1		2				5
6	Dera Ismail Khan	2		31	10	2				45
7	GB Zone		1							
8	Hari Pur	2	2	5	3	1				13
9	Kohat	1		2		3				6
10	Lakki Marwat	1				1				2
11	Mansehra	1		12	4	2				19
12	Mardan	1		4	1	5				11
13	Nowshera	1	1	19	7	6				34
14	Peshawar	1		11	7	3				22
15	Swabi	2				2				4
16	Swat			11	3					14
17	Tank		1							1
18	Torghar	1				1				2
Sub-Total		17	6	103	37	32				195

3.6.1.1. Achievements against Outputs

KP team worked on data entry reporting and validation in the month of December 2022.

Out put 1: Baseline / Impact Survey of Watercourses and Water Storage Tanks

During the reported month, KP Zonal team did not visit any watercourse or water storage tank for

baseline or mid line activity due to shortage of funds.

Output 2: Monitoring of the selected watercourses:

The field team could not conduct regular monitoring in the reporting month due to data entry to the dashboard system. Teams will conduct monitoring visits in coming months.

Output 3: Coordination Meetings

During the current reporting month, coordination and meetings have been carried out with OFWM department of KP. The purpose of the coordination with them was to collect the data for dashboard completion and its appropriate management by field officials of OFWM. This is to honor that ME&IE team receive tremendous support from OFWM directorate, whenever there is a need. Further the purpose of the meetings were also to get the updated data regarding TS or ongoing watercourses for monitoring purposes. The detail of coordination is given in [section 3.8.2](#) of this report in hand.

Output 4: Capacity Building of ME&IE Consultants and OFWM staff on Android Application

During the current reporting month, no formal training was imparted to staff of ME&IE and OFWM officials. However, continuous support was provided to OFWM officials on telephone for any issue while operating android system and/or data collection process.

HURDLES FACED DURING THE REPORTING MONTH

- Directorate remain involved in implementation of other funded projects with the NPIW-II. So, they are not able to give time to ME&IE Consultants due to shortage of time in supporting field visits.
- Public holidays can hinder the activities routine.

3.7 ACTIVITIES BALOCHISTAN ZONE – DECEMBER 2022

The report is consisting of different activities as listed below:

- Updated Summarized Progress of ME&IE Consultants, Balochistan Zone.
- Two days Training on Capacity Building of OFWM Field Staff (Android Based Data Collection Application), Balochistan Dashboard.
- Detail of Monitoring Field Visits.
- Meetings.

3.7.1 UPDATED PROGRESS OF ME&IE CONSULTANTS – BALOCHISTAN ZONE

The ME&IE Consultants, Balochistan have monitored 17 sites during the pre-testing of Monitoring Tools in different months. A total of 13 sites were monitored during executive visits with high officials. A total of two Baseline Surveys were conducted, the first was conducted in the month of June 2021 and the second, was conducted in two parts (first in March 2022 and second in June 2022). A total of 68 sites were monitored during the baseline surveys i.e 17 Watercourses and 51 Water Storage Tanks. The Impact Assessment Survey was conducted in the month of November 2022 in which 32 sites have been monitored so far. Regular monitoring/spot-checking is another important activity of ME&IE Consultants in which a total of 178 sites of different districts have been monitored till the reporting month. In regular monitoring, ME&IE Consultants monitored ongoing / completed sites covering all financial years i.e., 2019-20, 2020-21, and 2021-22. The Balochistan field teams have so far monitored 77 Watercourses and 101 Water Storage Tanks in regular monitoring. The updated status of the total activities done is given in the below Figure:

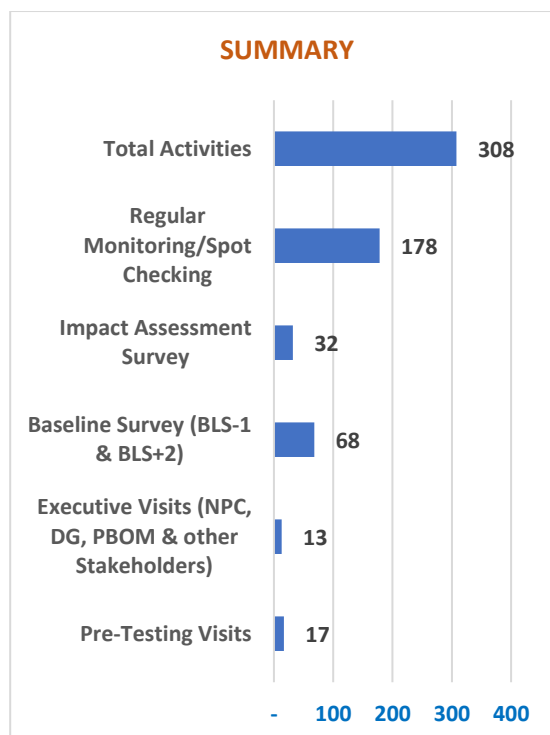


Figure 3.22: Updated status of the total activities done

The beneficiaries list of F.Y. 2022-23 is under progress by the Department. As soon as the Department initiates the works on F.Y. 2022-23 and finalizes the beneficiaries' lists, the ME&IEC,

Balochistan will start the "Baseline Survey – 3" activities accordingly.

Table-3.4: Summary of total activities done, District-wise

Sr. #	District	Pre-Testing		Executive Visits (NPC, DG, PBOM & other Stakeholders)		Baseline Survey		Impact Assessment Survey		Regular Monitoring / Spot Checking		Total
		WC	WST	WC	WST	WC	WST	WC	WST	WC	WST	
1	Quetta	3	3	1	1	-	6	-	4	5	15	38
2	Pishin	3	1	2	5	-	8	-	4	2	9	34
3	Killa Abdullah	-	-	-	-	1	1	1	1	5	2	11
4	Ziarat	-	-	-	-	-	3	-	-	2	4	9
5	Mastung	-	-	1	1	1	5	1	2	5	8	24
6	Nushki	1	2	1	-	-	-	-	-	2	1	7
7	Sibi	-	-	-	-	-	-	3	-	1	3	7
8	Jhal Magsi	-	-	-	-	1	4	-	-	1	4	10
9	Kachhi	-	-	-	-	-	8	-	-	1	10	19
10	Naseerabad	-	-	-	-	2	4	3	4	14	6	33
11	Jaffarabad	1	1	-	-	-	-	-	-	3	-	5
12	Sohbatpur	-	-	-	-	7	-	-	-	14	-	21
13	Loralai	-	-	-	-	1	2	1	2	2	6	14
14	Duki	-	-	-	-	-	-	-	-	2	1	3
15	Zhob	1	1	-	-	-	-	-	-	2	1	5
16	Kila-Saifullah	-	-	-	-	2	1	3	1	6	7	20
17	Musa khel	-	-	-	-	-	-	-	-	1	1	2
18	Sherani	-	-	-	-	-	-	-	-	2	2	4
19	Khuzdar	-	-	-	-	1	6	-	-	2	7	16
20	Kalat	-	-	-	1	1	3	1	1	4	4	15
21	Kech/Turbat	-	-	-	-	-	-	-	-	-	7	7
22	Pangur	-	-	-	-	-	-	-	-	1	3	4
Sub-Total		9	8	5	8	17	51	13	19	77	101	308

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.

The Balochistan Zonal field teams have monitored the sites of 22 districts out of 33 districts, the remaining 11 districts to be covered in upcoming months.

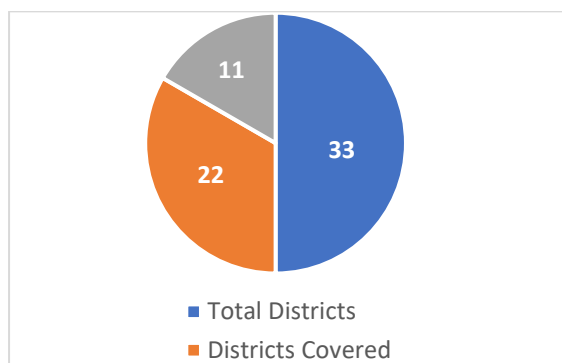


Figure 3.23: Number of Districts Covered by ME&IE – Balochistan

TRAINING ON CAPACITY BUILDING OF OFWM FIELD STAFF (ANDROID BASED DATA COLLECTION APPLICATION) – DASHBOARD, BALOCHISTAN

The dashboard is a “real-time” user interface showing graphical and tabular information of multiple data sets. Dashboards allow users to appreciate a situation at a glance and aids in making informed decisions. The way in which data are presented directly affects how they are understood and interpreted / consequently the decisions that are made because of the data.

The ME&IE Consultants conducted two days of training on the 7th and 8th of December in Quetta. The Directors, Deputy Directors, and other staff of OFWM, Agriculture Department have participated. The main objective of the training was to build capacity among Divisions, districts, and Field Teams to use real-time data collection through an android application.

The dashboard implementation phase consists of three stages

Stage I - Digitize and Migrate the Data

- Digitize the hard copy data
- Process the preliminary data cleaning and validation
- Migrate the complete data in the respective databases.

Stage II – Nominations of Data Collection Focal Personals at District Level

- For the selection of nomination from all districts by selecting a member (WMO or field engineer) from each district of Balochistan.

Stage III - Training and Capacity Building

Training was designed for multiple groups of users as mentioned below:

- DG, OFWM, Balochistan / Representative
- Regional Directors, OFWM, Balochistan.
- Deputy Directors, OFWM, Balochistan
- Field Teams, OFWM, Balochistan
- Project Consultants (NWMC) – Balochistan

The DG, OFWM, Balochistan has nominated a Focal Person to perform following assignments:

- Coordination between DG, OFWM, Balochistan & PMIS team of ME&IE Consultants.
- Coordinate with PMIS team for bottlenecks/problems resolution
- Coordinate with District DDs to facilitate the PMIS team
- Provide any other technical support on behalf of DG OFWM department

Data Entry Responsibility (OFWM):

The OFWM field staff were nominated to fill the missing previous completed and on-going schemes and validate the data through customized android base application developed by the ME&IE consultants. The ME&IE Consultants are fully engaged to give them facilitations in data feeding or any trouble shooting.

Data Verification Responsibility (OFWM & ME&IE):

After conducting the training successfully, the ME&IE PMIS team are receiving data (Aggregate Server) from OFWM Staff through customized android-based application and after cleaning and validation the wrong data are communicating to concerned staff for correction.

Benefits of GIS based Management Information System:

- 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.

Pics of training / works shop conducted on 7th and 8th
Dec. 2022:



Figure 3.24: Recitation of Holy Quran by DTL, ME&IE Consultants. First day of training.



Figure 3.25: view of training by ICT Team.



Figure 3.26: View of participants.



Figure 3.27: The OFWM field staff doing practical work / Mock Exercise through Android Application.



Figure 3.28: The Team Leader, ME&IE Consultants given speech on Monitoring & Evaluation aspects.



Figure 3.29: View of training certificates distribution. Last Day of Training.

NPIWC-II, MIS Balochistan, Group:

The ME&IE Consultants have made a group of all field staff of OFWM to resolve the issues related to Android Data Application timely. The ME&IEC are fully engaged with field staff of OFWM to accomplish this task as soon as possible. The field staff of OFWM are also visiting the ME&IEC office, physically to discuss the issues and for assistance in data uploading. The FTI/Focal Person and other ME&IE Consultants staff providing their full support and cooperation in data feeding.



Figure 3.30: The newly appointed Mr. Jahangir Marri, Agriculture Officer, District Kohlu visited the ME&IE office to learn how operate the Android Data Application, dated 30th Dec. 2022

3.7.1.1. FIELD VISITS

Regular Monitoring / Spot Checking of District Kech / Turbat.

Monitored by Mr. Rizwan Ahmed, DTL and Saleem Ahmed, M&E Officer.

1. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Mohammad Ayoub
Name of village:	Dabok
Union council:	Kalatuk
Chairman WUA:	Mohammad Ayoub
District:	Kech
Tehsil	Turbat
Coordinates	26.0440217 62.8596767
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	40x40 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	15 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	935,983/= Pak Rs
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes

Poverty reduction through generation of employment.	<ul style="list-style-type: none"> Yes, due to the good yield of the crop the poverty of the formers has reduced
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> It has become easier to manage the water which helps to avoid unnecessary water loss. Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased. Farmers were quite happy and demanded more intervention to increase their cultivated area Due to this intervention, the farmer had some land prepared near the WST and had planted more trees of dates on this land. Farmer was optimistic about more such schemes in the area for boosting up agricultural activities
General Observations	<ul style="list-style-type: none"> Government must focus on such type of interventions, which will simultaneously prove fruitful & beneficial for farmer and general masses at large. Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural Water tank helped to store water for field and also covered maximum population



Figure 3.31: Spot Checking of WST Mohammad Ayoub

2. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Meeran
Name of village:	Solband
Union council:	Solband
Chairman WUA:	Meeran
District:	Kech
Tehsil	Turbat
Coordinates	26.0527506 62.8002471
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	50x50 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	12 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,064,232/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Poverty reduction through generation of employment.	• Yes

Overall feedback of Farmer / Beneficiary

- Farmers were quite happy and demanded more intervention to increase their cultivated area
- Due to this intervention, the farmer had some land prepared near the WST and had planted more trees of dates on this land.

General Observations

- Water tank helped us to store water for field and also cover most population
- Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural
- Water tank helped to store water for field and also covered maximum population
- Govt. should provide solar system on subside rate as heavy load shedding is immense problem of this district overall.



Figure 3.32: Spot Checking of WST Meeran Khan

3. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Mohammad Saleem
Name of village:	Nozband
Union council:	Nasir Abad
Chairman WUA:	Mohammad Saleem
District:	Kech
Tehsil	Turbat
Coordinates	26.0701058 62.7432205
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	60x60 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	20 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,594,004/= PkRs.
Quality of work	Satisfactory
Cropping intensity increased	<ul style="list-style-type: none"> Yes
Crops yield increased	<ul style="list-style-type: none"> Yes
Poverty reduction through generation of employment.	<ul style="list-style-type: none"> Yes, Due to the good yield of the crop the poverty of the formers has reduced
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> It has become easier to manage the water which helps to avoid unnecessary water loss. Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased.
General Observations	<ul style="list-style-type: none"> Water tank helped us to store water

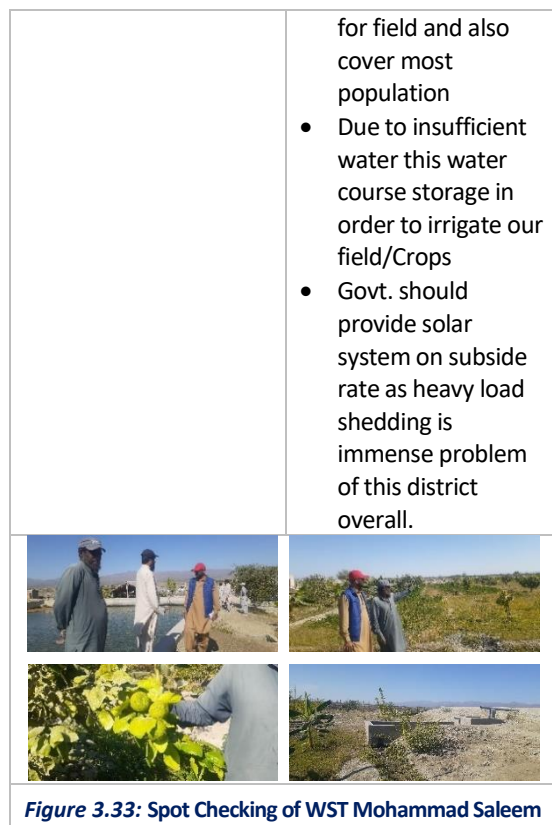


Figure 3.33: Spot Checking of WST Mohammad Saleem

4. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Zareef Ahmed
Name of village:	Mir Mir
Union council:	Kaltuk
Chairman WUA:	Zareef Ahmed
District:	Kech
Tehsil	Turbat
Coordinates	26.039595 62.878195
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	40x40 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	18 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	780,318/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	<ul style="list-style-type: none"> Yes



Crops yield increased	<ul style="list-style-type: none"> • Yes
Reduction in water disputes/thefts	<ul style="list-style-type: none"> • There is no theft of water
Poverty reduction through generation of employment.	<ul style="list-style-type: none"> • Yes
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • Farmer was optimistic about more such schemes in the area for boosting up agricultural activities • It has become easier to manage the water which helps to avoid unnecessary water loss • Water tank helped us to store water for field and also cover most population
General Observations	<ul style="list-style-type: none"> • Government must focus on such type of interventions, which will simultaneously prove fruitful & beneficial for farmer and general masses at large. • Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural • Water tank helped to store water for field and also covered maximum population
	

Figure 3.34: Spot Checking of WST Zareef Khan

5. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Habibur Rehman
Name of village:	Sorag
Union council:	Kalatuk
Chairman WUA:	Habibur Rehman
District:	Kech
Tehsil	Turbat
Coordinates	26.034705 62.8544983
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	60x60 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	13 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,550,309/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	<ul style="list-style-type: none"> • Yes
Crops yield increased	<ul style="list-style-type: none"> • Yes
Equity in water distribution increased	<ul style="list-style-type: none"> • Yes
Poverty reduction through generation of employment.	<ul style="list-style-type: none"> • Yes
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • Farmers were quite happy and demanded more intervention to increase their cultivated area • Water tank helped us to store water for field and also cover most
General Observations	<ul style="list-style-type: none"> • Government must focus on such type of interventions, which will simultaneously prove fruitful &

	<p>beneficial for farmer and general masses at large.</p> <ul style="list-style-type: none"> Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural Water tank helped to store water for field and also covered maximum population
	
<p>Figure 3.35: Spot Checking of WST Habib-ur-Rehman</p>	

6. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Rasheed Ahmed
Name of village:	Shay Kahan
Union council:	Shay Kahan
Chairman WUA:	Rasheed Ahmed
District:	Kech
Tehsil	Turbat
Coordinates	26.0420738 62.8087834
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	50x50 sq. Ft.
Depth of WST:	4.5 Ft

Command area of water storage tank:	14 Acre
No of beneficiaries:	1
Construction Cost of water storage Tank:	1,240,237/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	<ul style="list-style-type: none"> Yes
Crops yield increased	<ul style="list-style-type: none"> Yes
Reduction in water disputes/thefts	<ul style="list-style-type: none"> There is no theft of water
Poverty reduction through generation of employment.	<ul style="list-style-type: none"> Yes Due to the good yield of the crop the poverty of the formers has reduced
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmers were quite happy and demanded more intervention to increase their cultivated area Due to this intervention, the farmer had some land prepared near the WST and had planted more trees of dates on this land.
General Observations	<ul style="list-style-type: none"> Water tank helped us to store water for field and also cover most population Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural Water tank helped to store water for field and also covered maximum population Govt. should provide solar system on subside rate as heavy load shedding is immense problem of this district overall.



Figure 3.36: Spot Checking of WST Rasheed Ahmed

7. Field Visit Date: 30/11/22

Scheme	Water Storage Tank
Farmer Name	Saud Hoot
Name of village:	Mir Mir Allah Bakht
Union council:	Kalatuk
Chairman WUA:	Saud Hoot
District:	Kech
Tehsil	Turbat
Coordinates	26.038945 62.8731583
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	40x40 Sq. ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	30 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	780,318/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Equity in water distribution increased	• Yes
Reduction in water disputes/thefts	• There was no theft of water
Poverty reduction through generation of employment.	• Yes Due to the good yield of the crop the poverty of the formers has reduced
Overall feedback of Farmer / Beneficiary	• It has become easier to manage the water which helps to avoid

	<p>unnecessary water loss.</p> <ul style="list-style-type: none"> • Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased. • Farmers were quite happy and demanded more intervention to increase their cultivated area • Due to this intervention, the farmer had some land prepared near the WST and had planted more trees of dates on this land. • Farmer was optimistic about more such schemes in the area for boosting up agricultural activities
General Observations	<ul style="list-style-type: none"> • Government must focus on such type of interventions, which will simultaneously prove fruitful & beneficial for farmer and general masses at large. • Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural • Water tank helped to store water for field and also



Regular Monitoring / Spot Checking of District Panjgor.

Monitored by Mr. Rizwan Ahmed, DTL and Saleem Ahmed, M&E Officer.

1. Field Visit Date: 02/12/22

Scheme	Water Storage Tank
Farmer Name	Nazeer Ahmed
Name of village:	Saraduk
Union council:	Washbood
Chairman WUA:	Nazeer Ahmed
District:	Panjgor
Tehsil	Panjgor
Coordinates	27.0305587 64.2766136
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	60x60 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	30 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,594,004/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Reduction in water disputes/thefts	• There was no theft of water

Poverty reduction through generation of employment.	<ul style="list-style-type: none"> • Yes, Due to the good yield of the crop the poverty of the formers has reduced
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • It has become easier to manage the water which helps to avoid unnecessary water loss. • Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased.
General Observations	<ul style="list-style-type: none"> • Water tank helped us to store water for field and also cover most population • Due to insufficient water this water course storage in order to irrigate our field/Crops • Govt. should provide solar system on subside rate as heavy load shedding is immense problem of this district overall.



Figure 3.38: Spot Checking of WST Nazeer Ahmed

2. Field Visit Date: 02/12/22

Scheme:	Watercourse
Name of Farmer:	Nazeer Ahmed
Name of village:	Saraduk
Union council:	Washbood
Chairman WUA:	Nazeer Ahmed
District:	Panjgor
Tehsil	Panjgor
Coordinates	27.03079 64.276865
Source of irrigation:	Tube Well
Total length of watercourse:	609 Mtr
Estimated length of lining:	609 Mtr
Command area of watercourse:	30 Acre
No of beneficiaries:	2
Quality of Work	Good
Reduction in Water Logging and salinity	No salinity
Cropping intensity increased	Yes, approximately 10% Increased
Crops yield increased	• Yes
Equity in water distribution increased	• Yes
Reduction in water disputes/thefts	• There was no theft of water
Poverty reduction through generation of employment.	• The farmer gets good income due to better production
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is pick up.	• Industrialization did not increase significantly
Overall feedback of Farmer / Beneficiary	• Manpower usage decreases. • Time saving increased
General Observations	• Due to this scheme that farmer irrigated his land for rice crops and vegetable as well. • WUA was not activated



Figure 3.39: visited WC Nazeer Ahmed Scheme

3. Field Visit Date: 02/12/22

Scheme	Water Storage Tank
Farmer Name	Sarwer Hussain
Name of village:	Saraduk
Union council:	Washbood
Chairman WUA:	Sarwer Hussain
District:	Panjgor
Tehsil	Panjgor
Coordinates	27.0315966 64.28314
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	60x60 Sq. Ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	40 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,594,004/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Reduction in water disputes/thefts	• There was no theft of water
Poverty reduction through generation of employment.	• Yes


Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is pick up.	<ul style="list-style-type: none"> Industrialization didn't increase due to recent inflation.
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> It has become easier to manage the water which helps to avoid unnecessary water loss. Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased.
General Observations	<ul style="list-style-type: none"> Water tank helped us to store water for field and also cover most population Due to insufficient water this water course storage in order to irrigate our field/Crops Govt. should provide solar system on subside rate as heavy load shedding is immense problem of this district overall.
	

Figure 3.40: Spot Checking of WC Sarwer Hussain

4. Field Visit Date: 02/12/22

Scheme	Water Storage Tank
Farmer Name	Imamudin
Name of village:	Saraduk
Union council:	Washbood
Chairman WUA:	Imamudin
District:	Panjgor
Tehsil	Panjgor
Coordinates	27.0321214 64.2847583
Source of irrigation:	Tube Well
Shape of water storage tank:	Squire
Size of water storage tank:	60x60 Sq. ft.
Depth of WST:	4.5 Ft
Command area of water storage tank:	40 Acre
No of beneficiaries:	2
Construction Cost of water storage Tank:	1,594,004/= Pak Rs.
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Equity in water distribution increased	• Yes
Reduction in water disputes/thefts	• There was no theft of water
Poverty reduction through generation of employment.	• Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is pick up.	<ul style="list-style-type: none"> Industrialization didn't increase due to recent inflation.
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmers were quite happy and demanded more intervention to increase their cultivated area Water tank helped us to store water

	for field and also cover most
General Observations	<ul style="list-style-type: none"> Government must focus on such type of interventions, which will simultaneously prove fruitful & beneficial for farmer and general masses at large. Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural Water tank helped to store water for field and also covered maximum population



Figure 3.41: Spot Checking of WST Imamudin

Regular Monitoring / Spot Checking of District Killa Abdullah.

Monitored by Mr. Rizwan Ahmed, DTL and Mr. Naseeb Jan, FTI / M&E Expert.

1. Field Visit Date – 18th December 2022

Scheme	Water Storage Tank
Farmer Name	Khudai Dad
Name of village:	Khusnob Jalalzai
Union council:	Saddar
Chairman WUA:	Khudai Dad
District:	Killa Saifuulah
Tehsil	Killa Saifuulah

Coordinates	N 30.782779 E 68.398299
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	50x50 Sq.ft.
Depth of WST:	4.75 ft.
Command area of water storage tank:	30 Acres
No of beneficiaries:	5
Quality of work	Satisfactory
Cropping intensity increased	To some extent
Crops yield increased	20%
Poverty reduction through generation of employment.	To Some Extent
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Due to such intervention, farmer brought some area lying waste under cultivation, resultantly his crops yield increased. Due to this intervention, the farmer had some land prepared near the WST and had planted wheat on this land. Farmer was optimistic about more such schemes in the area for boosting up agricultural activities.
General Observations	<ul style="list-style-type: none"> Government must focus on such type of interventions, which will simultaneously prove fruitful & beneficial for Government, farmer and

	<p>general masses at large.</p> <ul style="list-style-type: none"> Govt must ensure provision of subsidized fertilizers, seeds, seedlings, sprays and rest of the items related to agricultural activities to the farmers. Government ought to take concrete steps in bringing up water table by making delay action dames, mini dames and other such techniques. Multifaced policies and strategies to counter global warming challenges is need of the hour. Heavy load shedding causing miseries for farmers in irrigating their lands.
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Figure 3.42: The worthy NPC, FPMU, NPIWC-II checking the sites. The FTI, ME&IEC taking interview of Farmer at WST, Khuda-e-Dad

2. Field Visit Date – 18th December 2022

Scheme	Water Storage Tank
Farmer Name	Mujeeb Ullah
Name of village:	Ubaid Ullah
Union council:	Saddar

Chairman WUA:	Mujeeb Ullah
District:	Killa Saifullah
Tehsil	Killa Saifullah
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	60x60 Sq.ft.
Depth of WST:	4.75 ft.
Command area of water storage tank:	20 Acres
No of beneficiaries:	5
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	20%
Poverty reduction through generation of employment.	To Some Extent
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Due to such intervention, farmer brought some of his area lying barren under cultivation. Farmer was quite happy and demanding more intervention.
General Observations	<ul style="list-style-type: none"> Govt must ensure provision of subsidized seeds, seedlings, sprays and other agricultural items to farmers. Govt must take into account the construction of small, mini, and delay action dames in the area in bringing up water table for agricultural activities. Government must ensure provision of subsidized seeds, sprays etc.

- Heavy load shedding causing issues for them in irrigating their farms, resultantly it affects their time as well as machinery being used for uplifting water during irrigating their farms.
- Such type of interventions motivated farmers to prepare more and more their barren and waste lands under cultivation.
- Farmers need to be sensitized and aware about modern techniques regarding farming.
- Farmer was optimistic about boosting up agricultural activities.



Figure 3.43: View of meeting with Farmer and view of WST

3. Field Visit Date – 18th December 2022

Scheme	Water Storage Tank
Farmer Name	Wazir Khan
Name of village:	Khusnob Jalazai
Union council:	Saddar
Chairman WUA:	Wazir Khan
District:	Killa Saifullah
Tehsil	Killa Saifullah
Coordinates	N 30.773802, E 68.511552
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	50x50 Sq. ft.
Depth of WST:	4.75 ft.
Command area of water storage tank:	30 Acres
No of beneficiaries:	6
Quality of work	Satisfactory
Cropping intensity increased	To Some Extent
Crops yield increased	25%
Poverty reduction through generation of employment.	To Some Extent
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • Due to such intervention cropping and yield increased • Due to this intervention, farmer brought some area lying waste since long. • Water increased by virtue of such scheme and came into a position to crop more and more crops.
General Observations	<ul style="list-style-type: none"> • The NPC, PFMU, NPIWC-II gave valuable suggestions to farmer that how he can use the solar plates for long period.

- Due to this intervention, the farmer had some land prepared near the WST and had planted wheat on this land.
- Govt must ensure provision of subsidized seeds, seedlings, sprays to farmers.
- Govt must take concrete steps in bringing up water table by making mini dames and it must focus and make ground related policies strategies to counter global warming challenges
- Farmer was optimistic about more such schemes in the area for boosting up agricultural activities.



Figure 3.44: View of meeting with Farmer and view of WST

4. Field Visit Date – 18th December 2022

Scheme:	Watercourse
Name of Farmer:	Bismillah
Name of village:	Killi M. Karim Bindat Mirzai
Union council:	Bindat Mirzai
Chairman WUA:	Bismillah
District:	Killa Saifullah
Tehsil	Killa Saifullah
Coordinates	N 30.729111, E 68.281865
Source of irrigation:	Tube Well
Total length of watercourse:	5500 Mt
Estimated length of lining:	2000 Mt
Command area of watercourse:	100 Acres
No of beneficiaries:	8
Quality of Work	Satisfactory
Cropping intensity increased	To Some Extent
Crops yield increased	To Some Extent
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> • As per farmer per tree yield increased by a significant amount and the farmer was planning to plant more fruit trees on his land but heavy loads shedding creating problems for farmer.
General Observations	<ul style="list-style-type: none"> • The NPC, FPMU, NPIWC-II pointed out some deficiencies in watercourse lining. • The water available for this vast land was not enough due to heavy load shedding in the area. So, farmer was facing issues in irrigating his farm properly. • Heavy prices of farm related items were become unbearable for them.

	<ul style="list-style-type: none"> Government must ensure seeds, sprays etc. on subsidized rates. Government should arrange awareness sessions to farmers regarding modern techniques of farming. Heavy prices of farming items in market were unbearable. Farmers need to be equipped with modern way and techniques of farming in terms of boosting up crop and yields activities.
	

Figure 3.45: View of WC and NPC visiting WC

Regular Monitoring / Spot Checking of District Killa Abdullah.

Monitored by Mr. Rizwan Ahmed, DTL and Mr. Basit Khan, M&E Officer.

1. Field Visit Date: 20-12-2022

Scheme:	Watercourse
Name of Farmer:	Zafarullah
Name of village:	Killi Popalzi
Union council:	Peralizi
Chairman WUA:	Zafarullah
District:	Killa Abdullah
Tehsil	Killa Abdullah
Coordinates	N 664347 E 664347
Source of irrigation:	Tube Well



Total length of watercourse:	2000 Mt.
Estimated length of lining:	2000 Mt.
Command area of watercourse:	16
No of beneficiaries:	1
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	No water logging and salinity in this area
Cropping intensity increased	Yes
Crops yield increased	Yes
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy with this intervention and demoing one WST too Water losses decreased significantly.



Figure 3.46: The NPC, FPMU, NPIWC-II checking the WC. ME&IEC taking information from Farmer.

2. Field Visit Date: 20-12-2022

Scheme	Water Storage Tank
Farmer Name	Faizulhak
Name of village:	Killi Meizi
Union council:	Meizi
Chairman WUA:	Faizulhak
District:	Killa Abdullah
Tehsil	Killa Abdullah

Coordinates	N: 304155 E: 664220
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	60x60 Sq. ft
Depth of WST:	4.5 ft
Command area of water storage tank:	8 acres
No of beneficiaries:	1
Quality of work	Back filling was not done properly
Overall feedback of Farmer / Beneficiary	Farmer was not available
General Observations	<ul style="list-style-type: none"> The farmer / beneficiary must take onboard so that ownership of scheme ensured. The NPC, FPMU, NPIWC-II pointed out some deficiencies and given necessary directions on spot.
	
	
<p>Figure 3.47: The NPC, FPMU, NPIWC-II checking the WST and the view of WST.</p>	

3. Field Visit Date: 20-12-2022

Scheme:	Watercourse
Name of Farmer:	Shair Muhammad
Name of village:	Abdullah Khan
Union council:	Abdullah Khan
Chairman WUA:	Shair Muhammad

District:	Killa Abdullah
Tehsil:	Killa Abdullah
Coordinates	N 304355 E663943
Source of irrigation:	Tube well
Total length of watercourse:	2000 Mt.
Estimated length of lining:	2000 Mt.
Command area of watercourse:	7 Acres
No of beneficiaries:	1
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	No water logging and salinity in this area
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	No such issue in this area
Reduction in water disputes/thefts	No such issue in this area
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is pick up.	To some extent
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy as he getting more benefits with Pakka WC Cultivated area increased significantly.
General Observations	<ul style="list-style-type: none"> Heavy prices of farm related items were become unbearable for them. Government must ensure seeds, sprays etc. on subsidized rates.

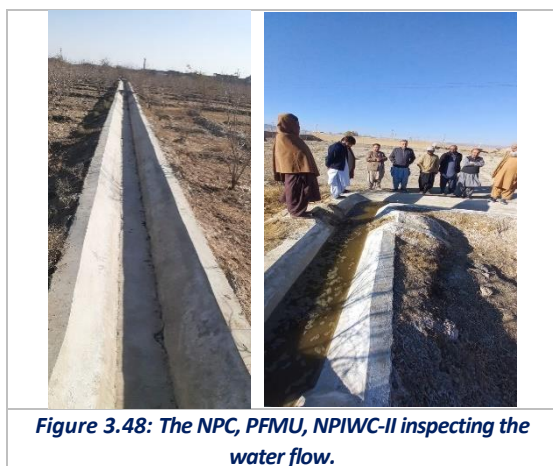


Figure 3.48: The NPC, PFMU, NPIWC-II inspecting the water flow.

4. Field Visit Date: 20-12-2022

Scheme	Water Storage Tank
Farmer Name	Asmatullah
Name of village:	Popalzi
Union council:	Kill Abdullah
Chairman WUA:	Asmatullah
District:	Killa Abdullah
Tehsil	Abdullah khan
Coordinates	N 303540 E664526
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50x50 Sq.ft.
Depth of WST:	4.5 ft.
Command area of water storage tank:	10 acres
No of beneficiaries:	1
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Overall feedback of Farmer / Beneficiary	• Farmer was not available



Figure 3.49: The NPC, FPMU, NPIWC-II inspecting the WST.

5. Field Visit Date: 20-12-2022

Scheme:	PVC
Name of Farmer:	Abdul Wali
Name of village:	Popalzai
Union council:	Alizai
Chairman WUA:	Abdul Wali
District:	Killa Abdullah
Tehsil	Killi Abdullah
Coordinates	N30369 E664531
Source of irrigation:	Tube well
Estimated length of PVC:	2000 Mt.
Command area of watercourse:	18 Acres
No of beneficiaries:	1
Quality of Work	Satisfied
Overall feedback of Farmer / Beneficiary	<ul style="list-style-type: none"> Farmer was happy as he getting more benefits with this intervention. No water loses due to this PVC pipe Cultivated area increased significantly.
General Observations	<ul style="list-style-type: none"> Government must ensure seeds, sprays etc. on subsidized rates.



Figure 3.50: View of PVC Scheme and Solar Panels.

3.7.1.2. MEETINGS

During the reporting month different meetings were held by the ME&IE, Balochistan with client and other stakeholders.

The detail of meetings is given in **section 3.8.3** of this report in hand.

3.8 COORDINATION MEETINGS OF ME&IE CONSULTANTS

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

3.8.1 Meetings of ME&IE Consultants Punjab Zone with Stakeholders

Meeting With Director General South Punjab Multan

Date	December 21 ,2022
Venue	Director General OFWM Office Old Shujhabad Road Agri Farm Multan.
Participants	
i. Engr. Zafar Ullah Sindhu, Director General Agriculture OFWM Multan ii. Mr. Muhammad Yousaf Bhatti, Deputy Team Leader Punjab ME&IE Consultants iii. Mr. Awais Jahangeer, Focal Person to DG office ME&IE Consultants iv. Muhammad Zubair, Field Team In Charge ME&IE Consultants South Zone Punjab	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Director General explained the ongoing activities in South zone. DTL Punjab brief on ME&IE Consultants' activities particularly in South Punjab introduced his team. Focal Person to DG Office discussed the method of data collection for PMIS Dashboard of completed intervention on division level. Director Headquarter assured his complete support and it decided ME&IE Consultants team will start data collection from Multan, DG Khan, Bahawalpur divisions. DG immediately directed his staff provide data on priority. 	



Figure 3.51: A view of meeting of ME&IE Consultants with D.G (Agri) (OFWM) Multan

Meeting with Director Agriculture OFWM Multan Division

Date	December 21 ,2022
Venue	Director Agriculture OFWM Office Old Shujhabad Road Agri Farm Multan.
Participants	
i. Dr. Khalid Rafique, Director Agriculture (OFWM) Multan ii. Mr. Muhammad Yousaf Bhatti, Deputy Team Leader Punjab ME&IE Consultants iii. Mr. Awais Jahangeer, Focal Person to DG office ME&IE Consultants	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> DTL Punjab brief about ME&IE consultants' activities The data collection for PMIS Dashboard on division level and Divisional targets/achievements of department. Director committed to provide data shortly. The progress/achievements of OFWM in the Multan division and for future planning of baseline 3 visits. The director further informed due to shortage of funds work has been stopped in the field under NPIWC-II. 	
Figure 3.52: View of meeting with Dr. Khalid Rafique, Director Agriculture (OFWM) Multan	

Meeting with Deputy Director OFWM District Lodhran

Date	December 22 ,2022
Venue	Deputy Director OFWM office District Lodhran
Participants	
i.	Mr. Muhammad Amjad Sargana Deputy Director Agriculture OFWM District Lodhran.
ii.	Mr. Muhammad Yousaf Bhatti, Deputy Team Leader Punjab ME&IE Consultants
iii.	Mr. Awais Jahangeer, Focal Person to DG office ME&IE Consultants
iv.	Muhammad Zubair, Field Team In Charge ME&IE Consultants South Zone Punjab
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The data collection for PMIS Dashboard on division level and Divisional targets/achievements of department. The progress/achievements of OFWM in the Tehsil and for future planning of baseline 3 visits. Due to shortage of funds work has been stopped in the field under NPIWC 2. 	



Figure 3.53: A view of meeting with Mr. Muhammad Amjad Sargana Deputy Director Agriculture OFWM District Lodhran.

Meeting with Assistant Director Kahrora Pakka

Date	December 22 ,2022
Venue	Pak Punjab Traders Mailsi Road Tehsil Kahrora Pakka District Lodhran
Participants	
i.	Majid Ali, Assistant Director Agri. OFWM, Kahrora Pakka
ii.	Mr. Muhammad Yousaf Bhatti, Deputy Team Leader Punjab ME&IE Consultants

- iii. Mr. Awais Jahangeer, Focal Person to DG office ME&IE Consultants
- iv. Muhammad Zubair, Field Team in Charge ME&IE Consultants South Zone Punjab

Meeting Agenda/Points discussed:

- The purpose of visit was to study the job – opportunities for the rural persons and income generation sources, like new vendors, transportation, in the operational area of the factory.



Figure 3.54: A view of meeting with Mr. Majid Ali, Assistant Director (Agri) OFWM Karor Pakka

Meeting With Deputy Director (Agri) OFWM Vehari

Date	December 23, 2022
Venue	Site visit Hanzla Traders & Laser Land Leveler 1 km ludan road Vehari
Participants	
i.	1Mr. Sheikh Muhammad Tariq Mahmood Deputy Director Agriculture OFWM District Vehar
ii.	Mr. Dildar Hussain Asstt.Dir. Agri/Assistant Agronomist. OFWM, Vehari
iii.	Mr. Muhammad Yousaf Bhatti, Deputy Team Leader Punjab ME&IE Consultants
iv.	Mr. Awais Jahangeer, Focal Person to DG office ME&IE Consultants
v.	Muhammad Zubair, Field Team in Charge ME&IE Consultants South Zone Punjab
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The main objective of the visit was to review the possibilities of new job for the local persons, and income generation opportunities for the service providers and benefits to the farmers/users. 	



Figure 3.55: A view of meeting with Mr. Muhammad Tariq Mahmood Deputy Director Agriculture OFWM District Vehari

3.8.2 Meetings of ME&IE Consultants KP Zone with Stakeholders

During the current reporting month, coordination and meetings have been carried out with OFWM department of KP. The purpose of the coordination with them was to collect the data for dashboard completion and its appropriate management by field officials of OFWM. This is to honor that ME&IE team receive tremendous support from OFWM directorate, whenever there is a need. Further the purpose of the meetings were also to get the updated data regarding TS or ongoing watercourses for monitoring purposes.

Date	December 28, 2022
Venue	Office of Focal Person (OFWM) KP
Participants	
iv. Mr. Muhammad Hayat Khan (OFWM) KP focal person	
v. Mr. Bakht Ali, Deputy Director Peshawar OFWM.	
vi. Mr. Fawad Ahmad, ICT Manager KP	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Missing data in the schemes and the difference in the numbers of completed schemes shared by the OFWM. Launching of Dashboard in the presence of Secretary agricultural. 	
Outcome of the meeting:	
Focal person told that he will discuss all the above points with DG OFWM KP and will let ME&IE consultants about all the progress being made.	



Figure 3.56: Meeting with Mr. Muhammad Hayat Khan (OFWM) Focal Person

Date	December 30, 2022
Venue	Peshawar OFWM office
Participants	
i. Mr Azmat Mr Shoukat	
ii. Mumtaz ullah, FTI and	
iii. Mehmood, FTI	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Discussion about the currently ongoing schemes under NPIWC-II project 	
Outcome of the meeting:	
Mr. Azmat informed that there is no ongoing scheme since the last 4-5 months. He further told that due to non-availability of fund no scheme is expected in near future.	
Figure 3.57: Meeting with Mr. Hafeez Khan (OFWM) DD Swabi	

Date	January 2, 2023
Venue	Swabi OFWM office
Participants	
iv. Mr Hafeez DD OFWM Swabi	
v. Mir Aslam Sub Engineer	
vi. Mr Munir WMO	
vii. Mumtaz ullah, FTI and	
viii. Mehmood, FTI	
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Discussion about the currently ongoing schemes under NPIWC-II project and sharing of TS data 	

Outcome of the meeting:

The DD told our team that there is no ongoing scheme at the moment. Two WSTs Ali Zaib WST and Tufail WST completed in Nov 2022. These are the only completed schemes which are completed recently. The DD also told us that the department face financial difficulties and they are not in a position to pay the liabilities for the completed schemes.

The DD inform us that the engineers and WMOs are busy with the world Bank schemes.

Explaining the department financial position, the DD told us that they are not able to pay there petrol bill or to buy stationary.

The DD said that he thinks that the NPIWC-II project may close soon.



Figure 3.58: Meeting with Mr. Hafeez Khan (OFWM) DD Swabi

3.8.3 Meetings of ME&IE Consultants Balochistan Zone with Stakeholders

During the reporting month different meetings were held by the ME&IEC, Balochistan with client and other stakeholders.

The detail of meetings is given below:

Date	November 30, 2022
Venue	Circuit House, District Turbat/Kech.
Participants	
I.	Mr. Asif Kakar, NPC, FPMU, NPIWC-II.
II.	Mr. Ali Raza, TL, NWMC.
III.	Mr. Mehboob, DD, OFWM, Kech
IV.	Mr. Khalid Mehmoood, DTL, NWMC, Balochistan
V.	Mr. Rizwan Ahmed, DTL, ME&IE Consultants, Balochistan.
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Updated progress and issues were discussed The NPC, FPMU, NPIWC-II asked to DD, Kech to submit his issues / problems after consultation with his staff for further submission. The law-and-order situation of Kech districts was discussed. The field visit plan was discussed. 	



Figure 3.59: The worthy NPC, FPMU, NPIWC-II held a meeting with DD, OFWM, Kech District and Consultants at Circuit House, Kech.

Date	December 02, 2022
Venue	Rest House, District Panjgur.
Participants	
I.	Mr. Zaman, DD, OFWM, Panjgor
II.	Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan
III.	Mr. Aminullah, Site Engineer, NWMC, District Panjgur.
IV.	Mr. Saleem Abro, M&E Officer, ME&IE Consultants.
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The DTL, ME&IE Consultants shared the field plan with DD, OFWM, Panjgur The DD Panjgur shared updated data / beneficiary lists of previous financial years with ME&IEC. The DTL, ME&IE Consultants shared the issues regarding data collection and non-availability of record/data/files at sites. 	



Figure 3.60: View of meeting held with DD, OFWM, Panjgur Districts.

ate	December 09, 2022
Venue	Office of DG, OFWM, Sariab Road, Rani Bagh, Quetta.
Participants	
I.	Mr. Behram Mulghani, Agriculture Officer, OFWM / Focal Persona.
II.	Dr. Usman Mustafa, TL, ME&IE Consultants.

III.	Mr. Rizwan Ahmed, DTL, ME&IEC, Balochistan.
IV.	Mr. Shumail, IT Expert, ME&IEC.
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The ME&IE Consultants thanked to Focal Persona of DG, OFWM on his support to make successful the training / workshop conducted on capacity building / data submission through Android based Data Application. The IT team shared the Android Data Application with Focal Person of DG, OFWM and briefed him about Dashboard implementation. The issues / problems regarding data collection were also discussed. 	
	
Figure 3.61: View of meeting.	

Date	December 12, 2022
Venue	DG Office, OFWM, Rani Bagh, Quetta.
Participants	
I.	Mr. Bashir Agha, Director, Water Management, Agriculture Department, Balochistan, Quetta.
II.	Mr. Meharullah, Director, Monitoring, OFWM, Balochistan.
III.	Deputy Directors, OFWM, (all districts of Balochistan)
IV.	Mr. Abdul Wali, DD, HQ, Quetta
V.	Mr. Behram Mulghani, Agriculture Officer, OFWM, Quetta
VI.	Mr. Yasir, Agriculture Officer, OFWM, Quetta
VII.	Mr. Khalid Mehmood, DTL, NWMC, Balochistan
VIII.	Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The Director, Water Management welcomed to all the participants. All DDs shared the updated physical progress of their respective zones. The DTL, ME&IE Consultants highlight the issue of weak response of Field Staff, 	

<p>OFWM regarding data provision / validation on Android Data Application.</p> <ul style="list-style-type: none"> The OFWM authorities asked to all the DDs to provide the missing data and validate the available data as soon as possible. 	
	
	
	
Figure 3.62: Progress Review Meeting held in good office of DG, OFWM, Sariab Road, Quetta	

Date	December 21, 2022
Venue	Office of DG, OFWM, Sariab Road, Rani Bagh, Quetta.
Participants	
I.	Mr. Behram Mulghani, Agriculture Officer, OFWM, Balochistan, Quetta.
II.	Mr. Rizwan Ahmed, DTL, ME&IE Consultants, Balochistan.
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> The ME&IE Consultants thanked to Focal Persona of DG, OFWM on his support to make successful the training / workshop conducted on capacity building / data submission through Android based Data Application. The DTL, ME&IE Consultants shared updated progress of data received at district level. 	



Figure 3.63: Meeting with Mr. Behram, Agriculture Officer, OFWM / Focal Person at DG, Office, Quetta.

Date	December 21, 2022
Venue	Office of DD, OFWM, Jaffarabad.
Participants	
I.	Mr. Tariq Baloch, FIT / M&E Expert, ME&IE Consultants.
II.	Field Staff, OFWM, Jaffarabad.
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> A meeting was held of ME&IE Consultants with Field Staff, OFWM at DD Office, Jaffarabad regarding data entry / validation of data through Android Data Application. The Field Staff shared the issues and problems regarding data provision. 	



Figure 3.64: View of Meeting at DD, OFWM, Jaffarabad.

3.9 INTERNAL MEETINGS OF ME&IE CONSULTANTS

Date	Every Monday
Venue	Routine Weekly 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.	Ms. Muniza Bashir Tarar, Social & Gender Specialist, NPIWC-II, National Office, 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.	Dr. Ikram Saeed, DTL, ICT-Zone, Islamabad
Meeting Agenda/Points discussed:	
<ul style="list-style-type: none"> Follow-up of previous meeting. Discussion of Quarterly Monitoring Report Discussion on preparation of Quarterly Work Plan Midline Survey Status of available funds and further requirements. Meeting wrapped-up by the Team Leader with concluding remarks 	

3.10 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. During the Month of July 2022 activities completed by ICT Team are summarized below.

3.10.1 Development of Customized Android Based Applications

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 OFWM staff KP zone.

3.10.2 Data collection of interventions in MIS/GIS database

The activity regarding data collection of Interventions in MIS/GIS database was completed in KP Zone in December 2021.

- Data cleaning and validation has been completed in KP Zone.
- The data collection for the dashboard is in progress in Balochistan. The ICT team is facing problems in data collection because a lot of data is missing which was required by the ICT team for Implementation of MIS Dashboard.

3.10.3 Implementation of MIS Dashboard

The Dashboard has been implemented in AJK, and the progress of Interventions is live on the Dashboard since the 4th of November 2021.

AJK Zone - Watercourses Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
MZD	32	96	73	16	217
Poonch	37	38	78	11	164
Mirpur	38	107	88	49	282
Overall	107	241	239	76	663

So far, Total 663 Watercourses data from AJK zone has been received and available live on Dashboard by which 381 Watercourse has been completed & 194 watercourses are under progress. Due to farmers' un-willingness 88 Work Orders have been cancelled till now. Detailed summary attached as **Annex-G**.

AJK Zone - Water Storage Tank Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
MZD	35	61	73	4	173
Poonch	15	46	140	68	269
Mirpur	2	16	64	13	95
Overall	52	123	277	85	537

537 Water Storage Tank data received from AJK zone and is available live on Dashboard by which 289 Water Storage Tank has been completed and 177 WSTs are under progress. Due to the unwillingness of farmers there 71 WST work orders have been cancelled till now. Detailed summary attached as **Annex-H**.

The Dashboard has also been implemented in KP Zone and progress of completed schemes is live on the Dashboard since 11th March 2022.

KP Zone - Watercourses Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur Agency	3	18	30	12	63
Bannu	73	35	93	14	215
D.I Khan	417	12	93	0	522
Hazara	84	56	146	33	319
Khyber Agency	6	13	6	0	25
Kohat	98	39	57	2	196
Kurram Agency	1	5	4	0	10
Malakand	178	167	411	3	759
Mardan	102	59	49	0	210
M. Agency	4	26	13	0	43
N.W Agency	2	3	0	0	5
Orakzai Agency	0	1	0	0	1
Peshawar	136	85	84	2	307
S.W Agency	3	12	13	0	28
Overall	1107	531	999	66	2703

KP zone currently 2703 total watercourses data live on Dashboard and by which 2399 schemes have been completed and 300 schemes are under progress. Due to the unwillingness of farmers 04 Schemes work order has been cancelled till to date. Detailed Summary attached as **Annex-I**.

KP Zone - Water Storage Tank Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur	1	10	9	1	21
Bannu	13	10	23	1	47
D. I. Khan	81	6	19	0	106
Hazara	28	43	87	4	162
Khy. Agency	1	9	12	0	22
Kohat	29	17	32	0	78
Kurram Agency	1	1	0	0	2
Malakand	74	95	177	0	346
Mardan	16	9	26	0	51
M. Agency	1	36	4	0	41
Orakzai Agency	0	2	0	0	2
Peshawar	36	25	59	2	122
S.W Agency	0	15	15	0	30
N.W Agency	0	8	8	1	17
Overall	281	286	471	9	1047

KP zone currently 1047 total WST data live on Dashboard and by which 861 schemes have been completed and 186 WSTs are under progress. Detailed Summary attached as **Annex-J**.

ICT Watercourses Data Summary			
Division	2020-21	2021-22	Overall
ICT	20	14	34
Overall	20	14	34

ICT zone so far 34 watercourse schemes have been initiated in this zone and all 34 have been completed till now.

Balochistan Zone – Watercourses Data Summary				
Division	2019-20	2020-21	2021-22	Overall
Kalat	601	141	76	818
Loralai	345	145	7	497
Makran	148	11	5	164
Nasirabad	216	104	135	455
Quetta	243	48	17	308
Rakhshan	128	58	41	227
Sibi	185	42	17	244
Zhob	197	69	43	309
Overall	2063	618	341	3022

Balochistan zone currently has 3022 total watercourses data live on Dashboard and by which 2693 schemes have been completed and remaining 329 are under progress. There's a lot of data missing to fulfill the Dashboard requirement. Due to deficiency in data some functions are not displaying the appropriate results. ICT team coordinating with concerned officials to fill the gap. Detailed Summary attached as **Annex-K**.

Balochistan Zone – WST Data Summary				
Division	2019-20	2020-21	2021-22	Overall
Kalat	98	150	321	569
Loralai	54	41	52	147
Makran	47	52	153	252
Nasirabad	29	48	74	151
Quetta	53	87	79	219
Rakhshan	26	67	67	160
Sibi	32	33	61	126
Zhob	39	62	117	218
Overall	378	540	924	1842

Balochistan zone currently has 1842 total Water Storage Tank data live on Dashboard and by which 1569 tanks have been completed and remaining 273 WSTs are under progress. There's also a lot of data missing to fulfill the Dashboard requirement. Due to deficiency in data some functions are not displaying the appropriate results. ICT team coordinating with concerned officials to fill the gap. Detailed Summary attached as **Annex-L**.

Punjab Zone – Watercourses Data Summary				
Division	2019-20	2020-21	2021-22	Overall
Bahawalpur	176	186	1	363
D.G Khan	142	69	3	214
Faisalabad	91	59	5	155
Gujranwala	65	27	1	93
Gujrat	52	28	2	82
Lahore	79	49	1	129
Multan	160	81	1	242
Sahiwal	95	89	0	184
Sargodha	85	73	0	158
Overall	945	661	14	1620

Punjab Zone currently has 1620 total Watercourses data live on Dashboard and all schemes are completed. There's also data missing in some districts and the ICT team is in close coordination with the Punjab OFWM Department to fill the missing data from concerned districts. Detailed Summary attached as **Annex-M**.

3.10.4 Balochistan Zone Capacity Building Training

The ICT Team conducted a two days (07 to 08 December 2022) training workshop at Balochistan Zone OFWM staff to enhance their capability of data collection through the Android Based Application for rapid and validated data transmission. 98 staff members from various districts participated in this training. (Training details attached as **Annex N**).

3.11 MONITORING / DATA COLLECTION ON SOCIAL AND GENDER COMPONENT

In the month of December, gender and social specialist prepared and reviewed quarterly and monthly reports for further submission activities were carried.

Following activities were carried out.

- Tabulation tables were prepared and submitted to information and communication technology team.
- Proposes study document was prepared along with key informant interview questionnaire
- Meetings held in Punjab Zonal office to review last quarter activities Gaps and issues were discussed in detail which hamper activities in field.

Gender Analysis will give us a clear and vivid idea of a. profile, Access, cultural and social profile, participation, and ownership

- Activity Profile (what men and women of different ages do, where and when are these activities carried out)
- Access and Control Profile (who has access to and control over resources, assets, services and decision making and what are the constraints in access and control of resources)
- Structural Factors and Trends (how activity, access and control patterns are influenced by laws, policies, institutions, economic/political trends, religious practices and cultural norms)
- Needs and Priorities (who is likely to benefit or lose, how will this impact on sustainability of project benefits Institutional Capacities (types of institutions necessary to achieve results, their commitment and capacity of government and non-government organizations) *[If applicable]*
- Project Cycle Analysis (likely specific impacts of the project on women and men and opportunities to address gender concerns across the project cycle).

Study document and questionnaire was prepared to carry out project components impact on landless farmers and women of the programe area Study Purpose

Objectives of the study is to evaluate the current state of affairs of the most vulnerable in rural communities such as tenant farmers, landless

people and labors will also be included. It will help to understand up-to-date situation and issues of the less privileged population.

- To access project interventions' impact on farmers, women, and men.
- Poverty and other social issues will also be part of the focus group.
- Landless farmers will be specially focused will access to poverty.

1. Desk Study of the project documents

- All available data regarding the program and other similar programs implemented in the area,
- Lessons Learnt from Desk Study and Baseline reports.

2. Study Focus

Desk Study-Review and analysis of secondary data and information about most vulnerable rural households and rural poverty

3. Focus Group Discussion (FGD)

Village as a unit for arranging consultations. Everyone in the community will be invited to the discussion, with a special focus on landless farmers and Haris

- a. Sampling framework 20 villages in each province covering all project components.
- b. In each village two consultations will be carried out with male and female farmers. At least 10 to 15 community members will attend.
- c. Case studies of Landless and small farmers will be prepared to access the impact.
- d. Take pictures using Auto Stamper.

4. Design and Methodology

- Informed all the participants regarding the venue of the FGD.
- Prepare a draft checklist for men and women.
- Pre-testing the Checklist.
- Refinement of the Checklist.
- Attendance of the participants.
- Pictures of consultation.
- Late Afternoon meeting to Check and Evaluate the Filled Checklist and identify the gaps.
- Analysis of FGDs data and information and Tabulation.

5. Analysis of Secondary Data and information

- Triangulation of secondary and primary data.
- Focus on Secondary data which will be collected during consultations in all provinces (Punjab, Ajk Baluchistan, ICT, and Gilgit) and Deputy Team leaders will select the area after consultation with the team by keeping cultural and social conditions of the place

Social & Gender Questionnaire was given in the last month's MMR November 2022 as Annexure-G.

CHAPTER 4: QUARTERLY WORK PLAN- ACTIVITIES (OCTOBER 2022 TO DECEMBER 2022)

The ME&IE Consultants' activities initiating during the 4th Quarter of year 2022 (1st October 2022 to 31st December 2022) are listed below. A tentative Work Plan for 4th Quarter of the year 2022 (1st October 2022 to 31st December 2022) showing time span detail is given as **Annex-A**.

Pre Field-Activities

- Preparation of 2nd-Phase Baseline Survey (Finalization of MTs)
- Internal Meetings ME&IE Consultants' Zonal Offices for development of Methodology for Baseline Survey Phase-II.
- Training of Field Staff for Baseline Survey Phase-II

Field Activities

- Regular monitoring of Interventions in the Field
- Data collection of the interventions in the field
- Baseline Survey Phase-II
- Online data entry in android-based application

ICT Assignment

- Development / Improvement of website of NPIWC-II
- Monitoring online data collection and Data entry
- Monitoring Android based Mobile Application under implementation by field staff
- Data collection of interventions in MIS/GIS database
- Data Cleaning. Development & Launching of Dashboard for Client Offices

Coordination

- Meetings of TL with NPC and OFWM Departments regarding Project Progress/Issues
- Meeting of DTLs with respective DTL of P C & concerned OFWM Departments
- M E & IE Consultants Internal Meetings

Deliverables

- Monthly Monitoring Report
- Quarterly Monitoring Report (July-September 2022)
- Preparation of Baseline Survey Report Phase-II

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

Document	Status
Draft Inception Report	Submitted
Final Inception Report	Submitted
Monthly Monitoring Report-First (DEC 2020-JAN 2021)	Submitted
Monthly Monitoring Report-Second (FEB 2021)	Submitted
Monthly Monitoring Report-Third (MAR 2021)	Submitted
Quarterly Monitoring & Evaluation Report-First (JAN-MAR 2021)	Submitted
Monthly Monitoring Report-Fourth (APR 2021)	Submitted
Monthly Monitoring Report-Fifth (MAY 2021)	Submitted
Monthly Monitoring Report-Sixth (JUNE 2021)	Submitted
Quarterly Monitoring & Evaluation Report-Second (APR-JUN 2021)	Submitted
Monthly Monitoring Report-Seventh (JULY)	Submitted
Monthly Monitoring Report-Eighth (AUG 2021)	Submitted
Annual Monitoring & Evaluation Report (1 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

Document	Status
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)	Submitted within stipulated time
Quarterly Monitoring & Evaluation Report-2 nd Quarter year 2022 (APRIL – JUNE 2022)	submitted within stipulated time
Annual Monitoring & Evaluation Report (2 nd Jul 2021-June 2022)	Submitted within stipulated time
Monthly Monitoring Report-Nineteenth (July 2022)	Submitted within stipulated time
Monthly Monitoring Report-Twentieth (August 2022)	Submitted within stipulated time
Monthly Monitoring Report-Twenty First (September 2022)	Submitted within stipulated time
Quarterly Monitoring & Evaluation Report-3 rd Quarter year 2022 (JUL – SEP 2022)	Submitted within stipulated time
Monthly Monitoring Report-Twenty Second (October 2022)	Submitted within stipulated time

Document	Status
Monthly Monitoring Report-Twenty Third (November 2022)	Submitted within stipulated time
Monthly Monitoring Report-Twenty Fourth (December 2022)	Report in hand to be submitted within stipulated time
Baseline Survey Report Phase-II	Submitted
Baseline Survey Report Phase-II (First Draft)	Submitted
Baseline Survey Report Phase-II (Updated version WC)	Submitted
Baseline Survey Report Phase-II (Draft version of WSTs)	Submitted
Survey Manual (Final version) (Special Reports)	Submitted

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 performing baseline surveys as well as the required obligatory followed surveys including Midline and endline
- Non-availability of complete up-to-date inventory / data of all interventions from the Client, Provincial Agricultural Departments & NWMC (NESPAK) till to date.
- Irregularity in the fund releases are also one the key hurdles towards the completion of the required obligatory project assignments, timely.

ANNEXES A to N

ANNEX-A: TENTATIVE WORK PLAN

ANNEX - A: TENTATIVE QUARTERLY WORK PLAN (OCTOBER TO DECEMBER 2022)

TENTATIVE WORK PLANNED FOR THE QUARTER (Oct 2022 To Dec 2022)													Legend		
														Activity starts	
														Activity Ends	
														Activity Span	
No.	ACTIVITIES	3 Months-Year 2022 (Weeks)													
		Oct				Nov				Dec					
		WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4		
1	Pre-Field Activities														
	1.1 Preparation for 2nd-Phase Baseline Survey (Finalization of MTs)														
	1.2 Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 2nd Phase Baseline Survey														
	1.3 Training of Field Staff for 2nd-Phase Baseline Survey														
2	Field Activities														
	2.1 Regular Monitoring of Interventions in the Field														
	2.2 Data collection of the interventions in the field														
	2.3 Baseline Survey stage - 2														
	2.4 Online data entry in android based application														
3	ICT Assignment														
	3.1 Development / Improvement of website of NPIWC-II														
	3.2 Monitoring online data collection and Data entry														
	3.3 Monitoring Android based Mobile Application under implementation by field staff.														
	3.4 Data collection of interventions in MIS/GIS database														
	3.5 Data Cleaning, Development & Launching of Dashboard for Client Offices														
4	Coordination														
	4.1 Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues														
	4.2 Meeting of DTLs with respective DTL of PC & concerned OFWM Departments														
	4.3 ME&IE Consultants Internal Meetings														
5	Deliverable														
	5.1 Monthly Monitoring Report														
	5.2 Quarterly Monitoring Report (January-March 2022)														
	5.3 Preparation of Baseline Survey Report 2nd-Phase														

ANNEX – A(i): TENTATIVE QUARTERLY WORK PLAN OF ICT ZONE

Sr. No.	Deliverables /Activity	ME&IE Targets	Start Date	End Date	ME&IE Activities for Field visits			2023											
					Baseline + Monitoring	Monitoring	Endline	Jan				Feb				Mar			
	Islamabad OFWM data							W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4
	Kashmir OFWM data																		
	GB OFWM data																		
1	Coordination with OFWM by DTL				This coordination will be carried out by DTL with NPC and relevant Line Departments through one to one, email and phone for field visits.														
1.1	Collection of completed data of 2021-22 WC/WST																		
1.2	Coordination for ICR Data with Director Office			-															
1.3	Coordination for field visits through emails																		
2	Islamabad/Rawalpindi Visits				Baseline-3	Monitoring	Endline												
2.1	Water courses	8	10-Jan	30-mar	6	6	2		1		1					2		2	2
2.2	Water Storage Tanks Rawalpindi	4	10-Jan	30-mar	4	4	-									3	1		
2.3	Laser Land Levelling	0																	
3	Kashmir Visits				Baseline-3	Monitoring	Endline												
3.1	Water courses	32	10 jan	30-mar	6	6	7		2	1	2		2			2	2		2
3.2	Water Stroage Tanks	12	10-mar	30-mar	6	6	2						2				3	3	
3.3	Laser Land Leveling (Progress is nil so far)																		

ANNEX – A(ii): TENTATIVE QUARTERLY WORK PLAN OF PUNJAB ZONE

TENTATIVE WORK PLANNED FOR the 3rd QUARTER of 2022 - 23													Legend
January - March 2023													Activity starts
													Activity Ends
													Activity Span
No.	ACTIVITIES	3 Months-Year 2023 (Weeks)											
		January				February				March			
		WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4
1	Pre-Field Activities												
	1.1 Preparation of Filed Activities												
	1.2 Strategy For collection of basic data on various interventions												
2	Field Activities												
	2.1 Regular Monitoring of interventions in the Field												
	2.2 Data Collection on Baseline of interventions												
	2.3 Basic Data Collection on Various Intervention(PMIS Dashboard) at Divisional Level												
3	Coordination												
	Meeting of ME&IE Consultants with Stakeholders regarding project progress / Issues												
	3.1 DTL with DG. Agri. OFWM / Director Agri. OFWM												
	Field teams with DDAs and ADAs OFWM in respective Districts												
	3.2 Meeting of ME&IE DTLs with respective DTLs of NWMC												
	3.3 Internal / Zoom Meetings of ME&IE Consultants												
4	Post Field Activities												
	4.1 Validation on Android Based Field Data												
5	Deliverable												
	5.1 Monthly Monitoring report												
	5.2 Quarterly Monitoring Report												
	5.3 Impact Evaluation Report												
	5.3 Midline 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;
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							<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>
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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: ICT ZONE TOTAL TARGETS AND DISTRICT-WISE ACHEIVEDD STATUS

Main Theme	Activity	Areas	Total Project Targets	Total Achieved by Last Month	This Month Targets	This Month achievements
Baseline 1&2 and Midline	Baseline 1&2, Watercourses	Islamabad	15	7	-	-
		Kashmir	35	25	-	-
	Baseline 1&2, WST	Islamabad	Nil	-	-	-
		Kashmir	13	5	-	-
		Rawalpindi	20	12		
	Baseline LLL	Kashmir	5	-	-	-
	Midline, Watercourses	Islamabad	15	4		
		Kashmir	4	2	2	2
	Midline, WST	Islamabad	-	-	-	-
		Kashmir	-	-		
		Rawalpindi	20	4		
	Midline LLL	Kashmir	5	-		
Monitoring activities	Water Users Association	Islamabad	30	11		
		Kashmir	57	32		
		Rawalpindi	40	16		
	Watercourse	Islamabad	15	7		
		Kashmir	35	25	2	2
	Water Storage Tank	Kashmir	13	5		
		Rawalpindi	20	12		
	Laser Land Leveling	Kashmir	5	-		
Coordination Meetings	Meeting with OFWM		Need Based	-	Need Based	1

ANNEX - F: METHODOLOGY OF MEASUREMENT OF WATER FLOW

PYGMY CURRENT METER:

Working principle:

- Current meter Measures Velocity (V)
- Direct / By counting revolutions per unit of time
- Area of Segments (A)
- $Q = A \times V$

SEGMENTAL AREA:

- Measure the top width of the water/channel
- Measure the bottom width of the channel
- Divide width in segments (each segment area = 10% of total area)
- Record the width of each segment
- Mark the distance from the initial point for each segment
- Take the average depth of water in each segment
- Measure velocities at 0.2 & 0.8 if depth > 60 cm
- Measure velocities in the center of each segment
- Find average velocity by counting pings/table $V = 0.123 N + 0.007N = \text{Revolutions/Second}$
- Calculate Q of each segment by $Q = A \times V$
- Add Q of all segments for total discharge

Specifications:

Model 1205

Flow Velocity – feet per second (meter per second)

- Minimum .25fps (.075mps)
- Maximum 3 fps (.914 mps)

Weight – Pounds (kilograms) .25 lb (.11kg) Suspension Means - Wading Rod

Field Observations:

Following are the field observations of the measurement of Water Flow by using a pygmy current meter at Water Course No 45136 /L.

Sr. No	Design Discharge (Cusec)	Actual Discharge Measured (Cusec)
1	3	2.60
2	3	2.55

Average Discharge = 2.57 Cusses

Following were the Field teams members who participated in the measurement of water flow at water course no 45136/L

Name	Designation
Awais Jahangeer	Field Team In charge /ME&IE Expert
Muhammad Zubair	Field Team In charge /ME&IE Expert

ANNEX - G: WATERCOURSES DATA SUBMISSIONS

Watercourses Data Submissions - Summary								
Division	District	Completed	Work Order Cancelled	Under Progress				Overall
				1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Muzaffarabad	Muzaffarabad	56	5	8	7	18	13	107
	Jhelum	18	0	6	0	14	6	44
	Neelum	27	12	11	3	13	0	66
Muzaffarabad Total		101	17	25	10	45	19	217
Poonch	Poonch	31	10	7	1	2	1	52
	Bagh	24	14	1	0	1	4	44
	Haveli	6	9	0	0	3	10	28
	Sudhnoti	22	15	1	0	2	0	40
Poonch Total		83	48	9	1	8	15	164
Mirpur	Mirpur	66	1	0	0	7	28	102
	Bhimber	99	0	0	0	0	18	117
	Kotli	32	22	5	0	1	3	63
Mirpur Total		197	23	5	0	8	49	282
Overall		381	88	39	11	61	83	663

ANNEX - H: WST/WHs DATA SUBMISSIONS

AJK - WST/WHs DATA SUBMISSIONS SUMMARY						
Division	District	Completed	Work Order Cancelled	Under Progress		Overall
				Work Order Issued	Work Order Pending	
Muzaffarabad	Muzaffarabad	121	3	9	13	146
	Jhelum	11	0	13	3	27
Muzaffarabad Total		132	3	22	16	173
Poonch	Poonch	48	19	5	21	93
	Bagh	37	18	2	2	59
	Haveli	15	16	13	28	72
	Sudhnoti	12	2	21	10	45
Poonch Total		112	55	41	61	269
Mirpur	Mirpur	7	1	4	9	21
	Bhimber	11	0	0	20	31
	Kotli	27	12	1	3	43
Mirpur Total		45	13	5	32	95
Overall		289	71	68	109	537

ANNEX - I: KP - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Work Order Cancelled	Under Progress				Overall
				1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bajaur Agency	Bajaur	46	0	5	2	10	0	63
Bajaur Agency Total		46	0	5	2	10	0	63
Bannu	Bannu	93	0	0	14	0	0	107
Bannu	Lakki Marwat	106	0	2	0	0	0	108
Bannu Total		199	0	2	14	0	0	215
D.I. Khan	D.I. Khan	482	0	2	0	0	0	484
D.I. Khan	Tank	38	0	0	0	0	0	38
D.I. Khan Total		520	0	2	0	0	0	522
Hazara	Abbottabad	25	0	1	1	0	0	27
Hazara	Battagram	38	0	3	0	0	0	41
Hazara	Haripur	58	0	0	15	0	0	73
Hazara	Lower Kohistan	7	0	0	0	13	0	20
Hazara	Mansehra	89	0	0	32	1	0	122
Hazara	Torghar	23	0	0	1	1	0	25
Hazara	Upper Kohistan	9	0	0	0	0	0	9
Hazara	Kolai Pallas	2	0	0	0	0	0	2
Hazara Total		251	0	4	49	15	0	319
Khyber Agency	Khyber	19	0	0	0	5	1	25
Khyber Agency Total		19	0	0	0	5	1	25
Kohat	Hangu	42	0	0	0	0	0	42
Kohat	Karak	67	0	0	1	0	0	68
Kohat	Kohat	85	0	0	0	0	1	86
Kohat Total		194	0	0	1	0	1	196
Kurram Agency	Kurram	9	0	0	1	0	0	10
Kurram Agency Total		9	0	0	1	0	0	10
Malakand	Buner	94	0	0	0	0	0	94
Malakand	Chitral	88	0	1	1	0	0	90
Malakand	Lower Dir	68	0	5	12	15	1	101
Malakand	Malakand	76	0	0	1	7	1	85
Malakand	Shangla	39	0	0	0	0	0	39
Malakand	Swat	164	3	28	55	1	2	253
Malakand	Upper Dir	85	0	0	12	0	0	97
Malakand Total		614	3	34	81	23	4	759
Mardan	Mardan	124	0	0	0	2	0	126
Mardan	Swabi	81	0	0	0	2	1	84
Mardan Total		205	0	0	0	4	1	210
Mohmand Agency	Upper Mohmand	32	0	0	0	0	0	32
Mohmand Agency	Lower Mohmand	11	0	0	0	0	0	11
Mohmand Agency Total		43	0	0	0	0	0	43
Orakzai Agency	Orakzai	1	0	0	0	0	0	1
Orakzai Agency Total		1	0	0	0	0	0	1
Peshawar	Charsadda	126	1	0	0	13	0	140
Peshawar	Nowshera	76	0	0	0	13	4	93
Peshawar	Peshawar	64	0	0	3	4	3	74
Peshawar Total		266	1	0	3	30	7	307
S.W Agency	S.W Agency	27	0	0	0	1	0	28
S.W Agency Total		27	0	0	0	1	0	28
N.W Agency	N.W Agency	5	0	0	0	0	0	5
N.W Agency Total		5	0	0	0	0	0	5
Overall		2399	4	47	151	88	14	2703

ANNEX - J: KP - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bajaur Agency	Bajaur	17	0	0	1	3	21
Bajaur Agency Total		17	0	0	1	3	21
Bannu	Bannu	11	0	1	0	1	13
Bannu	Lakki Marwat	34	0	0	0	0	34
Bannu Total		45	0	1	0	1	47
D.I. Khan	D.I. Khan	82	0	0	8	0	90
D.I. Khan	Tank	16	0	0	0	0	16
Dera Ismail Khan Total		98	0	0	8	0	106
Hazara	Abbottabad	18	0	0	0	0	18
Hazara	Battagram	25	0	0	4	0	29
Hazara	Haripur	40	0	0	0	0	40
Hazara	Kolai Pallas	2	0	0	2	0	4
Hazara	Lower Kohistan	0	0	0	0	1	1
Hazara	Mansehra	34	0	2	4	1	41
Hazara	Torghar	11	0	0	5	0	16
Hazara	Upper Kohistan	7	0	0	0	6	13
Hazara Total		137	0	2	15	8	162
Khyber Agency	Khyber	10	0	0	6	6	22
Khyber Agency Total		10	0	0	6	6	22
Kohat	Hangu	14	0	0	0	0	14
Kohat	Karak	60	0	0	0	0	60
Kohat	Kohat	4	0	0	0	0	4
Kohat Total		78	0	0	0	0	78
Kurram Agency	Kurram	2	0	0	0	0	2
Kurram Agency Total		2	0	0	0	0	2
Malakand	Buner	43	0	0	0	0	43
Malakand	Chitral	21	0	0	0	0	21
Malakand	Lower Dir	15	1	5	12	0	33
Malakand	Malakand	24	0	0	0	0	24
Malakand	Shangla	21	0	0	1	0	22
Malakand	Swat	99	3	7	31	25	165
Malakand	Upper Dir	35	1	0	1	1	38
Malakand Total		258	5	12	45	26	346
Mardan	Mardan	32	0	0	0	0	32
Mardan	Swabi	9	0	0	0	10	19
Mardan Total		41	0	0	0	10	51
Mohmand Agency	Mohmand	41	0	0	0	0	41
Mohmand Agency Total		41	0	0	0	0	41
Orakzai Agency	Orakzai	2	0	0	0	0	2
Orakzai Agency Total		2	0	0	0	0	2
Peshawar	Charsadda	13	0	0	1	0	14
Peshawar	Nowshera	56	0	0	0	0	56
Peshawar	Peshawar	25	0	2	12	13	52
Peshawar Total		94	0	2	13	13	122
S.W Agency	S.W Agency	30	0	0	0	0	30
S.W Agency Total		30	0	0	0	0	30
N.W Agency	N.W Agency	8	0	0	5	4	17
N.W Agency Total		8	0	0	5	4	17
Overall		861	5	17	93	71	1047

ANNEX - K: BALOCHISTAN - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	TS Issued	TS Pending	
Kalat	Awaran	160	0	0	1	2	163
Kalat	Kalat	159	0	0	0	1	160
Kalat	Khuzdar	162	0	0	0	0	162
Kalat	Lasbela	154	0	0	0	0	154
Kalat	Mastung	138	0	0	0	0	138
Kalat	Surab	0	0	0	0	42	42
Kalat Total		773	0	0	1	45	819
Loralai	Barkhan	64	0	0	0	0	64
Loralai	Duki	43	0	0	0	0	43
Loralai	Loralai	203	0	0	0	0	203
Loralai	Musakhail	187	0	0	0	0	187
Loralai Total		497	0	0	0	0	497
Makran	Gwadar	23	0	0	0	0	23
Makran	Kech	38	0	0	30	0	68
Makran	Panjgur	73	0	0	0	0	73
Makran Total		134	0	0	30	0	164
Nasirabad	Jaffarabad	109	1	0	30	1	141
Nasirabad	Jhal Magsi	27	0	0	0	0	27
Nasirabad	Kachi	0	0	0	17	85	102
Nasirabad	Nasirabad	67	0	0	0	68	135
Nasirabad	Sohbatpur	50	0	0	0	0	50
Nasirabad Total		253	1	0	47	154	455
Quetta	Killa Abdullah	110	0	0	0	0	110
Quetta	Pishin	134	0	0	0	6	140
Quetta	Quetta	58	0	0	0	0	58
Quetta Total		302	0	0	0	6	308
Rakhshan	Chaghi	82	0	0	0	0	82
Rakhshan	Kharan	51	0	0	0	0	51
Rakhshan	Nushki	67	0	1	4	3	75
Rakhshan	Washuk	20	0	0	0	0	20
Rakhshan Total		220	0	1	4	3	228
Sibi	Dera Bugti	44	0	0	0	0	44
Sibi	Harnai	42	0	0	0	0	42
Sibi	Kohlu	41	0	0	0	0	41
Sibi	Sibi	43	0	0	0	1	44
Sibi	Ziarat	73	0	0	0	0	73
Sibi Total		243	0	0	0	1	244
Zhob	Killa Saifullah	163	0	0	0	0	163
Zhob	Sherani	28	0	0	0	38	66
Zhob	Zhob	80	0	0	0	0	80
Zhob Total		271	0	0	0	38	309
Overall		2693	1	1	82	247	3024

ANNEX - L: BALOCHISTAN - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	TS Issued	TS Pending	
Kalat	Awaran	84	0	0	0	2	86
Kalat	Kalat	118	0	0	0	3	121
Kalat	Khuzdar	77	0	0	0	0	77
Kalat	Lasbela	105	0	0	0	45	150
Kalat	Mastung	106	0	0	0	0	106
Kalat	Surab	0	0	0	0	29	29
Kalat Total		490	0	0	0	79	569
Loralai	Barkhan	54	0	0	0	0	54
Loralai	Duki	29	0	0	0	0	29
Loralai	Loralai	54	0	0	0	0	54
Loralai	Musa Khail	10	0	0	0	0	10
Loralai Total		147	0	0	0	0	147
Makran	Gwadar	7	0	0	0	0	7
Makran	Kech	43	0	0	0	42	85
Makran	Panjgur	160	0	0	0	0	160
Makran Total		210	0	0	0	42	252
Nasirabad	Jaffarabad	9	0	0	8	0	17
Nasirabad	Jhal Magsi	30	0	0	0	0	30
Nasirabad	Kachi	0	0	0	14	68	82
Nasirabad	Nasirabad	8	0	0	0	0	8
Nasirabad	Sohbatpur	14	0	0	0	0	14
Nasirabad Total		61	0	0	22	68	151
Quetta	Killa Abdullah	56	0	0	0	0	56
Quetta	Pishin	58	0	0	0	61	119
Quetta	Quetta	44	0	0	0	0	44
Quetta Total		158	0	0	0	61	219
Rakhshan	Chaghi	56	0	0	0	0	56
Rakhshan	Kharan	28	0	0	0	1	29
Rakhshan	Nushki	62	0	0	0	0	62
Rakhshan	Washuk	13	0	0	0	0	13
Rakhshan Total		159	0	0	0	1	160
Sibi	Dera Bugti	39	0	0	0	0	39
Sibi	Harnai	18	0	0	0	0	18
Sibi	Kohlu	25	0	0	0	0	25
Sibi	Sibi	23	0	0	0	0	23
Sibi	Ziarat	21	0	0	0	0	21
Sibi Total		126	0	0	0	0	126
Zhob	Killa Saifullah	108	0	0	0	0	108
Zhob	Sherani	25	0	0	0	0	25
Zhob	Zhob	85	0	0	0	0	85
Zhob Total		218	0	0	0	0	218
Overall		1569	0	0	22	251	1842

ANNEX - M: PUNJAB - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bahawalpur	Bahawalnagar	112	0	0	0	0	112
Bahawalpur	Bahawalpur	77	0	0	0	0	77
Bahawalpur	Rahim Yar Khan	174	0	0	0	0	174
Bahawalpur Total		363	0	0	0	0	363
Dera Ghazi Khan	Dera Ghazi Khan	40	0	0	0	0	40
Dera Ghazi Khan	Layyah	68	0	0	0	0	68
Dera Ghazi Khan	Muzaffargarh	49	0	0	0	0	49
Dera Ghazi Khan	Rajanpur	57	0	0	0	0	57
Dera Ghazi Khan Total		214	0	0	0	0	214
Faisalabad	Chiniot	14	0	0	0	0	14
Faisalabad	Faisalabad	55	0	0	0	0	55
Faisalabad	Jhang	38	0	0	0	0	38
Faisalabad	Toba Tek Singh	48	0	0	0	0	48
Faisalabad Total		155	0	0	0	0	155
Gujranwala	Gujranwala	48	0	0	0	0	48
Gujranwala	Narowal	10	0	0	0	0	10
Gujranwala	Sialkot	35	0	0	0	0	35
Gujranwala Total		93	0	0	0	0	93
Gujrat	Gujrat	14	0	0	0	0	14
Gujrat	Hafizabad	40	0	0	0	0	40
Gujrat	Mandi Bahauddin	28	0	0	0	0	28
Gujrat Total		82	0	0	0	0	82
Lahore	Kasur	49	0	0	0	0	49
Lahore	Lahore	5	0	0	0	0	5
Lahore	Nankana Sahib	29	0	0	0	0	29
Lahore	Sheikhupura	46	0	0	0	0	46
Lahore Total		129	0	0	0	0	129
Multan	Khanewal	58	0	0	0	0	58
Multan	Lodhran	59	0	0	0	0	59
Multan	Multan	58	0	0	0	0	58
Multan	Vehari	67	0	0	0	0	67
Multan Total		242	0	0	0	0	242
Sahiwal	Okara	69	0	0	0	0	69
Sahiwal	Pakpattan	50	0	0	0	0	50
Sahiwal	Sahiwal	65	0	0	0	0	65
Sahiwal Total		184	0	0	0	0	184
Sargodha	Bhakkar	41	0	0	0	0	41
Sargodha	Khushab	36	0	0	0	0	36
Sargodha	Mianwali	20	0	0	0	0	20
Sargodha	Sargodha	61	0	0	0	0	61
Sargodha Total		158	0	0	0	0	158
Overall		1620	0	0	0	0	1620

ANNEX - N: FIELD DATA COLLECTION TRAINING WORKSHOP BALOCHISTAN ZONE

Two Days Training Workshop Field Data Collection Through Android Application

Organized by ME&IE Consultant

7th to 8th December 2022

Venue: Conference Hall - Agriculture Research Institute, Sariab Road, Quetta

Agenda

Training Objectives

This training workshop will enable participants to use the Android based data collection application for feeding data for MIS Dashboard.

Workshop Trainers

Name	Prefix	Role	Designation
Mr. Usman Mustafa	[UM]	Trainer	Team Leader
Mr. Rizwan Saleem	[RS]	Trainer	ICT Specialist
Mr. Shumail Mehmood	[SM]	Trainer	Data Analyst
Mr. Irfan Aziz	[IA]	Co-Trainer	Technical/Non-Technical

Wednesday, December 7 th , 2022			Day-1
Time		Topic	Presenter
10:00 AM	10:10 AM	Workshop Opening: Recitation of Holy Quran	DG Sb, DTL (ME&IEC & NWMC)
10:10 AM	10:30 AM	Inaugural speech	
10:30 AM	10:50 AM	Introduction of facilitators and participants	
10:50 AM	11:10 AM	Introduction to digital data collection & GIS based Progress Monitoring Dashboard	SM
11:10 AM	12:10 PM	Discussion on approved WC forms	SM
12:10 PM	1:00 PM	Discussion on approved WST forms	IA
1:00 PM	2:00 PM	Lunch/Prayer Break	
2:00 PM	2:30 PM	Introduction to Android data collection application	SM
2:30 PM	3:30 PM	Demonstration of approved WC forms on Android	SM, IA

3:30 PM	4:30 PM	Demonstration of approved WST forms on Android	IA
4:30 PM	4:50 PM	General discussion (Q&A Session)	SM
4:50 PM	5:00 PM	Day End Closing Remarks	

Thursday, December 8 th , 2022			Day-2
Time	Topic	Presenter	
10:00 AM	11:00 AM	Rapid Revision Session of Android Application and Digital Forms	SM
11:00 AM	11:20 AM	Benefits of Digital Data Collection	DTL (ME&IEC & NWMC)
11:20 AM	1:00 PM	Hands-on training session	SM, IA
1:00 PM	2:00 PM	Lunch/Prayer Break	
2:00 PM	3:00 PM	Hands-on training session	SM, IA
3:00 PM	3:30 PM	Data submissions review and identification of errors	SM, IA
3:30 PM	4:10 PM	Discussion on hurdles/issues faced during field activity	SM, IA
4:10 PM	4:30 PM	Discussion on data monitoring/validation checks	SM
4:30 PM	5:00 PM	Wrap-up and Q&A Session	SM

Trainee Certificate



**NATIONAL PROGRAM
FOR IMPROVEMENT OF WATERCOURSES
NPIWC-II**

TRAINEE CERTIFICATE






This certifies that Mr. MR. NOOR AHMAD designated as DDO
at OFWM has conducted two days training on **Android Based Data Collection Application
& GIS Based Progress Monitoring Dashboard.**

Held at Quetta, Balochistan from 07th to 08th December 2022


Team Leader
ME&IEC - NPIWC-II


ICT Specialist
ME&IEC - NPIWC-II

Trainee Holding Cards




**NATIONAL PROGRAM FOR IMPROVEMENT
OF WATER COURSES
NPIWC - II**

TRAINEE

Mr. Noor Ahmad

DDO

District: Quetta

Training Participants List

Sr. #	District	Name of Participants	Designation
1	Quetta	Mr. Noor Ahmad	DDO
2	Quetta	Mr. Muhammad Fazal	Agriculture Officer
3	Quetta	Mr. Qari Abdul Basit / Muhammad Khalid	Sub Engineer
4	Pishin	Syed Faizullah Shah	DDO
5	Pishin	Mr. Imran Hassan Khan	Water Management Officer
6	Pishin	Syed Ehsan Ullah / M. Usman Shah	Sub Engineer
7	Killa Abdullah	Mr. Anwer Adil	WMO
8	Killa Abdullah	Mr. Naveed Ahmad	A/O
9	Killa Abdullah	Mr. Daro Khan	Junior Engineer
10	Mastung	Mr. Faqeer Muhammad	DDO
11	Mastung	Mr. Nadir	WMO
12	Mastung	Mr. Dad Ali	Sub Engineer
13	Kalat	Syed Sikandar Shah	DDO
14	Kalat	Mir Tahir Khan	A/O
15	Kalat	Syed Mukhtiar Shah	S/E
16	Surab	Mr. Farid Ahmad	DDO
17	Khuzdar	Mr. Habibullah	DDO
18	Khuzdar	Imam Baksh	A/O
19	Khuzdar	Attaullah	S/E
20	Lasbella	Mr. Shahid Ali	DDO
21	Lasbella	Abdul Qadeer	WMO
22	Lasbella	Shahjahan	Comp: Operator
23	Awaran	Mr. Abdul Wahid	DDO
24	Awaran	Shahid Ali	A/O
25	Awaran	Ghulam Sarwar	S/E
26	Chaghi	Mr. Shah Nawaz	DDO
27	Chaghi	Khushal Khan	A/O
28	Chaghi	Safar Khan	S/E
29	Nushki	Mr. Sanaullah	DDO
30	Nushki	Asadullah	A/O
31	Nushki	Abdul Ghaffar	S/E
32	Kharan	Mr. Asif Saleh	DDO
33	Kharan	Abdul Salam	AAE
34	Kharan	Zia Ur Rehman	S/E
35	Washuk	Mr. Yahya Khan	DDO
36	Washuk	Mujeeb ur Rehman	WMO
37	Washuk	Arif Shah	AAE
38	Washuk	Muhammad Dawood	S/E
39	Panjgoor	Mr. Muhammad Zaman	DDO
40	Panjgoor	Zahoor Ahmad	WMO
41	Panjgoor	Sikandar Ali	S/E
42	Turbat	Mr. Mehbob Ali	DDO
43	Turbat	Nazir Ahmed	A/O
44	Turbat	Abdul Karim	S/E
45	Gwadar	Mr. Chakar Khan	DDO
46	Gwadar	Nasir Ali	A/O
47	Gwadar	Maula-dad	S/E
48	Kachhi	Mr. Ejaz Ahmad	DDO
49	Kachhi	Asif Taj	A/O

Sr. #	District	Name of Participants	Designation
50	Kachhi	Naseeb ullah	S/E
51	Jhal Magsi	Mr. Gahnwar Khan	DDO
52	Jhal Magsi	Rehmat Ullah	J/C
53	Jhal Magsi	Muhammad Ismail	S/E
54	Naseerabad	Mr. Saeed Ahmad	DDO
55	Naseerabad	Muhammad Ismail	WMO
56	Naseerabad	Ali Mardan	S/E
57	Sohbatpur	Mr. Imdad Ali	DDO
58	Sohbatpur	Muzamil Ahmad	WMO
59	Sohbatpur	Mohammad Qasim	S/E
60	Jaffarabad	Mr. Lal Jan	DDO
61	Jaffarabad	Mr. Babul Khan	J/E
62	Jaffarabad	Mr. Abdul Fateh	S/E
63	Sibi	Mr. Barkat Ali	DDO
64	Sibi	Ghulam Rasool	WMO
65	Sibi	Shahid Abbas / Javaid Murtaza	S/E
66	Dera Bugti	Mr. Amanullah	DDO
67	Dera Bugti	Abdul Majeed	J/C
68	Dera Bugti	Abdul Ghaffar	S/E
69	Harnai	Mr. Munir Ahmad	DDO
70	Harnai	Najeeb Ullah	A/O
71	Harnai	Gul Muhammad	S/E
72	Ziarat	Mr. Muhammad Mukhtiar	DDO
73	Ziarat	Ashir Aziz	A/O
74	Ziarat	Tariq	S/E
75	Kohlu	Mir Dil Malik Marri	DDO
76	Kohlu	Hassan Zarkoon	WMO
77	Kohlu	Nouroz Khan	S/E
78	Barkhan	Abdul Sadiq	DDO
79	Barkhan	Ghulam Farid	Assistant
80	Barkhan	Qazi Shahid	S/E
81	Musakhail	Kamal Khan	DDO
82	Musakhail	Ain Ullah	A/O
83	Musakhail	Jameel Khan	S/E
84	Loralai	Muhammad Anwer	DDO
85	Loralai	Habibullah	WMO
86	Loralai	Abdul Hadi	J/E
87	Duki	Saadullah	DDO
88	Duki	Abdul Hanif	S/E
89	Duki	Hussain Khan	S/E
90	Killa Saifullah	Abdul Khaliq	DDO
91	Killa Saifullah	Inayatullah	WMO
92	Killa Saifullah	Abdul Salam	S/E
93	Zhob	Abdul Ali	DDO
94	Zhob	Muhammad Umar	A/O
95	Zhob	Changaiz Khan	S/E
96	Sherani	Pir Muhammad	DDO
97	Sherani	Muhammad Raza	A/O
98	Sherani	Muhammad Zahid /Abdullah Khan	J/C

TRAINING PICTURES

