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

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

MONITORING, EVALUATION AND IMPACT EVALUATION CONSULTANTS

QUARTERLY MONITORING & EVALUATION REPORT

JULY TO SEPTEMBER 2022

A Joint Venture of
G3 Engineering Consultants (Pvt.) Ltd. (Lead Firm)
EASE-PAK
ADA Consultants Inc.
In Association with S&S Associates

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

Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants
For
National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)

QUARTERLY MONITORING AND EVALUATION REPORT

JULY - SEPTEMBER 2022

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ACRONYMS

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

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

EXECUTIVE SUMMARY

The report in hand, "Quarterly Monitoring and Evaluation Report for the period of 01st July 2022 to 30th September 2022" is comprising of five chapters.

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

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

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

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

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

Chapter -3 of this report covers the detail of ME&IE Consultants' activities initiating during the reporting period (01st July, 2022 to 30th September, 2022) as listed below.

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

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

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

- Preparation and conduction of for 2nd Baseline Survey
- Refresher training of field teams for data collection
- Data collection from OFWM Department/NWMC for Baseline survey/regular monitoring
- Regular Monitoring of Interventions in the Field
- Data Collection of the Interventions in the Field
- Online Data Entry in Android Based Application.
- Baseline survey field visits
- Data entry, Data cleaning, Data processing & data Analysis
- Meetings of ME&IE Consultants with Stakeholders Regarding Project Progress / Issues
- Monitoring / Data Collection on Social and Gender Component
- Updation / refinement of NPIWC-II web site
- Data collection of interventions in MIS/GIS database
- Updataion of data on Dashboard.
- Data collection of interventions in MIS/GIS database

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

Table ES.1: Compliance Status of Quarterly Tentative Work Plan, 1st Apr. to 30th Jun. 2022

No.		Activities Planned for the Reporting Quarter	Status	
1	**Pre-field Activities:**			
	1.1	Preparation and conduction of 2nd Phase Baseline Survey	Complied	
	1.2	Internal Meetings of ME&IE Consultants' Zonal Office for development of Methodology for 2nd Phase Baseline Survey	Complied	
	1.3	Referesher Training of Field Staff for 2nd Baseline Survey	Complied	
2	**Field Activities:**			
	2.1	Regular Monitoring of Interventions in the Field	Complied/continued for current year	
	2.2	Data Collection of the Interventions in the Field	Complied/ in progress	
	2.3	Baseline Survey Stagee-2	Data Collection is in progress	
	2.4	Online data entry in android based application	In progress	
3	**ICT Assignment:**			
	3.1	Development / Improvement of web site 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/Dashboard	Complied	
	3.5	Data updation on Dashboard	Complied	
4	**Coordination**			
	4.1	Meetings of TL with NPC and OFWM departments regarding Project Progress / issues	Meetings conducted	
	4.2	Meetings of DTLs with respective DTL of PC & concerned OFWM departments	Meetings conducted	
5	**Deliverables:**			
	5.1	Monthly Monitoring Report (MMR)	19th MMR (JUL 2022)	Submitted
			20TH MMR (AUG 2022)	Submitted
			21st MMR (SEPT 2022)	Submitted
			22nd MMR (Oct 2022)	To be submitted on Stipulated time
	5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER (OCT-DEC 2021)	Submitted
			QM&ER (APR-JUN 2022)	Submitted
			QM&ER (JUL-SEPT 2022)	Report in hand to be submitted on Stipulated time
	5.3	Annual Monitoring & Evaluation Report (2nd)	July 2021-June 2022	Submitted
	5.4	Baseline Survey Phase-II	Draft Report submitted	

CHAPTER-1: INTRODUCTION

1.1 PROJECT PROFILE

Project Name	National Program for Improvement of Watercourses in Pakistan Phase-II **(NPIWC-II)**
Project Areas	Punjab, KP, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir, and Islamabad Capital Territory (ICT)
Sponsoring Agency	Ministry of National Food Security & Research
Executing Agencies (EAs)	Following are different EAs: i. Federal Project Management Unit (FPMU), ii. DGA OFWM Punjab iii. DGA OFWM KP iv. DGA OFWM Balochistan v. Director Irrigation and Small Dams, AJK vi. Director WM, GB vii. Director Agriculture Extension Services (AES) ICT
Project Period	5 Year (2019-2024)
Total Project Cost	154,542.355 million (Umbrella PC-1, including Sindh)
ME&IE Consultancy Period	4 year
ME&IE Consultant:	JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering Services (Pvt.) Ltd., Centre for Social Research and Development (CSRD) and ADA Consultants Inc. Canada
ME&IE Consultant Mobilized	November 20, 2020

1.2 PROJECT DESCRIPTION

1.2.1 Project Development Objectives

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

1.2.2 Project Objectives – General & Quantitative

1) General Objectives:

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

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

2) Quantitative Objectives:

The quantitative objectives of the Project are as under:

Project outputs

i) Mobilization through capacity building of Water Users Associations/Farmers Organizations in improved water management techniques and their registration under On-Farm Water Management and Water User Associations Ordinance [Act] 1981 and organization of 47,278 WUAs.
ii) Reconstruction/renovation and remodeling of 47,278 watercourses, involving complete earthen renovation, partial lining of critical reaches (50% of the total watercourse length as decided in the high-level meeting), and installation of water control structures. It is expected to save around 5.82 MAF per annum (approx. saving of 123 acre-feet (AF) per watercourse per annum).
iii) Construction of 14,932 water storage tanks with 60% subsidy.
iv) Provision of 11,610 Laser Land Levelers at 50% cost sharing, with the expectation to save about 50% irrigation water for wheat and about 68% of irrigation water for paddy.

Project impacts

v) Reduction in Water Logging and salinity in project areas to the extent of 10%.
vi) Cropping intensity is expected to increase by 5-20%.
vii) Crop's yield is estimated to increase by 10-15%.
viii) Equity in water distribution increased by about 30%.

ix) Reduction in water disputes/thefts and litigation amongst the Farmers over water distribution by about 80%.
x) Help poverty reduction through generation of employment.
xi) Self-sufficiency in food through utilization of water saved for edible oil seed production.

Project indirect benefits to industry/economic activities

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

Awareness support to farmers

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

1.2.3 Project Beneficiaries

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

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

1.2.4 Project Components

The NPIWC-II comprises four components.

C1: ORGANIZATION OF WATER USERS ASSOCIATIONS:

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

i) Provide right of way for constructing watercourse,
ii) Arrange skilled and unskilled labour required for reconstruction / maintenance of earthen water channel, installation of water control structures, and lining of critical reaches,
iii) Procure construction materials for carrying out civil works,
iv) Settle matters of disputes amongst the water users in respect of channel alignment, fixation of Naccas, distribution of work, etc.,
v) Make alternate arrangements for conveyance of water during execution of improvement works,
vi) 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.

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

C3: CONSTRUCTION OF WATER STORAGE TANKS:

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

i) Store water during the rainy season and times of no use in the commands of perennial / non-perennial canals for subsequent irrigations at the critical crop growth stages,
ii) Provide flexibility for storage of plentiful canal and rainfall runoff water for its more expedient use subsequently,
iii) Collect, store and filter water from:
    - Small Dams, Springs, Streams, Nallas 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 in large flow rates.

C4: PROVISION OF LASER LAND LEVELING UNITS:

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

1.2.5 Project Targets

Project aims at achieving the targets (Figure-1.1) for 5 years starting from year 2019-20 to 2023-24. The targets for each province/Zone (excluding Sindh) are given in below Figure-1.2.

Project Targets:

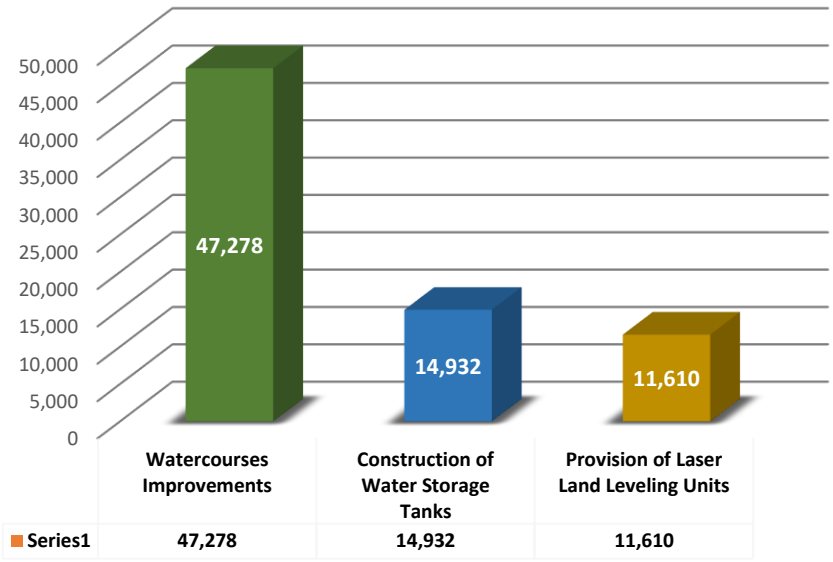


Figure-1.1: Pakistan Targets

Zonal Targets:

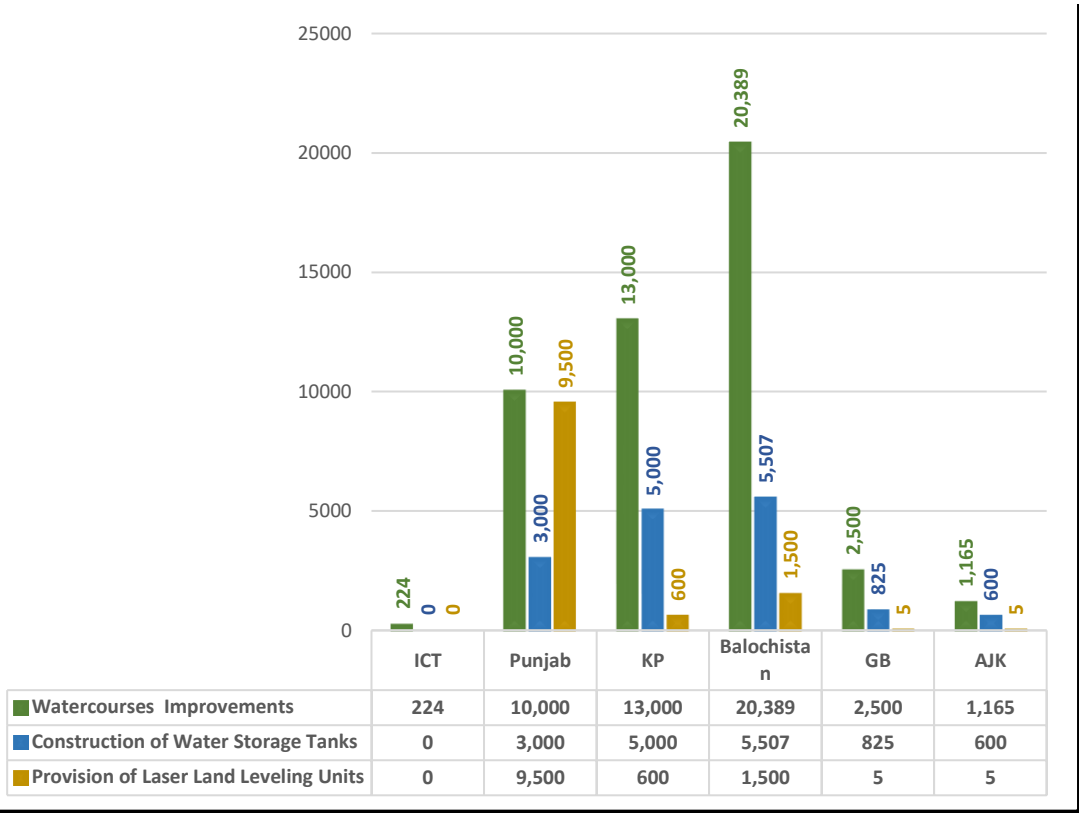


Figure-1.2: Zonal Targets

CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS

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

2.1 OBJECTIVES

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

2.2 SCOPE OF THE SERVICES

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

i) Undertake baseline, midline and end line surveys for the project activities / interventions in all the project areas,
ii) Develop monitoring strategy, framework and Result-Based Monitoring (RBM) indicators,
iii) Preparation of monthly, quarterly and annual monitoring, evaluation and validation reports of the project activities,
iv) Assessing the water saving per annum on watercourses, water storage tanks and field levels as well as aggregate due to the project interventions,
v) Assessing the improvement in water availability due to the provision of conveyance system,
vi) Assessing the economic benefits to the agriculture in terms of changes in yields, irrigated area, cropping pattern, cropping intensity, farm income and employment in command area of watercourses and water storage tanks,
vii) Assessing the extent of community mobilization, financial and administrative sustainability of water users' associations and ensuring the maintenance of watercourses, water storage tanks and laser land Levelers,
viii) Economic impact of project interventions,
ix) Carry out the impact evaluation of the project intervention on the economy and stakeholders,
x) Develop a website containing information on facilities and services, applications, procedures, watercourses, water storage tanks and laser Levelers database, etc. (while the project staff will maintain the website),
xi) Provide technical support for the development of a custom-designed mobile application (Android Based) to capture on-site project progress and geo-tagged photos. It should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management. The said requirement is based on the following functional features:

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

2.3 MONITORING STRATEGY

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in the following Table-2.1. However, detailed methodology and procedures to carry out the Monitoring, Evaluations and Impact Evaluations of the project interventions were explained in Chapter 6 of Inception Report. The strategy aims to be finalized and implemented in close coordination with the client and active participation of the beneficiaries as well as the project stakeholders.

Table 2.1: Monitoring Strategy for ME&IE Activities

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
1	Baseline, midline and endline surveys	Team Leader, Socio-Economic Expert, Agricultural Economist and Deputy Team Leader of respective province/unit.	• Baseline and impact surveys will be carried out on a sample basis. • Data will be collected by field teams on pre-designed data collection tools through an android application on TABs. • Baseline and impact surveys will be carried out in phases as target watercourses are not preselected. • Baseline will be carried out before the intervention and the impact one year (two crop seasons) after the completion of the intervention. • The midterm study will review the project progress at middle of the project implementation • The endline study will assess the impact of the project interventions.
2	Reporting	All core team members	Following periodic reports will be prepared and submitted: • 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	**Water Saving on Watercourses:** • Water flow will be measured on sample watercourses selected for the baseline and impact surveys • The flow will be measured at four points of the selected watercourses: close to water outlet, head reach, middle reach and tail reach. • The measurements will be done through current meters.

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
			• 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.
			Water Savings on WSTs • Since WSTs will be filled and emptied on a continuous basis, the water savings will be assessed on the basis of water pumped from the tank to irrigate the fields. • The assessment will be done either by readings on the pump gauge or periodic interviewing the farmer. • Based on water savings on sample WSTs, total water savings will be estimated for all project WSTs. The savings will be reported per WST, per annum and aggregate for the project in LPS and in Acre feet. **Water savings due to Laser Land Leveling** • Water savings at field level will be assessed through farmers' interviews. • The impact survey form will include questions to be asked from the farmers who got their land levelled: ➢ 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 The difference will be water saving due to laser land leveling
			Based on water savings on sample LLL units, total water savings will be estimated for all project LLL units. The savings will be reported per LLL unit, per annum and aggregate for the project in LPS and in Acre feet.
4	Community mobilization	Social and Gender Specialist and Socio-Economic Expert	The extent of community mobilization will be assessed by investigating whether: • 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	• 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	• The results of the baseline and impact surveys will be used to quantify impact on the economy • Additional food produced due to the project will be estimated. It is benefit towards food security

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
		Expert	• 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	• Analysis as in serial 6 will be carried out with reference to various stakeholders, like community, government, farmers, etc.
8	Spot checking	Team Leader, Deputy Team Leaders & Field teams/Engineers.	During the field visits for WUAs baselines impacts of Watercourses, WSTs and laser leveling units, the interventions will be spot checked for quality of construction, material, functioning and beneficiaries' satisfaction etc.
9	Process monitoring	Field Teams of Agriculture Deptt., Project Consultants, ME&IE Consultants & ICT/Technology Specialist	• The process 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	• The State-of-the-art MIS / Progress Monitoring Model will be developed for NPIWC-II. • Customized forms will be developed to collect data from the implementing teams on-site for progress monitoring • These forms will be made available to the teams on smart phones through an android application • The teams will be adequately trained to use the application • Data on physical and financial stages with dates will be fed to the system for process monitoring • GIS coordinates for watercourses, WSTs, laser units (if available) and WUAs offices will be uploaded to the system and could be viewed / reached by the management online • The system will be maintained on GOOGLE server so that it is accessible by the management from anywhere in Pakistan and abroad • Custom reports will be possible as the user demands / desires • The results could be displayed on small as well as large screens.
11	Development of Android based application	ICT / Technology Specialist	All the data collection forms / tools will be executed through customized developed Android based applications accessible with smart phones / TABs.

2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS

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

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

CHAPTER 3: WORK PLAN OF THE CONSULTANTS FOR THIRD QUARTER

3.1 COMPLIANCE STATUS OF WORK PLAN OF QUARTER JUL-SEPT 2022

The ME&IE activities initiating during the 3rd Quarter of the year 2022 (1st July 2022 to 30th Sept 2022) and their compliance status is summarized below. The Tentative Work Plan for the 3rd Quarter of year 2022 (1st July 2022 to 30th September 2022) is given as **Annex-A**.

3.1.1 Pre-Field Activities

S#	Activities	Status
i	Preparation and conductiong of 2nd Phase Baseline Survey	Complied, Refer chapter 4 for detail:
ii	Internal Meetings of ME&IE consultants for development of Methodology for 2nd Phase Baseline Survey	Complied, Refer chapter 4 for detail:
iii	Referesher Training of Field Staff for 2nd Baseline Survey	Complied, Refer chapter 4 for detail:

3.1.2 Field Activities

S#	Activities	Status
i	Regular Monitoring of Interventions in the Field	Complied, Refer chapter 4 for detail:
ii	Data Collection of the Interventions in the Field	Complied, Refer chapter 4 for detail:
iii	Baseline Survey-II	Complied, Refer chapter 4 for detail:
iv	Online data entry in android based application	Complied, Refer chapter 4 for detail:

3.1.3 ICT Assignment

S#	Assignment	Status
i	Development / Improvement of web site of NPIWC-II	Complied Refer chapter 4 for detail:
ii	Monitoring online data collection ad Data entry	Complied, Refer chapter 4 for detail:
iii	Monitoring Android based Mobile Application under implementation by field staff	Complied, Refer chapter 4 for detail:
iv	Data collection of interventions in MIS/GIS database / Dashboard	Complied, Refer chapter 4 for detail:
v	Data updation on Dashboard	Complied, Refer chapter 4 for detail:

3.1.4 Coordination

S#	Activities	Status
i	Meetings of TL with NPC and OFWM departments regarding Project Progress / issues	Meetings conducted on regular basis
ii	Meetings of DTLs with respective DTL of PC & concerned OFWM departments	Meetings conducted on regular basis

3.1.5 Deliverables

S#	Reports	Status
i	Monthly Monitoring Reports (MMRs) July & August 2022	Submitted
ii	Monthly Monitoring Report (MMR) September 2022	Submitted
	Monthly Monitoring Report (MMR) October 2022	To be submitted within stipulated time
iii	Quarterly Monitoring & Evaluation Report (QM&ER) April-June 2022	Submitted
Iv	Quarterly Monitoring & Evaluation Report (QM&ER) July-September 2022	To be submitted within stipulated time
V	Annual Monitoring & Evaluation Report (2nd) Jul 2021 – Jun 2022	Submitted
V	Baseline Survey-II	Draft Report Submitted

CHAPTER 4: ACTIVITIES DURING THE REPORTING QUARTER

4.1 INTRODUCTION

Quarterly Monitoring & Evaluation Report (QM&ER) explains the understanding towards all activities to be carried out as per TORs of ME&IE assignment and their completion within stipulated time frame.

4.2 OBJECTIVE OF QM&ER

The Main objective of Quarterly Monitoring and Evaluation Report (QM&ER) is to update the Client about the activities carrying out by the ME&IE Consultants during the reporting quarter. Reporting is an integral part of monitoring and evaluation framework.

4.3 REPORTING QUARTER

This current QM&ER covers the period from 01st July 2022 to 30th September 2022.

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

4.3.1 IMPROVEMENT OF MONITORING TOOLS AND REFERESHER TRAINING WORKSHOP

Improvement of MTs is a continuous process throughut the implementation of the ME&IE activities by the consultants. In the light of experience of data collection MTs were mor refined by the consultants. To make the familiarize with this improvement / refinement in the MTs a foru (04) days' refresher training workshop was conducted in Consultants' National Office Islamabad. All the DTLs and Field Team Incharges along with Core Team and Authorized Representative of the JV participated in the workshop.

The consultants were also femilarized with the updated Android application for data collection. SOPs were also devised for data collection in order to ensure the efficiency and quality of the data at the field level. The workshop was connducted under the supervision of Team Lead and Authorized representative of JV. All the FTIs were advised to disseminate the learning to their respective field officers and they must follow the SOPs for the upcoming data collection processes.

This training/refresher was held to enable the participants to improve the Android based data collection for Baseline, Impact and Monitoring Surveys. Activities of the training are detailed below.

Day-1:

- Introduction of participants
- Management Speeches
- Role of FTI/Supervisors & Enumerators
- Survey Methodology
- Issues/Problems at Province Level
- Presentation of Monitoring Tools
- General Discussion
- ME&IEConsultants updated progress

Day-2

- Importance of technology during field survey
- Farming practices and input data
- Planning of activities for 2022-23
- Speech by NPC, FPMU
- Android Application and Digital Forms
- Discussion of hurdles, issues, data monitoring, validation & reliability checks
- Annual Workplan and Budget

Day-3

- Field visit in ICT Zone along all participants
- Water Flow Measurement through Pygmy Meter
- Discussion session, field experience and hurdles mutually shared for enhancing undersatnding
- Meeting of TL, DTLs and Core Team Members on planning for next quarter and discussion of management issues.

Day-4

- Field Data Validations
- Management Speech
- Closing remarks by all DTLs
- Wrap-up Session

NPC, FPMU, NPIWC-II, Director G3EC/Auth. Rep. of JV, TL, DTLs and other ME&IE Consultants and staff participating in workshop, at National Office, Islamabad

Meeting of TL, DTLs and ICT Specialist - Core Team Members - Islamabad

Field visit and water flow measurement at NARC by using Pygmy Meter

ME&IE Consultants' visit of PATCO Office at NARC office, Islamabad

Group photo of ME&IEC Team with Management, National Office, Islamabad

4.3.2 REALLOCATION OF ZONAL OFFICE, QUETTA.

In the month of September 2022, the office building of zonal office, Quetta has been shifted to House # 40, Marri Street, Arbab Karam Khan Road, Quetta from House # 543/3, Chiltan Road, Cantt, Quetta. The purpose of shifting of Quetta office was to have easy access to client offices. Now the new office premisis is about at 02 KM distance at fove minutes drive from the DG ofifice, OFWM, Balochistan. Now ME&IE consultants will have easy access to client staff and other stockholders. Moreover, the new building has sufficient space for office accommodation with enough care parking space.

The view of new office building of ME&IE Consultants, Zonal Office, Quetta, Balochistan

4.3.3 MONITORING OF INTERVENTIONS IN THE FIELD

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

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

Consultants' activities including routine monitoring of the interventions and data collection for Baleline Survey-II and Midline Survey remined continued during the reporting perioe. Consltants also visited client offices for data collection

4.3.3.1 Monitoring / Field Visits of Interventions by Zonzl Office ICT

During the current quarter (July 2022 to Septemebr 2022), Islamabad Capital Territory (ICT) Zone team conducted field visits for regularly monitoring as well as for Baseline Survey-II. ICT field team visited districts of Punjab Barani areas, ICT, and Azad Jammu & Kashmir (AJK). Detail of interventions visited is given belo in **Table 4.1**:

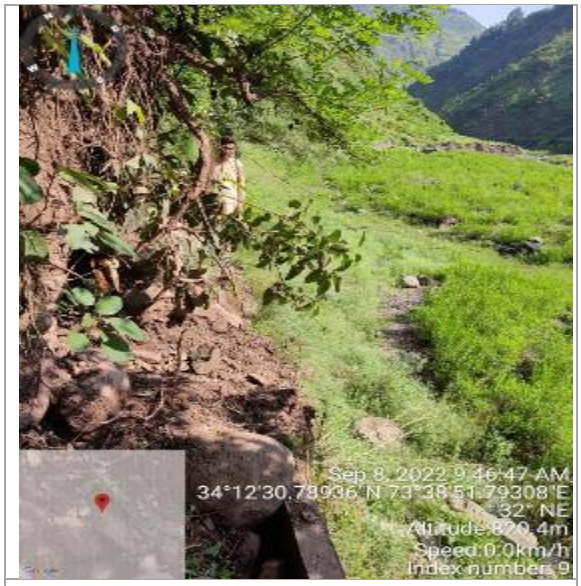
Table 4.1: Midline Survey Field Plan of ICT and Punjab Barani Areas

Visit Date	Division	District	Village	Component	Name of the scheme
18-Aug-22	ICT	Islamabad	Tarlai Kalan	WC +WST	Tarlai Kalan-2
18-Aug-22	ICT	Islamabad	Pind Baigwal	WC	Pind Baigwal
19-Aug-22	ICT	Islamabad	Thanda Pani	WC	Thanda pani
19-Aug-22	ICT	Islamabad	Moza Arrah	WC	Moza Arrah
23-Aug-22	Rwp	Kallar Saidan	Mouza Maira Sangal	WST	Mouza Maira Sangal
23-Aug-22	Rwp	Kallar Saidan	Mouza Shah Bagh	WST	Mouza Shah Bagh
24-Aug-22	Rwp	Attock	Bafahad	WST	Bafahad
24-Aug-22	Rwp	Attock	Bafahad	WST	Bafahad
07-Sep-22	AJK	Muzaffarabad	Hatiyah Duppata	WC	Maira Duppata
07-Sep-22	AJK	Muzafarabad	SeriDarra	WC	DhanI Mai Sahiba
07-Sep-22	AJK	Muzaffarabad	Muzafarabad	WC	Kardila
07-Sep-22	AJK	Jhelum valley	Langla/Hattain	WST	Kukkar warra
08-Sep-22	AJK	Jhelum valley	Gujar Bandi/Hattain	WST	Gujar Bandi
08-Sep-22	AJK	Jhelum valley	Hadiyah Bala	WC	Khatae
08-Sep-22	AJK	Jhelum valley	Lamian/Hattain	WST	Lower Dudh Pura
08-Sep-22	AJK	Jhelum valley	Lamian/Hattain	WST	Dudh Pura
08-Sep-22	AJK	Jhelum valley	Langla /Hattain	WC	Soha

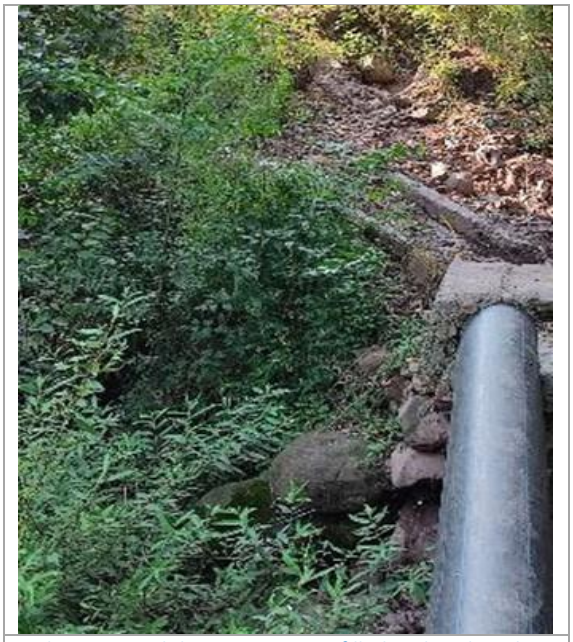
Field activities were affected due to heavy rains during the reporting quarter, however, ICT Team visited above listed interventions and collected data for Baseline Survey –II and Midline Survey. The data was uploaded directly from field on the MIS system through androod based application. The data was analysed by the ICT team and vetted by the consultants for report writing. Detail of field visits of interventions and data collection by Zonal Team ICT is given **Annex-E.**

ME&IE teams during its visit monitored eight watercourses and nine four water storages tanks. During the monitoring, debris and vegetation was found in the watercourses. On questioning, the farmers told that the vegetations will be removed before the onset of next cropping season. The farmers further told, as it is not the harvesting seasn and they don't nead irrigation water. The debris is filled in the watercourses due to heavy rains during the current monsoon. Now he farmers are planning to celan the watercourse before the start of harvesting.

Kukkarwara Watercourse, full of thick Vegetations



Maira Dupatta Watercourse filled with Debris due to current Monsoon



Dhani Mai Sahiba Watercourse filled with Debris due to Heavy Rains of current Monsson

4.3.3.2 Monitoring of Interventions and Baseline /Midline Survey in Punjab Zone

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

The brief feature of each intervention is as under:

i. Field visits of targeted interventions.
   a. Improvement of watercourses
   b. Construction of water storage tank
   c. Provision of laser land leveler
ii. Meetings with DDA's /ADA's and other OFWM staff.
iii. ME&IE Consultants observations during field monitoring and feedback from beneficiaries.

Field visits were carried out for the purpose of monitoring, baseline and midline survey purposes. For midline survey number of interventions were almost same as covered the baseline survey. Similarly, beneficiaries / farmers interviewed were same persons as interviewed earlier for the purpose of baseline survey. The overall Summary of Field Activities covered during the reporting quarter is given in the table below:

Table 4.2: Interventions Covered in Punjab During Reporting Quarter

Interventions	Regular Monitoring	Baseline Survey-II	Midline Survey-I
Watercourse	30	11	19
Water Storage Tank	7	2	5
Laser Land Leveler	2	-	-
Total No. of Activities Covered	**39**	**13**	**24**

ME&IE field teams conducted field visits for regular monitoring, baseline survey / midline survey of interventions in District Rahim Yar Khan, Panjab. ME&IE teams visited Tehsil Rahim Yar Khan, Sadiqabad, Khanpur and Liaqatpur. Field observations of ME&IE Teams are given below in detail.

i) Baseline Survey in Punjab Zone

i. Baseline Survey Observations on watercourse improvement:

Following are the Baseline Survey Observations of watercourse Improvement:

- The watercourse was constructed in perennial canal area.
- Farmers have maintained Pakki (Weekly) Wara Bandi at the watercourse.
- No Waterlogging cases were found in Tehsil Sadiqabad and Rahim Yar Khan, however, it was noted about 9% in the areas of other tehsils visited during the reporting quarter. In the same areas about 4% salinity patches were also noticed.
- Groundwater was observed was unfit for irrigation. However, in general it becomes better on mixing with canal water.
- After improvement of watercourse, per acre irrigation time has been reduced significantly.
- Numbers of watercourse cleaning has reduced which also resulted reduction in labor hours per cleaning.
- Reduction in water losses has also reduced and conveyance of water at tail reaches is improved.
- Major Crops sown include sugarcane, wheat, cotton and mango orchards particularly in the areas of Tehsil Sadiqabad.

ii. Monitoring Observations of Watercourse improvement:

During the field visit it has observed that:

- Joints on this watercourse were filled properly
- Alignment of the watercourse was good
- Quality of segments was satisfactory
- Watercourse bed was compacted properly
- Lining of the watercourse was as per design
- At some locations, backfilling of the watercourse was not done properly, which may cause damages to the watercourses.

iii. Field Observations of Monitoring/ Baseline Survey

- Before the construction of WST, the land was barren and its terrain was uneven.
- The time consumed to irrigate one acre after construction was 3 to 4 hrs. There is no shortage of water in Rabi season. During the Kharif season, farmers faced acute shortage of water, crops wholly depend upon rainwater in kharif season.
- Farmers were very happy and fully satisfied with OFWM department.
- Now after construction of WST farmer has started growing Orchard i-e citrus.

iv. Field Observations of Laser Land Leveler

Observations of ME&IE Field teams, regarding benefits of Laser Land Leveling units are as under:

i. Yield has been increased upto 15%.
ii. Uniform distribution of water and reduction in conveyance time.

v. Monitoring of Laser Land Leveler (LLL)

i. Most of the equipment was in good condition.
ii. Most of the Owners /service provider were happy about the benefits of LLL.

ii) Midline Survey in Punjab Zone

ME&IE Team conducted regular Monitoring / Midline Survey/ Revisit of the W/C Surveyed during Baseline Survey-I. The monitoring / Midline survey pertains to the watercourses surveyed in Baseline Survey-I. The data collected was directly submitted through android based system to ICT department for further processing / analysis. The watercourses for midline survey are the same as of baseline. At some locations respondents interviewed are changed, however most of them were same as in Baseline Survey-I. Efforts were made to select the respondents of the same location watercourse, category of farm size and tenurial status. Main features of the visits are as under.

i. Meetings with field officers and staff of OFWM.
ii. Farmers perception
iii. ME&IE Consultant Remarks

iii) Beneficiaries Interviewed at the Spot

Perception of Farmers

- Water supply has increased to significant extent, while warabandi are now Pakki (weekly timing)
- Nominal data on water logging and salinity were present.
- Ground water in most of the areas was fit for irrigation.

- Water reaches now at the tail and no major shortages of water were reported.
- No changes were made in cropping pattern.
- The time irrigating for an acre has reduced by 50%.
- The number water course cleaning times and labor in cleaning has been reduced.
- Irrigation and water theft cases are significantly reduced.
- The income of farmers has increased as result of water supply/ increase in yield but unfortunately rise in the prices of fertilizers and other inputs has reduced the margin.

Remarks of ME&IE Consultants

As a result of water supply increase the quantum per cropped area has increased. This has increased the yield per acre and hence increase in income. The value of land as well as land rent particularly at the tail has significantly increased.

Farmers Perception in Irrigated Mix Zone

- Farmers were very happy because the flow increased and water theft reduced resulted in 30-40% increase in water supply.
- No changes were noticed on cropping pattern.
- There is no water logging and salinity observed in survey area.
- Farmers say that earlier the crop which used to take an hour to be irrigated now gets irrigated in half hour.
- Farmer was asking and insisting to increase the lining length of the watercourse upto 70-75% and they were looking forward to get assistance from the Govt.
- Overall, it was observed that OFWM field staff behavior and cooperation with farmers was good and farmers were satisfied.

i. ME&IE Consultant Remarks

- The productivity per acre has increased due to increase in water supply
- Meanwhile Farmers are dissatisfied for the increase in the prices of fertilizers and other inputs

ii. Irrigated Cotton Zone

Farmer perceptions:

- Water flow increased approx. 35%
- Irrigation applications time process decreased approx.30-40 minutes.
- Yield of Wheat Increases Approx.25-30%
- Yield of Rice Increases Approx.20%
- Major Crops: Rice, wheat,
- Although the farmers were well aware of the program but quite unserious towards the construction of the watercourse

ME&IE Consultant Remarks

- Warabandi should be pakki (Weekly timing)
- Naccas should be properly fixed to further reduce the water leakages.
- The corporation of OFWM department was exemplary.

Detail of all Field visits is in Punjab Zone is give as **Annex-F.**

4.3.3.3 Regular Monitoring / Field Visits by Zonal Office KP

Tangible Achievement of the 3rd Quarter 2022:

During the 3rd quarter of the year 2022, the ME&IE Consultants' activities in KP Zone are classified as follow.

- **Conducting Surveys**
- **Revising Monitoring and Evaluation Survey Tools**
- **Field Teams Engineers Training**
- **Coordination with OFWM Department KP**

During the reporting quarter, the activities of ME&IE consultants of KP Zonal office were consisting of conducting surveys, attending meetings and workshop for revising MTs for the surveys at National Office Islamabad, providing training to the Field Teams and coordination with the OFWM Department KP. In addition to these, regular contacts were made with District Directors OFWM regarding facilitation of our survey teams in the field. Several meetings Project coordinator were held regarding newly launched schemes in the year 2021-22 of Water Courses and Water Storage Tanks in KP.

Surveys: Two rounds of surveys were made, one each for baseline and impact evaluation, by the field teams covering 13 sample districts of KP. Three field teams were launched one, to the Southern zone, one

to Central zone and the other to Northern zone. In the month of July till mid of August the teams' focus was on baseline survey, while from mid-August and September 2022, the impact evaluation data were collected by the field teams. Details of which are given in the month-wise activities coming ahead.

Revising MTs: Keeping in view the objectives of the NPIWC-II project data and the observations reported by the field teams the Team Leader and ICT team NPIWC-II Consultants decided to arrange a four days' workshop for the FTIs and the DTLs of the KP, Punjab, Baluchistan, and Capital territory Islamabad at National Office Islamabad. The workshop lasted for four days; i.e from September 21 to 24, 2022. The FTIs from all the zones along with the DTLs and other Core Team members actively participated in the works and contributed towards the revising of the MTs. The authorized representative of the G3 consultants also attended the workshop and advised the participants to try their level best towards the achievements and timely completion of the task.

Field Teams Training: On the return from the workshop the FTIs were assigned the task to offer the training to their respective teams at their zonal offices. In the supervision of the DTL the FTIs of the KP zonal office Peshawar offered training to the field team engineers for four days including one-day field trip for demonstration of water measurement on site. The FTIs discussed each and every question of all the MTs with the field team engineers in detail.

Coordination with the OFWM Department: The DTL, FTIs and ICT Manager kept close coordination both face to face and digitally with officials of the OFWM Department KP throughout the quarter under reference. Coordination with OFWM Department is a routine activity of the ME/IE consultants KP zone. Before launching the surveys, the field teams shared the field plan with the said department for facilitating their data collection from the respondents. The consultants are thankful for their generous cooperation in this regard

Summary of activities in KP Zone is listed below ad given in **Table 4.3**.

1. Meetings
2. Field activities
3. Trainings

Table 4.3: Activities Carried out by KP Zonal Team During 3rd Quarter (July to September 2022)

S. No.	Date/Month	Description of Activity	Venue	Agenda
July				
1.	4/07/22	Weekly progress review and other relevant issues	Zoom Meeting	Weekly Progress Review
2.	25/07/22	Weekly progress review and other relevant issues	Zoom Meeting	Weekly Progress Review
3.	1-31/07/22 excluding weekends	Monitoring and Baseline survey	Central, Southern and Northern districts of Khyber Pakhtunkhwa	Conducting Baseline Survey-II
4.	4/07/22	Weekly progress review and other relevant issues	Zoom Meeting	Weekly Progress Review
August				
5.	21/08/22	Weekly progress review and other relevant issues	Zoom Meeting	Weekly Progress Review
6.	26/08/22	Visit of the NPC, Dy NPC and Team Leader	Zonal office Peshawar KP of the ME/IE Consultants, NPIWC–II.	Review of Progress of the ME/IE Consultants, NPIWC – II. KP
7.	12/08/22	Training of the Water Management Official KP	Zonal office Peshawar KP of the ME/IE Consultants, NPIWC – II.	Up loading of the data on Dashboard of the WCs/WSTs

S. No.	Date/Month	Description of Activity	Venue	Agenda
8.	1/08/22 excluding weekends	Monitoring and Baseline survey	Central, Southern and Northern districts of Khyber Pakhtunkhwa	Conducting Baseline Survey-II
9.	21/08/22	Weekly progress review and other relevant issues	Zoom Meeting	Weekly Progress Review
September				
10.	1st September	Guidance to the FTI and FTEs for collection of information	Zonal office Peshawar KP of the ME/IE Consultants, NPIWC – II.	Ensuring the Accuracy of the data
11.	1-22 September	Impact Evaluation survey	Central, Southern and Northern districts of Khyber Pakhtunkhwa	Conducting Midline Survey
12.	21-24 September	Four days Workshop	National office Islamabad	Discussion on Revised MTs
13.	27-29 September	Training of the FTEs by the FTIs	Zonal office Peshawar KP of the ME/IE Consultants, NPIWC – II.	To impart training to the FTEs by the FTIs on the MTs for the Baseline and Impact Evaluation Survey

Detail of all field visits for Baseline Survey-II and Midline Survey in KP are given as **Annex-G**

4.3.3.4 Regular Monitoring / Field Visits by Zonal Office Balochistan

The activities done by the Balochistan Zone during the quarter from July to September 2022 are listed below:

- Midline / Impact Field Surveys activities
- Regular Monitoring / Spot Checking
- Reallocation of Zonal Office, Quetta.
- Plan for Dashboard, Balochistan Zone.
- 04 days' Workshop, Refresher Training and Annual Planning at National Office, Islamabad.
- 02 days' workshop / refresher on MTs at Regional Office, Quetta
- Meetings
- Prepared Quarterly Work Plan (October to December 2022) for next quarter – Balochistan Zone.

i) Overall Progress in Balochistan

The ME&IE Consultants (ME&IEC), Balochistan have monitored 17 Watercourses and 51 Water Storage Tanks in "Baseline Survey" activities. The total benchmarked sites in First Baseline Survey were 68. As per TORs ME&IEC are responsible for submitting the midline survey report in the middle of the assignment, in this context ME&IE Consultants conducted the Midline / Impact Survey in the month of July 2022. The ME&IEC has monitored 22 sites (08 Watercourses and 14 Water Storage Tanks). Due to heavy floods in Balochistan, the field activities of ME&IEC were affected badly in the last months of August and September 2022.

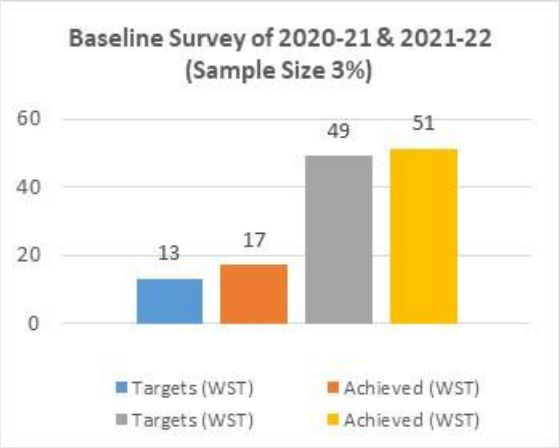
The Balochistan field teams also conducted regular monitoring. The Balochistan field teams have monitored 73 watercourses and 88 Water Storage Tanks. A total of 161 sites have been monitored to date. The updated status of the total activities done is given in the **Table 4.4** below:

Table 4.4: Activities of Balochistan ME&IE Teams

Sr. No.	Type of Visit	No. of Visits
1	Pre-Testing Visits	16
2	First BLS (Phase-I)	32
3	First BLS (Phase-II)	21
4	First BLS (Phase-III)	15
5	Midline Survey / Impact Evaluation	22
6	Executive Monitoring Visits	11
7	Regular Monitoring/Spot Checking	161
Total Activities		278

The Balochistan field teams have been completed of Baseline Survey activities of F.Y. 2020-21 and 2021-22.

The targets and achieved sites are showing in below graph:



The regular monitoring / spot checking is another main task of ME&IE Consultants. The Balochistan field teams are doing this activity on monthly basis and reported in MMR accordingly.

The targets and achieved sites as shown in below graph:

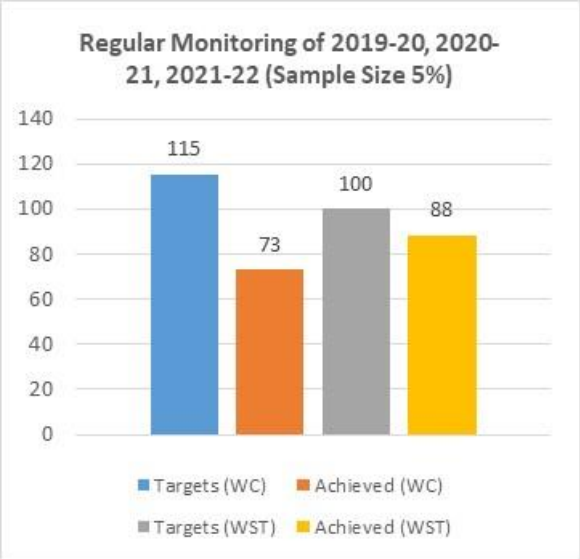


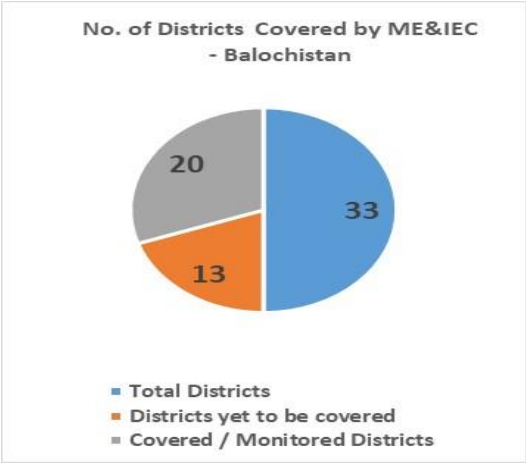
Table 4.5: Summary of Districtwise Total activities in balochistan

Sr. #	District	Pre Testing		Executive Visits (NPC, DG, & other Stackholders)		First Baseline / Bench Marked		Midline Survey		Regular Monitoring / Spot Checking		Total
		WC	WST	WC	WST	WC	WST	WC	WST	WC	WST	
1	Quetta	3	2	-	-	-	6	-	4	5	15	**35**
2	Pishin	3	1	2	5	-	8	-	-	2	9	**30**
3	Killa Abdullah	-	-	-	-	1	1	-	-	3	2	**7**
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	-	-	-	-	-	-	-	-	1	3	**4**
8	Jhal Magsi	-	-	-	-	1	4	-	-	1	4	**10**
9	Kachhi	-	-	-	-	-	8	-	-	1	10	**19**
10	Naseerabad	-	-	-	-	2	4	2	1	14	6	**29**
11	Jaffarabad	1	1	-	-	-	-	-	-	3	-	**5**
12	Sohbatpur	-	-	-	-	7	-	3	-	14	-	**24**
13	Loralai	-	-	-	-	1	2	1	4	2	6	**16**
14	Duki	-	-	-	-	-	-	-	-	2	1	**3**
15	Zhob	1	1	-	-	-	-	-	-	2	1	**5**
16	Kila-Saifullah	-	-	-	-	2	1	1	3	5	4	**16**
17	Musa khel	-	-	-	-	-	-	-	-	1	1	**2**
18	Sherani	-	-	-	-	-	-	-	-	2	2	**4**
19	Khuzdar	-	-	-	-	1	6	-	-	2	7	**16**
20	Kalat	-	-	-	1	1	3	-	-	4	4	**13**
Sub-Total		**9**	**7**	**4**	**7**	**17**	**51**	**8**	**14**	**73**	**88**	**278**

The beneficiaries list of F.Y. 2022-23 is under progress by the OFWM. As soon as OFWM initiates the works on F.Y. 2022-23 and finalizes the beneficiaries' lists, the ME&IEC, Balochistan will start the "Baseline Survey" activities accordingly.

ii) Districts Coverage

There are 33 districts in Balochistan, 04 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 20 districts of 33 districts, the remaining 13 districts to be covered in upcoming months.



iii) Midline Survey - Balochistan

The Midline Survey is conducted in the middle of the Project i.e., mention time here to check the overall performance benefits of the project and report to the client so that they could take necessary measures to keep the project on track.

The baseline survey provides a reference point for tracking the project's progress; that is, to measure the degree and quality of change during an activity's implementation.

Midline survey research is an opportunity to examine how the program/project is performing and how you might course correct and improve it.

iv) Objective of Midline Survey (NPIWC-II):

i. Evaluate the impacts of project's interventions
ii. To checked is the project on track
iii. Quality of work done
iv. Protocols of the project are being followed or not
v. Is scheme file available and completed in all respects

In the month of July 2022, ME&IEC, Balochistan surveyed 22 sites of the Midline Survey.

Sr. #	District	Midline Survey		Total
		WC	WST	
1	Quetta	-	4	**4**
2	Mastung	1	2	**3**
3	Naseerabad	2	1	**3**
4	Sohbatpur	3	-	**3**
5	Loralai	1	4	**5**
6	Kila-Saifullah	1	3	**4**
Sub-Total		**8**	**14**	**22**

Detail of all the filed vists during the current quarter is given in **Annex-H.**

v) Flood in Balochistan and Field Activities of ME&IE Consultants:

The ME&IEC field activities were badly affected due to heavy rains and floods in the month of August 2022.

The monsoon season affected several provinces of Pakistan, causing floods, flash floods and severe weather-related events, and resulting in an increased humanitarian impact.

This disaster destroyed critical agricultural assets and infrastructure in Balochistan. They caused losses in the production of crops, livestock, and fisheries. They also affected agricultural trade flows and caused losses in agricultural-dependent manufacturing subsectors such as the textile and food processing industries.

4.4 MEETINGS OF ME&IE CONSULTANTS WITH CLIENT AND STAKEHOLDERS

ME&IE Consultants remained in contact with all the zonal office of the Client during field monitoring and data collection for Baseline Survey-II and Midline Survey. Consultants conducted meetings with officials of Provincial OFWM and Irrigation departmets. Detail of meetings held by ME&IE consultants with client is given as **Annex-I**.

4.5 INTERNAL MEETINGS OF ME&IE CONSULTANTS

ME&IE Consultants conducted routine internal meetings every Monday do discussed the progress of work and issues faced by the ME&IE consultants and field teams. A general view of such meetings is given as under:

Date / Day	**Every Monday**
Venue	Zoom Meeting
Participants	
i. Dr. Usman Mustafa, Team Leader, ME&IE Consultants, National Office, Islamabad. ii. Dr. Muhammad Abdul Quddus, Agricultural Economist, Lahore Office. iii. Dr. Ikram Saeed, Deputy Team Leader, ME&IE Consultants, Islamabad. iv. Dr. Humayun, Deputy Team Leader, ME&IE Consultants, KPK. v. Mr. Yousaf Bhatti, Deputy Team Leader, ME&IE Consultants, Punjab. vi. Mr. Rizwan Ahmed, Deputy Team Leader, ME&IE Consultants, Balochistan. vii. Mr. Rizwan Saleem, IT Specialist viii. Ms. Muniza Tarrar Social & Gender Specialist	
Meeting Agenda/Points discussed:	
Consultants conduct progress review meeting every Monday to discuss the following ● Sharing updated progress in tangible form by all DTLs ● Discuss issues faced by the ME&IE consultants related to field visits / monitoring ● Baseline Survey Phase-II, and Midlien Survey	

4.6 ICT ASSIGNMENT

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

4.6.1 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.

4.6.2 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	2	203
Poonch	37	38	78	1	154
Mirpur	38	107	88	26	259
Overall	**107**	**241**	**239**	**29**	**616**

So far, Total 616 Watercourses data from AJK zone has been received and available live on Dashboard by which 373 Watercourse has been completed & 155 watercourses are under progress. Due to farmers un-willingness 90 Work Orders have been cancelled till now. Detailed summary attached as **Annex-J**).

AJK Zone - Water Storage Tank Data Summary					
Division	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**Overall**
MZD	35	61	73	2	171
Poonch	15	46	140	16	217
Mirpur	2	16	64	10	92
Overall	**52**	**123**	**277**	**28**	**480**

472 Water Storage Tank data received from AJK zone and is available live on Dashboard by which 278 Water Storage Tank has been completed and 132 WSTs are under progress. Due to un-willingness of

farmers there 70 WST work orders have been cancelled till now. Detailed summary attached as **Annex-K**.

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

Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur	3	18	30	7	58
Bannu	73	35	93	0	201
D.I. Khan	417	12	93	0	522
Hazara	84	56	146	18	304
Khyber Agency	6	13	6	0	25
Kohat	98	39	57	0	194
Kurram Agency	1	5	2	0	8
Malakand	178	167	395	1	741
Mardan	102	59	49	0	210
M. Agency	4	26	13	0	43
Orakzai Agency	0	1	0	0	1
Peshawar	136	85	78	2	301
S.W. Agency	3	12	13	0	28
N. W Agency	2	3	0	0	5
Overall	**1107**	**531**	**975**	**28**	**2641**

KP zone currently 2641 total watercourses data live on Dashboard and by which 2384 schemes have been completed and 257 schemes are under progress due to un-willingness of farmers 05 Schemes work order has been cancelled till to date. Detailed Summary attached as **Annex-L.**

KP Zone - Water Storage Tank Data Summary

Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur	1	9	6	0	16
Bannu	12	18	23	0	53
Dera Ismail Khan	79	6	19	0	104
Hazara	28	42	80	2	152
Khyber Agency	1	9	6	0	16
Kohat	29	17	32	0	78
Kurram Agency	1	1	0	0	2
Malakand	74	88	146	0	308
Mardan	15	8	18	0	41
M. Agency	1	36	4	0	41
Orakzai Agency	0	2	0	0	2
Peshawar	36	25	37	2	100
S.W Agency	0	15	14	0	29
N.W Agency	0	0	5	0	5
Overall	277	276	390	4	947

KP zone currently 932 total WST data live on Dashboard and by which 845 schemes have been completed and 101 WSTs are under progress. Detailed Summary attached as **Annex-M**.

ICT Watercourse 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 by which 31 have been completed and 3 watercourses are under progress.

The ICT team is continuously in process of cleaning and validating the received data and communicating mistakes to the concerned ADs for correction.

4.6.3 Refresher Training Data Colelction in KP Office

The ICT Team conducted 04 days Refresher Training & Annual Planning Workshop at National office Islamabad for ME&IE staff to enhance their capability of Baseline, Impact & Monitoring data collection through the Android Based Application for rapid and validated data transmission. 22 members from all Zone/Units participated in this training. Training details given as **Annex-N.**

4.7 MONITORING / DATA COLLECTION ON SOCIAL AND GENDER COMPONENT

During the reporting quarter Social and Gender Experts' team conducted visit to the ICT, Punjab Barani areas and AJK zones as per plan. The aim of the

visits was to collect data on Gender and Social component, for Baseline Survey-II and Midline Survey and to observe the impact on targeted interventions under the project NPIWC II. The team coordinated with the beneficiaries and conducted interviews and focal discussions. Summary of visits of Social Gender Team is given in **Table 4.6** below while detail of field visits of interventions is given as **Annex- O**.

Table 4.6: Summary of Field Visits of Social & Gender Team

Month	Zone/ Province	Name of scheme	UC/Tehsil/ District	Date of visit	Meeting/Field visit along with Govt Officials	Officials	Name of beneficiaries	Purpose of visit	Nature of intervention
August 2022	ISBD	Pindbagwal	ICT	18.8.2022		Ms. Abida Ms. Maryam & Ms. Sana	Ms. Shazia w/o Chaudary Khanzada Waheeda Bibi w/o Mr.Ali	Midline	Water Storage Tank / Watercourse
		Tarlai Kalan	ICT			Ms. Abida Ms.Maryam & Ms. Sana	Ms.Amna w/o Mr. Omer Ali	Midline	Watercourse
		Muza Arrah	ICT	19.8.2022		Ms. Abida Ms. Maryam & Ms. Sana	Zar Bibi w/o Muhaamad Amjad	Baseline	Watercourse
		Thanda Pani	ICT			Ms. Abida Ms. Maryam & Ms. Sana	Ms. Sobia w/o Mr. Zubair	Midline	Watercourse
	PUNJAB	Mouza Shah Bagh	Kalar Saidain	23.8.2022	Muhammad Noor Deputy Director of OFWM, Rawalpindi	Ms. Abida Ms. Maryam & Ms. Sana	Jameela Bibi w/o Mr. Zameer Hussain	Baseline	Water Storage Tank
		Maira Sangal	Kalar Saidain		Muhammad Noor Deputy Director of OFWM, Rawalpindi	Ms. Abida Ms. Maryam & Ms. Sana	Raja Zulfiqar Ali Mrs. Nasreen Farmer w/o Mr. Chiraz	Baseline	Water Storage Tank
		Bafahad	Attock	24.8.2022	Mrs. Ambreen Assitant Director OFWM Rawalpindi	Ms. Abida Ms. Maryam & Ms. Sana	Ms. Sania W/o Mr. Saqib Javed	Midline	Water Storage Tank
		Bafahad	Attock				Mr. Asad Ali khan	Midline	Water Storage Tank

Month	Zone/ Province	Name of scheme	UC/Tehsil/ District	Date of visit	Meeting/Field visit along with Govt Officials	Officials	Name of beneficiaries	Purpose of visit	Nature of intervention
September 2022	AJK	Maira Duppata	HatiyahDuppata/ Muzaffarabad/ Muzafarabad	7.9.2022	Assistant Director OFWM Mr. Tariq	Ms. Abida, Ms. Maryam Ms. Sana & Muhammad Bilal	Mrs. Yasmeen w/o Raja Nazeer	Midline	Watercourse
		Dhandi Mai Sahiba	SeriDarra/ Muzaffarabad/ Muzafarabad	7.9.2022	Assistant Director OFWM Mr. Tariq	Ms. Abida Ms. Maryam Ms. Sana & M.	Mrs. Noreen w/o Mr. Rafiq Abbasi Khurshid Bibi w/o Malik Aman	Midline	Watercourse
		Kardila	Muzafarabad/ Muzaffarabad/ Muzafarabad	7.9.2022	Assistant Director OFWM Mr. Tariq	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal	Shehnaz Bibi w/o Syed Hussain Sajawal Mrs. Sehrish Naqvi w/o Mr.Muhib Ali	Baseline	Watercourse
		Kakar warra /kakar warra	Langla/Hattain/ Jhelum valley	8.9.2022	Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal	Syeda Samina Gillani w/o Syed Nayar ul Hassan	Baseline	Water Storage Tank / Watercourse
		Gujar Bandi	Gujar Bandi/Hattain/ Jhelum valley	8.9.2022	Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal	Ms.Maida Naqvi w/o Syed Safiq	Baseline	Water Storage Tank
		Khatae	/Hadiyah Bala/ Jhelum valley		Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal	Mrs.Shakeela w/o Ejaz Khan Ms. Jameela w/o Mr. Rafiq Mrs. Rehana D/o Haji	Baseline	Watercourse
		Lower Dudh Pura	Lamian/Hattain/ Jhelum valley	8.9.2022	Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal		Baseline	Water Storage Tank
		Dudh Pura	Lamian/Hattain/ Jhelum valley		Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal		Baseline	Water Storage Tank
		Soha	Langla /Hattain/ Jhelum valley	8.9.2022	Eng. Assistant Director (OFWM Khuwaja Owais Ali	Ms. Abida Ms. Maryam Ms. Sana & Muhammad Bilal		Baseline	Watercourse

CHAPTER 5: ISSUES / BOTTLENECKS

The ME&IE Consultants have been facing following constraints for timely initiating the activities:

- Non availability of Technical Sanctions of the watercourses required for baseline survey
- Due to delay in approval of Monitoring Tools could not be able to move field teams on time (as per work plan) for the Baseline and Monitoring Surveys
- Non-availability of complete up-to-date inventory / data of all interventions from the Client, Provincial Agricultural Departments & NWMC (NESPAK) till to date.
- 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.

ANNEXES A to O

ANNEX - A: TENTATIVE WORK PLAN FOR QUARTER (JULY-SEPTEMBER 2022)

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

TENTATIVE WORK PLANNED FOR THE QUARTER (JULY TO SEPTEMBER 2022)

Legend
- Activity starts
- Activity Ends
- Activity Span

No.	ACTIVITIES	3 Months-Year 2022 (Weeks)											
		July				August				September			
		WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4	WK-1	WK-2	WK-3	WK-4
1	**Field Activities**												
1.1	Regular Monitoring of Interventions in the Field												
1.2	Data collection of the interventions in the field												
1.3	Online data entry in android based applciation												
2	**ICT Assignment**												
2.1	Development of website of NPIWC-II												
2.2	Monitoring online data collection and Data entry												
2.3	Monitoring Android based Mobile Application under implementation by field staff.												
2.4	Data collection of interventions in MIS/GIS database												
2.5	Designing of dashboard of Project Interventions												
3	**Coordination**												
3.1	Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues												
3.2	Meeting of DTLs with respective DTL of PC												
4	**Deliverable**												
4.1	Monthly Monitoring Report												
4.2	Quarterly Monitoring Report												
4.3	Final Baseline Survey Report												

ANNEX - B: MATRIX OF RESPONSIBILITIES

MATRIX OF RESPONSIBILITIES

LEGEND	
●	Primery Responsibility
⊙	Secondry Responsibility
O	Assistance

SR. NO.	DELIVERABLE / ACTIVITIES	NPC-FPMU	Agriculture Dept. (OFWM)	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,	O	●	-	-
2	**Certification of operational documents of the project,** • Design, cost estimates, completion reports of watercourses, • Design, cost estimates, completion reports of water storage tanks,	O	⊙	●	-
3	Undertake baseline, midline and endline surveys of the project activities/interventions in all the project areas.	-	-	-	●
4	Develop monitoring strategy, framework and Result Based Monitoring (RBM) indicators,	-	-	-	●
5	Assessing the water saving per annum on watercourse and water storage tanks as well as aggregate due to the project interventions.	-	-	-	●
6	Assessing the improvement in water availability due to provision of conveyance system.	-	-	-	●
7	Assessing the economic benefits to the agriculture in terms of increase in yield, irrigated area, cropping pattern, cropping intensity, farm income and employment in command area of watercourses and water storage tanks.	-	-	-	●
8	Assessing the extent of community mobilization, financial and administrative sustainability of Water Users' Associations and ensuring the maintenance of watercourses, water storage tanks and laser land levelers.	-	-	-	●
9	Economic Impact of project interventions.	-	-	-	●
10	Carryout impact evaluation of the project investment on the economy and stakeholders.	-	-	-	●
11	Preparation of Monthly, Quarterly and Annual Monitoring, Evaluation and Validation Reports of the project activities.	-	-	-	●
12	Develop a website containing information of facilities and services, applications, procedures, watercourses, water storage tanks, and laser levelers database etc. (Maintaining website should be the responsibility of project staff).	-	-	-	●
13	Provide technical support for the development of a custom-designed mobile application (Android) to capture on-site project progress, geo tagged photos; should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the	-	-	-	●

ANNEX - C: MONITORING LOG-FRAME

Project subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
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

Project subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
C2: Watercourses Improvements	Improvement of 47,278 watercourses on cost sharing basis: 40% farmers in terms of labour, and 60% funded by project.	a) Establishment of 47,278 Water users' associations (WUAs); b) Registration of 47,278 WUAs; c) Improvement and realignment of earthen section of 47,278 watercourses; d) Lining of up to 50% length of 47,278 watercourse either by: • Precast concrete parabolic lining (PCPL) segments, or • Rectangular brick masonry, or	a) 47,278 WCAs established; b) 47,278 WCAs registered; c) 47,278 watercourses improved and lined;	a) Conveyance losses for improved watercourses decreased by about 15 percentage points. b) 1.654 million households benefited from the activity; c) 11.347 million acres served with improved watercourses	a) Increase in cropping intensity on improved watercourses by 5-24%; b) Increase in crop yields. c) Increase in irrigated area d) Increase in agriculture output per unit of water by about 37%	a) Increase in farm income; b) Increase in employment for farm labour; c) Reduction in poverty; d) Enhanced food security for the country.	a) The water flow measurements will be carried out at before and after watercourse improvement on 2-5% sample basis; b) Agriculture survey before and after watercourse improvement on 2-5% sample basis; c) The survey will determine: • Cropping pattern before and after the improvement; • Cropping intensities before and after improvement;

Project subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
		any other method as approved by the project					• Before and after crop yields; • Before and after employment; 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.
C3: Construction of Water Storage Tanks (WSTs)	a) Construction of 14,932 water storage tanks	a) 14,932 small farmers mobilized to construct water storage tanks for irrigation	a) 14,932 WSTs constructed b) 14,932 WSTs operated and maintained	a) Water which was otherwise largely going to be wasted is saved b) Irrigation provided at	a) More area irrigated b) Increased cropping intensities	a) Increased crop yields b) Increased total crop output quantum c) Increased farm income	a) 2-5% sample of WSTs will be surveyed b) A data collection form will be designed to measure water

Project subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
		b) They agree to contribute 40% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 40% on issuance of FCR		critical stages of the crops c) Flexibility achieved for irrigation		d) Increased farm employment	saving due to WSTs c) The forms used for baseline and impact surveys in case of watercourses will also be used for WSTs d) Same data analysis will be carried out here as in case of watercourses.
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	a) 11,610 laser units provided to farmers / service providers; b) Farmers trained in using the units.	a) 11,610 farmers / service providers received PLL units; b) Farmers / service providers received training in using the units.	a) Land levelled on Farmers' / service providers' farms; b) Land levelled on fellow farmers on rent; c) Total 3.483million acres levelled	a) Water application efficiency increased at field level; b) Even germination of seed. c) Field application losses reduced by 10	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

Project subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
	50% by the project.			by 11,610 units.	percentage points d) Water productivity increased by 24%		agriculture sample surveys. b) 2-4% sample units will be visited by ME&IE Consultants teams after one years of delivery c) The unit will be verified d) Area treated during the year will be collected e) Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.

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	10th 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	10th 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: FIELD VISITS BY ZONAL TEAM ICT

Detail of field visits of ICT Zone ME& IE Team during the Current Quarter July 2022 to September 2022:

i) Visit of Water Storage Tank+Watercourse (Pipeline) on 18th August 2022

Scheme	Water storage Tank + pipe line
Farmer Name	Omer Ali Khan
Name of village:	Tarlai Kalan
Chairman WUA:	Omer Ali Khan
District:	ICT
Province	ZICT
Source of irrigation:	Tubewell
Type of Watercourse	PVC 3''
Shape of WST	Square
Command area :	2.5 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problems related to water theft*

ME&IE Team with beneficiary of Water Storage Tank in Tarlai Kalan

Field area of Tarlai Kalan

Detail of Field Visit: ME&IE team reached Tarlai Kalan at 12:00 pm, the beneficiary Omer Ali was Already there. Omer Ali is the only beneficiary of this watercourse and WST. Last year when the team has visited for baseline survey he was growing wheat but now the land was not prepared for any crop.

Water storage tank was filled with water but there was no usage of WST nor pipeline. The land was un levelled and was not well drained, due to heavy rainfall. The beneficiary was not getting any benefit for the pipeline and WST but he was planning for some citrus orchards in future.
He was also building his house on the land that was about 0.125 Acre.

ii) Visit of Water Storage Tank+Watercourse (Pipeline) on 18th August 2022

Scheme	Water storage Tank + pipe line
Farmer Name	Chaudhary Khanzada
Name of village:	Pindbaigwal
Chairman WUA:	Chaudhary Khanzada
District:	ICT
Province	ICT
Source of irrigation:	Tubewell
Type of Watercourse	PVC 3''
Shape of WST	Square
Command area :	5 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problems related to water theft*

ME&IE Team with beneficiary of Water Storage Tank Pindbaigwal

Detail of Field Visit: The team left the Islamabad national office early morning at 7:30 am and reached the village pind baigwal at 8:30 am. The team had a meeting with beneficiary named Chaudary Khanzada who is an advocate of high court. The beneficiary availed the subsidy for intervention including PVC 3'' pipeline and a water storage tank in the year 2020-21. In the meeting they discussed about the cost and effects before and after the intervention.

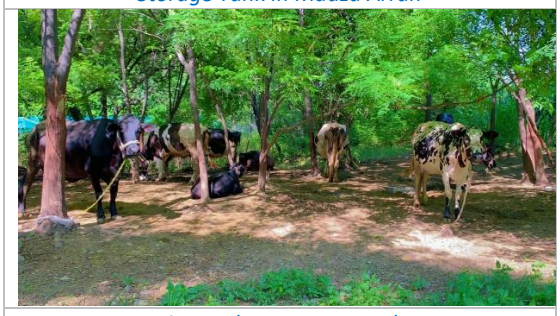
It was observed that the farmer was benefited after this intervention, as his cropping intensity has been increased, he was cultivating wheat and maize before this intervention but now after this intervention the cropping pattern changed. He showed the team his land and different vegetables grown on the land.

Some kharif vegetables were grown there on the land including Okra, gourd, zucchini. In one half part of the land maize were grown. According to the beneficiary in last season he had harvested wheat and the yield produced was about 35 Maund this year while before this intervention the yield produced was only 32 maund.

iii) Visit of Water Storage Tank+Watercourse (Pipeline) on 19th August 2022

Scheme	Water storage Tank + pipe line
Farmer Name	Amjad Ali
Name of village:	Mouza Ara
Chairman WUA:	Amjad Ali
District:	ICT
Province	ICT
Source of irrigation:	Tubewell
Type of Watercourse	PVC 3''
Shape of WST	Square
Command area :	3.75 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problems related to water theft*

ME&IE Team in Discussion with Beneficiary Water Storage Tank in Mauza Arrah



Livestock at Mauza Arrah

Detail of Field Visit:

On 18th August the team visited water storage tank of Mr. Amjad Ali in areas of ICT, for midline survey. The beneficiary Amjad Ali is well aware of agriculture practices. He has 35 years of farming experience. He suggested that the availability of seeds is needed by the farmers. He further added that the productions can be more than 35 maund if the quality of seed improves.

The quality of seeds needs to be improve. HE was using organic fertilizer Farm yard manure as well as Urea and DAP. He had his own livestock including cows. Amjad Ali was also in practice of dairy farming.

In baseline survey when the team visited a year ago Amjad Ali was getting 30-32 Maund of wheat per acre and this year the land produced 35 maund of wheat per acre. Maize was at its growing stage and was not yet harvested.

The source of water is tube well. The team observed that the water using for irrigation was clean. The water reserved in WST was also uncontaminated.

iv) Visit of Water Storage Tank+Watercourse (Pipeline) on 19th August 2022

Scheme	Water storage Tank + pipe line
Farmer Name	Syed Zubair Hussain
Name of village:	Thanda pani
Chairman WUA:	Syed Zubair Hussain
District:	ICT
Province	ICT
Source of irrigation:	Tubewell
Type of Watercourse	PVC 3''
Shape of WST	Square
Command area :	1.75 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problems related to water theft*

ME&IE Team in Discussion with beneficiary of Water Storage Tank in Thanda Pani

Field area of Water Storage Tank in Thanda Pani

Detail of Field Visit: ME&IE team move further towards the area Thanda Pani after visiting the village Mauza Arrah. The beneficiary was already there at the field area.

Syed Zubair Hussain is the single beneficiary of this intervention. He was well educated and also an advocate. He had hired two labors for agricultural activities.

The female participation in agricultural activities is observed as nil. Female in this village were only consulted for household activities.

He told the team that before the intervention he was facing difficulty regarding the irrigation of water but now the issue has been resolved. The source of water is tube well.

Lemon and peach orchards were grown on the land. At one parcel of the land some Kharif vegetables were also grown for home use only.

Detail of field visits of Barani Areas, District Rawalpindi is given below:

v) Visit of Water Storage Tank on 23rd August 2022

Date of Visit	23-08-2022
Scheme	Water storage Tank
Farmer Name	Raja Zulfiqar Ali
Name of village:	Maira Sangal
Tehsil	Hassan Abdal
Province	Punjab
Source of irrigation:	Bore-Tube well (TW)
Shape of WST	Square
Length/ width	25x25 Sq. feet
Command area of WST :	3.5 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problem related to water theft reported*

ME&IE Field Team on Visit of Water Storage Tank in Marial Singal

Tunnel Vegetables at Water Storage Tank in Marial Singal

Detail of Field Visit: ME&IE ICT-team reached at Maira Sangal village accompanied with Deputy Director of OFWM, Rawalpindi. The aim of this visit was to conduct midline survey and the impact of the above mentioned WST. The beneficiary of Maira Sangal Water Storage Tank was already there.

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

He was growing some Kharif vegetables, namely, cauliflower, Okra, Bitter guard, etc. Although, the production of vegetables was badly affected due to heavy rainfalls in resultant to overall climate changes.

He also owns livestock including some cows and goats. The farmer was not using chemical fertilizer, since he used FYM gathered from his own animals. The land is fertile and suitable for different crops.
The farmer has also rainfed agriculture land. The shape of the constructed water storage tank was square with measurement of 25X25 sq. feet shape along with the depth of 5ft. Source of water being used by the beneficiary to fed the WST is tube well through subsoil bore. The social & gender specialist accompanied the ME&IE team to get interviewed

female folks of Maira sangal village. They were well educated and were quite aware of agriculture and crops production. It was noticed that they were happy with the crop production. They were getting fresh vegetables at home grown farm and enjoying the benefits of kitchen gardening.

vi) Visit of Water Storage Tank on 23rd August 2022

Date	23-08-2022
Scheme	Water Storage Tank
Farmer Name	Zameer Hussain
Name of village:	Mouza Shah Bagh
District:	Rawalpindi
Province	Punjab
Source of irrigation:	Bore-TW
Type of WST:	Square
Length and width of the WST:	25X25 Sq. Feet
Command area of WST:	3 Acres
No of beneficiaries:	1
Equity in water distribution increased	*No Problems related to Equity in Water Distribution.*
Reduction in water disputes/thefts	*No problems related to water theft*

Field Team engaged in gathering information from female farm workers

ME&IE Field Team with Owner of Water Storage Tank during Field Visit

Detail of Field Visit: On the same day, the team moved towards another village "Mouza Shah Bagh" to assess the impact of the targeted intervention pertaining to use this information for midline survey. Since, the same area was already visited by the field team to conduct baseline-2 survey information. The depth of WST is 5ft. The beneficiary of this WST used different types of chemical fertilizers including DAP, urea, Zinc, SOP and Nitrates as well as organic, FYM.

Farmer was happy with the targeted intervention but due to climate change, torrential rainfalls severely damaged the production of tomatoes and bitter guard, but still some pickings of these vegetables along with lady finger was being harvested every after second day.

Females were well aware of the crops and about the land holding by them, they were active in decision making related to the land sale and crops selection as well as active in making household decision but they didn't own any piece of land.

vii) Visit of Water Storage Tank on 24th August 2022

Date of Visit	24-08-2022
Scheme	Water storage Tank
Farmer Name	Saqib Javed
Name of village:	Bafahad
Tehsil	Hassan Abdal
Province	Punjab
Source of irrigation:	Bore-TW
Shape of WST	Square
Length, width	25X25 Sq. feet
Command area of WSP :	6 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No problems related to water theft*

Field team's Visit of Water storage Tank in Hasanabdal with Beneficiary

ME&IE ICT-Zone team reached the village, Bafahad in Hasan Abad Tehsil of Rawalpindi District along with deputy director of OFWM. The beneficiary of WST was already present on the site.

The owner farmer of the WST told about his family, profile of farming and the crops grown on the farm, especially, fruits and vegetables. Farmer is well

versed with the crop cultivation along with good agricultural practices. At the time of baseline survey phase –II, the team noticed that the target farmer used to grow only citrus orchards, but currently during the midline survey, it was observed that he started growing peach orchard as well. The trees were still young but not yet bearing fruits until the maturity of trees i.e., 2 years.

The land holding by the farmer was now more than before as he has included the peach orchard. He also has livestock including some cows and buffaloes. The farmer used Urea and DAP as a chemical fertilizer, and also used FYM as an organic fertilizer. The land is fertile and also suitable for different crops.

The farmer has also owning agricultural land in rainfed areas. The shape of the constructed water storage tank was square with measuring 25X25 sq. feet and depth 5ft. The Source of water supply to the WST is bore-TW and installed in the nearby vicinity.

viii) Visit of Water Storage Tank on 24th August 2022

Date of Visit	24-08-2022
Scheme	Water storage Tank
Farmer Name	Asad Ali Khan
Name of village:	Bafahad
Tehsil	Hassan Abdal
Province	Punjab
Source of irrigation:	Bore-TW
Shape of WST	Square
Length, width	25X25 Sq. feet
Command area of WST :	12 Acres
No of beneficiaries:	1
Reduction in water disputes/thefts	*No water theft*

ME&IE team at WST at Bafahad

ME&IE Team in Discussion with DD OFWM

Detail of Field Visit: ME&IE team reached Hassan Abdal and then along with Assistant director OFWM Mrs. Ambreen, the team visited the beneficiary of WST at his farm. The beneficiary, owner of farm is out of country and the farm is being managed by his nephew.

During the introduction of the farm family, the land occupied by them is a clayey type soil. He was well educated and was quite aware of all the agricultural practices. Before this intervention, he used to grow maize and wheat, but after this intervention he shifted to orchard cultivation, especially planted Plum, Oranges and Fig trees.

The farm was operated with the assistance of two permanently hired labor force. They are getting remuneration on monthly basis. It was observed that Female participation in farming activities was at the level of decision making where they were involved regarding crop selection etc. However, they were not involved in any labor activities. Females were well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase and tenancy related arrangements.

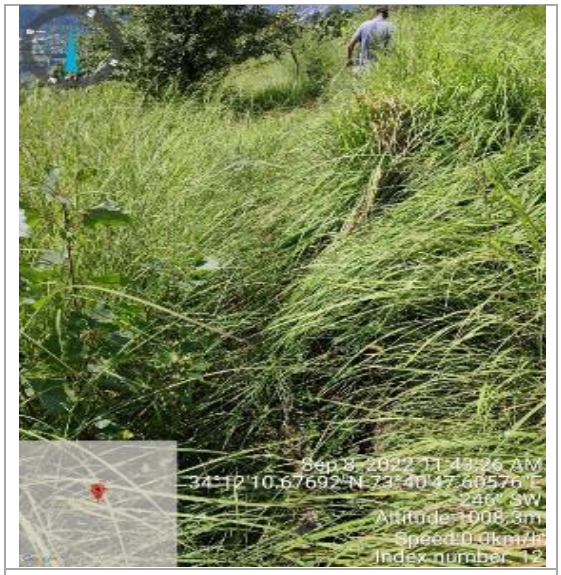
The following were the main findings:

i. It was found that Water User association was active in all the watercourses in Kashmir areas.
ii. Farmers can allocate desired amount of water for their crops.
iii. Mostly they don't have disputes but some who pointed, they have resolved all their issues by meetings through the coucelling of WUAs.
iv. Most of the farmers are educated and they are calm in their routine work. They explained that they are well aware of the lining importance and they worked very hard with Govt for lining of their watercourses.

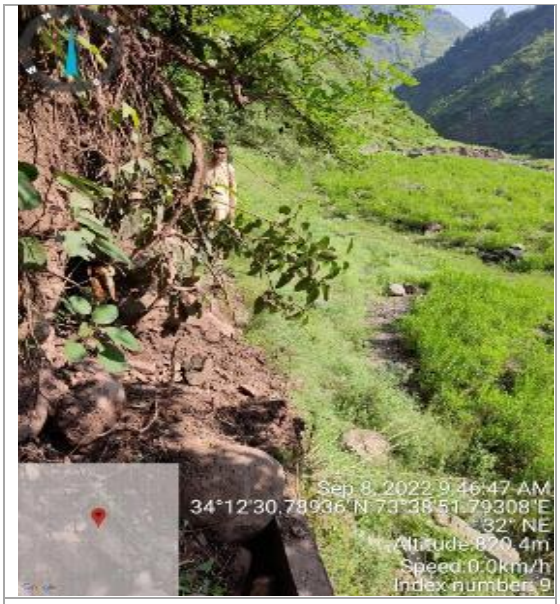
v. Female remain involved in agricultural practices and they also took part in decision making regarding crop growing.
vi. Generally landholding is small and different number of farmers possess land on single watercourse.
vii. Rice was main crop grown before the earth-quake of the 2005, however, due to destruction of watercourses, people started to grow wheat and maize on their lands. There was less or no irrigation at all after 2005. Now with the construction of these watercourses farmers started growing rice as well as vegetables in the area.
viii. There was no waterlogging menance in the area.

Output 2: Monitoring of the selected Watercourses;

ME&IE teams during its visit monitored six watercourses and four WSTs. During the monitoring, debris and vegetation was found in the watercourses, which community told that they will remove it before the onset of next cropping season. They further told that now a day's crops are ready to harvest and they were not in need of water, while due to heavy rains the debris fell in the watercourses and blocked it.



Kukkarwara watercourse, full of Vegetation.



Maira Dupatta Watercourse full with debris after rainfall

ME&IE team discussion with farmers

Dhani Mai Sahiba Watercourse filled with debris

ix) Visit of Sater Storage Tank Maira Duppata, AJK

ME&IE team reached village along with Assistant director of OFWM. The aim of this visit was midline survey and to observe the impact.

It was observed that the beneficiaries of Maira duptta were happy with this intervention. Before the intervention there was problem in irrigating crops but now they were getting the required amount of water for each crop.

Watercourse Maira Dupatta

There were total 13 beneficiaries at this watercourse. The source of water for this intervention is stream. All the farmers were getting benefited by the intervention. The cropping intensity was increased. Rice was not produced before this intervention in the area due to non-availability of water but now rice crops was also grown. Farmers started to grown different Kharif vegetables crops.
Interviews were taken from 6 beneficiaries, 2 from head, 2 from mid of the WC and 2 from the tail of WC. During the interview the beneficiaries gave data about land holding by them, crops and yield obtained this year.

Most of the farmers were obtaining more yield of their crops this year than before this intervention.

x) Visit of Watercourse Dhani Mai, AJK

Intervention Dhanni Mai sahiba

Vegetables crop at Dhani Mai sahiba

ICT field team visit **Dhani Mai Sahiba**, in order to conduct mid line survey. Team met with chairman of WUA and beneficiaries of WC. The beneficiaries were happy with the intervention. They told the field team that due to the sufficient water and timely availability of water their number of crops increased than before also increase in production has been noticed.

Total number of beneficiaries were 40, the team arranged to meet some of them, interviews were taken. The land occupied by each farmer was not more than few kanals but they were getting benefitted by their small piece of land. Kashmiri collard was the main crop grown in this area known as currum saag in local language. It's a kharif vegetable and most of the farmers were growing currum saag.
The farmers were well aware of the agricultural practices. They were using Urea and FYM as fertilizer.

Watercourse was monitored by the team, measurements and coordinates at the spot were taken. It was observed that the watercourse was maintained to be cleaned.

Females were well aware of the crops and about the land holding by them, they were active in decision making related to the land sale and crops selection and were active in household decision but they didn't own any piece of land.

Maize crop at Kardla

xi) Visit of Watercourse Kardala, AJK

The team visit watercourse Kardala in order to conduct baseline survey. This watercourse is located in village Kardala. OFWM team informed that purpose of this intervention is to supply water for agricultural irrigation as well as for domestic use and drinking needs of inhabitants and livestock. During the introduction the farmers told about their family, the land occupied by them, and some information about the crops grown.

Most of them have livestock including goats, cows and buffaloes. Most of the farmers were using Urea and DAP as fertilizer, FYM was used as a fertilizer by most of the farmers. According to them the land is fertile and also suitable for different crops.

The team also met the females that were indirect beneficiaries of the watercourse Kardala. Females were well aware of the crops and about the land holding by them, they were active in decision making related to the land sale and crops selection and were active in household decision but they didn't own any piece of land

Maize crop at Kardla

xii) Visit of Water Storage Tank Kukarwarra, AJK

The team visit the village Kukarwarra for baseline survey. Interviews were taken from the beneficiaries. During the introduction they told about the crops grown, and some information about the land occupied by him. He was well educated and was quite aware of all the agricultural practices. The team visited his land. The farmer has agricultural land in non-canal area. He also has livestock including some cows and buffaloes. The farmer used Urea and FYM as a major fertilizer. The land is fertile and also suitable for different crops. It was observed that Female participation in farming activities was at the level of decision making where they were involved regarding crop selection etc. however, they were not involved in any labor activities. Females were well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase or tenancy.

xiii) Visit of Water Storage Tank Dooda Pora Lower, AJK

ICT team visit the village Doodh Pora Lower for baseline survey, and take coordinates and measure the WST along with OFWM Team. The beneficiaries were interviewed. They used to grow rice and maize. It was observed that Female participation in farming activities was at the level of decision making where they were involved regarding crop selection etc. however, they were not involved in any labor activities. Females were well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase or tenancy.

xiv) Visit of Water Storage Tank Dood Pura, AJK

WST Upper Dood pura

The team has visited two interventions at village dood pura named as lower dood pura WST and

Upper dood pura WST. This intervention has only three beneficiaries. The WST was completed and was filled with water.

During the introduction they told about the crops grown, and some information about the land occupied by him. He was well educated and was quite aware of all the agricultural practices. The team visited his land. The farmer has agricultural land in non-canal area. He also has livestock including some cows and buffaloes. The farmer used Urea and FYM as a major fertilizer. The land is fertile and also suitable for different crops.

It was observed that Female participation in farming activities was at the level of decision making where they were involved regarding crop selection etc. however, they were not involved in any labor activities. Females were well aware of the crops and the land holding by them, they were active in decision making related to the land sale, purchase or tenancy.

xv) Visit of Water Storage Tank Soha, AJK

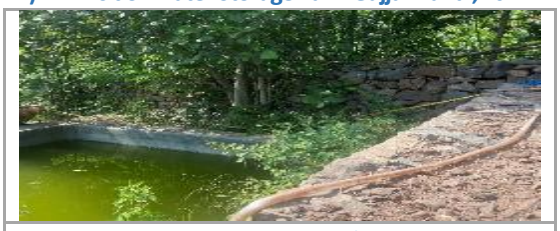
The scheme was located in village Soha. The village was situated near Nalla Ager. The purpose of intervention is to provide enough water for agricultural irrigation, domestic use and also meet drinking needs of inhabitants and livestock.

During the introduction they told about the crops grown, and some information about the land occupied by him.

Main crop of the area was maize but the beneficiaries were also growing vegetables and Rice. ICT team take interview related to intervention from 6 beneficiaries, two from head, two from middle and two from tail of WC.

It was observed that Female participation in farming activities was at the level of decision making where they were involved regarding crop selection etc. however, they were not involved in any labor activities

xvi) Visit of Water Storage Tank Gujjar Bandi, AJK



WST Gojar Bandi

Live stock farm Gojar Bandi

ICT team visit village Gujjar Bandi intervention (WST). The Farmer is very cooperative and was quite satisfied from the OFWM department. Farmer told about land occupied by him and detail information about crops. The main crop of the farmer was fodders. He was cultivating different types of fodders for his livestock farm. He was not using crops for commercial use but only for livestock. He had numbers of cows and buffaloes. Milk of the cows and buffaloes was using commercially by the beneficiary.

There is an increase in wheat production and that he also sown Okra and tomato this year. Jahangir of Shahin shah watercourse also saw an increase in his yield as October 3, 2022as compared to his crop last year. Jahangir told our team that the time to irrigate their land is reduced and that he can irrigate his full land now

ANNEX - F: FIELD VISITS BY ZONAL TEAM PUNJAB

1- FIELD VISITS OF VISIT OF WATERCOURSES IN PUNJAB ZONE

i. No. 20245-R, Iqbal Nagar, Rahim Yar Khan, Punjab on 1st July 2022

Watercourse No	20245-R	
Type of Watercourse	Regular	
Chak No/Village	Iqbal Nagar	
District and Tehsil	R.Y Khan, Sadiq Abad	
Name of Distributary	Bong	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	188 LPS
	Middle	105 LPS
	Tail	65 LPS
Sanctioned Discharge	141 LPS	
Designed Discharge	205	
Culturable Command area	347 Acre	
Total No of water users	23	
Estimated lining Length	1695 M	

ME&IE Team Inspecting the Joints of Lined Portion of the Watercourse

List of Farmers, their locations on WC & tenure status on WC 20245/R -Punjab on 1st July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Bilal Dastgeer	Tail	2	-	-	2	FCR
Muhammad Hussain	Middle	11.5	1	3	9.5	
Shan Ali	Tail	8	2	-	10	
Ameer Buksh	Head	4.5	8	-	12.5	
Syed Makhdoom Hussain	Head	100	-	-	100	
Bashir Ahmad	Middle	2		-	2	

General Discussion with Farmers about perception of water saving on this watercourse

ii. Visit of Watercourse No. 9636-TR, Chak 148-P, R. Yar Khan, Punjab onf 2nd July 2022

Watercourse No	9636-TR	
Type of Watercourse	Additional	
Chak No/Village	148-P	
District and Tehsil	R.Y Khan, Sadiq Abad	
Name of Distributary	Seena war	
Type of Moga	Open Flume	
Measured Discharge Before Improvement	**Head**	77 LPS
	Middle	65 LPS
	Tail	50 LPS
Sanctioned Discharge	70 LPS	
Tube well Discharge (if any)	241 Acres	
Designed Discharge	95 LPS	
Culturable Command area	-	
Total No of water users	23	
Estimated lining Length	1818 M	

ME&IE Field Team at the Inauguration Point of Watercourse no 9636-TR

List of Farmers, their locations on WC & tenure status on WC 9636-TR -Punjab on 2nd July 2022

Name of Farmer	Location of WC	Area (Acres)				Status
		Owned	Rented	Rented Out	Operated Area	
Muhammad Tariq	Tail	2		-	2	FCR
Muhammad Saleem	Tail	10	5	-	15	
Muhammad Afzal	Tail	7.5	8	-	15.5	
Muhammad Naeem	Middle	12.5	-	-	12.5	
Muhammad Arif	Head	3	-	-	3	
Ghulam Muhammad	Middle	-	12.5	-	12.5	

General Discussion with Farmers about reduction in water losses on the watercourse

iii. Visit of Watercourse No. 9636-TL, Chank 148-P, R. Yar Khan on 2nd July 2022

Watercourse No	9636-TL	
Type of Watercourse	Additional	
Chak No/Village	148-P	
District and Tehsil	R.Y. Khan, Sadiq Abad	
Name of Distributary	Seena war	
Type of Moga	Open Flume	
Measured Discharge Before Improvement	**Head**	120 LPS
	Middle	110 LPS
	Tail	100 LPS
Sanctioned Discharge	100 LPS	
Tube well Discharge (if any)	20 LPS	
Designed Discharge	160 LPS	

Culturable Command area	358 Acre
Total No of water users	15
Estimated lining Length	1190 M

A view of lined portion of Watercourse

List of Farmers, their locations on WC & tenure status on WC 9636-TL -Punjab on 2nd July 2022

Name of Farmer	Location of WC	Area (Acres)				Status
		Owned	Rented	Rented Out	Operated Area	
Muhammad Tariq	Tail	2		-	2	FCR
Muhammad Saleem	Tail	10	5	-	15	
Muhammad Afzal	Tail	7.5	8	-	15.5	
Muhammad Naeem	Middle	12.5	-	-	12.5	
Muhammad Arif	Head	3	-	-	3	
Ghulam Muhammad	Middle	-	12.5	-	12.5	

A View of Collection of data from the beneficiaries of watercourse on Android Based Application

iv. Visit of Watercourse No. 33100-R, Bindoor Abasiyan, R. Yar Khan, Punjab, on 3rd July 2022

Watercourse No	33100-R	
Type of Watercourse	Regular	
Chak No/Village	Bindoor Abbasiyan	
District and Tehsil	R.Y Khan, Sadiq Abad	
Name of Distributary	Bindoor Abbasiyan	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	-
	Middle	-
	Tail	-
Sanctioned Discharge	160 LPS	
Tube well Discharge (if any)	-	
Designed Discharge	205 LPS	
Culturable Command area	-	
Total No of water users	20	
Estimated lining Length	2985 M	

Visit of Watercourse for Inspection of work at site.

List of Farmers, their locations on WC & tenure status on WC 33100-R -Punjab on 3rd July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Muhammad Abbas	Head	50		-	50	ICR - II
Abdul Ghaffar Abbasi	Head	10	10	-	20	
Abdul Samad	Middle	10	-	-	10	
Allah Buksh	Head	50	29	-	79	
Abdul Rehman Abbasi	Tail	4	-	-	4	

Discussion with the Farmer regarding water Theft / Litigation

v. Visit of Watercourse No. 118914-TL, Chack 114/1L, R. Yar Khan, Punjab on 4th July 2022

Watercourse No	118915-TL	
Type of Watercourse	Additional	
Chak No/Village	114/1L	
District and Tehsil	Rahim Yar Khan	
Name of Distributary	1 – L / AbayHayat	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	125 LPS
	Middle	100 LPS
	Tail	80 LPS
Sanctioned Discharge	100 LPS	
Tube well Discharge (if any)	-	
Designed Discharge	125 LPS	
Culturable Command area	360 Acres	
Total No of water users	20	
Estimated lining Length	1328 M	

ME&IE Team Taking Coordinates at Moga point

List of Farmers, their locations on WC & tenure status on WC 118915-TL Punjab on 4th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Ameer Buksh	Middle	6	6	-	12	ICR - II
Aslam Sohail	Tail	80	-	30	50	
Muhammad Qasim	Middle	4	-	-	4	
Muhammad Shehzad	Tail	-	30	-	30	
Noor Muhammad	Tail	6	--	-	6	
Ali Nawaz	Tail	35	25	-	60	
Muhammad Idrees	Head	4	-	-	4	

Discussion with the Farmer regarding water Theft / Litigation

vi. **Visit of Watercourse No. 104950-L, Chank 116/1L, R. yar Khan, Punjab, on 4th July 2022**

Watercourse No	104950-L	
Type of Watercourse	Additional	
Chak No/Village	116/1L	
District and Tehsil	Rahim Yar Khan , Khanpur	
Name of Distributary	1 – L / bay hayat	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	100 LPS
	Middle	80 LPS
	Tail	60 LPS
Sanctioned Discharge	80 LPS	
Tube well Discharge (if any)	-	
Designed Discharge	120 LPS	
Culturable Command area	650 Acres	

Total No of water users	28
Estimated lining Length	2116 M

Inspection of Segments at site.

List of Farmers, their locations on WC & tenure status on WC 104950-L Punjab on 4th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Muhammad Idrees	Head	4	-	-	4	TS
Muneeb Ahmad	Tail	12.5	-	-	12.5	
Zahid Ahmad	Tail	12.5	-	-	12.5	
Babar Fareed	Tail	-	10	-	10	
Tahir Iqbal	Tail	33	-	-	33	
Ameer Ahmad	Head	20	20	-	40	

Data collection from beneficiaries of watercourse on ODK

vii. Visit of Watercourse No. 1560-R, Khan Wah, R. Yar Khan, Punjab, on 5th July 2022

Watercourse No	1560-R	
Type of Watercourse	Additional	
Chak No/Village	Khan Wah	
District and Tehsil	Rahim Yar Khan, Khanpur	
Name of Distributary	I – R chak	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	62 LPS
	Middle	55 LPS
	Tail	45 LPS
Sanctioned Discharge	60 LPS	
Tube well Discharge (if any)	28 LPS	
Designed Discharge	90 LPS	
Culturable Command area	266 Acre	
Total No of water users	16	
Estimated lining Length	776 M	

Inspection of lined portion of watercourse

List of Farmers, their locations on WC & tenure status on WC 1560-R Punjab on 5th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Muhammad Ahsan	Tail	13.5	-	-	13.5	FCR
Ghulam Sarwar	Head	3	-	-	3	
Raiz Ahmad	Middle	7	-	-	7	
Jafar Hussain	Tail	1.5	-	-	1.5	
Muhammad Zahid	Tail	-	2.5	-	2.5	
Hafiz Liaquat Ali	Middle	13.5	-	-	13.5	

Data Collection from beneficiaries of watercourse on ODK regarding Cost of Production

viii. Visit of Watercourse No. 95500-R, Chack 105/L, R. Yar Khan, on 5th July 2022

Watercourse No	95500-R	
Type of Watercourse	Additional	
Chak No/Village	105/L	
District and Tehsil	Rahim Yar Khan , Khanpur	
Name of Distributary	1L – Abr Hait	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	
	Middle	
	Tail	
Sanctioned Discharge	110 LPS	
Designed Discharge	130 LPS	
Culturable Command area	287	
Total No of water users	13	
Estimated lining Length	1197	

ME&IE Team Entering Monitoring Field Data on ODK at Watercourse 95500-R Punjab

List of Farmers, their locations on WC & tenure status on WC 95500-R Punjab on 5th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Imran Ali	Tail	16.5	-	-	16.5	FCR
Liaquat Ali	Tail	6	-	-	6	
Muhammad Nadeem	Middle	-	24	-	24	
Muhammad Asif Rana	Tail	12	-	-	12	
Shahid Mehmood	Middle	16	-	-	16	
Muhammad Asif	Tail	12	-	-	12	

Discussion with the beneficiaries of watercourse regarding Watercourse Cleaning

ix. Visit of Watercourse No. 20585-R, Chack 138/A, R. Yar Khan, Punjab, on 5th July 2022

Watercourse No	20585-R	
Type of Watercourse	Additional	
Chak No/Village	138/A	
District and Tehsil	Rahim Yar Khan, Liaqatpur	
Name of Distributary	Abbasiyan	
Type of Moga	ASOM	
Measured Discharge Before Improvement	**Head**	130 LPS
	Middle	120 LPS
	Tail	100 LPS
Sanctioned Discharge	96 LPS	

Culturable Command area	327 Acres
Total No of water users	-
Estimated lining Length	1393

Collection of Coordinates at Moga Point

List of Farmers, their locations on WC & tenure status on WC 20585-R Punjab on 6th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Mushtaq Hussain	Middle	8.5	-	-	8.5	FCR
Afzal Ahmad	Middle	12	-	-	12	
Muhammad Saqib	Head	4	-	-	4	
Nishat Ahmad	Middle	6.5	-	-	6.5	
Muhammad Suleman	Middle	4	1	-	5	
Ghulam Haider	Middle	5	-	-	5	

Discussion with the beneficiaries of watercourse regarding Watercourse Cleaning

x. Visit of Watercourse No. 93445-L, Chack 3/A, R. Yar Khan, Punjab on 2nd July 2022

Watercourse No	93445-L
Type of Watercourse	Additional

Chak No/Village	3/A
District and Tehsil	Rahim Yar Khan, Liaqatpur
Name of Distributary	Abbasiyan Canal
Type of Moga	Pipe

Measured Discharge Before Improvement	**Head**	121 LPS
	Middle	80 LPS
	Tail	61 LPS
Sanctioned Discharge		
Tube well Discharge (if any)	20 LPS	
Designed Discharge	170 LPS	
Culturable Command area	322	
Total No of water users	-	
Estimated lining Length	-	

General discussion with beneficiary of watercourse about benefits of watercourse

List of Farmers, their locations on WC & tenure status on WC 93445-L Punjab on 6th July 2022

Name of Farmer	Location of WC	Area (Acres)					
		Owned	Rented	Rented Out	Operated Area	Status	
Naseer Ahmad	Tail	16.5	-	-	16.5	FCR	
Akbar Ali	Middle	15	-	-	15		
Iftikhar Ahmad	Tail	1.5	20	-	21.5		
Muhammad Ajmal	Middle	12	-	-	12		
Muhammad Tahir	Middle	12.5	-	-	12.5		
Mumtaz Khan	Tail	7	6	-	13		*Discussion with the Beneficiaries of watercourse regarding Change in Cropping Pattern*

xi. Visit of Watercourse No. 17635-R, Chack 54/A, R. Yar Khan, Punjab on 2nd July 2022

Watercourse No	17635-R	
Type of Watercourse	Regular	
Chak No/Village	54/A	
District and Tehsil	Rahim Yar Khan, Liaqatpur	
Name of Distributary	3-R	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	
	Middle	
	Tail	
Sanctioned Discharge	75 LPS	
Tube well Discharge (if any)	-	
Designed Discharge	110 LPS	
Culturable Command area	-	
Total No of water users	-	
Estimated lining Length	2608	

Data Collection on ODK by Field Team regarding Monitoring

List of Farmers, their locations on WC & tenure status on WC 17635-R Punjab on 7th July 2022

Name of Farmer	Location of WC	Area (Acres)				
		Owned	Rented	Rented Out	Operated Area	Status
Khadam Hussain	Tail	10	2.5	-	12.5	FCR
Muhammad Umair	Middle	13	6	-	19	
Muhammad Bota	Tail	10	-	-	10	
Muhammad Tayyab	Middle	0	25	-	25	
Tahir Zaman	Middle	0	75	-	75	
Muhammad Riaz Khan	Head	25	25	-	50	

Discussion with the beneficiaries of watercourse regarding Water Theft/ Litigation

List of Farmers, their locations on WC & tenure status on WC 11430-L, Kasur Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
M. Asfaq	Head	2	3	0	5	
M. Farooq	Head	1	4	0	5	FCR
M. Javed	Head	1	1.5	0	2.5	
Munir Ahmed	Head	2	0	0	2	
Asif Ali	Head	5	-	-	5	
Muhammad Siddique	Head	1	-	-	1	

General Discussion of Field Team with Farmers about Benefits of watercourse improvement

xii. Field Visit of Watercourse No. 3854-R, Baqar Ke, Punjab, on 25th July 2022

Watercourse No	3854-R	
Type of Watercourse	Regular	
Chak No/Village	Baqar Ke	
District and Tehsil	Kasur	
Name of Distributary	Baqar Ke	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	49 LPS
	Middle	40 LPS
	Tail	32 LPS
Sanctioned Discharge	64 LPS	
Designed Discharge	80 LPS	
Culturable Command area	400 Acre	
Total No of water users	45 Nos	
Estimated lining Length	1227 m	

Watercourse Monitored by ME&IE Team

List of Farmers, their locations on WC & tenure status on WC 3854-R, Kasur Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Javaid Amjad	Middle	16	-	-	16	
M. Ramzan	Tail	1.5	-	-	1.5	FCR
Rashid Javed	Head	4	-	-	4	
Muhammad Bilal	Middle	-	30	-	30	
Abdul Ghaffor	Middle	4	-	-	4	

Field Team Collecting Data from Beneficiaries of watercourse

xiii. Field Visit of Watercourse No. 58622-L in Chak Pandoki, Gujranwala, Punjab on 25th July 2022

Watercourse No	58622-TL	
Type of Watercourse	Additional	
Chak No/Village	Pandoki	
District and Tehsil	Gujranwala / Wazirabad	
Name of Distributary	Pathan ke	
Type of Moga	Open Flume	
Measured Discharge Before Improvement	**Head**	69 LPS
	Middle	50 LPS
	Tail	40 LPS
Sanctioned Discharge	LPS	
Designed Discharge	70 LPS	
Culturable Command area	225 Acres	

Total No of water users	12 Nos
Estimated lining Length	284 m

Field Team taking Coordinates of Lined Portion of Watercourse at the Tail end

List of Farmers, their locations on WC & tenure status on WC 58622-TL, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Moazzam Abbas	Head	55	-	-	55	
Ghazanfar Ali	Middle	10	-	-	10	FCR
Ahsan Ullah	Tail	45	-	-	45	

Field Team Collecting Data from Beneficiaries of watercourse

xiv. **Field Visit of Watercourse No. 12445-R in Chak Dhela Chatha, Gujranwala, Punjab on 26th July 2022**

Watercourse No	12445-R
Type of Watercourse	Additional
Chak No/Village	Dhella Chatha
District and Tehsil	Gujranwala / Wazirabad

Name of Distributary	Nokhar	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	**Head**
	Middle	**Middle**
	Tail	**Tail**
Sanctioned Discharge	49 LPS	
Designed Discharge	105 LPS	

Culturable Command area	339 Acres
Total No of water users	10
Estimated lining Length	1928 M

Field Team Inspecting Joints of Watercourse

List of Farmers, their locations on WC & tenure status on WC 12415-R, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Abid Hussain	Head	8	-	-	8	
Muhammad Azam	Head	38	-	-	38	FCR
Muhammad Ishfaq	Head	17	-	-	17	
Riaz Ahmad	Middle	24	-	-	24	
Muhammad Imran	Middle	-	40	-	40	
Hasnain Naveed	Tail	18	-	-	18	

Field Team Collecting Data from Beneficiaries of watercourse and briefing role of ME&IE Consultants

xv. Field Visit of Watercourse No. 18715-R Village Hazrat Kalian Wala, Gujranwala, Punjab on 27th July 2022

Watercourse No	18715-R	
Type of Watercourse	Additional	
Chak No/Village	Hazrat Kalian Wala	
District and Tehsil	Gujranwala / Wazirabad	
Name of Distributary	Venika	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	120 LPS
	Middle	110 LPS
	Tail	100 LPS
Sanctioned Discharge	LPS	
Designed Discharge	145 LPS	
Culturable Command area	Acres	

Total No of water users	10 Nos
Estimated lining Length	800 m

Field Team Inspecting Naccas at Watercourse

List of Farmers, their locations on WC & tenure status on WC 18715-R, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Ikhlaq Ahmad	Head	50	50	-	100	
Hamid Mehmood	Head	70	-	-	70	FCR
Muhammad Luqman	Tail	45	-	-	45	
Syed Ahsan Shah	Middle	25	-	-	25	
Ghulam Rasool Chatta	Middle	130	-	-	130	
Muhammad Zaman Chatta	Tail	78	-	-	78	

Field Team Collecting Data from Beneficiaries of watercourse

xvi. Field Visit of Watercourse No. 21600-R, Village Tung Khurd, Gujranwala, Punjab on 28th July 2022

Watercourse No	21600-R	
Type of Watercourse	Additional	
Chak No/Village	Tung Khurd	
District and Tehsil	Gujranwala / Noshera Virkan	
Name of Distributary	Mango ki	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	42 LPS
	Middle	35 LPS
	Tail	30 LPS
Sanctioned Discharge	29 LPS	
Designed Discharge	75 LPS	
Culturable Command area	470 Acres	
Total No of water users	31 Nos	

Estimated lining Length	1390 m

Field visit is shown in picture 3.37 & 3.38.

Picture 3.1: Field Team Inspecting Watercourse Covered with Weeds, Showing Improper Maintenance

List of Farmers, their locations on WC & tenure status on WC 21600-R, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Mian Arshad	Head	19	-	-	19	
Muneer	Head	10	-	8	2	FCR
Abdul Sami Khan	Middle	15	5	-	20	
Ahmad Ali	Middle	4.25	-	-	4.25	
Haji Taj	Tail	10	5	-	15	
Muneer Ahmad	Tail	2	1	-	3	

Field Team Collecting Data from Beneficiaries of watercourse

xvii. Field Visit of Watercourse No. 73300-R, Village Khan Musalman, Gujranwala, Punjab on 28th July 2022

Watercourse No	73300-R	
Type of Watercourse	Regular (New)	
Chak No/Village	Khan Musalman	
District and Tehsil	Gujranwala / Noshera Virkan	
Name of Distributary	Noshera Virkan	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	63 LPS
	Middle	55 LPS
	Tail	45 LPS
Sanctioned Discharge	18.40 LPS	
Designed Discharge	80 LPS	
Culturable Command area	239 Acres	
Total No of water users	16 Nos	
Estimated lining Length	1133 m	

Field Team on Visit of Watercourse No. 7330-R

List of Farmers, their locations on WC & tenure status on WC 73300-R, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Muhammad Mansha	Head	4.5	-	-	4.5	
Tariq Mahmood	Middle	8	-	-	8	**FCR**
Mansha	Middle	4.5	-	-	4.5	
Abdul Rehman	Tail	6	-	-	6	
Ghulam Abbas	Tail	28	4	-	32	
Kashif Abbas	Tail	8	-	-	8	

Field Team in Meeting With Beneficiaries of watercourse, along with Assistant Director OFWM Noshera Virkan, Tariq Mehmood and other OFWM staff

xviii. Field Visit of Watercourse No. 125800-R, Village Garmula Virkan, Gujranwala, Punjab on 26th July 2022

Watercourse No	125800-R	
Type of Watercourse	Additional	
Chak No/Village	Garmula Virkan	
District and Tehsil	Gujranwala / Noshera Virkan	
Name of Distributary	Noshera	
Type of Moga	Open Flume	
Measured Discharge Before Improvement	**Head**	52 LPS
	Middle	45 LPS
	Tail	35 LPS
Sanctioned Discharge	15 LPS	
Designed Discharge	60 LPS	
Culturable Command area	381 Acres	
Total No of water users	16 Nos	
Estimated lining Length	1133 m	

Field Team Inspecting lined portion of Watercourse

List of Farmers, their locations on WC & tenure status on WC 125800-R, Gujranwala, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Nazir Hussain	Head	-	6.5	-	6.5	
Mehfooz Ullah	Middle	3	5	-	8	FCR
Ghulam Murtaza	Tail	-	7	-	7	
Allah Ditta	Tail	8	-	-	8	
Shokat Ali		-	35	-	35	
		-	-	-	-	

Field Team accompanied with Assistant Director, Tariq Mehmood, OFWM Noshera Virkan, during Field visit and Focal group discussion with the Beneficiaries of Watercourse

xix. Field Visit of Watercourse No. 10483-L, Village Shareefabad, Okara, Depalpur, Punjab on 19th July 2022

Watercourse No	10483-L	
Type of Watercourse	Additional	
Chak No/Village	Sahreefabad	
District and Tehsil	Okara, Depalpur	
Name of Distributary	Makhdoom Minor	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	129 LPS
	Middle	99 LPS
	Tail	84 LPS
Sanctioned Discharge	65 LPS	
Designed Discharge	140 LPS	
Culturable Command area	493 Acres	

Total No of water users	10 Nos
Estimated lining Length	5730 m

Field Team Inspecting Watercourse during Field Visit

List of Farmers, their locations on WC & tenure status on WC 10483-L, Okara, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Ashraf Ali	Middle	40	-	30	10	
M. Aslam	Middle	40	-	-	40	FCR
Javed Iqbal	Middle	80	-	-	80	
Mubashir Iqbal	Middle	50	-	40	10	
Aftab Iqbal	Middle	53	-	-	53	
Mohsin Iqbal	Middle	80	-	-	80	

ME&IE Team in Meeting with Farmers for Data Collection on ODK

xx. Field Visit of Watercourse No. 67700-L, Village Faridpur Sohag, Okara, Depalpur, Punjab on 20th July 2022

Watercourse No	67700-L	
Type of Watercourse	Additional	
Chak No/Village	Faridpur Sohag	
District and Tehsil	Okara, Depalpur	
Name of Distributary	Lower Soha	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	125 LPS
	Middle	100 LPS
	Tail	80 LPS
Sanctioned Discharge	102 LPS	
Designed Discharge	145 LPS	
Culturable Command area	648 Acres	

Total No of water users	5 Nos
Estimated lining Length	2553 m

Field Team Monitoring the Watercourse at Site during Field Visit

List of Farmers, their locations on WC & tenure status on WC 67700-L, Okara, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Sohail Khan	Head	103	-	53	50	FCR
Raoof Nawaz Khan	Head	15	-	-	15	
Farooq Khan	Head	42	-	37	5	
Ahmed Faraz Khan	Head	25	-	25	-	
Tariq Khan	Head	0	55	0	55	

ME&IE Team Collecting data on ODK

xxi. Field Visit of Watercourse No. 20100-L, Village Arora Mian Khan, Okara, Depalpur, Punjab on 20th July 2022

Watercourse No	20100-L	
Type of Watercourse	Regular	
Chak No/Village	Arora Mian Khan	
District and Tehsil	Okara, Depalpur	
Name of Distributary	Sahby Wala	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	53 LPS
	Middle	42 LPS
	Tail	34 LPS
Sanctioned Discharge	49 LPS	
Designed Discharge	65 LPS	
Culturable Command area	229 Acres	

Total No of water users	10 Nos
Estimated lining Length	915 m

Field Team Monitoring Watercourse during Field Visit

List of Farmers, their locations on WC & tenure status on WC 20100-L, Okara, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Shafqat Khan	Middle	25	-	-	25	FCR
M. Ahmad	Middle	35	-	-	35	
M. Aslam	Middle	30	-	-	30	
M. Ittefaq	Middle	30	-	-		
Muddassar Ali	Middle	5	-	5	-	
Nasir Ahmed	Middle	3	-	-	3	

Field Team in general Discussion with Farmers about Benefits of an Improved Watercourse

xxii. Field Visit of Watercourse No. 18000-L, Village Bothana, Okara, Depalpur, Punjab on 20th July 2022

Watercourse No	18000-L	
Type of Watercourse	Additional	
Chak No/Village	Bothana	
District and Tehsil	Okara, Depalpur	
Name of Distributary	Nehran Wala	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	54 LPS
	Middle	41 LPS
	Tail	35 LPS
Sanctioned Discharge	65 LPS	
Designed Discharge	80 LPS	
Culturable Command area	264 Acres	

Total No of water users	28 Nos
Estimated lining Length	760 m

Field visit is shown in picture 3.49 & 3.50.

Field Team Monitoring Watercourse at Site during Field Visit

List of Farmers, their locations on WC & tenure status on WC 18000-L, Okara, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Khushi Muhammad	Middle	5	5	-	10	FCR
Riaz Ahmad	Middle	12	-	4	8	
Muhammad Nawaz	Middle	4	-	-	4	
Asghar Ali	Middle	7.5	4	-	11.5	
M. Nazar Abbas	Middle	8	-	-	8	
Ghulam Muhammad	Middle	5	3	-	8	

Field Team in general Discussion with Farmers and Data Collection

xxiii. Field Visit of Watercourse No. 26590-L, Pul-88, Moza Shadi Khan Munda, Muzaffargarh, Kot Addu, Punjab on 20th July 2022

Watercourse No	26590-L
Type of Watercourse	Additional
Chak No/Village	Pul-88, Moza Shadi Khan Munda
District and Tehsil	Muzaffargarh, Kot Addu
Name of Distributary	Thal

Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	LPS
	Middle	LPS
	Tail	LPS
Sanctioned Discharge	100 LPS	
Designed Discharge	130 LPS	
Culturable Command area	237 Acres	
Total No of water users	29 Nos	
Estimated lining Length	1357 m	

Field Team Taking Measurement of Watercourse during Field Visit

List of Farmers, their locations on WC & tenure status on WC 26590-L, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Abdul Razaq	Head	15	-	-	15	
Sabir Hussain	Middle	15	-	-	15	**FCR**
Muhammad Sideeq	Tail	8	-	-	8	
Abul Aziz	Tail	10	-	-	10	
Gulam Fareed	Tail	18	-	-	18	
Muhammad Nawaz	Tail	40	-	-	40	

Field Team in Meeting with Beneficiaries of Watercourse, for Data Collection

xxiv. Field Visit of Watercourse No. 17600-L, Village Mozah Raan, Muzaffargarh, Kot Addu, Punjab on 21st July 2022

Watercourse No	17600-L	
Type of Watercourse	Additional	
Chak No/Village	Mozah Raan	
District and Tehsil	Muzaffargarh, Kot Addu	
Name of Distributary	Magi Magsan	
Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	98 LPS
	Middle	85 LPS
	Tail	65 LPS
Sanctioned Discharge	100 LPS	
Designed Discharge	125 LPS	
Culturable Command area	277 Acres	
Total No of water users	8 Nos	
Estimated lining Length	2063 m	

Field Team Taking Measurement in the length of Improved Watercourse

List of Farmers, their locations on WC & tenure status on WC 17600-L, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Muhammad Imran	Head	18	-	-	18	
Abdul Hussain	Head	12	-	-	12	FCR
Malik Allah Yar	Head	25	-	-	25	
Ijaz Ahmad	Middle	27	-	-	27	
Iftikhar Hussain	Middle	27	-	-	27	
Khadim Hussain	Middle	12	-	-	12	

Field Team in Meeting with Beneficiaries of Watercourse, for Data Collection and listing the issues of Farmers

xxv. Field Visit of Watercourse No. 26338-R, Village Khar Shargi, Muzaffargarh, Kot Addu, Punjab on 21st July 2022

Watercourse No	26338-R	
Type of Watercourse	Additional	
Chak No/Village	Mozah Khar Sharqi	
District and Tehsil	Muzaffargarh, Kot Addu	
Name of Distributary	Kariya Sanawan	
Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	90 LPS
	Middle	75 LPS
	Tail	55 LPS
Sanctioned Discharge	65 LPS	
Designed Discharge	100 LPS	
Culturable Command area	223 Acres	

Total No of water users	14 Nos
Estimated lining Length	1380 m

Field Team Taking Measurement the length of Improved Watercourse

List of Farmers, their locations on WC & tenure status on WC 26338-R, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Gulam Abbas	Head	6	-	-	6	
Gulam Shabeer	Head	27	-	-	27	FCR
Muhammad Aslam	Middle	22	-	-	22	
Wahid Baksh	Middle	23	-	-	23	
Muhammad Rafeeq	Tail	26	-	-	26	
Mukhtar Ahmad	Tail	8	-	-	8	

Field Team in Meeting with Beneficiaries of Watercourse, for Data Collection

xxvi. Field Visit of Watercourse No. 211073-R, Chak No. 521 TDA Noor Shah Talai, Muzaffargarh, Kot Addu, Punjab on 22nd July 2022

Watercourse No	211073-R

Type of Watercourse	Additional	
Chak No/Village	Chak 521 TDA,Noor Shah Talai	
District and Tehsil	Muzaffargarh, Kot Addu	
Name of Distributary	Baghal	
Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	90 LPS
	Middle	78 LPS
	Tail	55 LPS
Sanctioned Discharge	36 LPS	
Designed Discharge	90 LPS	
Culturable Command area	480 Acres	
Total No of water users	18 Nos	

Estimated lining Length	2064 m

Field Team Monitoring the Improved Watercourse along with Farmers

List of Farmers, their locations on WC & tenure status on WC 211073-R, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Muhammad Rafique	Head	10	-	-	10	
Muhammad Afzal	Head	40	-	-	40	**FCR**
Muhammad Waqas	Middle	6	-	-	6	
Gulam Abbas	Middle	25	-	-	25	
Zaheer Abbas	Middle	5	-	-	5	
Adnan Ashraf	Tail	3	-	-	3	

Field Team in Meeting with Beneficiaries of Watercourse, and collecting data related to Cropping Pattern

xxvii. Field Visit of Watercourse No. 94934-L, Chak No. 604 TDA UC Wandhar, Muzaffargarh, Kot Addu, Punjab on 22nd July 2022

Watercourse No	94934-L	
Type of Watercourse	Additional	
Chak No/Village	Chak No.604 TDA,UC Wandhar	
District and Tehsil	Muzaffargarh, Kot Addu	
Name of Distributary	Lanju	
Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	95 LPS
	Middle	68 LPS
	Tail	LPS
Sanctioned Discharge	53 LPS	
Designed Discharge	100 LPS	
Culturable Command area	432 Acres	
Total No of water users	11 Nos	

Estimated lining Length	1550 m

Field Team Taking Coordinates of Moga Point of Watercourse

List of Farmers, their locations on WC & tenure status on WC . 94934-L, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Fida Hussain	Head	7	-	-	7	
Ihsan Kamal Khan	Middle	3	-	-	3	FCR
Muhammad Aziz ulah	Middle	13.5	-	-	13.5	
Hafiz Habib ullah	Middle	11	-	-	11	
Muhammad Qasim	Tail	11	-	-	11	
Abdul Sattar	Tail	9	-	-	9	

Beneficiary givening his Remarks on Benefits of Improved Watercourse

xxviii. Field Visit of Watercourse No. 46922-L, Chak No. 583 TDA UC Saidiqabad, Muzaffargarh, Kot Addu, Punjab on 22nd July 2022

Watercourse No	46922-L	
Type of Watercourse	Additional	
Chak No/Village	Chak no.583 TDA,UC Sadiqabad	
District and Tehsil	Muzaffargarh, Kot Addu	
Name of Distributary	2-L-Lanju	
Type of Moga	Pipe	
Measured Discharge Before Improvement	**Head**	LPS
	Middle	LPS
	Tail	LPS
Sanctioned Discharge	48 LPS	
Designed Discharge	80 LPS	

Culturable Command area	723 Acres
Total No of water users	21 Nos
Estimated lining Length	1138 m

Pictorial view of field visit is given in picture 3.61 & 3.62.

Field Team Measuring Improved Watercourse by using Measuring Wheel

List of Farmers, their locations on WC & tenure status on WC . 46922-L, Muzaffargarh, Punjab

Name of Farmer	Location on WC	Area/Acres			Operated Area	Status
		Owned	Rented In	Rented Out		
Muhammad Saeed	Head	40	-	-	40	
Abdul Ghafoor	Middle	26	-	-	26	FCR
Gulam Mustafa	Middle	34	-	-	34	
Muhammad Javed	Tail	76	-	-	76	
Muhammad Rafique	Tail	25	-	-	25	
Muhammad Akhtar	Tail	74	-	-	74	

Field Team Interviewing Farmers at Watercourse

xxix. Field Visit of Watercourse No. 11430-L in Chak Mojoki, District Kasure, Punjab on 25th July 2022

Watercourse No	11430-L	
Type of Watercourse	Additional	
Chak No/Village	Mojoki	
District and Tehsil	Kasur, Chunian	
Name of Distributary	Mojoki	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	121 LPS
	Middle	118 LPS
	Tail	105 LPS
Sanctioned Discharge	76 LPS	
Designed Discharge	140 LPS	
Culturable Command area	313 Acres	
Total No of water users	50 Nos	
Estimated lining Length	1106 m	

ME&IE Team Inspecting Joints in Watercourse

Water course No	63100-L	
Type of Watercourse	Additional	
Chak No/Village	Pagalla	
District and Tehsil	Gujranwala & Noshera Virkan	
Name of Distributary	Noshera	
Type of Moga	AOSM	
Measured Discharge Before Improvement	**Head**	50 LPS
	Middle	43 LPS
	Tail	37 LPS
Sanctioned Discharge	50 LPS	
Designed Discharge	60 LPS	
Culturable Command area	404 Acres	
Total No of water users	37	
Estimated lining Length	2342	

Inspection of Joints at Watercourse

xxx. Visit ofWatercourse No. 63100-L, Pagalla, Noshera Virkan, Punjab on 3rd August 2022

List of Farmers, their locations on WC & tenure status on WC . 43100-L, Pagalla, Punjab

Name of Farmer	Location of WC	Area (Acres			
		Owned	Rented	Rented Out	Operated Area
Muhammad Ismail	Head	4	4	-	8
Muhammad Sajjad	Head	4	-	-	4
Muhammad Ramzan	Mid	22	-	-	22
Muhamad Saleem	Mid	7.5	-	-	7.5
Muhammad Masroof	Tail	2	-	-	2
Jabar Ali	Tail	1	-	-	1

Picture 3.2: General Discussion with Farmers about Benefits of a watercourse by Field Team members

2- DETAIL OF FIELD VISITS OF WATER STORAGE TANKS AND DATA COLLECTION IN PUNJAB

The brief profile of water storage tanks visited for baseline purpose are shown as under:

1. Visit of Water Storage Tank on 3rd July 2022

WST Owner:	Abdul Ghaffar khan Abbasi
Name of village:	Bindoor Abbasiyan
Tehsil & District:	Sadiqabad , Rahim yar khan
Source of irrigation:	Canal
The shape of the water storage tank:	Square
Size of water storage tank:	22x22
Depth of WST:	6
Command area of water storage tank:	12
No of beneficiaries:	1
Name of the Orchard	Mango, Citrus

A view of water storage tank

2. Visit of Water Storage Tank on 3rd July 2022

WST Owner:	Abuzar
Name of village:	Thapar
Tehsil & District:	Sadiqabad , Rahim yar khan
Source of irrigation:	Canal + Tube Well
The shape of the water storage tank:	Trapezoidal
Size of water storage tank:	22x18
Depth of WST:	6.5
Command area of water storage tank:	6
No of beneficiaries:	1
Name of the Orchard	Mango, Guave, Citrus

Site Visit for Monitoring of Water Storage Tank

3. Visit of Water Storage Tank (Rana Jalil Ahmad)

Date of Visit	13-09-2022
WST Owner:	Rana Jalil Ahmad
Name of village:	Kot Nisar Shah
Tehsil & District:	Noshera Virkan, Gujranwala
Source of irrigation:	Tube well
The shape of the water storage tank:	Square
Size of water storage tank:	22 ft x 22ft
Depth of WST:	6.5 ft
Command area of water storage tank:	5.5 Acre
No of beneficiaries:	1
Name of the Orchard	Green Chili, Bitter Gourd

ME&IE Team Interviewing Mr. Jalil Ahmed, Bneneficiary of Water Storage Tank

4. Water Storage Tank (Shamim Haider)

Date of visit	14-09-2022
WST Owner:	Shamim Haider
Name of village:	Lakhan Wall
Tehsil & District:	Gujrat, Gujrat

Source of irrigation:	Tube well
The shape of the water storage tank:	Square
Size of water storage tank:	22ft x 22ft
Depth of WST:	6 ft
Command area of water storage tank:	7.83 Acres
No of beneficiaries:	1
Name of the Orchard	Guava

View of WST of Shamim Haider and Data Collection from the beneficiary

5. Water Storage Tank (Shamim Haider)

Date of Visit	15-09-2022
WST Owner:	Rao Muhammad Farooq
Name of village:	47/2L
Tehsil & District:	Okara, Okara
Source of irrigation:	Canal + Tube well
The shape of the water storage tank:	Rectangular
Size of water storage tank:	80 x 70 ft
Depth of WST:	10ft
Command area of water storage tank:	6.5 Acre
No of beneficiaries:	1
Name of the Orchard	Citrus Intercropped with Wheat, Canola, Sugarcane, Maize

6. Water Storage Tank on 15th October 2022

Date of Visit	15-09-2022
WST Owner:	Rao Muhammad Farooq
Name of village:	47/2L
Tehsil & District:	Okara, Okara
Source of irrigation:	Canal + Tube well
The shape of the water storage tank:	Rectangular
Size of water storage tank:	80 x 70 ft
Depth of WST:	10ft
Command area of water storage tank:	6.5 Acre
No of beneficiaries:	1
Name of the Orchard	Citrus Intercropped with Wheat, Canola, Sugarcane, Maize

Pictorial View of Concreted WST

7. Water Storage Tank (Arif Masood)

Date	16-09-2022
WST Owner:	Arif Masood
Name of village:	Mojika
Tehsil & District:	Chunian, Kasur
Source of irrigation:	Canal
The shape of the water storage tank:	Rectangular
Size of water storage tank:	150 x 70ft

Depth of WST:	5.5ft
Command area of water storage tank:	6 Acre
No of beneficiaries:	1
Name of the Orchard	Guava, Citru, (Lemon)

Eroded View of Geomembrane WST
ME&IE Team Interviewing Beneficiay of WST, Mr. Arif Masood

1. Water Storage Tank (M. Asghar)

Date	16-09-2022
WST Owner:	M Asghar
Name of village:	Rasool Pur Bairoon
Tehsil & District:	Kasur, Kasur
Source of irrigation:	Canal + Tube well
The shape of the water storage tank:	Rectangular
Size of water storage tank:	60ft x 45ft
Depth of WST:	5ft
Command area of water storage tank:	1.5 Acre
No of beneficiaries:	1
Name of the Orchard	Sugarcane

ME&IE Team Collecting Data from Beneficiary at the Location of WST

3- DETAIL OF FIELD VISITS OF LASER LAND LEVELER AND DATA COLLECTION IN PUNJAB

Brief particulars of owners of laser land levelers are also shown as under:

1. Visit of Laser Land Leveler on 4-07-22

Owner of LLL	Waqar-Ul-Haq
District	Rahim Yar Khan
Tehsil	Rahim Yar Khan
Quantity Of ground Water	Good for Irrigation
Major Crops	Wheat, Cotton, Sugarcane

A View of Monitoring of LLL at Site

2. Visit of Laser Land Leveler on 4-07-22

Owner of LLL	Muhammad Aslam
District	Rahim Yar Khan
Tehsil	Rahim Yar Khan
Quantity Of ground Water	Good for Irrigation
Major Crops	Wheat, Cotton, Sugarcane

A View of Monitoring of LLL at Site

3. Field Visit to Laser Land Leveler of Mr. Waqar-Ul-Haq, Rahim Yar Khan, Punjab, on 4th July 2022

Owner of LLL	Waqar-Ul-Haq
District	Rahim Yar Khan
Tehsil	Rahim Yar Khan
Quantity Of ground Water	Good for Irrigation
Major Crops	Wheat, Cotton, Sugarcane

Pictorial view of visit is given in picture 3.26.

ME&IE Team with Farmers during Monitoring of LLL

ANNEX - G: FIELD VISITS BY ZONAL TEAM KP

1. BASELINE SURVEY-II

During the month of July 2022, all the three teams (Team-1, Team-2, and Team-3) comprising of nine members were deputed to different zones of Khyber Pakhtunkhwa for the baseline survey-II. During the survey the field teams covered a number of districts in southern, central, and northern zones as per detail below.

Details of Water Courses and Water Storage Tanks Covered in Baseline Survey-II during July, 2022

S. No.	Province	District	Nature of Scheme	
			Water course	Water Storage Tank
1	Khyber Pakhtunkhwa	Dera Ismail Khan	29	3
2		Nowshera	9	3
3		Peshawar	4	5
4		Buner	6	1
5		Swat	0	1
Overall			**48**	**13**

Watercourse Monitoring		
Province	**Division**	**No.**
KP	Dera Ismail Khan	26
	Malakand	6
	Peshawar	12
Overall		**44**

Water Storage Tank Monitoring		
Province	**Division**	**No.**
KP	Buner	2
	Dera Ismail Khan	3
	Nowshera	3
	Peshawar	4
	Swat	1
Overall		**13**

Water Flow Measurement			
Province	**District**	**Water Channel Name / Number**	**No. of Records**
KP	Dera Ismail Khan	Abbas TWWC	1
	Dera Ismail Khan	Sanaullah TWWC	1
Overall			**2**

Social & Gender		
Province	**District**	**No.**
KP	Buner	8
	Dera Ismail Khan	29
	Nowshera	12
	Peshawar	7
	Swat	1
Overall		**57**

List of Some of the Schemes Surveyed During Baseline-II During the Month of July 2022

- Muhammad Ayaz TWWC Kot Dolat DIKhan
- Sabir Hussain TWWC Sikandar Shumali Chahkan DIKhan
- Muhammad Haris TWWC Maddi Kulachi DI Khan
- Umar Farooq TWWC Kat Jhok Tahir DIKhan
- Muhammad Fahim TWWC Malana DIKhan
- Ummar Amin WST Hathala Kulachi DIKhan
- Abdul Razzaq TWWC Budh Sharqi DIKhan
- Muhammad Ramak DIKhan
- Muhammad Akram TWWC Kala Gorh DIKhan
- Fatima Begum WST Paharpur DIKhan
- Sana Ullah TWWC Yarik DIKhan
- Malik Habib Ullah TWWC Qazi Koker DIKhan.
- Ghulam Rabbani TWWC Rodi Khel Pahar Pur DIKhan
- Ghulam Sadiq TWWC Kiri Khaisor DIKhan
- Saif Ur Rehman TWWC Dhap Chaba DIKhan
- Ijaz Ud Din WC Sheikh Rajo DIKhan
- Ikram Ullah WST & TWWC Bahadri DIKhan
- Ali Muhammad TWWC Kachi Painda Khan DIKhan
- Muhammad Sher TWWC Umer Khel Kaccha DIKhan
- Allah Dad TWWC Sheikh Rajo DIKhan
- Sabir Hussain TWWC Sheikh Rajo DIKhan
- Ghulam Rabbani TWWC Rodi Khel Pahar Pur DIKhan
- Sardar Malik Liaqat Ali TWWC Rakh Lakri DIKhan
- Abass TWWC Yarik DIKhan
- Shah Nawaz TWWC Skinder Shumali DIKhan
- Zahir Ul Amin WC Peshawar
- Mogha No.19725/L, Jehangira, Nowshera
- Mogha No.9800/L Jehangira, Nowshera
- Ibrahim Khan WST, Peshawar
- Afaq Ahmad WST, Badabher, Peshawar
- Zahir Ul Amin WST, Peshawar
- Muhammad Usman (WST) Peshawar

During the month of August 2022, two teams (Team-2, and Team-3) comprising of six members were deputed to Southern and Northern zones of Khyber Pakhtunkhwa for the baseline survey-II. During the survey the field teams covered only two districts in southern, and northern zones because of paucity of funds as per detail below

Details of Water Courses and Water Storage Tanks covered in Baseline Survey-II during August, 2022

S. No.	Province	District	Nature of Scheme		
			Watercourse	Water Storage Tank	Total
1	Khyber Pakhtunkhwa	Dera Ismail Khan	04	03	07
2		Haripur	05	04	09
Overall			**09**	**07**	**16**

Water Course and Water Storage Tanks Monitored in Baseline Survey-II during August, 2022

S. No.	Province	District	Nature of Scheme		
			Water course	Water Storage Tank	Total
1	Khyber Pakhtunkhwa	Dera Ismail Khan	04	03	07
2		Haripur	05	04	09
Overall			**09**	**07**	**16**

List of Scheme Surveyed and Monitored in Baseline Survey-II During the Month of August 2022 is as follows:

- Ahsan Raza TWWC, Haripur
- Muhammad zaman khan TWWC, Haripur
- Shabbir Muhammad Abbasi TWWC, Haripur
- Akhtar Zaman WST WC, Haripur
- Ghulam Asghar TWWC, Haripur
- Ahsan Raza WST, Haripur
- Muhammad Zaman Khan, WST Haripur
- Khani Zaman WST, Haripur
- Abdul Majeed WST, Panyala Paharpur DI Khan
- Ameer Asfandyar WST, Panyala Paharpur DI Khan
- Javeed Anwar WST, Wanda Kikri Hathala DI Khan
- Mumtaz WST, Giloti Paharpur DI Khan
- Qayum Nawaz TWWC, Malana/ Malana DI Khan
- SaifUllah WST, Wanda karim Khan Paharpur DI Khan
- Zameer Hussain TWW, CJhoke Makka/ Fateh Mando DI Khan

2. IMPACT EVALUATION SURVEY

During the Month of September 2022 all the field teams (Team 1, Team 2, and Team 3) comprising of nine members were deputed to Central, Southern and Northern zones of Khyber Pakhtunkhwa for the Midline survey. During the survey the field teams visited all those schemes already covered in the baseline survey during the fiscal year 2021-22 in Central, Southern, and Northern zones.

Details of Water Courses and Water Storage Tanks Re-Surveyed in Impact Survey in Khyber Pakhtunkhwa during September, 2022

S. No	District	WC	WST	Total
1	Dera Ismail Khan	2	0	2
2	Tank	0	1	1
3	Lakki Marwat	1	0	1
4	Bannu	1	0	1
5	Kohat	3	0	3
7,	Haripur	2	2	4
8	Abbottabad	2	0	2
9	Mansehra	2	0	2
10	Batagram	1	0	1
11	Torgar	1	0	1
12	Peshawar	3	1	4
13	Nowshera	9	3	12
14	Charsadda	2	0	2
15	Mardan	5	1	6
16	Swabi	2	0	2
Total		**36**	**8**	**44**

List of Schemes Visited for Data Collection for Impact Evaluation Analysis During the Month of September 2022 in KP

S.No.	District	Name of WC/WST	S.No.	District	Name of WC/WST
1	Kohat	Abdul Qadir TWWC Ghulam Banda/ Togh	23	Nowshera	9284/TF Bara Banda

S.No.	District	Name of WC/WST	S.No.	District	Name of WC/WST
2	Kohat	Ahsan Hayat TWWC Bali Tang/ Ghumbat	24	Tank	Mehtab Ahmad WST Maidad Khel
3	Kohat	Asim Altaf TWWC Ghumbat/ Ghumbat	25	Mardan	Ahmad Ali Water Storage Tank Rustam
4	Bannu	Habib Ullah TWWC Azem Kaly/ Domil	26	Mardan	Muhammad Zaib TWWC, Rustam
5	DI Khan	Sona Khan TWWC Rodi Khel	27	Mardan	Ali Serwar TWWC
6	Lakki Marwat	Gulo Khan TWWC Wanda Dalan	28	Mardan	1700/L Canal Water Course
7	Haripur	Shakir Tube well WC	29	Mardan	Fazle Subhan Water Course, Takhtbhai
8	Haripur	Nazakat Khan TWWC	30	Mardan	6550 / R Canal Water course, Rustam
9	Haripur	Nazakat Khan WST	31	Swabi	026/L Canal Water course
10	Abbottabad	Abid Gul Pipe WC	32	Swabi	Baz Muhammad Tube well Water course
11	Abbottabad	Baghoter Doga Pipe WC	33	Nowshera	Iftikhar Water Storage Tank
12	Mansehra	Ashaiq Hussain TWWC	34	Nowshera	Rehaj Gul Water Storage Tank, Jehangira
13	Mansehra	Moeen Pipe WC	35	Nowshera	Swab Ud Din Water Storage Tank, Jehangira
14	Batagram	Badiuzaman Pipe WC	36	Nowshera	Muhammad Tahir Shah Tub well Water course
15	Torgar	Jaga Baala WC	37	Nowshera	Muhammad Zaib Water course Jehangira
16	Charsadda	Noor Al Amin TWWC Mardhand	38	Nowshera	3900/ R Canal Water course, Jehangira
17	Charsadda	3077/R TWWC Muzafar Kally	39	Nowshera	Abdullah Tube well Water course, Pabbi
18	Peshawar	Shad Muhammad TWWC	40	Nowshera	Sartaj Tube well Water course
19	Peshawar	70000/L Hazar Khwani,	41	Nowshera	15881/L Canal Water course
20	Peshawar	159000/L WGC	42	DI Khan	Naimat Ullah TWWC Rodi Khel
21	Peshawar	Aqeel Afzal WST	43	Nowshera	Wajahat TWWC and Shahin Shah TWWC
22	Haripur	Abid Khan WST Ghazi			

ANNEX - H: FIELD VISITS BY ZONAL TEAM BALOCHISTAN

i. Field Visit of Water Storage Tank Khudai Dad in Jalazai, Kila Saif Ullah, Balochistan, on 19th July 2022

Scheme:	Water Storage Tank
Name of Farmer:	Khudai Dad
Name of village:	Jalalzai
Union council:	Sadar
Chairman WUA:	Khudai Dad
District:	Killa Saif Ullah
Tehsil	Killa Saif Ullah
Coordinates	N 30.726.779 E 68.898.299
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of WST:	50'x50'
Depth:	4'.75"
Command area:	10 acres
No of beneficiaries:	1 No.
Starting date:	28 May 2022
Completion date:	15 June 2022
Quality of Work	Good
Reduction in Water Logging and salinity	*No such problem in this area*
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• Farmers are very happy to get benefits of this intervention and thankful to the Agriculture Department. • Farmers were requesting the Government provide a Solar Energy Panel as heavy load shading is affecting their agricultural activities. • The farmer told the ME&IE team that due to non-availability of industries and markets, a very large number of products of his land, mainly Carrot, Chili and Tomato are wasted. Farmers requested the Government to build mini-industries in the area so that the Value-added products be produced and the wastage of Crop production can be eradicated. • Farmer told to ME&IEC that when the vegetables are ripe and are ready to be picked and sold, imports from Iran and Afghanistan highly impact the prices of our local production
General Observations	• The farmer was well aware about news crops and land. • After provision of WST on his land, the farmer has started to grow Tobacco on his farm. • In this area, the farmers were demanding more WSTs, to increase their production. • There is a shortage of Fertilizers in the District.

ME&IE Team at WST Khudadi Dad, with Farmer and OFWM Team, collecting Data

ii. Field Visit Date – 19 July 2022

Scheme	Water Storage Tank
Farmer Name	Shams Ur Rehman
Name of village:	Molvi Shah Mohammad
Union council:	Khusnob Jalalzai
Chairman WUA:	Shams Ur Rehman
District:	Killa Saif Ullah
Tehsil	Killa Saif Ullah
Coordinates	N 30-8194439 E 68.375826
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.75"
Command area of water storage tank:	10 acres
No of beneficiaries:	8 Nos.
Starting date:	1 May-2022
Completion date:	16 May-2022
Quality of work	Good
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• Farmer is very happy to get benefits of this intervention and thankful to the Agriculture Department. • Farmer was requesting the Government provide a Solar Energy Panel as heavy load shading is affecting their agricultural activities. • The farmer told the ME&IE team that due to non-availability of industries and markets, a very large number of products of his land, mainly Carrot, Chili and Tomato are wasted. Farmers requested the Government to build mini-industries in the area so that the Value-added products be produced and the wastage of Crop production can be eradicated. • Farmer told to ME&IEC that when the vegetables are ripe and are ready to be picked and sold,

	imports from Iran and Afghanistan highly impact the prices of our local production
General Observations	• There was salinity in the land, due to which the farmer was having problems. • There should be an awareness campaign held in the district about the problems of Salinity.

Picture 3.3: ME&IE Team Inspecting WST and discussing about the benefits and impacts of WST

iii. Field Visit of WST, Abdul Rasheed, in Kharkaran, Killa Saifullah, Balochistan on 19th July 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Rasheed
Name of village:	Kharkaran
Union council:	Saddar
Chairman WUA:	Abdul Rasheed
District:	Killa Saif Ullah
Tehsil	Killa Saif Ullah
Coordinates	N 30-7176475 E 16.58231
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.75"
Command area of water storage tank:	7 acres No.
No of beneficiaries:	8 Nos.
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	No
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• Farmer was happy with this intervention provided by the Govt. • Heavy load shedding was observed in this area due to this farmer was demanding Solar Panel on subsidies rates from the Government. • Total command area of the beneficiary was very dispersed and was demanding a WC for his land to increase his cultivable area. Heavy floods affected his land, especially tomatoes. Now he will be required to preparation land again
General Observations	• The farmer was well aware about his land. He was growing Carrots and Turnips and was supplying them

	to KP, Sindh and Punjab.

Spot checking of WST by ME&IEC

iv. Field Visit of Watercourse Hayat Ullah, in Sardar Rozi Khan, Killah Saifullah, Balochistan on 19th July 2022

Scheme:	Watercourse
Name of Farmer:	Hayyat Ullah
Name of village:	Sardar Rozi Khan
Union council:	Bandat Mirzai
Chairman WUA:	Hayyat Ullah
District:	Killa Saif Ullah
Tehsil	Killa Saif Ullah
Coordinates	N 30-7272909 E 16.5823388
Source of irrigation:	Tube Well
Total length of watercourse:	2000 ft
Estimated length of lining:	2000 ft
Command area of watercourse:	50 Acres
No of beneficiaries:	12 Nos.
Cost of Construction of WC:	15,483,67
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	*No such problem in this area*
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• The farmer was educated and knew about all the benefits of a lined WC, due to which the maintenance of the WC was very good. • The farmer was planning to increase his cultivable land and improve his cropping pattern and plant low delta crops, and was demanding HEIS for his land.
General Observations	• The farm well maintained the farm and pruned the orchards timely. • The demand of farmer for the provision of HEIS technology for his farm. • The field team of ME&IEC advice to farmer to remove the bushes from the edges of watercourse

ME&IE Team, Spot checking of WC and discussion with farmer about the scheme.

v. Field Visit of WST Abdul Majeed, in Killi Khalli Quetta, Balochistan on 19th July 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Majeed
Name of village:	Killi Khalli
Union council:	Shadinzai
Chairman WUA:	Abdul Majeed

District:	Quetta
Tehsil	Zarghoon
Coordinates	N 30.1581, E 66.9476
Source of irrigation:	Tub well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.5"
Command area of water storage tank:	10 Acres
No of beneficiaries:	1 No.
Quality of work	Satisfactory
Cropping intensity increased	No
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• He told the ME&IE team that he had increased his cultivable area by 3 acres, and improved his cropping pattern. He started tunnel farming after the provision of WST. • He was requesting a PVC scheme from the National Program because his WST and tube well were very far away from his cultivable land.
General Observations	• Sign board of the scheme was not available. • File was complete, but TS and the inputs from the project consultants were not complete.

ME&IE team along with Qari Abdul Basit, Sub-Engineer, OFWM and Beneficiary ii). View of WST

vi. Field Visit of WST Waseemullah Khan, in Killi Sardar Karez, Quetta, Balochistan on 19th July 2022

Scheme	Water Storage Tank
Farmer Name	Waseemullah Khan
Name of village:	Killi Sardar Karez
Union council:	Shadinzai
Chairman WUA:	Waseemullah Khan
District:	Quetta
Tehsil	Zarghoon
Coordinates	N 30.1475 E 66.9527
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	60x60
Depth of WST:	4'.75"
Command area of water storage tank:	10 Acre
No of beneficiaries:	1 No.
Quality of work	Good

Cropping intensity increased	No
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	No
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• Farmer was requesting for HEIS, because the cropping pattern only consisted of Tunnel Farming.
General Observations	• A Sign Board was available. • File was completed, but TS and the inputs from the project consultants were not completed.

vii. Field Visit of WST Watan Yar, in Quetta, Balochistan on 19th July 2022

Scheme	Water Storage Tank
Farmer Name	Watan Yar
Name of village:	Yaranabad
Union council:	Baleli
Chairman WUA:	Watan Yar
District:	Quetta
Tehsil	Kuchlak
Coordinates	N 30.2943, E 60.9054
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	60'x60'
Depth of WST:	4'.75"
Command area of water storage tank:	10 Acre
Quality of work	Good
Cropping intensity increased	*WST was not in use*
Crops yield increased	*WST was not in use*
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	*WST was not in use*
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	*Farmer was not available*
General Observations	• Sign board was not available. • File was completed, but TS and the inputs from the project consultants • not complete. • The WST was not connected to the water source, and was not in use.

View of WST showing pile of mud inside outflow and was not in use at all.

viii. Field Visit of WST Ahmed Yar, in Yaranabad, Quetta, Balochistan on 19th July 2022

Scheme	Water Storage Tank
Farmer Name	Ahmed Yar
Name of village:	Yaranabad
Union council:	Baleli
Chairman WUA:	Ahmed Yar
District:	Quetta
Tehsil	Kuchlak
Coordinates	N 30.2906, E 66.9060
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	60'x60'
Depth of WST:	4'.75"
Command area of water storage tank:	10 Acres
No of beneficiaries:	1 No.
Quality of work	Not Satisfactory
Cropping intensity increased	No
Crops yield increased	To some extent
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	No
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	*Farmer was not Available*
General Observations	• Sign board was not available. • File was completed, but TS and the inputs from the project consultants were not completed. • A crack was found which has damaged one wall to another wall including the bed of WST. • Back filling of this WST was very weak because the soil of that area was Clayey and had salinity.

Spot checking of WST with OFWM staff. Boundary of WST is damaged

ix. Field Visit of Watercourse Abdul Ghani, in Mamani, Mastung, Balochistan, on 20th July 2022

Scheme:	Watercourse
Name of Farmer:	Abdul Ghani
Name of village:	Mamani
Union council:	Shamsabad
Chairman WUA:	Abdul Ghani
District:	Mastung
Tehsil	Mastung
Coordinates	N 29.8211, E66.9166
Source of irrigation:	Tube well
Total length of watercourse:	3500 rft.
Estimated length of lining:	2000 rft.
Command area of watercourse:	10 Nos.
No of beneficiaries:	1 No.
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	*No such problem in this area*
Cropping intensity increased	Yes
Crops yield increased	Yes

Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent (farmer was preparing more land, employment may increase in future)
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• Farmer was facing problems regarding shortage of electricity. • He was demanding a WST for his land. • The farmer planted Tomato, Onion and Coriander after the provision of this WC.
General Observations	• The farmer had good knowledge about his land. • Due to the provision of this WC, he was preparing more land for cultivation of Grapes and other Orchards.

During Field Visit of Watercourse ME&IE Team Interviewing the Beneficiary

x. Field Visit of WST Salman Ahmed, in Gondain, Mastung, Balochistan on 20th July 2022

Scheme	Water Storage Tank
Farmer Name	Salman Ahmed
Name of village:	Gondain
Union council:	Jalab Gandan
Chairman WUA:	Salman Ahmed
District:	Mastung
Tehsil	Dasht
Coordinates	N 29.9001, E 67.0953
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	60x60
Depth of WST:	4.75
Command area of water storage tank:	16 Acres
No of beneficiaries:	1 No.
Quality of work	Good
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	To some extent
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	• The farmer told the ME&IE team that due to the provision of this WST; he has increased his cultivable land. • Before the intervention, the farmer had to irrigate his land every 7-8 days but

	after this intervention he irrigated the land after 15 days due to proper irrigation after the intervention. • Electricity is available only for 6 hours a day. Farmer was requesting Solar Panels.
General Observations	• The WST was properly maintained.

Field Team Interviewing Beneficiary during visit of WST

xi. Field Visit of WST, Abdul Samad, in Pingow, Mastung, Balochistan on 20th July 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Samad
Name of village:	Pingow
Union council:	Spezand
Chairman WUA:	Abdul Samad
District:	Mastung
Tehsil	Dasht
Coordinates	N 30.0046, E 67.0699
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.75"
Command area of water storage tank:	0 (It was not in use as not connected with water source yet)
No of beneficiaries:	0 (It was not in use as not connected with water source yet)
Quality of work	Good
Cropping intensity increased	*WST was not in use*
Crops yield increased	*WST was not in use*
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	*WST was not in use*
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	No
Overall feedback of Farmer / Beneficiary	*Farmer was not Available*
General Observations	• The construction of the WST was good, but there was no water source connected to the WST till now and it was not in use. • The Department is requested to look in to the matter

View of WST with unmanaged Outflow

xii. Field Visit of Watercourse Abdul Ghafar, in Drazinda, Loralai, Balochistan on 21st July 2022

Scheme:	Watercourse PVC
Name of Farmer:	Abdull Ghafar
Name of village:	Drazinda
Union council:	Kach Amakzai
Chairman WUA:	Abdull Ghafar
District:	Loarlai
Tehsil	Bori
Coordinates	30.513708
Source of irrigation:	68.271194
Total length of watercourse:	4000 Rft
Estimated length of lining:	1500 Rft
Command area of watercourse:	20 Acre
No of beneficiaries:	5 Nos.
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	*No such problem in this area*
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem at this site*
Reduction in water disputes/thefts	*No such problem at this site*
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	Yes
Overall feedback of Farmer / Beneficiary	• Farmers were satisfied with such intervention at his farm. • Farmers need more such schemes in their area. • This was a PVC based scheme as this farm was located in a hilly area. • Farmers ought to be taken into confidence during schemes distribution process. • Small farmers ought to be provided with a scheme. • Good impacts have been noticed in terms of crop productions, yields etc.
General Observations	• Filings related to scheme not found, therefor ME&IE Team could not validate or verified different indicators concerning scheme. • WUA was not functional. • Project is on track but needs much more improvements in some areas. • Farmers need to be provided with the latest agricultural techniques to make these interventions more beneficial. • Government ought to ensure agricultural inputs at subsidized rates keeping in view the state inflation rate. • Farmers ought to be taken on board during the project implementation process.

PVC scheme used for irrigating at orchard of farmer Abdul Ghaffar

xiii. Field Visit of ST Allah Uddin, in Shah Kareez, Loralai, on 21st July 2022

Scheme	Water Storage Tank
Farmer Name	Allah Uddin
Name of village:	Shah Kareez
Union council:	Shah Kareez
Chairman WUA:	Allah Uddin
District:	Loralai
Tehsil	Bori
Coordinates	30.4008142 68.5263137
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.5"
Command area of water storage tank:	18 Acres
No of beneficiaries:	5 Nos.
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	Yes
Overall feedback of Farmer / Beneficiary	• Small farmers need to be focused to extend the benefits of the project on a large scale. • Farmer was found satisfied with this intervention and he need more such scheme in terms of irrigating his remaining parcels • • Government ought to ensure provision of agricultural inputs on subsidized rates keeping in view the existing inflation rate in the state. •
General Observations	• About 40% to 60% increase have been noticed in crop productions, yields, employments, byproducts etc. • Files were not available, therefore, the ME & IE team could not validate different indicators regarding the scheme. • WUA was not functional. • Sign board was not displayed • Backfilling was not done properly.

Picture 3.4: Spot checking of WST and interviewing farmer about WST impacts

xiv. Field Visit of WST Muzaqir Habib, in Zangiwala, Loralai, Balochistan on 22nd July 2022

Scheme	Water Storage Tank
Farmer Name	Muzaqir Habib
Name of village:	Zangiwala
Union council:	Zangiwala
Chairman WUA:	Muzaqir Habib
District:	Loralai
Tehsil	Bori
Coordinates	30.410125 68.6359764
Source of irrigation:	Tube well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.5"
Command area of water storage tank:	50 Acres
No of beneficiaries:	6 Nos.
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	Yes
Overall feedback of Farmer / Beneficiary	• Farmer was satisfied with the scheme. • The farmer was demanding subsidized agricultural inputs and items.
General Observations	• Projects have been proven beneficial for farmers regarding increased cultivated area. • Scheme existed in an orchard comprising mostly almonds and remaining were pistachio, apricot, olive etc. • Mostly the trickle system was observed on farms. • Project impacts have been observed, especially better control over water supply. • Good impacts have been noticed in terms of crop production. • WUA was not functional. • No signboard was displayed. • OWFM should arrange technical and awareness sessions to the farmers

Spot check at Almond farm of Farmer Muzakir Habib.

xv. Field Visit of WST Noor Ullah in Darghai, Loralai, Balochistan on 22nd July 2022

Scheme	Water Storage Tank
Farmer Name	Noor Ullah
Name of village:	Darghai
Union council:	Lahore
Chairman WUA:	Noor Ullah

District:	Loralai
Tehsil	Bori
Coordinates	30. 4050581 68. 7038235
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	50'x50'
Depth of WST:	4'.5"
Command area of water storage tank:	50 acres
No of beneficiaries:	6 Nos.
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	Yes
Overall feedback of Farmer / Beneficiary	• Farmer was satisfied with the scheme in respect of its positive impacts and better control over his water. • Farmers need more such interventions in the area. • Facing electricity shortage which directly affects agricultural outcomes.
General Observations	• Files related to scheme was not available, therefor ME&IE team could not verify and validate the scheme properly • WUA was not functional. • No signboard was displayed. • Due to the high inflation rate in the country, the Government ought to ensure subsidized inputs and necessary items to farmers. • The impacts due to such a scheme have been noticed ranging 50%-80% at his farm in terms of crop production, yield, and employment. • Small farmers ought to be focused on scheme distributions to extend impacts on a large scale.

Field visit is shown in picture 3.77.

Spot checking of WST and Interview session with farmer Noor Ullah about the impacts of WST at his farm.

xvi. Field Visit of WST Molvi Abdul Jalil, in Darghai, Loralai, Balochistan on 21st July 2022

Scheme	Water Storage Tank
Farmer Name	Molvi Abdull Jalil
Name of village:	Darghai
Union council:	Lahore
Chairman WUA:	Molvi Abdull Jalil
District:	Loralai
Tehsil	Bori
Coordinates	30.4041572 68.7131345
Source of irrigation:	Tube Well
Shape of water storage tank:	Square
Size of water storage tank:	40'x40'
Depth of WST:	4'.5"
Command area of water storage tank:	25 Acres
No of beneficiaries:	4 Nos.
Quality of work	Satisfactory
Cropping intensity increased	Yes
Crops yield increased	Yes
Equity in water distribution increased	*No such problem in this area*
Reduction in water disputes/thefts	*No such problem in this area*
Poverty reduction through generation of employment.	Yes
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	Yes
Overall feedback of Farmer / Beneficiary	• According to the farmer, such a scheme has proved beneficial for him as he got better control of his water in respect of irrigating his farm. • Farmers were demanding more such intervention in upcoming years.
General Observations	• Employment ratio has increased. • Such projects play a vital role in boosting up agricultural activities that directly add to national GDP.

Interviewing farmer Molvi Abdul Jalil about WST and its impacts on his farming and orchard.

xvii. Field Visit of Watercourse Mohammad Bux, in Sakhi Mohammad Bux, Sohbat Pur, Balochistan on 22nd July 2022

Scheme:	Watercourse
Name of Farmer:	Mohammad Bux
Name of village:	Sakhi Mohammad Bux
Union council:	Noor Pur
Chairman WUA:	Mohammad Bux
District:	Sohbat Pur
Tehsil	Faridabad
Coordinates	28.462569 68.390117
Source of irrigation:	Pat Feeder Canal
Total length of watercourse:	454 Mtr
Estimated length of lining:	454 Mtr
Command area of watercourse:	350 Acre
No of beneficiaries:	80
Cost of Construction of WC:	2,825,815
Quality of Work	Satisfactory

Reduction in Water Logging and salinity	There is no salinity in water
Cropping intensity increased	Yes, approximately 10 percent Increased
Crops yield increased	Yes
Equity in water distribution increased	• Yes
Reduction in water disputes/thefts	• There is no theft of water
Poverty reduction through generation of employment.	• The former gets good income due to better production
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	• Industrialization did not increase significantly
Overall feedback of Farmer / Beneficiary	• Manpower usage also decreases with the time of farmer
General Observations	• The farmer was very happy and the land was fertile properly. Requested for more schemes. • Due to this scheme, the farmer irrigated his land for rice, crops and vegetables as well. • TS has not issued • WUA was not activated

ME&IE Team during Visit of WC Collecting Data from Beneficiary

xviii. Field Visit of Watercourse Khalil Ahmed, in Dirgi, Sohbat Pur, Balochistan on 23rd July 2022

Scheme:	Watercourse
Name of Farmer:	Khalil Ahmed
Name of village:	Dirghi
Union council:	Dirghi
Chairman WUA:	Khalil Ahmed
District:	Sohbat Pur
Tehsil	Sohbat Pur
Coordinates	28.482021 68.490901
Source of irrigation:	Pat Feeder Canal
Total length of watercourse:	603 Mtr
Estimated length of lining:	603 Mtr
Command area of watercourse:	640 Acre
No of beneficiaries:	17 Nos.
Cost of Construction of WC:	2,825,815
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	There is no salinity in water
Cropping intensity increased	Yes, approximately 10 percent Increased
Crops yield increased	Yes
Equity in water distribution increased	• Yes, the distribution of water has increased substantially and water is provided to the crops as per requirement.
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 picking up.	• Industrialization did not increase significantly
Overall feedback of Farmer / Beneficiary	• It helps a lot in water delivery which does not waste time and water
General Observations	• Mr. Khaleel Ahmed was very pleased and thankful to OFWM for this intervention as water flow is good and saves water as well. Farmer was demanding more

	schemes as he had a huge quantity of fertile land. ● TS was not issued ● WUA was not activated

Field Team Measuring Watercourse

xix. Field Visit of Watercourse Shehzad in Mohammad Ali Khan, Sohbat Pur, Balochistan on 23rd July 2022

Scheme:	Watercourse
Name of Farmer:	Shehzad
Name of village:	Mohammad Ali Khan
Union council:	Ghurri
Chairman WUA:	Shehzad
District:	Sohbat Pur
Tehsil	Sohbat Pur
Coordinates	28.469913 68.432296
Source of irrigation:	Pat Feeder Canal
Total length of watercourse:	435 Mtr
Estimated length of lining:	435 Mtr
Command area of watercourse:	280 Acre
No of beneficiaries:	8 Nos.
Cost of Construction of WC:	2,825,815
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	There is no salinity in water
Cropping intensity increased	Yes, approximately 10 percent Increased Increase in yield has been observed due to availability of water to the crops as required
Crops yield increased	Yes
Equity in water distribution increased	● Yes, the distribution of water has increased substantially and water is provided to the crops as per requirement.
Reduction in water disputes/thefts	● There is no theft of water
Poverty reduction through generation of employment.	● Yes, due to the good yield of the crop the poverty of the farmers has reduced.
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	● Industrialization didn't increase due to recent inflation.
Overall feedback of Farmer / Beneficiary	● The farmer feels a lot of comfort due to the facility of water delivery
General Observations	The farmer was very pleased to receive such a nice scheme, good deviation of water to all his fields and they demand for the next scheme.

Meeting with Farmers about impact and checking spot WC village Dirgi

xx. Field Visit of Watercourse Abdul Rehman, in Village Haji Abdul Rehman, Naseerabad, Balochistan on 24th July 2022

Scheme:	Watercourse
Name of Farmer:	Abdul Rehman
Name of village:	Haji Abdul Rehman

Union council:	Quba Sher Khan Gharbi
Chairman WUA:	Abdul Rehman
District:	Naseerabad
Tehsil	Dera Murad Jamali
Coordinates	28.549598 68.183500
Source of irrigation:	Pat Feeder Canal
Total length of watercourse:	350 Mtr
Estimated length of lining:	350 Mtr
Command area of watercourse:	90 Acre
No of beneficiaries:	12
Cost of Construction of WC:	2,825,815
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	There is no salinity in water
Cropping intensity increased	Yes, increase in yield has been observed due to availability of water to the crops as required
Crops yield increased	Yes
Equity in water distribution increased	• Yes, the distribution of water has increased substantially and water is provided to the crops as per requirement.
Reduction in water disputes/thefts	• There is no theft of water
Poverty reduction through generation of employment.	• Yes, Due to the good yield of the crop the poverty of the farmers has reduced.(could we tell the number reduction in poverty)
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	• Industrialization didn't increase due to recent inflation.
Overall feedback of Farmer / Beneficiary	• The farmer feels a lot of comfort due to the facility of water delivery
General Observations	• The farmer was thankful to OFWM for this scheme • TS has not issued • WUA has not activated

Field Team Measuring Watercourse and Interviewing he Farmer

xxi. Field Visit of Watercourse Mohammad Safar in Village Jan Mohammad Jamali, Naseerabad, Balochistan on 24th July 2022

Scheme:	Watercourse
Name of Farmer:	Mohammad Safar
Name of village:	Jan Mohammad Jamali
Union council:	Quba Sher Khan Gharbi
Chairman WUA:	M Safar
District:	Naseerabad
Tehsil	Dera Murad Jamli
Coordinates	28.578077 68.147574
Source of irrigation:	Pat Feeder Canal
Total length of watercourse:	359 Mtr
Estimated length of lining:	359 Mtr
Command area of watercourse:	120 Acre

No of beneficiaries:	07
Cost of Construction of WC:	2,825,815
Quality of Work	Satisfactory
Reduction in Water Logging and salinity	• There is no salinity in water
Cropping intensity increased	• Yes
Crops yield increased	Yes
Equity in water distribution increased	Yes, the distribution of water has increased substantially and water is provided to the crops as per requirement.
Reduction in water disputes/thefts	• There is 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
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	• Industrialization didn't increase due to recent inflation.
Overall feedback of Farmer / Beneficiary	• It has become easier for the farmer to manage the water which helps to avoid unnecessary water loss • Farmer was demanding more schemes under this programme
General Observations	• TS has not issued • WUA has not been activated.

Taking Water Flow Measurement with pigmy meter at WC Shehzad Ahmed

xxii. Field Visit of Watercourse Abdul Rehman in Village Haji Abdul Rehman, Naseerabad on 24th July 2022

Scheme	Water Storage Tank
Farmer Name	Abdul Rehman
Name of village:	Haji Abdul Rehman
Union council:	Quba Sher Khan Gharbi
Chairman WUA:	Abdul Rehman
District:	Naseerabad
Tehsil	Dera Murad Jamali
Coordinates	28.549881 68.183861
Source of irrigation:	Pat Feeder Canal
Shape of water storage tank:	Squire
Size of water storage tank:	56x56
Depth of WST:	4.5 Ft
Command area of water storage tank:	90 Acre
No of beneficiaries:	12 Nos.
Construction Cost of watercourse:	2,825,815
Quality of work	Satisfactory
Cropping intensity increased	• Yes
Crops yield increased	• Yes
Equity in water distribution increased	• Yes, the distribution of water has increased substantially and water is provided to the crops as per requirement.
Reduction in water disputes/thefts	• There is 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
Cement industry, bricks Killen, Precast Structures Industry and other related industries' production is picking up.	• Industrialization didn't increase due to recent inflation.

Overall feedback of Farmer / Beneficiary	• It has become easier for the farmer to manage the water which helps to avoid unnecessary water loss • Farmer was demanding more schemes under this programme
General Observations	• TS has not issued WUA has not been activated.
Field visit is shown in picture 3.84.	
Taking interview from framer regarding impact of schemes and Spot Checking of WST	

ANNEX - I: COORDINATION MEETINGS OF ME&IE CONSULTANTS WITH THE CLIENT

i) Meetings of Me&IE Zonal Team ICT with Client and Stakeholders

In September 2022, ME&IE field team conducted meeting with Project Director Irrigation Department Muzaffarabad in his office in Muzaffarabad AJ&K. Ms. Abida (Gender Specialist) also met with female M&E officer and held discussions with her.

ME&IE Monitoring Team in Meeting with Project Director AJ&K

ii) Meetings on ME&IE Zonal Team Punjab with Client and Stekeholders

Meeting with ADA Depalpur District Okara

Date	July 19, 2022
Venue	Assistant Director (OFWM) Office Tehsil Depalpur District Okara
Participants	
i. Abdul Hafeez Assistant Director of Agriculture (OFWM) ii. Mr. Awais Jahangeer, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Abd ur Raoof Saad Field Team Engineer ME&IE Consultants Lahore. iv. Muhammad Bilal Sohail Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey /Monitoring by Field Team In-charge. • Discussed Targets / Achievements of various intervention under NPIWC-II • Discussed future activities of department and other relevant issues.	

ME&IE Team in Meeting with ADA OFWM Depalpur, Mr. Abdul Hafeez during Mid-Line Survey

Meeting with ADA Kasur

Date	July 25, 2022
Venue	Assistant Director (OFWM) Office District Kasur
Participants	
i. Mr. Nadeem Jafri Assistant Director of Agriculture (OFWM) ii. Mr. Awais Jahangeer, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Abd ur Raoof Saad Field Team Engineer ME&IE Consultants Lahore. iv. Muhammad Bilal Sohail Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey /Monitoring by Field Team In-charge. • Discussed Targets / Achievements of various intervention under NPIWC-II • Discussed future activities of the department and other relevant issues.	

ME&IE Team with ADA OFWM Kasur, Dr. Nadeem Jafri regarding during Mid-Line Survey / Monitoring.

Meeting with DDA Okara

Date	July 20, 2022
Venue	Deputy Director (OFWM) Office District Okara
Participants	
i. Mr. Saeed Alvi Deputy Director Agriculture (OFWM) ii. Mr. Awais Jahangeer, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Abd ur Raoof Saad Field Team Engineer ME&IE Consultants Lahore. iv. Muhammad Bilal Sohail Field Team Engineer ME&IE Consultants Lahore	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey/Monitoring by Field Team In-charge. • Review Progress / Achievement	

ME&IE Team in Meeting with Deputy Director Agriculture OFWM, Mr. Saeed Alvi regarding Mid-Line Survey

Meeting with DDA Gujranwala

Date	July 25 2022
Venue	Deputy Director (OFWM) Office District Gujranwala
Participants	
i. Amir Saleem Mangat Deputy Director Agriculture (OFWM), District Gujranwala. ii. Mr. Muhammad Rizwan Suleman, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Nauman Rasheed Field Team Engineer ME&IE Consultants Lahore. iv. Sohail Ahmad Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey /Monitoring by Field Team In-charge. • Discussed Targets / Achievements of various intervention under NPIWC-II • Discussed future activities of department and other relevant issues	

ME&IE Team in Meeting with Deputy Director Agriculture Mr. Amir Saleem Mangaat Regarding Mid-Line Survey

Meeting with ADA Wazirabad

Date	July 26 2022
Venue	Assistant Director (OFWM) Office Tehsil Wazirabad, District Gujranwala
Participants	
i. **Aftab Ahmad** Assistant Director Agriculture (OFWM) ii. **Mr. Muhammad Rizwan Suleman,** Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Nauman Rasheed Field Team Engineer ME&IE Consultants Lahore. iv. Sohail Ahmad Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey/Monitoring by Field Team In-charge. • Review Progress / Achievement	

ME&IE Team in Meeting with Assistant Director Wazirabad, Aftab Ahmad Regarding Mid-Line Survey

Meeting with ADA Noshera Vikran

Date	July 28 2022
Venue	Village Garmula Virkan ,Tehsil Noshera Virkan, District Gujranwala
Participants	
i. **Tariq Mehmood** Assistant Director Agriculture (OFWM), Tehsil Noshera Virkan, District Gujranwala ii. **Mr. Muhammad Rizwan Suleman**, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Nauman Rasheed Field Team Engineer ME&IE Consultants Lahore. iv. Sohail Ahmad Field Team Engineer ME&IE Consultants Lahore. v. Chairman Water user Association	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-line Survey/Monitoring by Field Team In-charge. • Basic Data Collection from ADA Office.	

ME&IE Team in Meeting with Assistant Director Noshera Virkan Regarding Mid-Line Survey

Meeting with ADA Muzaffargarh

Date	July 21, 2022
Venue	Assistant Director (OFWM) Office Tehsil Kot Addu, District Muzaffargarh
Participants	
i. Ijaz Ahmad Gurmani Assistant Director (OFWM) Office Tehsil Kot Addu, District Muzaffargarh ii. Mr. Muhammad Zubair, Field Team In-charge (Sub Zone -3) ME&IE Consultants Lahore. iii. Umer Farooq Hammad Field Team Engineer ME&IE Consultants Lahore. iv. Misbah ur Rehman Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Baseline Survey/Monitoring by Field Team In-charge. • Basic data Collection from ADA Office.	

ME&IE Team in Meeting with Assistant Director Muzaffargarh Regarding Mid-Line Survey

Meetings of ME&IE Consultants with Assisstant Director Agriculture (OFWM),

Date	August 03 ,2022
Venue	Village Pagalla Virkan, Tehsil Noshera Virkan, District Gujranwala
Participants	
i. Tariq Mehmood Assistant Director Agriculture (OFWM), Tehsil Noshera Virkan, District Gujranwala ii. Mr. Muhammad Rizwan Suleman, Field Team In-charge (Sub Zone -2) ME&IE Consultants Lahore. iii. Sohail Ahmad Field Team Engineer ME&IE Consultants Lahore. iv. Nauman Rasheed Field Team Engineer ME&IE Consultants Lahore.	
Meeting Agenda/Points discussed:	
• Briefing on ME & IE Consultants activities regarding Mid-Line Survey /Monitoring by Field Team In-charge. • Discussed Targets / Achievements of various intervention under NPIWC-II • Discussed future activities of the department and other relevant issues.	

ME&IE Team in Meeting with Assistant Director Agriculture Noshera Virkan, Gujranwala

Meetings of Me&Ie Consultants with Director (H.Q) Directorate General of Agriculture (OFWM Lahore

Date	August 25 ,2022
Venue	Director General OFWM Office Davis Road, Lahore
Participants	
i. Hafiza Yasin Qaiser Director (H.Q) D.G Office Lahore. ii. Mr. Tariq Mehmood Agronomist D.G Office Lahore.	

iii. Mr. Matlloob Elahi Deputy Project Director Watercourses D.G Office Lahore.
iv. Mr. Muhammad Yousaf Bhatti Deputy Team Leader, ME&IE Consultants Lahore.
v. Mr. Muhammad Rizwan Suleman, Field Team In-charge (Subzone-2) ME&IE Consultants Lahore.

Meeting Agenda/Points discussed:

- Briefing on ME & IE Consultants Annual Report 2021-22.
- Discussion on targets / achievements of various interventions in Punjab during 2021-22
- Review of field activates under recent change in climate in the field during 2022-23.

ME&IE Team in Meeting in D.G. Office Lahore

Meeting with ADA Noshera Vikran

Date	October 13 ,2022
Venue	Assistant Director of Agriculture (OFWM) Noshera Virkan

Participants

i. Mr. Tariq Mehmood Assistant Director of Agriculture (OFWM) Noshera Virkan
ii. Mr. Muhammad Rizwan Suleman Field Team in Charge- II
iii. Mr. Noman Rasheed Field Team Engineer
iv. Mr. Sohail Ahmad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities Midline Survey.
- Review of midline survey the progress of project in the respective area and basic data of sampled Water Storage Tank.
- Seek the cooperation/coordination of field staff

ME&IE Team along AD Agr. (OFWM) Noshera Virkan, Tariq Mehmood accompany during the field visit to the beneficiary of WST regarding Midline Survey/ Monitoring

Meeting with ADA Wazirabad

Date	October 14 ,2022
Venue	Assistant Director of Agriculture (OFWM) Wazirabad / (This office team was looking after the WST in Gujrat.)

Participants

i. Mr. Aftab Ahmad Assistant Director of Agriculture (OFWM) Wazirabad
ii. Mr. Muhammad Rizwan Suleman Field Team in Charge - II
iii. Mr. Noman Rasheed Field Team Engineer
iv. Mr. Sohail Ahmad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities Midline Survey.
- Review of the progress of project in the respective area and basic data of sampled water storage tank.
- Seek the cooperation/coordination of field staff

Meeting with A. D. Agriculture (OFWM)Wazirabad Aftab Ahmad regarding Midline Survey/ Monitoring

Meeting with DDA Okara

Date	October 15 ,2022
Venue	Deputy Director of Agriculture (OFWM) Okara

Participants

i. Mr. Saeed Ullah Alvi Deputy Director of Agriculture (OFWM) Okara
ii. Mr. Awais Jahangeer F. Team in Charge - I
iii. Mr. Bilal Sohail Field Team Engineer
iv. Mr. Sohail Ahmad Field Team Engineer

Meeting Agenda/Points discussed:

- Briefing of ME & IE Consultants on project activities Midline Survey.
- Review of the progress of project in the respective area and basic data of sampled water storage tank.
  - Seek the cooperation/coordination of field staff

Meeting with D. D. Agriculture (OFWM) Okara Saeed Ullah Alvi during Midline Survey in Tehsil Okara

Meeting with ADA Okara

Date	October 19 ,2022
Venue	Assistant Director Agriculture (OFWM) Okara
Participants	
i. Mr. Mr. Atique Ur Rehman Assistant Director Agriculture OFWM Tehsil Chunian District Kasur ii. Mr. Awais Jahangeer F. Team in Charge - I iii. Mr. Bilal Sohail Field Team Engineer iv. Mr. Sohail Ahmad Field Team Engineer	
Meeting Agenda/Points discussed:	
• Briefing of ME & IE Consultants on project activities Midline Survey. • Review of the progress of project in the respective area and basic data of sampled water storage tank. • Seek the cooperation/coordination of field staff	

Meeting with AD Agriculture (OFWM) Okara, Engr. Muhammad Younus during Midline Survey in Okara

Meeting with ADA Kasur and Chunian

Date	October 16 ,2022
Venue	Assistant Director Agriculture (OFWM) Kasur
Participants	
i. Mr. Mr. Atique Ur Rehman Assistant Director Agriculture OFWM Tehsil Chunian District Kasur ii. Mr. Awais Jahangeer F. Team in Charge - I iii. Mr. Bilal Sohail Field Team Engineer iv. Mr. Sohail Ahmad Field Team Engineer	
Meeting Agenda/Points discussed:	
• Briefing of ME & IE Consultants on project activities Midline Survey. • Review of the progress of project in the respective area and basic data of sampled water storage tank. • Seek the cooperation/coordination of field staff	

ME&IE Team in Meeting A.D. Agriculture Tehsil chunian & Kasur, Mr. Atique Ur Rehman during Midline Survey of WST in Tehsil Kasur

iii) Meetings on ME&IE Zonal Team KP with Client and Stekeholders

Meeting with the NPC, Dy NPC and Team Leader:

On August 26, 2022 the NPC along with the Dy. NPC and Team Leader paid a visit to the zonal office Peshawar KP of the ME/IE Consultants, NPIWC – II. And held a meeting with the DTL KP Zone. Agenda of the meeting was to review the Progress of the ME/IE Consultants, NPIWC – II. KP Zonal office Peshawar.

The DTL Zonal office Peshawar made a presentation of the progress made so for and the on-going activities of the project. After presentation of the DTL the NPC and Dy. NPC raised a number of questions the DTL responded to those questions and made them satisfied. The NPC also met with the Field Team In-charges (FTIs) and discussed the personal and field related problems. The NPC assured them that due consideration will be given to these problems.

Meeting with the NPC, Dy.NPC and Team Leader of the ME/IE Consultants NPIWC-II at KP Zonal Office

iv) Meetings on ME&IE Zonal Team Balochistan with Client and Stekeholders

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

Date	4th July 2022
Venue	Zoom Meeting
Participants	
i. Dr. Usman Mustafa, Team Leader, ME&IE Consultants, National Office, Islamabad. ii. Dr. Muhammad Abdul Quddus, Agricultural Economist, Lahore Office. iii. 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.	
Meeting Agenda/Points discussed:	
• Follow-up of previous meeting. • All zones shared updated progress of field visits, and discussed submission of MMR, QMR and AMR. • DTLs shared plan for Midline Survey and remaining works of Baseline • Status of available funds and further requirements. • Provision of Android System and Field Vehicles. • Meeting will be wrapped-up by the Team Leader with concluding remarks	

Date	19 July 2022
Venue	Office of the DDA, OFWM Killa Saifullah
Participants	
i. Mr. Abdul Khaliq Jogezai, DDA, OFWM, Agriculture Department, Govt. of Balochistan. ii. Mr. Molvi Rozi Khan iii. Mr. Mati Ullah Sub-Engineer, OFWM iv. Mr. Manzoor Ahmad Kasi ME&IE Expert, ME&IEC v. Mr. Qaisar Khan, ME&IE Officer, ME&IEC	
Meeting Agenda/Points discussed:	
• The work plan regarding Midline Survey shared by OFWM staff • The protocols and required data regarding Midline Survey were discussed • The DDA ensured to ME&IEC for entire support and coordination at all times.	

Meeting in the office of DDA Dist. Killa Saifullah

Date	20 July 2022
Venue	Office of the DDA, OFWM, Mastung
Participants	
i. Mr. Faqir Muhammad, DDA, OFWM, Mastung ii. Mr. Sher Ahmed, Sub-Engineer, OFWM iii. Mr. Dad Muhammad, Sub-Engineer, OFWM iv. Mr. Manzoor Ahmed Kasi, FTI/M&E Expert. v. Mr. Basit Khan, M&E Officer vi. Mr. Hamza H. Qureshi, M&E Officer	
Meeting Agenda/Points discussed:	
• Beneficiary's lists F.Y 2020-2021 and 2021-2022 • Scheme Files • Technical Sanctions	

Meeting in the Office of the DDA OFWM, Mastung

Date	**20/07/2022**
Venue	Deputy Director OFWM Office Loralai

Participants

i. Muhammad Anwar, DDA, OFWM.
ii. Abdul Hadi, Engineer OFWM
iii. Naseeb Jan FTI/M&E Expert

Meeting Agenda/Points discussed:

- Discussion held on midline survey activities.
- Discussions on overall monitoring activities to be done once planned.
- Discussed beneficiaries lists in detail.
- The Deputy Director appreciated and extended his maximum support to ME&IE team for such activities at his district.

Meeting in the office of DDA Dist. Loralai

Date	**27 July 2022**
Venue	Office of the DG, OFWM, Agriculture Department, Govt. of Balochistan, Rani Bagh, Sariab Road, Quetta.

Participants

i. Mr. Abdul Wahah Kakar, Director General, OFWM, Balochistan.
ii. Mr. Bashir Agha, Director, PMU, National Programme, Balochistan
iii. Mr. Khalid Mehmood, DTL, NWMC, NESPAK, Balochistan
iv. Mr. Rizwan Ahmed, DTL, ME&IEC, G3EC, Balochistan

Meeting Agenda/Points discussed:

- Discussed overall progress of National Programme
- Discussed strategy for news works F.Y. 2022-23 (Different suggestions were given by all participants)
- The DTL, ME&IEC Consultants highlight the long pending issue regarding provisions of data for Dashboard. The DG gave necessary directives to concerned officials at the spot and assured that required data will be provided to ME&IEC as soon as possible.
- It was decided a coordination meeting of all stakeholders will be conducted every 2 months.

Meeting held in Office of Director General, OFWM, Balochistan

Date	**10 Sep. 2022**
Venue	Office of the DG, OFWM, Agriculture Department, Govt. of Balochistan, Rani Bagh, Sariab Road, Quetta.

Participants

i. Mr. Abdul Wahab Kakar, Director General, OFWM, Balochistan.
ii. Mr. Manzoor Kasi, M&E Expert, ME&IE Consultants.

Meeting Agenda/Points discussed:

- A meeting was held with DG, OFWM, Balochistan regarding data collection for Dashboard, Balochistan.

Meeting held in Office of Director General, OFWM, Balochistan

Date	**12 Sep. 2022**
Venue	Office of the DG, OFWM, Agriculture Department, Govt. of Balochistan, Rani Bagh, Sariab Road, Quetta.

Participants

i. Mr. Asif Kakar, NPC, FPMU, NPIWC-II
ii. Mr. Abdul Wahab Kakar, Director General, OFWM, Balochistan.
iii. Mr. Bashir Agha, Director, Water Management
iv. Mr. Abdul Wali, Deputy Director, Technical, OFWM, Quetta.

v. Mr. Behram Malgani, Agriculture Officer, OFWM, Quetta.
vi. Mr. Khalid Mehmood, DTL, NWMC, NESPAK, Balochistan
vii. Mr. Rizwan Ahmed, DTL, ME&IEC, G3EC, Balochistan
viii. Mr. Manzoor Kasi, M&E Expert, ME&IE Consultants.

Meeting Agenda/Points discussed:

- A presentation on overall progress of National Programs given by DG, OFWM, Balochistan to the NPC, PFUM, NPIWC-II.
- The issues regarding funding, project budget was discussed
- A report regarding flood damages were presented to the NPC, FPMU, NPIWC-II.
  - The targets / funds for F.Y. 2022-23 were discussed.
- The NPC, FPMU, NPIWC-II discussed the issues facing by ME&IEC regarding collecting the data for Dashboard, Balochistan. The DG, OFWM, Balochistan assured the NPC and ME&IEC for their best cooperation in this regard and the DG, OFWM, Balochistan give necessary directions to all DDs to provide desire data to ME&IEC immediately

Meeting held in Office of Director General, OFWM, Balochistan

Date	**30 Sep. 2022**
Venue	Office of the DG, OFWM, Agriculture Department, Govt. of Balochistan, Rani Bagh, Sariab Road, Quetta.

Participants

i. Mr. Abdul Wali, Deputy Director, Technical, OFWM, Quetta.
ii. Mr. Behram Malghani, Agriculture Officer, OFWM, Quetta
iii. Mr. Rizwan Ahmed, DTL, ME&IEC, Balochistan.
iv. Mr. Manzoor Kasi, M&E Expert, ME&IE Consultants.

Meeting Agenda/Points discussed:

- A meeting was held with Deputy Director, Abdul Wali, Deputy Director, Technical, OFWM, Quetta and Mr. Behram Malghani, Agriculture Officer, OFWM, Quetta regarding data collection for Dashboard, Balochistan.

Meeting held in Office of Director General, OFWM, Balochistan

ANNEX - J: WATERCOURSE DATA SUBMISSION SUMMARY OF AJK ZONE

AJK - Watercourses Data Submissions – Summary

Division	District	Completed	Work Order Cancelled	Under Progress				Over all
				1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
MZD	Muzaffar abad	55	5	8	8	18	13	107
	Jhelum	18	0	6	0	14	6	44
	Neelum	23	12	13	5	0	0	53
Muzaffarabad Total		95	**96**	**17**	**27**	**13**	**32**	**19**
Poonch	Poonch	31	12	7	1	0	1	52
	Bagh	24	14	1	0	0	0	39
	Haveli	6	9	0	0	2	7	24
	Sudhnoti	19	15	4	0	1	0	39
Poonch Total		80	**80**	**50**	**12**	**1**	**3**	**8**
Mirpur	Mirpur	66	1	0	0	7	27	101
	Bhimber	99	0	0	0	0	0	99
	Kotli	32	22	5	0	1	0	60
Mirpur Total		**197**	**23**	**5**	**0**	**8**	**27**	**260**
Overall		373	90	44	14	43	54	618

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

AJK - WST/WHS Data Submissions Summary						
Division	District	Completed	Work Order Cancelled	Under Progress		Overall
				Work Order Issued	Work Order Pending	
Muzaffarabad	Muzaffarabad	120	3	8	13	144
	Jhelum	11	0	13	3	27
Muzaffarabad Total		**131**	**3**	**21**	**16**	**171**
Poonch	Poonch	45	19	6	15	85
	Bagh	33	18	3	0	54
	Haveli	15	16	3	15	49
	Sudhnoti	11	2	6	10	29
Poonch Total		**104**	**55**	**18**	**40**	**217**
Mirpur	Mirpur	7	0	4	10	21
	Bhimber	11	0	0	20	31
	Kotli	25	12	3	0	40
Mirpur Total		**43**	**12**	**7**	**30**	**92**
Overall		**278**	**70**	**46**	**86**	**480**

ANNEX - L: WATERCOURSE DATA SUBMISSION SUMMARY OF KP ZONE

KP - Watercourse Data Submission – Summary							
Division	District	Completed	Under Progress				Over all
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bajaur Agency	Bajaur	46	5	2	5	0	58
Bajaur Agency Total		**46**	**5**	**2**	**5**	**0**	**58**
Bannu	Bannu	93	0	0	0	0	93
Bannu	Lakki Marwat	106	2	0	0	0	108
Bannu	N.W Agency	199	2	0	0	0	201
Bannu Total		**482**	**2**	**0**	**0**	**0**	**484**
D.I. Khan	D.I. Khan	38	0	0	0	0	38
D.I. Khan	Tank	520	2	0	0	0	522
D.I. Khan Total		**24**	**2**	**1**	**0**	**0**	**27**
Hazara	Abbottabad	38	3	0	0	0	41
Hazara	Battagram	58	0	15	0	0	73
Hazara	Haripur	7	0	0	13	0	20
Hazara	Lower Kohistan	77	0	29	1	0	107
Hazara	Mansehra	23	0	1	1	0	25
Hazara	Torghar	9	0	0	0	0	9
Hazara	Upper Kohistan	2	0	0	0	0	2
Hazara Total		**238**	**5**	**46**	**15**	**0**	**304**
Khyber Agency	Khyber	19	0	0	5	1	25
Khyber Agency Total		**19**	**0**	**0**	**5**	**1**	**25**
Kohat	Hangu	42	0	0	0	0	42
Kohat	Karak	67	0	1	0	0	68
Kohat	Kohat	84	0	0	0	0	84
Kohat Total		**193**	**0**	**1**	**0**	**0**	**194**
Kurram Agency	Kurram	8	0	0	0	0	8

KP - Watercourse Data Submission – Summary

Division	District	Completed	Under Progress				Over all
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Kurram Agency Total		**8**	**0**	**0**	**0**	**0**	**8**
Malakand	Buner	94	0	0	0	0	94
Malakand	Chitral	88	1	0	0	0	89
Malakand	Lower Dir	68	5	6	11	0	90
Malakand	Malakand	76	0	1	4	1	82
Malakand	Shangla	39	0	0	0	0	39
Malakand	Swat	164	28	55	1	2	250
Malakand	Upper Dir	85	0	12	0	0	97
Malakand Total		**614**	**34**	**74**	**16**	**3**	**741**
Mardan	Mardan	124	0	0	2	0	126
Mardan	Swabi	81	0	0	2	1	84
Mardan Total		**205**	**0**	**0**	**4**	**1**	**210**
Mohmand Agency	Upper Mohmand	32	0	0	0	0	32
Mohmand Agency	Lower Mohmand	11	0	0	0	0	11
Mohmand Agency Total		**43**	**0**	**0**	**0**	**0**	**43**
Orakzai Agency	Orakzai	43	0	0	0	0	43
Orakzai Agency Total		**1**	**0**	**0**	**0**	**0**	**1**
Peshawar	Charsadda	126	0	0	13	0	139
Peshawar	Nowshera	76	0	0	13	4	93
Peshawar	Peshawar	64	0	0	5	0	69
Peshawar Total		**266**	**0**	**0**	**31**	**4**	**301**
S.W Agency	S.W Agency	27	0	0	1	0	28
S.W Agency Total		**27**	**0**	**0**	**1**	**0**	**28**
N.W Agency	N.W Agency	5	0	0	0	0	5
N.W Agency Total		**5**	**0**	**0**	**0**	**0**	**5**
Overall		**2384**	**48**	**123**	**77**	**9**	**2641**

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

KP - WST 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	16	0	0	0	0	0	16
Bajaur Agency Total		**16**	**0**	**0**	**0**	**0**	**0**	**16**
Bannu	Bannu	11	0	0	0	0	0	11
Bannu	Lakki Marwat	34	0	0	0	0	0	34
Bannu	N.W Agency	8	0	0	0	0	0	8
Bannu Total		**53**	**0**	**0**	**0**	**0**	**0**	**53**
D.I. Khan	D.I. Khan	80	0	0	0	8	0	88
D.I. Khan	Tank	16	0	0	0	0	0	16
Dera Ismail Khan Total		**96**	**0**	**0**	**0**	**8**	**0**	**104**
Hazara	Abbottabad	18	0	0	0	0	0	18
Hazara	Battagram	23	0	0	0	4	0	27
Hazara	Haripur	40	0	0	0	0	0	40
Hazara	Kolai Pallas	2	0	0	0	2	0	4
Hazara	Lower Kohistan	0	0	0	0	0	1	1
Hazara	Mansehra	32	0	0	2	5	0	39
Hazara	Torghar	11	0	0	0	4	0	15
Hazara	Upper Kohistan	7	0	0	0	0	1	8
Hazara Total		**133**	**0**	**0**	**2**	**15**	**2**	**152**
Khyber Agency	Khyber	10	0	0	0	6	0	16
Khyber Agency Total		**10**	**0**	**0**	**0**	**6**	**0**	**16**
Kohat	Hangu	14	0	0	0	0	0	14
Kohat	Karak	60	0	0	0	0	0	60
Kohat	Kohat	4	0	0	0	0	0	4
Kohat Total		**78**	**0**	**0**	**0**	**0**	**0**	**78**
Kurram Agency	Kurram	2	0	0	0	0	0	2
Kurram Agency Total		**2**	**0**	**0**	**0**	**0**	**0**	**2**
Malakand	Buner	43	0	0	0	0	0	43
Malakand	Chitral	20	1	0	0	0	0	21
Malakand	Dir Lower	15	0	0	0	10	2	27
Malakand	Dir Upper	24	0	0	0	0	0	24
Malakand	Malakand	21	0	0	0	1	0	22

KP - WST Data Submission – Summary								
Division	**District**	**Completed**	**Work Order Cancelled**	**Under Progress**				**Overall**
				1st Milestone	**2nd Milestone**	**Work Order Issued**	**Work Order Pending**	
Malakand	Shangla	95	0	3	6	29	2	135
Malakand	Swat	33	0	1	0	1	1	36
Malakand Total		**251**	**1**	**4**	**6**	**41**	**5**	**308**
Mardan	Mardan	30	0	0	0	0	0	30
Mardan	Swabi	9	0	0	0	0	2	11
Mardan Total		**39**	**0**	**0**	**0**	**0**	**2**	**41**
Mohmand Agency	Mohmand	41	0	0	0	0	0	41
Mohmand Agency Total		**41**	**0**	**0**	**0**	**0**	**0**	**41**
Orakzai Agency	Orakzai	2	0	0	0	0	0	2
Orakzai Agency Total		**2**	**0**	**0**	**0**	**0**	**0**	**2**
Peshawar	Charsadda	13	0	0	0	1	0	14
Peshawar	Nowshera	57	0	0	0	0	0	57
Peshawar	Peshawar	25	0	0	0	2	2	29
Peshawar Total		**95**	**0**	**0**	**0**	**3**	**2**	**100**
S.W Agency	S.W Agency	29	0	0	0	0	0	29
S.W Agency Total		**29**	**0**	**0**	**0**	**0**	**0**	**29**
N.W Agency	N.W Agency	0	0	0	0	5	0	5
S.W Agency Total		**0**	**0**	**0**	**0**	**5**	**0**	**5**
Overall		**845**	**1**	**4**	**8**	**78**	**11**	**947**

ANNEX - N: REFRESHER TRAINING IN KP OFFICE ON DATA OLECTION

PROCEEDINGS OF REFRESHER TRAINING WORKSHOP

One-day training workshop on Capacity Building ***(Android Based Data Collection Application and Improvement of the Quality of Data Collection)*** for the staff of Khyber Pakhtunkhwa districts' field teams of (NPIWC-II), was conducted at Directorate OFWM office, Peshawar on August 12, 2022. The Director General OFWM, Mr. Javed Iqbal and Hamid Ullah (Focal Person) also attended the training workshop, encouraging participants to take the training seriously with the aim of improving data collection and overcoming pendency and discrepancies of the collected data.

Training Methodology and Approach: The multitude of training methodologies was utilized in order to make sure all the participants get the whole concepts and they learn to present better-quality data.

- **Discussion Approach:** A participatory-discussion approach was used because the target staff were in a better position to identify existing weaknesses, strengths and need for change. In the course of discussion, the members of survey teams familiarized themselves with the environment and were provided proper guidance for gathering the Baseline-IV, data in respect of Agricultural and Technical aspects.

- **Training Method:** Participatory training methods were used during the workshops, which involved the learners actively. During the training workshops, the following learner-centered training methods were used:
    - Brainstorming for good data collection
    - Group discussion.
    - Demonstrations of discrepancies of the formerly collected data.

  As much as possible, Trainers stuck to the workshop timetable while at the same time working through materials at the participants pace. In order to accommodate every participant and to allow them to participate freely, ample time was given for discussion, which helped to bring out their experiences.

- **Training Intervention:**

  Delivery Process: The training was delivered in three modules. The capacity levels of the various participants differed from one to the other, which presented a challenge in the delivery of the trainings. To overcome this challenge, different approaches were used.

  Module 1 – Understanding of Digital Data Collection and their Benefits

  - Problems in Data Collection and Management
    - Data reliability (will we get the same data, when collected again?)
    - Data validity (Are we measuring what we say we are measuring?)
    - Data integrity (Is the data free of manipulation?)
    - Data accuracy/precision (Is the data measuring the "indicator" accurately?)
    - Data timeliness (Are you getting the data in time?)
    - Data security/confidentiality (Loss of data / loss of privacy)

- How technology helps us to address the above issues?
- Why use Mobile Technology in Data Collection?

Module 2 – Introduction to Data Collection Forms

- Technical discussion on each field of the Watercourse Data Collection forms
- Technical discussion on each field of Data Collection forms

Module 3 – Introduction to Android Application & Digital Data Collection Forms

- Application Interface
- Digital Forms
- Fill Blank Form
- Edit save Form
- Send Finalized Form
- Pre-Designed Forms of Watercourses and Water Storage Tanks

Module 4 – Discussion

- All participants discussed their related forms
- Discuss the data validation and review the mistakes during the discussion

- **Participants Feedbacks**

At the end of the workshop, participants were invited to fill up the feedback forms. While most participant responses were aligned with the workshop objectives, there were many who had never participated in such training before and were fairly unclear about what to expect. The list of feedbacks has been summarized below:

- Learn more about the Android Application
- Knowledge to improve the technical skills
- How the teams will save time in comparison to conventional data collection methods
- How delays can be handled between activities
- Reduce the communication gaps between teams and higher authorities
- Learn more about the Watercourses activities data
- Knowledge on conservations
- To be committed up to the end of the Training Workshop
- To learn how to conduct trainings
- To be able to transfer knowledge to other team members
- To learn about keeping good records

- **Training Details:** Detail of Training is given below:

NPIWC-II PAKISTAN

One Day Refresher Training Workshop
Field Progress Data Collection Through Android Application

Organized by OFWM KP, NPIWC-II - KP
August 12th, 2022
Venue: Directorate on Farm Water Management Office, Peshawar.

Agenda

Training Objectives

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

Workshop Trainers

Name	Prefix	Role	Designation
Mr. Shumail Mehmood	[SM]	Trainer	Data Analyst
Mr. Fawad Ahmad	[FA]	Co-Trainer	ICT/Technology Specialist

Friday, August 12th, 2022

Time		Topic	Presenter
		Workshop Opening:	
10:00 AM	10:10 AM	Recitation of Holy Quran	
10:10 AM	10:30 AM	Introduction of facilitators and participants	
10:30 AM	10:45 AM	Introduction to digital data collection & GIS based Progress Monitoring Dashboard	[SM]
10:45 AM	12:00 AM	Demonstration of approved WC and WST forms on Android Application	[SM]
12:00 PM	01:00 PM	Discussion Session on Previously Faced Issues	[SM,FA]
01:00 PM	**02:15 PM**	**Lunch/Prayer Break**	
02:15 PM	04:30 PM	Hands-On Practice	[SM,FA]
04:30 PM	05:00 PM	Wrap Session and Closing Remarks	[SM]

Participants of the Training

Sr. #	Name	Designation	Place of Posting
1	Qalb e Abbas	Water Management Officer	Mansehra
2	Waseem Ullah	Water Management Officer	Bannu
3	Sami Ullah	Water Management Officer	Lakki Marwat
4	Zeeshan Ahmad	Junior Clerk	Swabi
5	Shakir Ullah	Sub Engineer	D.I.Khan
6	Ihsan Ullah Khan	District Officer	Kurram
7	Akhtar Munir	Sub Engineer	Mansehra
8	Qaiser Alam	Sub Engineer	Malakand
9	Shakil Ahmad	Sub Engineer	Malakand
10	Sardar Ali	Sub Engineer	Malakand
11	Muhammad Shoaib	Water Management Officer	Malakand
12	Asif Khan	Sub Engineer	Shangla
13	Bashir Ahmad	Sub Engineer	Lower Dir
14	Nazir Jan	Sub Engineer	Lower Dir
15	Fazal Hussain	Water Management Officer	Chitral
16	Dr. Rafiq ur Rehman	District Officer	Upper Dir
17	Farhad Ali	Sub Engineer	Swabi
18	Zarmast Khan	Sub Engineer	Battagram
19	Mohsin Ali	Sub Engineer	Abbotabad
20	Gulistan Khan	Sub Engineer	Haripur
21	Muhammad Qasim	Water Management Officer	Haripur
22	Salman Ahmed	Project Associate	Peshawar
23	Sami Ullah	Project Associate	Khyber
24	Muhammad Waseem	Project Associate	Peshawar
25	Akhtar Ali	Sub Engineer	Swat
26	Farman Ali	Sub Engineer	Swat
27	Fawad Ali	Sub Engineer	Bajaur
28	Mazhar Iqbal	Water Management Officer	Karak
29	Muhmmad Tufail	District Officer	Karak
30	Mazhar Iqbal	Sub Engineer	Abbotabad
31	Nasir Shah	Sub Engineer	Mansehra
32	Arif Khan	Sub Engineer	Mansehra
33	Azam Mehmoob	Sub Engineer	Mansehra
34	Akhyar Alam	Computer Operator	Nowshera
35	Afaq Ali	Sub Engineer	Nowshera
36	Abdul Rashid	Sub Engineer	Hangu
37	Muhammad Nadeem	District Officer	South Waziristan
38	Salim Javed	Water Management Officer	Lower Dir
39	Muhammad Riaz	Water Management Officer	Peshawar
40	Umar Farooq	Sub Engineer	Mardan
41	Muhammad Uzair	Sub Engineer	Kohistan Upper
42	Rafaqat Hussain	Sub Engineer	Kohat
43	Aman Ullah	Computer Operator	Bannu
44	Kifayat Ullah	Sub Engineer	Bannu

Pictorial View of the Training

Director General OFWM, Mr. Javed Iqbal Innaugrating the Refresher Training Workshop

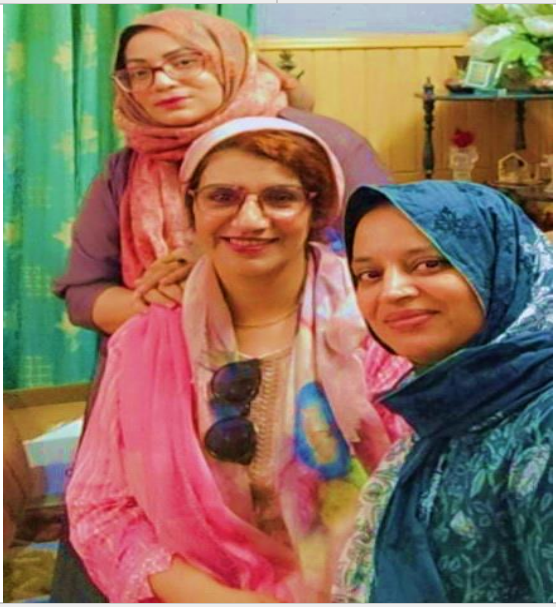
Mr. Fawad Ahmad ICT Manager at KP Office Peshawar is delivering lecture during training

Mr. Shumail ICT Manager at National Office Islamabad is delivering lecture during training

ANNEX - O: VISIT REPORT ON SOCIAL & GENDER ACTIVITIES

INTERVENTION # 1

Name of scheme	Pind Baigwal
Type of scheme	Water storage tank
Name of beneficiary	Choudhary Khanzada
Type of survey	Midline
Survey Date	18-8-2022



Mrs. Shazia with field team at her at home.

Beneficiary Introduction

The team reached the village Pind Baigwal and met Advocate Chaudary Khanzada the beneficiary of WST. Team also his wife Mrs. Shazia and asked many questions related to this visit.

Mrs. Shazia is a 40-years old hand holds master's degree. She is housewife and looks after her family including 4 children (2 girls and 2 boys).

Mr. Khanzada is a very sensible and humble person and keeps her wife involved in all decisions.

Before intervention

Mr. Shazia explained that she has hired a maid who assisted her in routine house chores as she was overburden due to household activities. She has good knowledge of agriculture and crops but does not actively participate in these activities. She was not aware of NPIWC-II project. She told that on their farm, they have female farmers for picking the vegetables.

After Intervention

Mr. Khanzada said that there is no profit no loss during the current cultivation period because paid Rs 77,000 electricity bill for the water storage facility. However, they enjoying pure milk, desi ghee, yogurt, butter, fresh vegetables, wheat, and maize from their farm due this intervention.

She told that female farmers' daily wages are lesser than male farmers. Before this intervention were purchasing vegetables and wheat from the market, but now they are using their crops, vegetables, and dairy products which are more fresh and healthy for them and saving money. Their workload has decreased in terms of visiting markets for food items and time-saving. Mrs. Shazia has a cow at his farm and gets all, dairy items for his family.

Impact of intervention

- Saved money by growing crops and vegetables at farm
- Income increased
- Generated employment in the field
- Health improved
- Nutrition level improved
- Women empowerment

INTERVENTION #2

Team met Mr. Ali and his wife Waheeda Bibi. Mr. Ali is labor farmer at farm of Khandaza. Social and Gender Team interviewed Waheeda Bibi who belongs to the Pashtoon family. She is 40 years, having primary education, and lives with her family in a rented home. She has 4 children, who are school going. Both husband and wife are working as permanent hired labor on Khanzada's farm.

Waheeda Bibi told that she has no knowledge of the NPIWC-II Project, but she was well aware of agriculture crops and their cultivation. She is also working maid and getting 20,000/- per month. She assists her husband in farming activities and taking care of livestock. She prepares dairy products like ghee, yogurt at home from milk. She told that they belong to a poor and landless family.

After Intervention

Waheeda Bibi is very thankful to Mr. Khandaza because they are giving vegetables and milk products free of cost. Her workload has also decreased in terms of visiting markets for food items which also saved her much time and money. Their monthly expenditure became less, and also their time were save vegetablesInjoys fresh veatables and is now concentrating more on her and family's health.

They are getting fresh milk butter, fresh vegetables, wheat, and maize from the owner farm. The money spending on such items were saved.

Impact of intervention

- Income of landless family
- Livelihood and health improves
- Time & money saved

INTERVENTION #3

Name of scheme	Mauza Arrah
Type of scheme	Watercourse
Name of beneficiary	Muhammad Amjad
Type of survey	Midline
Date of survey	18.08.2022

ME&IE & Social & Gender team interview with farmer Muhammad Amjad at Muza Arrah

ME&IE team reached at Mauza Arrah beneficiary Muhammad Amjad was already there. Muhammad Amjad is the only beneficiary of this watercourse.

Beneficiary Introduction

Zar Bibi is a 52-year-old woman. She is primary pass. Zar Bib is a housewife. She has three children including 02 boys & a girl and children are going to local educational institutes. During interview Zar Bibi shared that her husband Muhammad Amjad didn't involve her in any decision-making matters. This is due to cultural and strict family customs. She said that she is totally dependent on her husband and can't go anywhere without her husband's permission. She is not participating in agriculture activities

She explained that due to the overburden of household activities she hired a maid who assists her in house chores. Zar Bibi hasn't owned a piece of land. She added that her husband is not helping her in any household activities because in his family males were not allowed to help female member's in house chores. Zar Bibi has no knowledge of WUAs. and has no knowledge about NPIWC-II Project.

Before Intervention

Before the intervention, they were spending a lot of money on purchasing vegetables, wheat, and dairy products from the market.

After Intervention

Zar Bibi told that now they were getting fresh vegetables, wheat and dairy products after the intervention.

Impact of intervention

Her workload has decreased in terms of visiting markets for food items which also saved her much time and money and monthly expenditure became less.

Challenges

She told us that they faced a big challenge of an electricity bill of the water storage tank that is about 25000/- PKR which lead to no benefit out of their efforts

INTERVENTION #4

After visiting Mauza Arrah the moves move further towards Thanda pani. ME&IE team reached the beneficiary. The Social and Gender specialist requested Zubair Hussain permit to meet her wife Ms. Sobia for the Gender questionnaire.

Beneficiary Introduction

Mrs. Sobia is a 45-year-old and educated woman. She belongs to Mauza Arrah village. Mrs. Sobia is a housewife and her husband is an advocate who also runs a travel agency for Holy pilgrimage i.e Umra

and Hajj. She has 02 children (a boy & a girl). All two children are going to the nearest educational, institutes. According to Mrs. Sobia her husband Mr. Zubair Hussain is very cooperative and always involved her in most of the decisions. She explained that due to the overburden of household activities she hired a maid who assist her in household activities. She said that she is independent in her matter and can go anywhere there is no restriction from her husband. Mrs. Sobia doesn't own a piece of land. She has knowledge about recently cultivated crops but she is not participating in agriculture activities as in her family females are not involved in any labor activities. Mrs. Sobia have no knowledge about NPIWC-II Project and has no idea regarding WUAs.

Before Intervention

Sobia told that before the construction of the water course they had less labor and the yield of crops was also low. Water supply and storage is the main issue in their area. The yield of crops did not increase because of shortage of water. She mentioned that due to an insufficient supply of water they were not able to cultivate more crops. She added that before intervention they were spending a lot of money on purchasing vegetables, crops, and dairy products from the market.

Name of scheme	Thanda Pani
Type of scheme	Watercourse
Name of beneficiary	Zubair Hussain
Type of survey	Midline
Date of survey	19.08.2022

Meeting with Mr. Zubair Hussain at Mauza Arrah

After Intervention

She told that after intervention they were getting wheat and maize. Syed Zubair Hussain had two labors for agricultural activities.

She told the team that before the intervention they were facing difficulty regarding the irrigation of water but now the issue has been resolved.

Lemon and peach orchards were grown on the land. At one parcel of the land some, Kharif vegetables were also grown for home use only.

OVERALL FINDING/OBSERVATIONS

1. There are no WUAs because there was a single beneficiary of all the interventions in ICT.
2. Most of the females were unaware of the project NPIWC-II.
3. Household activities are mostly done by women.
4. Women didn't own a piece of land.
5. Females have no knowledge regarding WUAs
6. Mostly women are doing household activities, due to cultural constraints male members didn't assist females in household activities.
7. Females were well aware of the crops but not participating in farming activities.
8. According to the culture women didn't own any land legally.
9. Female family member education level is primary.
10. Most of the females were not involved in decision-making activities.
11. Females were not involved in any labor activities.
12. It was observed that due to exceeding in electricity bills they were not gaining the profit.
13. Most of the male refuses the team to take the interview from the females. There was a long distance between cultivated land and their home. Females rarely visited their farms.
14. Male were uncomfortable to allowing their females to meet with the survey team, but the social and gender team managed to take interviews.

FIELD VISIT REPORT

On August 23th and 24th 2022, team Social and Gender Specialist planned and organized the visit to

the Punjab. The aim of the visit was to observe the impact of Midline survey of targeted interventions under the project NPIWC II. Detail of Field and Gender team visited the watercourses of Punjab

Name of WST	Village	Survey Date
Mouza Shah Baghl	Mouza Shah Baghl	23-08-22
Maira Sangal	Maira Sangal	23-08-22
Hassan Abdal	Bafahad	24-08-22

PURPOSE OF VISIT

- To conduct interviews for the Midline of the female's beneficiary
- To pre-test the format of the social and gender checklist
- To collect the required data
- To observe the impact of the intervention the livelihood.

ME&IE ICT-team reached at Maira Sangal village accompanied with Deputy Director of OFWM, Rawalpindi. The aim of this visit was to conduct midline survey and the impact of the WST. The beneficiary of Maira Sangal water storage tank was already there.

INTERVENTION #1

Beneficiary Introduction

Mr. Zameer Hussain is owner of the water storage tank and also teacher in government school. He was physically disable, but he was very active and handworker man. The team requested Mr. Zameer Ahmed to meet her wife Jameela Bibi.

Jameela Bibi is 70 years old. She is housewife. She has 04 children includes 03 boy & a girl. According to Jameela Bibi her husband Mr. Zameer Hussain is a very cooperative and always involved her in most of the decisions. She explained that due to the overburden of household activities she hired a maid who assist in household activities. She is independent in her matters and can go anywhere there is no restriction from her husband.

Jameela Bibi doesn't own a piece of land. She told that in their culture women were not given any piece of land. She has knowledge about recently cultivated crops but she is not participating in agriculture activities. females are not involved in any labor activities, due to cultural restriction. Jameela Bibi have no knowledge about NPIWC-II project. After visiting Maira Sangal team moved towards another intervention Mouza Shah Bagh. The beneficiary was already present there. Raja Zulfiqar Ali is the only beneficiary of this water storage tank. Mr. Raja Zulfiqar Ali stated that female farmer is also working in his farm. Team meet the female farmer and her family.

INTERVENTION #2

Name of scheme	Mouza Shah Bagh
Type of scheme	Water storage tank
Name of beneficiary	Raja Zulfiqar Ali
Type of survey	Midline
WUAs member	Chairmain

Ms. Nasreen female farmar labour and Ms. Abida Munir (Social & Gender Specialist) at Mouza Shah Bagh Rawalpindi

ME&IE team Social & Gender team with farm owner

Beneficiary Introduction

Ms. Nasreen is labor farmer belongs from a Punjabi family. She's thirty-five years old.

Nasreen told that her husband is very cooperative and she can go outside without her husband's

permission there is no such restriction from her husband's side. She has no knowledge of the NPIWC-II Project, but she was well aware of the crops.

Mrs. Nasreen hasn't owned a piece of land, but she knows the names of crops and currently which crops are cultivated on the farm. Mrs. Nasreen told that with mutual understanding both husband and wife were taking decisions on the education and marriage matters of their children and other household matters. She hasn't a personal cell number because she can't buy a mobile phone and both husband and wife use the same cell.

After Intervention

It was observed that Mrs. Nasreen was working on the farm as a labor. She told the team that her children including her four daughters and a son all were working together in the farm. She lives with her family in a home given by the landlord. She was migrated from Chicha Watani town to earn some money for her daily livings, two months ago, as they were not getting the amount of money needed by their family in their native village.

Mrs. Nasreen stated that her whole family is working on a farm. Mrs. Nasreen and her whole family member are illiterate. They never went to school. Although She was happy with the intervention but due to climate change, torrential rainfalls severely damaged the production of tomatoes and bitter guard, but still Some pickings of these vegetables along with lady finger was being harvested every after second day. The owner was also giving them other benefits apart from their basic salaries. They were getting vegetables for their own use due to which their monthly expenditure became reduced, and their time was also saving. Her monthly expenditure is less than before. She enjoys fresh vegeatables and is now concentrating more on her and her family's health. They are getting, fresh vegetables, wheat, and maize from the farm owners. The money spent on such items is saved as is very thankful to Raja Zulfiqar Ali.

Mrs. Nasreen further elaborate that they are getting paid PKR 20/ bag of 5kg by the owner.

Every day, they packed more than ten bags of Ladyfingers. She said that by this way they are earning 400-500 PKR per day. She also told us that her children cleaned the land with their hands. Husband's selling the bags at the market. Her husband did not engage her in any marketing activity she told after that the water storage tank is very useful intervention because the crops can be irrigated by sufficient water.

INTERVENTION #3

On 24th August 2022, ME&IE team and Assistant director OFWM Mrs. Ambreen, reached Hassan Abdal. Mr. Sadiq owner of WST were already present on the site. He told about his family, profile of farming and the orchard grown on the farm, especially, fruits and vegetables. After that we interviewed beneficiary wife Mrs Sania.

Name of scheme	Bafahad
Type of scheme	Water storage tank
Union Council	Bafahad
Tehsil	Hassan Abdal
Province	Punjab
Name of beneficiary	Mr. Sadiq
Type of survey	Midline

Team with Mr. Sadiq (beneficiary) and Mrs. Ambreen,(Assistant director OFWM) at Bafahand Hassan Abdal

Beneficiary Introduction

Mrs. Sania is a 38-year-old educated woman who has done master. Mrs. Sania Khan belongs to a Pashtoon family. She is housewife and her husband is a businessman. She has 3 children (02 boys & 01 girls) and all are going to educational institutes. According to Mrs. Sania, her husband is a very strict man and didn't involve her in any kind of business and household matters. She added that her husband is not helping her in any household activities because in his family males were not allowed to help female member's in house chores. She explained that she was overburdened due to household activities and hired a maid who assists

her in some of the crucial house chores. She further described that she can't go anywhere without her husband's permission. She does not know about the NPIWC-II Project, but she was well aware of the crops.

After Intervention

She explained that they were not getting any financial benefits yet because they had cultivated peaches orchards for the last one and half years. The orchard will take two more years to be fruitful. They have to wait for profit and fruit. Her husband didn't cultivate any kind of crops and vegetables on his farm. It was observed during visit that the Water storage tank was empty. Mrs. Sania khan told that they have kept the chicken, buffaloes, and cow in their farm. The eggs and hen was not for sale purpose but they are using the organic eggs and chickens for their own use. She told that after 04 years they will get the fruit as well as the profit. She told that after construction of the water storage tank there is a change in household expenditure now they are not buying eggs and dairy products from market. She further emphasized that pure milk products and organic eggs and chicken are very healthy.

OVERALL FINDING/OBSERVATIONS

- There are no WUAs because only one member was holding the land.
- Most females do not know NPIWC-II Project.
- Household activities are mostly done by women.
- Women didn't own a piece of land.
- Females do not know the WUAs
- Mostly women are doing household activities, due to cultural constraints male members didn't assist females in household activities.
- Mostly Females were well aware of the crops but no participate in farming activities.
- According to the culture women didn't own any land legally.
- Female family members' education level is primary.
- Most of the females were not involved in decision-making activities.
- Females were not involved in any labor activities.
- It was observed that due to exceeding in electricity bills they were not gaining the profit.
- Most of the male refuses the team to take the interview from the female. There was a long distance between cultivated land and their home. Females rarely visited their farms.
- Male was uncomfortable allowing their females to meet with the survey team, but the social and gender team managed to take Interviews.

On September 7th and 8th September 2022, ME, IE team, and Social and Gender Specialist planned and organized the visit to the AJK. The aim of the visit is to observe the impact the of Midline survey on targeted interventions under the project NPIWC II. AJK visit was coordinated with Deputy Director Mr. Basharat (OFWM Muzafarabad) who managed the visit locations. The social and Gender Team along with ME&IE Team (Ms. Maryam, Ms. Sana Gul and Muhammad Bilal) visited water courses with OFWM officials, Eng. Assistant Director OFWM, Khuwaja Owais Ali and Assistant Director OFWM Mr. Tariq. Following watercourses and water storage tanks were visited during visit. In addition, the team conducted two focus group discussions in village Khatae Muzaffarabad. Gender checklist was used during the interview of beneficiaries. The checklist covered the impact of the intervention on livelihood. The following planned activities were completed during field visits.

INTERVENTION # 1

Name of scheme	Maira Duppata
Type of scheme	Watercourse/Water storage tank
Union Council	Maira Duppata
Tehsil	Hatiyah Dupatta
District	Muzaffarabad
Name of beneficiary	Raja Nazeer
Type of survey	Midline
WUAs member	Chairmain
Female member WUAs	02

Mrs. Yasmeen gave interview to Ms. Abida Munir (Social & Gender Specialist) at Maira Duppata village.

Beneficiary Information

Mrs. Yasmin Nazir is a 75-year-old educated woman. She belongs to Maira Duppata village. After completing her 40 years of service, she got retirement from the education department. She has only one daughter. Raja Nazeer is a very cooperative husband, he always encourages her to give her opinion on vital family decisions. She is not restricted by her husband, so she can go anywhere alone. She is the owner of vast land in her village but is unaware of how much area she owns.

She said that now she could not do the tough chores of the household. She was too preoccupied with household activities. To cut the work burden, she hired a maid who assists her in routine house tasks and activities. Mrs. Yasmeen has good knowledge of agriculture and crops. Previously she was also involved in farming activities physically, now her health condition didn't allow her to work in farming activity. She has knowledge of NPIWC II of the project but she doesn't know about WUAs.

Before Intervention

Mrs. Yasmeen Akhter's husband Raja Nazeer owns the land of 200 Kanal in Maira Duppata village. She told that before the construction of the water storage tank/water course they had less labor and the yield of crops was also low. Water supply and storage is the main issue in their area. The yield of crops did not increase because of a shortage of water. Mrs. Yasmeen mentioned that due to an insufficient supply of water they were not able to multi-cropping. She added that before intervention they were spending a lot of money on purchasing vegetables, maize, and dairy products from the market. Mrs. Yasmeen also told that WST was damaged due to heavy rain and flood and it needs to be renovated.

Impact of Intervention

Ms. Yasmeen Akhter is very grateful to the team and described that after the construction of the water course, now they have sufficient water for their rice crops because more water is required for the rice crops as compared to other crops. She briefly described that now they also cultivate seasonal vegetables like koram sag (The local name of a popular Green leaf vegetable). In her farm they had both female and male labors. They were giving more wages to male labor as compared to female labors this rationale was due to level of activity. The female labor was involved only in picking the vegetables, whereas male labor does all other hard farming activities.

They were giving RS 700/- daily wage to female labors and RS 1200/- per day to male labors. She further added that they were using crops and vegetables of their own farm which is more fresh and healthy. It saves a lot of their money. Their workload substantially decreased in terms of being far from their home just for purchasing the purchase of food items. Mrs. Yasmin has a cow from which they are getting fresh milk yogurt and butter which they consume at her home. Mrs. Yasmeen was thankful to the team that after getting sufficient water their agriculture yield has increased to big level. Moreover, less expenditure saved their time and money. They were also providing employment to poor families in their area.

INTERVENTION # 2

Name of scheme	Kakar Wala
Type of scheme	Watercourse/WST
Union Council	Langla
Tehsil	Hattain
District	Jhelum valley
Name of beneficiary	Syed Nay ul Hassan
WUAs member	Chairmain
Type of survey	Baseline

Mrs. Syeda Samina Gillani with Social and gender specialist Ms. Abida Munir at Kakar wala village Muzafarabad

Beneficiary Information

Mrs. Syeda Samina Gillani is a 50-year-old educated woman. She belongs to Kakar Wala village. She completed her high school studies. Her husband Syed Nay ul Hassan is 64 years old. He has an F.A. degree. She has five children (04 daughters & 1 son). Every child is literate.

Syed Nayar ul Hassan 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. She is the owner of the land but she is unaware of how much area does she own.

She hired a maid to assist her to perform common household tasks because she felt overburdened by household duties. She is well-versed in farming and crops. She was also interested in farming activities. Although she is aware of the NPIWC project, she is familiar with WUAs.

Before Intervention

According to Syeda Samina Gillani, her husband has 15 years of farming expertise. Before the construction of the water storage tank, and watercourse Syeda Samina stated, they had few labor and limited crop yield. Their major issue is a shortage of water in the area, which has caused a decrease in crop yield. Before the intervention, she explained, they were spending a large amount of money at the market to buy maize rice, and other seasonal vegetables. Previously she was doing kitchen gardening for their own use. They planned to expand their agricultural activities, but they are unable to cultivate any crops and vegetables on their farm due to a shortage of water.

Impact of Intervention

Syeda Samina Gillani shared that their crop yield increased after the construction of a water storage tank and watercourse. She is practically engaged in both personal and professional kitchen gardening.

Currently, they are growing maize and other several seasonal vegetables like okra, kurram saag, and onions. She added that most of the growing vegetables were damaged after extremely heavy rain fall this year.

She is now more knowledgeable about agriculture and knows it better than many other women. She is doing picking and planting. Furthermore, she said that she looks after livestock as there is the virus affecting milking animals. They just have one cow at the moment and they use her milk and other dairy products for their use.

She extremely appreciated the NPIW team for making their farming efforts simpler and more profitable than before.

She explained that earlier, they had to put more effort and attention into their work. Now that they have enough water supply for their crops yield has increased, and they have hired workers too to work effectively and efficiently in the field. They've now saved both time and money. The advantages no longer only benefit the upper class but increase in labors indicates rise of employment. Additionally, they provided housing foodstuffs, and crops to their farm labors. They are consuming the vegetables and crops of their land.

INTERVENTION # 3

Name of scheme	Gujar Bandi
Type of scheme	Watercourse/Water storage tank
Union Council	Langla
Tehsil	Hattain
District	Jhelum valley
Name of beneficiary	Syed Nay ul Hassan
WUAs	Chairman
Female member in WUAs	No female member in WUAs
Type of survey	Baseline

Mrs. Maida during interview in Gujar Bandi village

Beneficiary Information

Mrs. Maida Naqvi is 35 years-old-woman and she has a Master's degree. She belongs to Gujjar Bandi village. Her husband is 55 years old. She has 02 children (01 daughters & 01 son). Every child is literate. Her husband Syed Shafiq is a very supportive spouse who usually encourages his wife in making decisions for the family. She is not restricted by her husband; therefore, she is allowed to travel alone. She is the owner of the land but she is unaware of how much area she owns.

She hired a maid to assist her in order to perform common household tasks because she felt overburdened by household duties. She is well aware of farming and crops. She was also interested in farming activities. Although she is aware of the NPIWC project, she is not familiar with WUAs.

Before Intervention

According to Mrs. Maida Naqvi, the main problem in the village of Gujar Bandi is water scarcity, which has reduced crop productivity and yield. They were spending a lot of money on water tanks prior to the construction of the water storage tank. Mrs. Maida stated that they previously purchased four water tanks on their farm on alternate days. There were spending approx. 16000/- PKR per week on water tanks, which cost 2000/- PKR each. Four water tanks were used within three days. Only agricultural and dairy farms were served by this water. They produced fewer crops and had few labors. They intended to grow more crops and vegetables but were unable due to a shortage of water. Mrs. Maida explained that her husband had previously planned to expand the commercial dairy business but was unable to do effectively due to a lack of water, which prevented him from cultivating fodder.

Impact of Intervention

Her husband expanded his dairy farm after the intervention and they no longer needed to buy the water tanks for livestock and farming activities. She admired the team and was extremely grateful for them as their 16000 PKR were saved. Now, her husband has a large dairy farm where he had over ten cows and thirty buffalos. He has grown maize marketed grass for use as cattle fodder. Since rainwater was saved and used, there is no longer a water shortage. She mentioned that everything is now done by machine, which saves time but more people are employed for their farms. She continued by saying that they were only selling 140 PKR for one-liter milk, which was a relatively cheap price compared to other dairy farms. They produce dairy products for their own consumption too. She is very much satisfied with the intervention. The advantages no longer only benefit the upper class but to the labor class as well. Additionally, they provided housing foodstuffs and crops to their farm labors to increase their agricultural production.

INTERVENTION # 4

Name of scheme	Kardala
Type of scheme	Watercourse
Union Council	Muzafarabad
Tehsil	Muzafarabad
District	Muzafarabad
Name of beneficiary	Mr. Muhib Ali
WUAs member	Chairmain
Female WUAs	0
Type of survey	Baseline

Mrs. Sehrish gave information to Social and Gender specialist (Ms. Abida Munir) regarding the intervention at Kardila village.

Beneficiary Information

Mrs. Sehrish is a 28-year-old woman. She belongs to Kardila village. She has done MSc. Her Husband Mr. Muhib Ali is a Government servant. She has 02 daughters. Her husband Mr. Muhib Ali is a very supportive spouse who usually encourages her in making decisions for the family. She is not restricted by her spouse; therefore, she is allowed to travel alone. She is owner of land she is unaware of how much land comes under her ownership.

She hired a maid to assist her who performs common household tasks because she felt overburdened by household chores. She is well-versed in farming and crops and she was also interested in farming activities although she is aware of the NPIWC project, she is not familiar with WUAs.

Before Intervention

Mrs. Sehrish told that Azad Kashmir's rain has not fallen sufficiently like in Punjab province. After 2005 earthquake, the land was unfertile. They only cultivated fodder for livestock. Mrs. Sehrish told before intervention they were cultivating fodder which resulted less amount of income generation. Earlier, they had to put more effort and time into their work but crops yield was not enough they could only cultivate fodder for their livestock. She explained that earlier, they had to put more effort and attention into their work crops yield was not increased.

After Intervention

Mrs. Sehrish shared that after 17 years of earthquakes now they got sufficient water after the intervention of the watercourse. Mrs. Sehrish was very grateful to the NPIWC-II program she explained that after the construction of the watercourse their need for agricultural water is fulfilled. Now they are cultivating rice and maize. Previously they were not cultivating rice, because rice is that type of crop which require more water as compared to other crops. Now that they have a sufficient water supply for their crops the yield has increased. Mrs. Sehrish shared that they had to hire labors now to complete the work effectively and efficiently in the field. Their time and money is saved after the intervention of NPIWC-II and WST. Now they have kept livestock on their farm. The advantages of the scheme are benefited by all. Additionally, they provided housing, foodstuffs, and crops to their farm labors. The employment is increasing whereas and poverty in decreasing.

INTERVENTION # 5

Name of scheme	Khatae
Type of scheme	Watercourse
Union Council	Khatae
Tehsil	Hadiyah Wala
District	Jhelum valley
Name of beneficiary	Mr. Ejaz
Type of survey	Baseline

Mrs. Shakeela gave information regarding intervention.

Beneficiary Information

Ms. Shakeela is 32-year-the old. She has completed primary education. Her Husband Mr. Ejaz is in the police forces. She has 02 daughters (02 years & 04 years) and 02 sons (10 years and 12 years). Shakeela's husband is a very supportive spouse who usually encourages his wife in making decisions for the family. She is not restricted by her spouse and therefore, is allowed to travel alone. She doesn't own any land. She didn't hire a maid to assist her because she can't afford to pay the salary. She was also interested in farming activities. Although she doesn't know about NPIWC -II project as well with WUAs. Mr. Muhib is a very sensible and humble person who keeps his wife involved in all decisions. She told that her husband is very cooperative and she can go outside without her husband's permission, there is no such restriction from her husband's side. She was well aware of the crops.

Before Intervention

According to Mrs. Shakeela that before the intervention of the watercourse we had to travel to collect the water from far away of their houses. Before the intervention, they faced many problems related to domestic water supply. They had to travel more than an hour for fetching water. Their life was very hard because tap water was not sufficient to fulfill their domestic water needs in their area. After completing the household chores, she went to collect the water accompanied by her children which caused an effect on their studies of the children. The children were unable to focus on their studies and their homework was usually incomplete. It was very hard to collect sufficient water for domestic purposes because more water means more human resources and she faced health issues due to carrying heavy water buckets and pots. She further told that she can't leave their children alone at home. Because nobody was there to look after the children, the majority of household activity was done by female members. She shared that in crucial weather they were compelled to collect water. Male members have not participated in water collection activity as they were busy with jobs outside the village. They can't take leave from their job and can't go alone for fetching water.

After Intervention

Mrs. Shakeela is very thankful to the team that after construction of watercourses now their time is saved. Watercourse is so near from there house that there is no need to travel far away. They can use sufficient water without any tension. They are utilizing using water for washing dishes, clothes, cleaning home and bathing/personal & domestic hygiene etc. They have now time for other household task. Mrs. Shakeela shared she is doing kitchen gardening at home level, in her spare time because water is no problem for them anymore.
Now their health related issues are resolved as she didn't have to carry heavy pot and travel for long She is rather spending more time with her family.

INTERVENTION # 6

Name of scheme	Hatiya wala village
Type of scheme	Watercourse
Union Council	Khatae
Tehsil	Hadiyah Wala
District	Jhelum valley
Name of beneficiary	Muhammad Naveed
Type of survey	Baseline

Gardening information with beneficiaries at Hatiya wala village Muzafarabad

Beneficiary Information

Nagina belongs to Hatiya wala Bala village. She is 35 years old. She has 03 daughters and 02 sons. She shared that she is illiterate but her all children are studying in school. Her husband is daily wage labour. Her husband Muhammad Naveed is a very supportive spouse who usually encourages his wife in making decisions of the family. She is not restricted by her spouse; therefore, she is allowed to travel alone. She does not own any land.

She didn't hire a maid to assist her because she can't afford the salary of maid. She has done all household activities like cooking washing dishes & clothes, cleaning home, take care of children as well as older family members. Ms. Nagina also participate in animal gazing. She also made dairy items like butter, desi ghee. She was also interested in farming activities. She was well aware of the crops. Mrs. Nageena shared that after completing her household task she goes out for feeding the animals near farm. She also gives bath to milking animals. She shared that both husband and wife had to do work for fulfill their basic needs. They were also selling the milk and dairy products. She further told that in their area there was no health facility nearby their residence. She highlighted the drinking water issues in her area. their work but crops yield was not increased. They wanted to cultivate more crops in their farm.

After Intervension

Nagina shared that after the intervention they got sufficient water in the area. She explained that after construction of watercourses their need of agriculture water is fulfilled. Now they are cultivating maize and other vegetables in more quantity. shared that they have hired labors to work effectively and efficiently in the farm by doing so

they've saved both time and money. They have also kept livestock in their farm. She explained that earlier, they had to put much effort and attention into their work but crops yield was not according to their desire. Additionally, they providing vegetables to their farm labors.

INTERVENTION # 7

Name of scheme	Khatae
Type of scheme	Watercourse
Union Council	Khatae
Tehsil	Hadiyah Bala
District	Jhelum valley
Name of beneficiary	Haji Qadoos
Type of survey	Baseline

Khatae watercourse

Beneficiary Information

Ms. Rehana is 22-year-old. She lives with her family as her husband gave him divorced after 07 months of her marriage life. She is studying in madrasa to complete the Alima course. Her father is a very helpful man who encourages her daughter to get education. She shared that there is no restriction by her parents therefore, she can travel alone. She has a land but she doesn't know how much area she actually owns. She further told that she will hand her land to her brother because in their culture women gives their land to their male members.

She didn't hire a maid to assist her because her father can't afford to pay her or give her salary. She is interested in farming activities although she doesn't know about NPIWC project as well with WUAs.

Before Intervention

Before the intervention of watercourses, Ms. Rehana said, individuals had to go long distances to collect water from far away from their dwellings. Before the intervention, Ms. Rehana added, there were several problems regarding domestic water consumption, for water collection they have to travel for more than an hour. For the purpose of getting water, they cannot travel alone because the tap water in their area was insufficient to meet their domestic water requirements and this had made their lives really hard. They performed their household chores and then travel far away accompanying other women to fetch the water. It was extremely difficult to gather enough water for domestic needs since more water requires more manpower. Sometimes they slip over the weight of the water pot, ruining the entire water supply and wasting their precious time due to the weight of the water bucket and pots. This activity caused her various health issues. Sometimes they were going to be late from the water gathering task. Majority of home chores were performed by women. Men weren't involved in the activity of fetching water. They had a lot of work to do that their requirements cannot be met by the water they carry from the farfarlag region. They occasionally have to spend the entire day doing laundry. They wash their clothing at the nearby water source and they returned after drying the clothing.

After Intervention

Ms. Rehana is satisfied with the intervention. She told that her time is saved and have less work to do. In addition, she told that the intervention has been appreciated by more women because they have enough water for domestic usage. They can wash their dishes, clothing, and clean their house without any hassle. As part of their home level, they also began kitchen gardening. They don't need to wait more for water because it flows continuously. However, they live fearlessly since the watercourse is so close to their home. Now there is no need to visit health facility and spend money on medicines, because now there is no need to travel so long with heavy pots, bottles.

INTERVENTION # 8

Name of scheme	Dhani Mai Sahiba
Type of scheme	Watercourse

Union Council	Seri Darra
Tehsil	Muzafarabad
District	Muzafarabad
Name of beneficiary	Mr. Rafiq Abbasi
WUAs member	Chairmain
Type of survey	Midline
WUAs female member	01

Dhani Mai Sahiba Watercourse

Beneficiary Information

Nosheen is 38 years old woman. Nosheen is a housewife. Mr. Rafiq Abbasi is her husband and is 62 years old. He is a landlord. She has four children. Her husband is an incredibly encouraging partner who frequently supports his wife in making decisions for the family. She is allowed to go alone because her spouse does not have any restrictions. She doesn't possess any land. She decided not to hire a maid in order to keep herself occupied with domestic duties. She is taking care of all domestic chores, including washing the dishes, cleaning the house, and caring for the animals. She is unaware of the NPIWC-II and doesn't know about WUAs.
She participated in farming tasks and was well aware of the crops.

Before Intervention

According to Mrs. Nosheen, Azad Kashmir does not receive as much rainfall as the Punjab province, and as a result, the soil remained. They only cultivated fodder for livestock Mrs. Nosheen was very grateful to NPIWC-II program. Before the intervention, according to Mrs. Nosheen they were growing vegetables and fodder, thus they were only making a very small profit. In the past, she said, they had to put in more time and effort, but agricultural productivity did not grow. They desired expanding their farm's crop yield.

After Intervention

According to Mrs. Nosheen after the intervention, they received enough water for crops. She said that after the construction of watercourse their water requirement for cultivation was fulfilled. Maize and other vegetables are now growing more. They are also giving work to landless and unemployed workers on farms in order to work efficiently and perfectly.

INTERVENTION # 9

Name of scheme	Dhani Mai Sahiba
Type of scheme	Watercourse
Union Council	Seri Dara
Tehsil	Muzafarabad
District	Muzafarabad
Name of beneficiary	Malik Aman
Type of survey	Midline

Khurshid Bibi describe the intervention impact at Dhai Mai Sahiba village Muzafarabad

Beneficiary Information

Khurshid Bibi is 65-year-old. Her Husband Mr. Malik Aman is retired from Government job. She has 01 son. She lost her 04 children in 2006 earthquake.
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. She is landless. She didn't hire a maid because she wanted to busy herself in household activities. She is doing all household activities like washing clothes, and dishes, cleaning home, milking & bathing animal

Although she doesn't know about NPIWC-II project as well with WUAs. She was well aware of the crops and also participating in farming activities.

Before Intervention

Mrs. Khurshid Bibi told that Azad Kashmir rain has not fallen sufficient like Punjab province after the 2005 earthquake the land was unfertile. She told that water is a big issue in her area. They only cultivated fodder for livestock. Mrs. Sehrish told before intervention they were cultivating fodder and vegetables therefore; they were not getting a big amount of profit in a very lesser amount. She explained that earlier, they had to put more effort and time into their work but crop yield was not increased. They wanted to cultivate more crops in their farm.

After Intervention

Khurshid Bibi shared that after the intervention they got sufficient water. She explained that after construction of watercourses their need of agriculture water is fulfill. Now they are cultivating maize and other vegetables in more quantity. Khurshid Bibi shared that they have hired labors also to work for effectively and efficiently in the farm. They've now saved both time and money. Now they keep livestock in their farm. She explained that earlier, they had to put more effort and attention into their work but crops yield was not increased.

The advantages no longer only benefit the upper class Additionally, they providing vegetables to their farm labors

OVERALL FINDING/OBSERVATIONS

1. Most Kashmiri women are participating in farming activities.
2. Women doing kitchen gardening at the home level.
3. Picking activity done by female farmers, and all other remaining hard farming activities done by male members.
4. Household chores are done by female members. Male doesn't assist female in household activities.
5. Livestock care and bathing activity is done by female members.
6. Female members are making dairy products for their personal use and for business purposes.
7. There is no restriction on female members to work in fields. Females are not restricted by male members which means they can go anywhere alone.
8. Male members are very cooperative and supportive and encourage females, to give their opinion on vital family decisions.
9. It was observed that most female members were permitted to take pictures during interviews.
10. Majority female members are land owners but don't know how much area they owned. According to them that they can give their property to male members. It is in their culture/custom and they have to do it. They have no issue in transferring their land to male members.
11. Water collection activity is done by females and children. Male members are not participating in the water collection activity.
12. Most of the females hired maids for assisting them in household chores.
13. Mostly females are unaware of the NPIWC II project as well as WUAS.
14. It was observed that female is members of WUAs Dhani Mai Sahiba and Maira Duppata village.

s.#	Before Intervention	After Intervention
1	Insufficient water for crops and less yield. The farmers were making very less profit	The community received sufficient water for crops and now yield has increased.
2	Below-poverty families were unemployed. No opportunity for work as a labor.	Below-average poverty labors got the opportunity to work on farms, and landlords provided them shelter.
3	Most females have to travel for more than an hour for collection of domestic water. Women faced health issues to traveling with water containers.	Now time is saved and there is no need to travel. The water course is nearby to their home.

4	Azad Kashmir does not receive as much rainfall as the Punjab province, which results in the soil remaining unfertile.	The water issue was resolved and now yield increased. The crop yield has increased.
5	They were spending a lot of money on purchasing vegetables, crops, and dairy products from the market.	Now they are using their own crops and vegetables from their own farm which are fresh and healthy. It saves a lot of their money as well as time saved.
6	Females were doing kitchen gardening on the home level only.	Now female members are practically engaged in both personal and professional kitchen gardening.
7	Multi-cropping	Several seasonal vegetables like okra, kurram saag (Hybrid Sarsong), and onions are cultivated.
8	Less to no knowledge of agriculture equipment	Agriculture knowledge improved. Farming efforts are simpler and more profitable. Most farming activities are done by machine, which saves time.
9	Difficulties in less fodder production	Now they do fodder production to keep livestock on their farm. They are producing professional dairy farms activities.
10	No cultivation of rice crops because this crop required more water as compared to other crops.	Now they have sufficient water for the rice crops. The requirement of water is fulfilled which results in a high yield.
11	Before WUAs were not formed.	WUAs (Male) are very active so there is a reduction in water-related disputes.
13	The electricity bill cost very high	Reduction in electricity bill.

FOCUS GROUP DISCUSSION

The Government of Pakistan is implementing a project entitled "National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II). The NPIWC-II comprises four components to be implemented in Punjab, KP, Balochistan, GB, AJK, and ICT: The Project Development Objectives (PDO) are to improve irrigation water management at tertiary and field levels in Pakistan.

Generally, in the rural set up of Pakistan women's involvement in agricultural farming and livestock rearing is often unpaid. So does seen in AJK, there females are considered to be the helping hands of their male family members. Agricultural labor is an extra workload done by these females who are also engaged in performing household chores and looking after their family and children. However, there are many women who also work in other farmer's fields. These women are engaged in activities includes the cultivation and harvesting of different crops; moreover, they get money against their labor, and there are some who are working as housemaids.

The engagement of women in the rural workforce is often influenced by social, economic, and cultural contexts, and in some social systems, it is also strongly influenced by religious norms. There are similarities in rural women's engagement in agriculture farming, livestock rearing, domestic chores, groundwater management, and other economic activities in different provinces in Pakistan, but there are also some observed dissimilarities

Focus group disccuion at Khatae village Muzafarabad

INTRODUCTION

A Focus group discussion was conducted in Khatae village with 10 female beneficiaries to explore their views regarding intervention. The purpose of the FGD is to together with females from similar

backgrounds and experiences discuss the impact of the intervention. Most female belongs to the same village Khatae. The FGDs were held separately for female farmers. Most of the females are involved in farming activities. Water is the main issue in the area. Due to insufficient water, most farmers faced problems.

METHODOLOGY

Social al & Gender specialists conducted FGD with the female farmers of the area named Khatae. Focus group discussion was arranged in a common venue where females can reach easily without any issue. Target audience were 10 adult females who have farming knowledge and also from the same area and languages were selected for the discussion. Venue and time were decided with the mutual consensus of the female beneficiaries. Tool for the FGD were developed as per required data.

OBJECTIVES

- identify the role of women in agriculture and other associated fields
- Situation before the intervention.
- Impact of intervention/watercourse in the area.

KEY FINDINGS

- Azad Kashmir does not receive as much rainfall as the Punjab province, which results in the soil remaining unfertile.
- Women's agricultural labor is an extra workload besides doing household chores and caring for children and family elders.
- Female farmers also worked together with male farmers on the field. Mostly, the crops are grown by men as compared to women whereas picking and soil cleaning activity done by female farmers.
- Mostly males participated in market activities. The majority of male farmers are involved in marketing activities. Females farmer are not allowed to go to market, due to cultural constraints.
- Before the intervention they faced many problems in farming and yield was less due to insufficient water and they got very less profit.
- Females were not doing multi-cropping due to water shortage.
- There was no female organization before the intervention.
- Females were doing kitchen gardening on the home level due to a shortage of water.
- They were spending a lot of money on purchasing vegetables, crops, and dairy products from the market.
- Most females have to travel for more than an hour for the collection of domestic water. Women faced health issues to traveling with water containers.
- According to the female participant " **kia pani bharna sirf aurat ka kam hy**" (does water collection a task for women?)
- No cultivation of rice crops because this crop required more water as compared to other crops.
- Females were doing kitchen gardening on the home level only.
- Below-poverty families were unemployed. No opportunity for work as a labor.
- No cultivation of rice crops because this crop required more water as compared to other crops.

CONCLUSION

- The farmers are facing many issues including scarcity of both domestic and irrigation water, land degradation due to water logging and salinity, and low agricultural production. These issues have significantly affected the livelihood sources of farming communities and pushed them towards poverty.
- The involvement of women in agriculture production is more than men but they are not appreciated due to social and cultural norms. These restrictions keep these women away from natural resources and decision-making.
- Women are mostly involved in pre and post-crop production like sowing, thinning, weeding, picking, harvesting and seed storage.
- In relation to households, women play an important role in water management, as there they are the collectors, users and managers of water. Because of these roles, women have considerable knowledge about water resources, including quality and reliability, restrictions, and acceptable storage methods.
- Women do not play any role in decision-making regarding water management at

the field level, purchase/sale of farming implements, land preparation, and determination of type and amount of fertilizers (pesticides, herbicides) used due to traditional and cultural barriers.

- The community received sufficient water for crops and now yield has been increased.
- Below-average poverty labors got the opportunity to work on farms, and landlords provide them shelter.
- Time is saved and there is no need to travel far. The water course is nearby to their home.
- The water issue was resolved and now yield is increased.
- Beneficiaries are using their own crops and vegetables from their own farm which are fresh and healthy. It saves a lot of their money as well as time saved.
- Female members are practically engaged in both personal and professional kitchen gardening. Several seasonal vegetables like okra, kurram saag (Hybrid Sarsong), and onions are cultivated.
- Agriculture knowledge improved. Farming efforts are simpler and more profitable.
- Most farming activities are done by machine, which saves time and effort.
- WUAs (Male) are very active so there is a reduction in water-related disputes.
- Beneficiaries are involved in fodder production to keep livestock on their farm. They are producing professional dairy farm activities.
- Rural women are undertaking a lot of work; their work is not well acknowledged by male members as well as society.

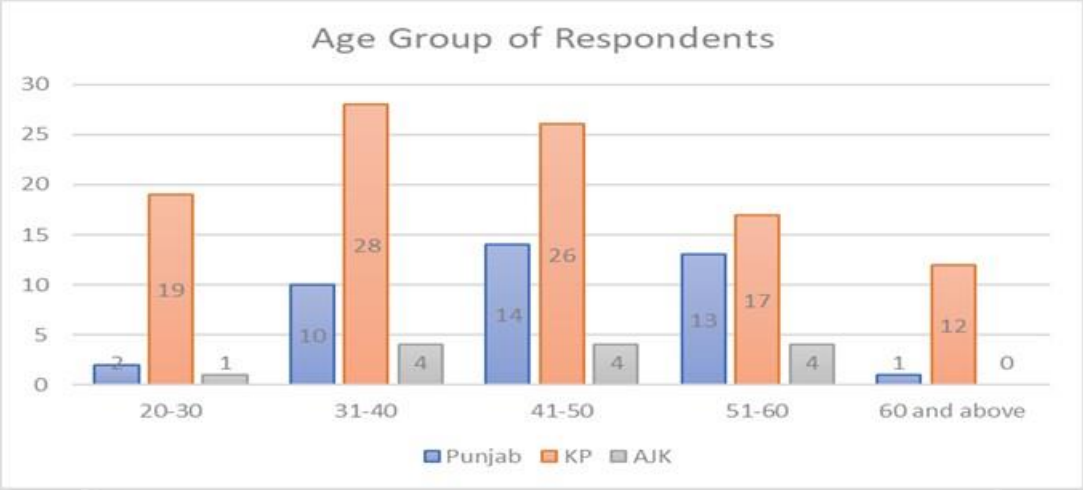
ANALYSIS

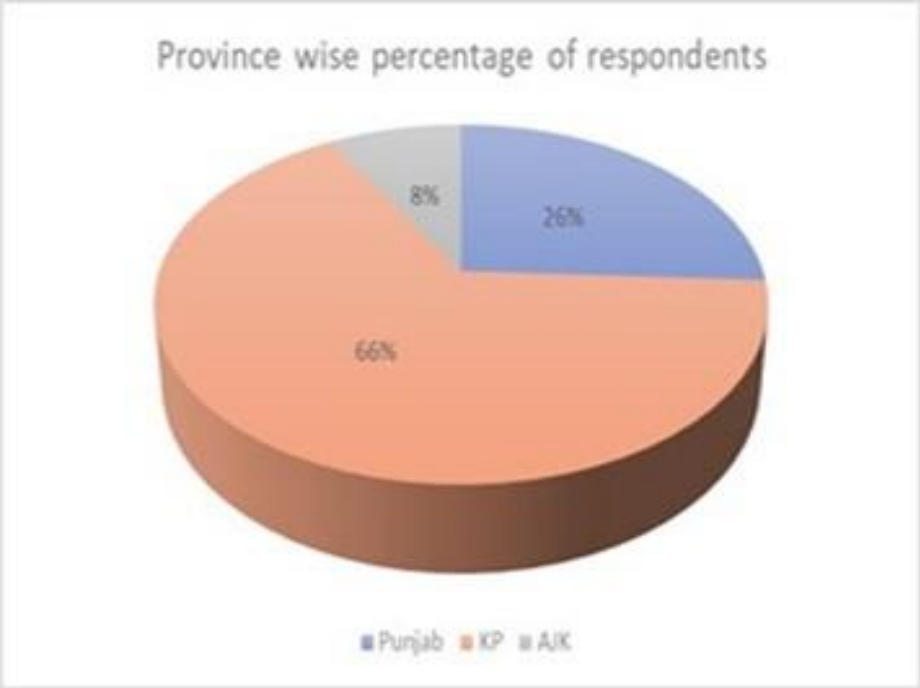
AGE GROUP

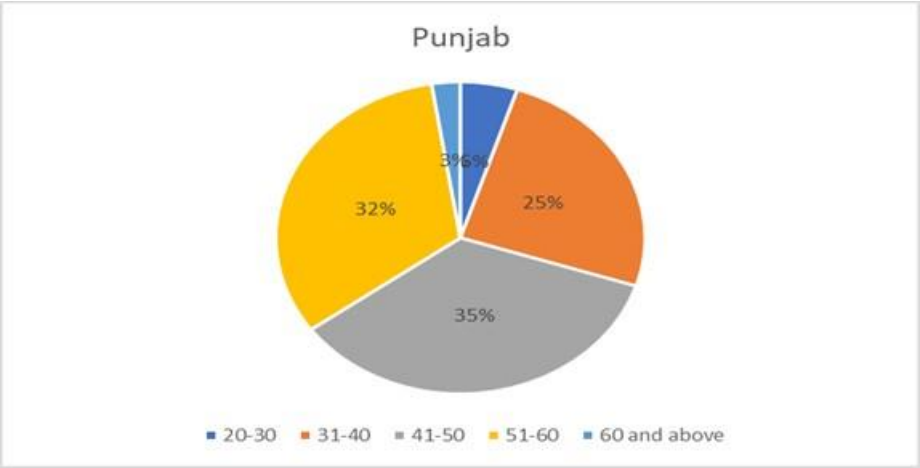
Most of the respondents are in 41 to 50 age group i.e. 44 is equal to 44%. And 42% in between 31 to 40 years' age bracket. 24 % is 50 to 60 years .6.64%is among 20 to 30 age bracket. Data depicts that most of them are not working or taking part in irrigational activities if we analyses the above tables

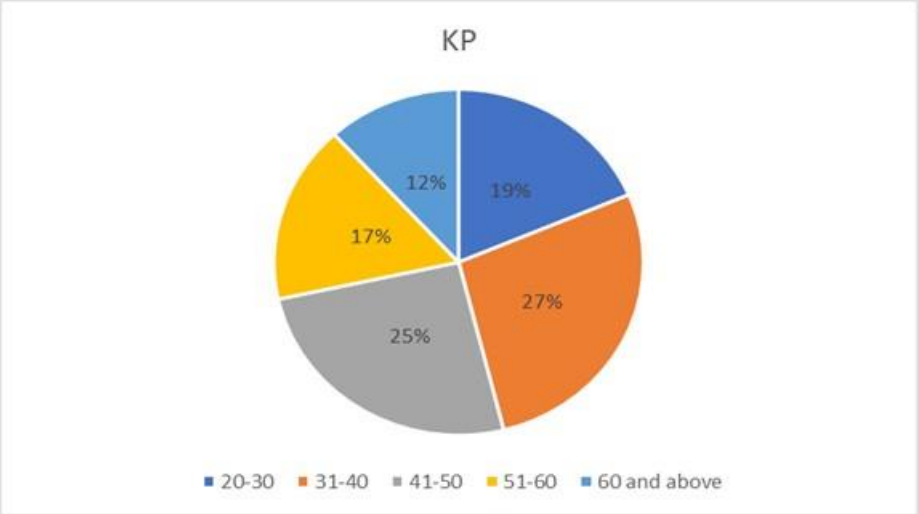
Age Group

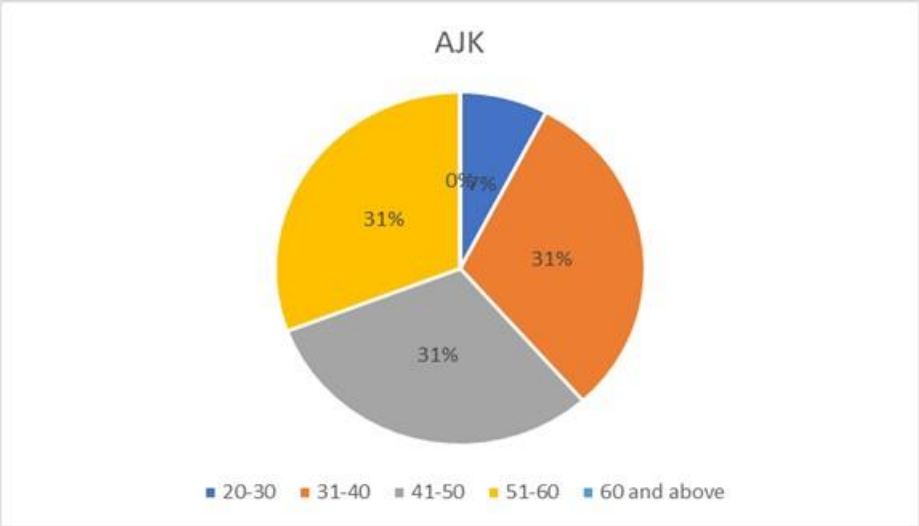
Zone/Unit	20-30	31-40	41-50	51-60	60 and above	Overall
Punjab	2	10	14	13	1	40
KP	19	28	26	17	12	102
AJK	1	4	4	4	0	13
Overall	**22**	**42**	**44**	**34**	**13**	**155**


Age Group of Respondents
30
25
20
15
10
5
0
2
19
1
10
28
4
14
26
4
13
17
4
1
12
0
20-30
31-40
41-50
51-60
60 and above
Punjab
KP
AJK


Province wise percentage of respondents
8%
26%
66%
Punjab
KP
AJK


Punjab
3%
6%
32%
25%
35%
20-30
31-40
41-50
51-60
60 and above





EDUCATION LEVEL

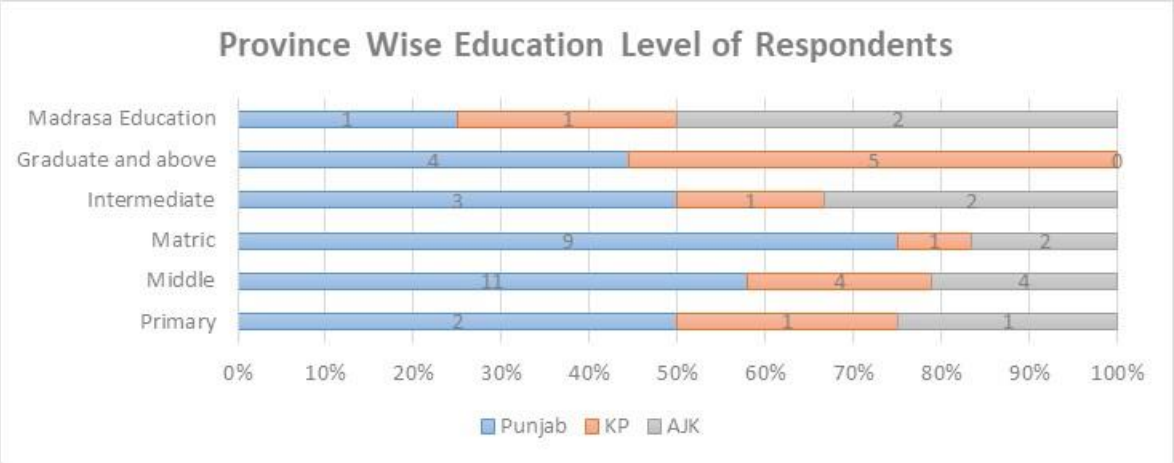
Literacy rate is not very high in rural areas as compared to the urban areas in Pakistan. According to the statistics in Punjab 30/54 respondents are literate while in KPK 13/ 54 respondents are literate and talking about AJK 11/54 respondents are literate. The highest illiteracy rate was in KPK with 89%.

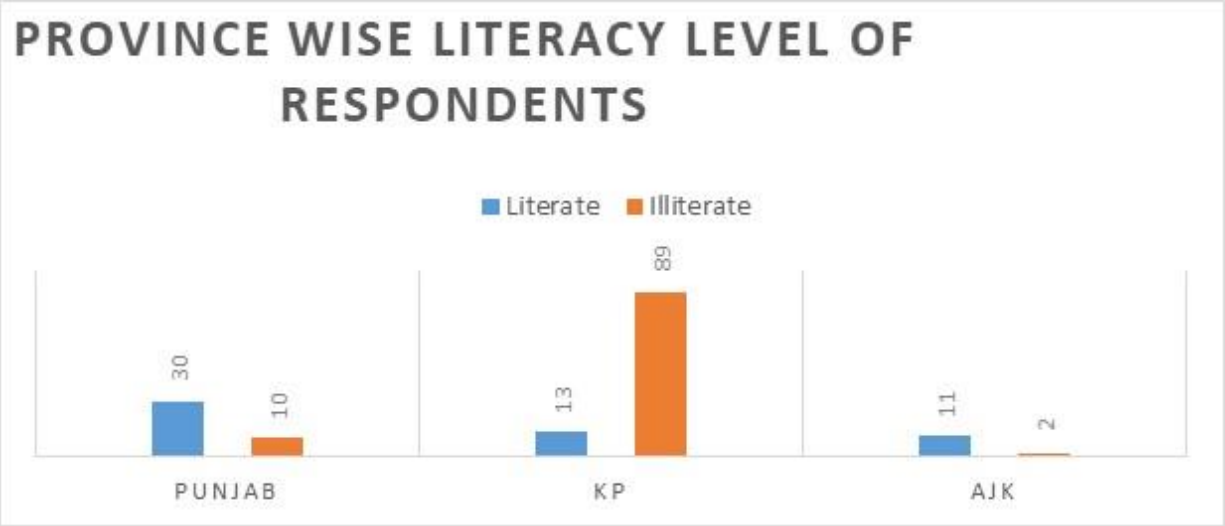
Education Level

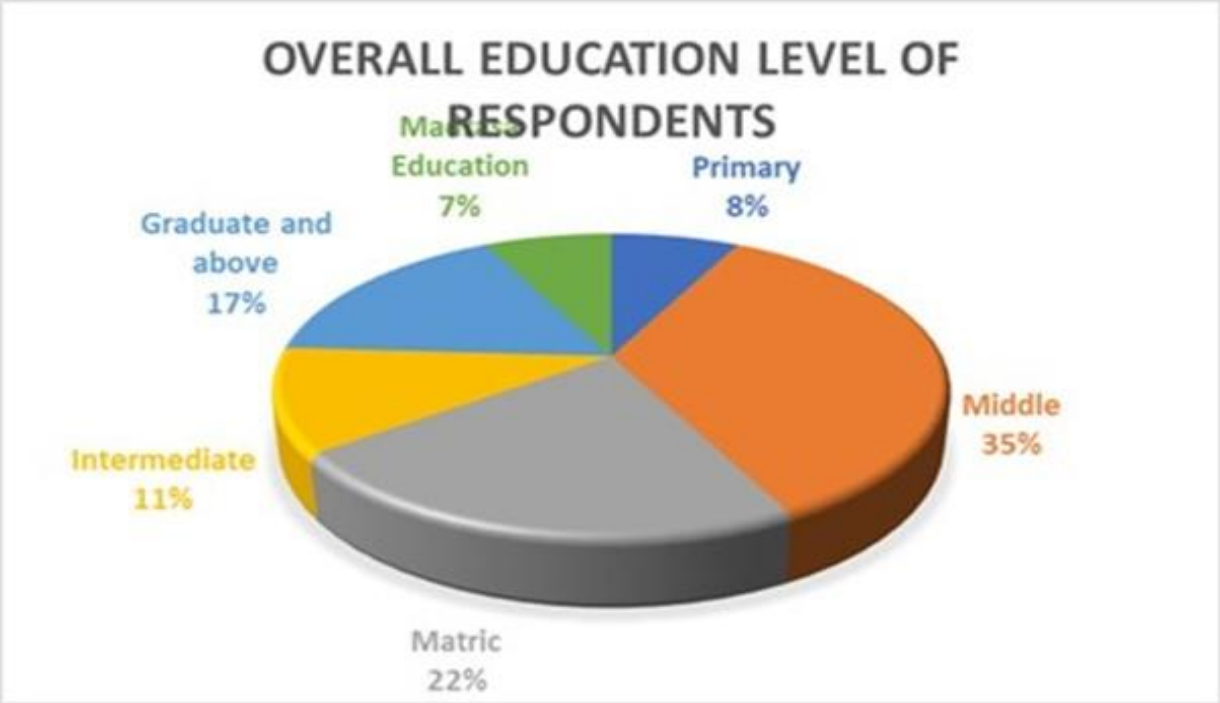
Zone/Unit	Primary	Middle	Matric	Intermediate	Graduate and above	Madrasa Education	Overall
Punjab	2	11	9	3	4	1	30
KP	1	4	1	1	5	1	13
AJK	1	4	2	2	0	2	11
Overall	**4**	**19**	**12**	**6**	**9**	**4**	**54**

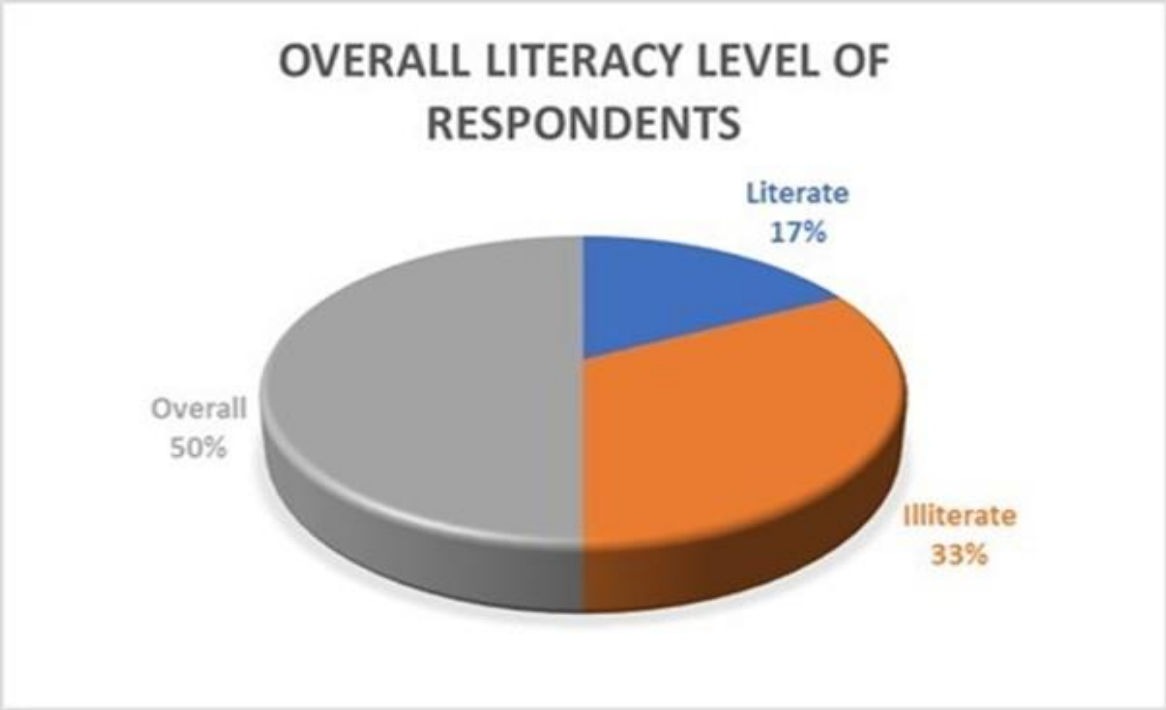
Literacy Level

Zone/Unit	Literate	Illiterate	Overall
Punjab	30	10	40
KP	13	89	102
AJK	11	2	13
Overall	**54**	**101**	**155**






OVERALL EDUCATION LEVEL OF RESPONDENTS
Education
7%
Primary
8%
Graduate and above
17%
Middle
35%
Intermediate
11%
Matric
22%

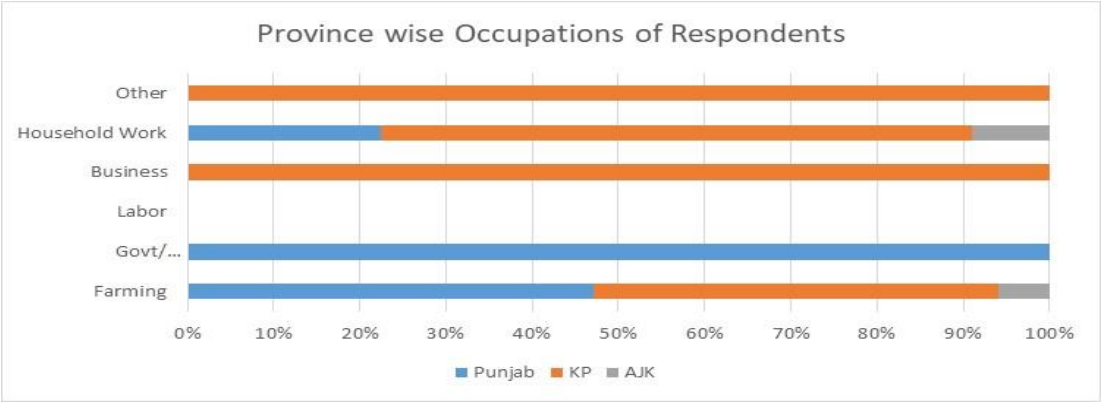

OVERALL LITERACY LEVEL OF RESPONDENTS
Literate
17%
Overall
50%
Illiterate
33%

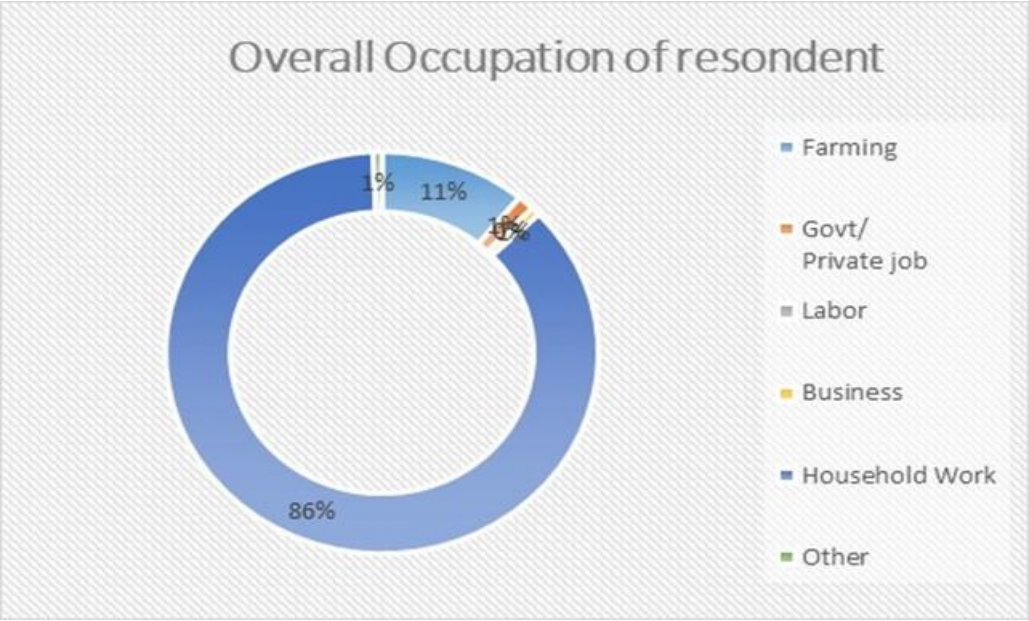
OCCUPATION

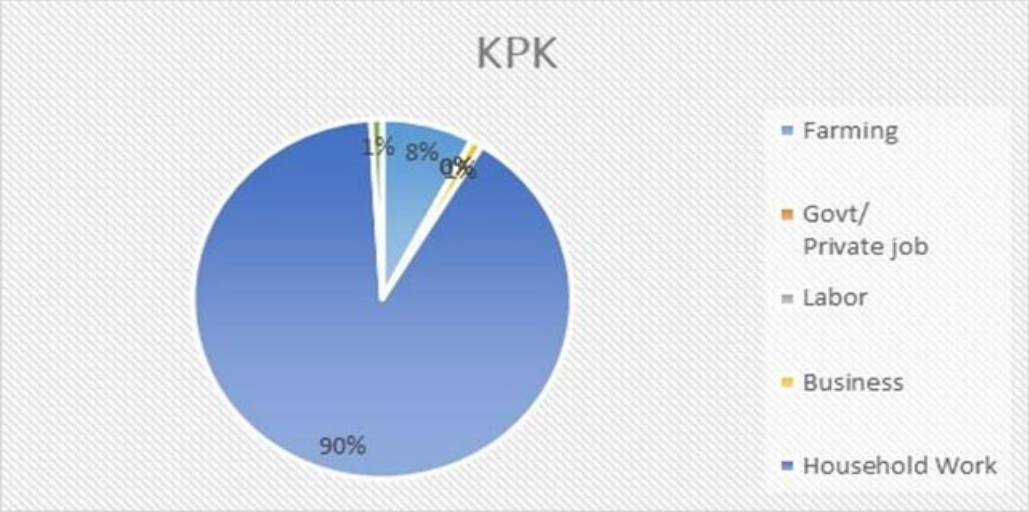
Pakistan's population is consisting of 51 percent of women. The below data clearly shows that out of 155 females 17 are only linked with farming meaning 11%. 134 females are involved in household work 86% are involved in household work and not much contributing in income generation activities. In government jobs ratio is 2/155 according to the respondent's data and only 1 in business.

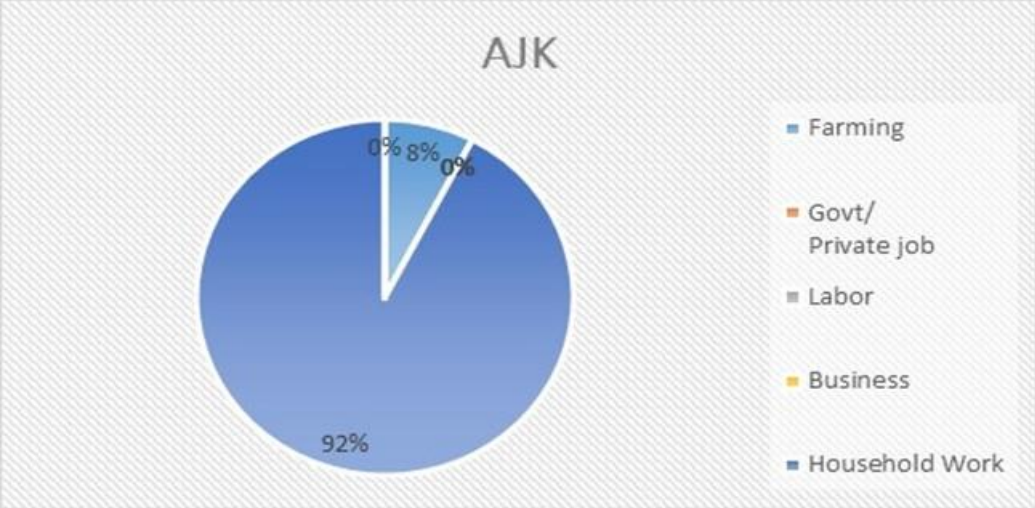
Occupation

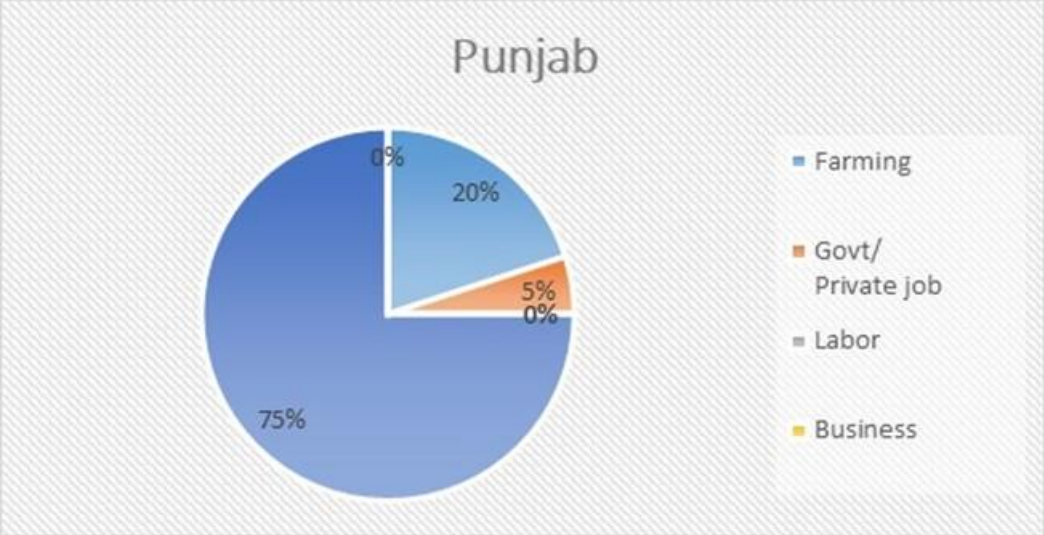
Zone/Unit	Farming	Govt/ Private job	Labor	Business	Household Work	Other	Overall
Punjab	8	2	0	0	30	0	40
KP	8	0	0	1	92	1	102
AJK	1	0	0	0	12	0	13
Overall	**17**	**2**	**0**	**1**	**134**	**1**	**155**






KPK
1%
8%
0%
90%
Farming
Govt/ Private job
Labor
Business
Household Work


AJK
0%
8%
0%
92%
Farming
Govt/ Private job
Labor
Business
Household Work

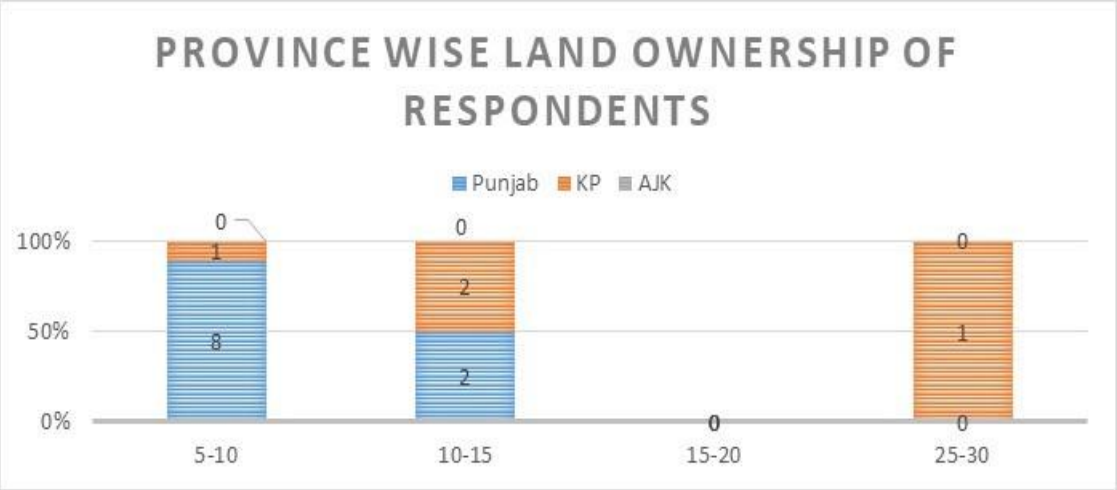

Punjab
0%
20%
5%
0%
75%
Farming
Govt/ Private job
Labor
Business

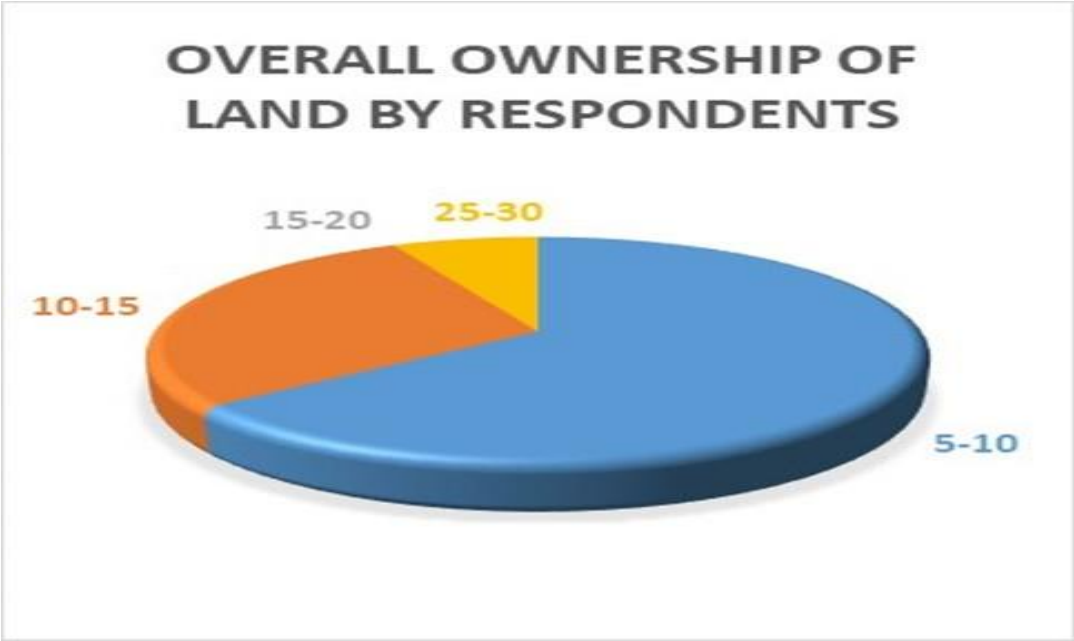
LAND OWNERSHIP

According to the statistics the ownership question clearly depicts the land holding. Due to cultural constrain female farmers were having lack of education and less knowledge. In Punjab it is found that 60.5 of respondents owns in between 5 to 10 acres in Punjab, 2 respondents answer 10 to 15. And in KPK 44.25 respondents owns a land between 5-10. 2 owns a land between 10 to 15 acres while 1 owns a land between 25-30 acres.

Land Ownership (Acres)

Zone/Unit	5-10	10-15	15-20	25-30	30-35	35-40	40-45	45-50	50 and above	Overall
Punjab	8	2	0	0	0	0	0	0	0	60.5
KP	1	2	0	1	0	0	0	0	0	44.25
AJK	0	0	0	0	0	0	0	0	0	0
Overall	**9**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**104.75**



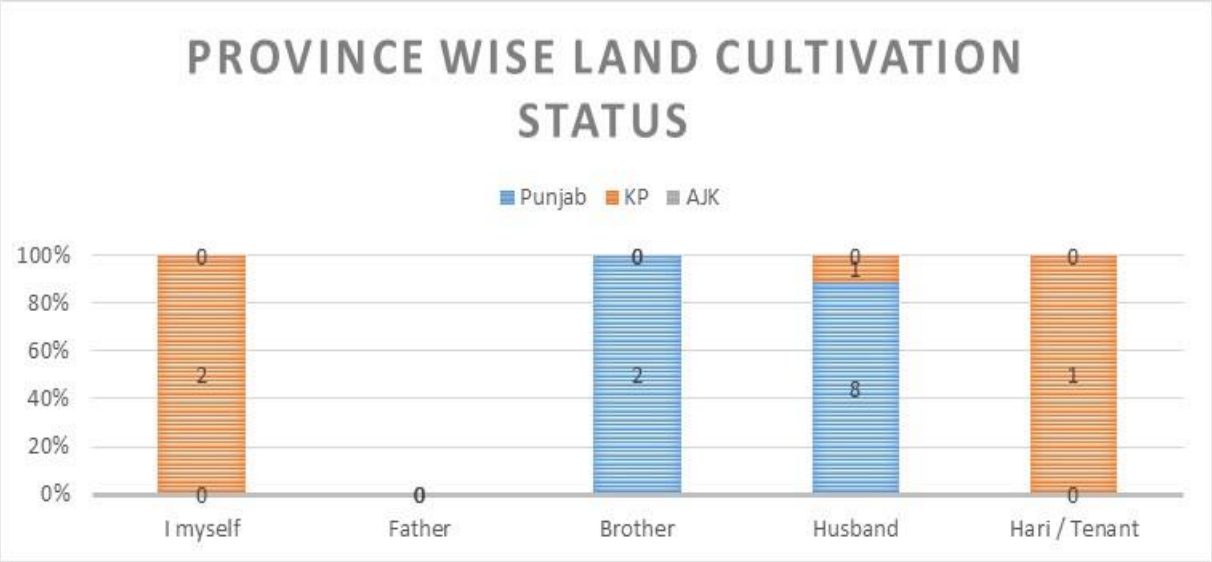


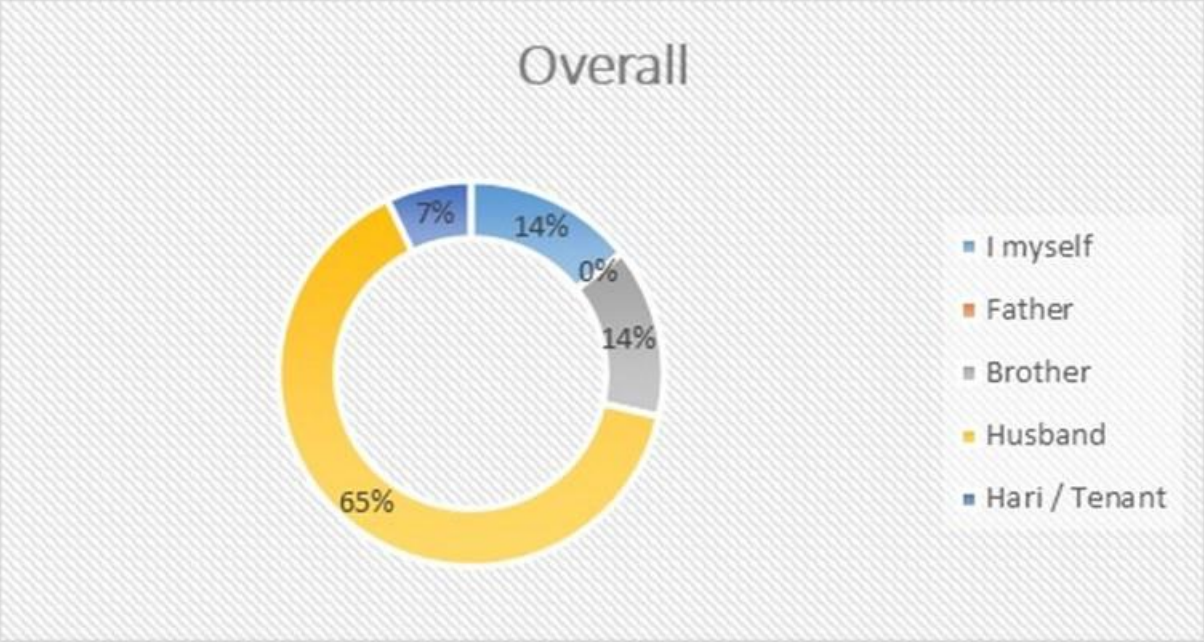
WHO CULTIVATES YOUR LAND

Land cultivation clearly depicts that all assets are owned by male family members and cultivation is the male's responsibility. This question is only answered by 14 respondents, out of which only 2 females were found who cultivate the land, and its 14% answered brothers. 65 % responded husband it means most of the respondents are married and knows that husband is cultivating.

Who Cultivates Your Land

Zone/Unit	I myself	Father	Brother	Husband	Hari / Tenant	Do not know	Overall
Punjab	0	0	2	8	0	0	10
KP	2	0	0	1	1	0	4
AJK	0	0	0	0	0	0	0
Overall	**2**	**0**	**2**	**9**	**1**	**0**	**14**





DECISION MAKING IN FARMING ACTIVITIES

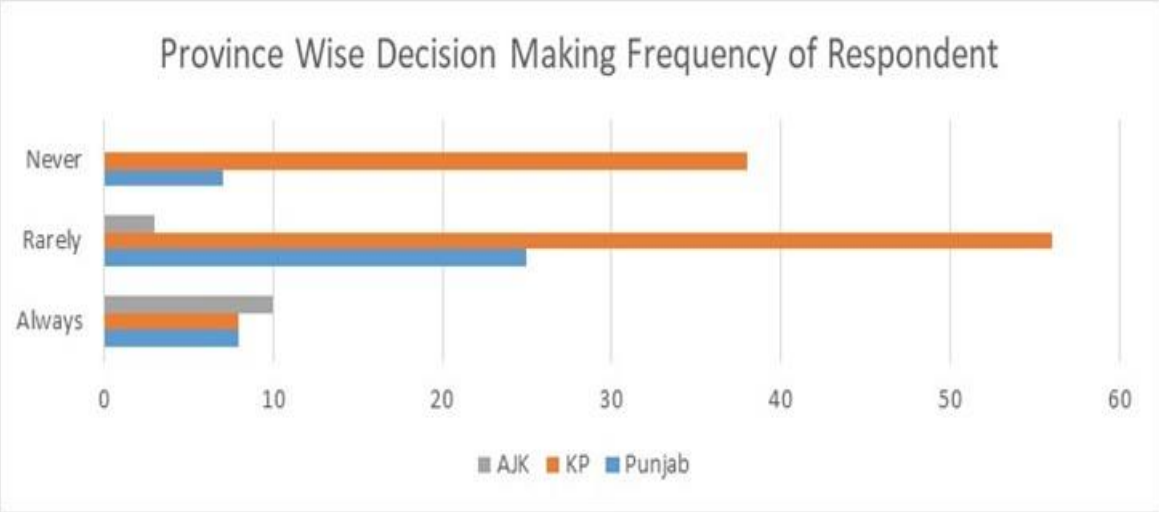
As per cultural norms, women are not joining in any decision-making, they are only contributing into house hold chores. So we can easily say that women are not allowed to take any decisions, mostly women are dependent on male family members. In Punjab7/40 respondents answered never which means that they didn't take part in decision making. 25/40 respondents answered rarely which depicts that they rarely are a part of decision making in the house while 8/40 respondents answered always.

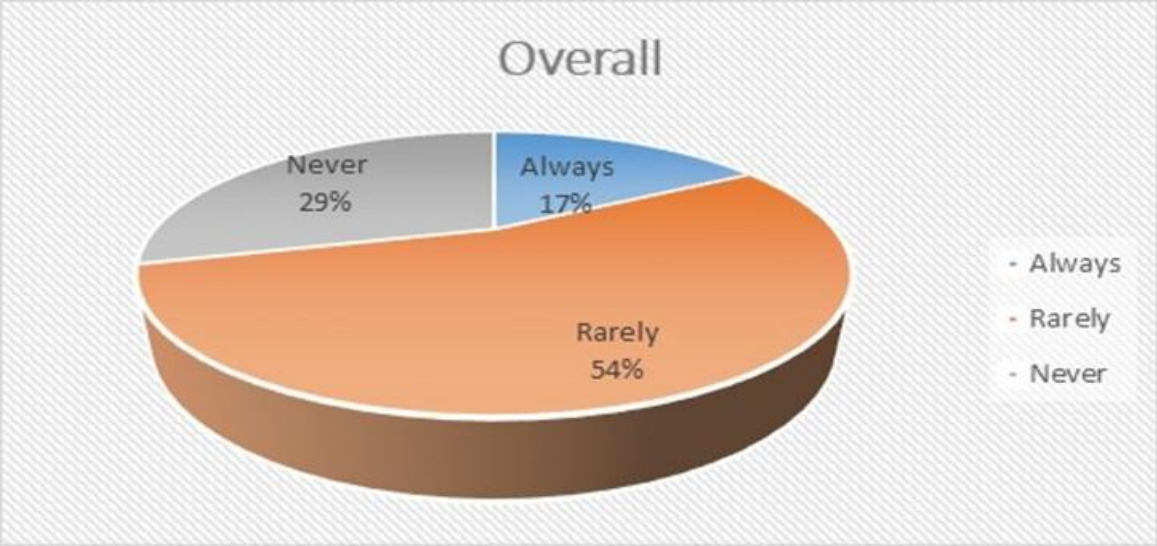
In KPK 38/102 respondents answered never which means that they didn't take part in decision making. 56/102 respondents answered rarely which depicts that they rarely are a part of decision making in the house while 8/102 respondents answered always.

In AJK 10/13 answered always which means that females in the area are given rights and authority to be a part of decision making.

Decision Making in Farming Activities

Zone/Unit	Always	Rarely	Never	Overall
Punjab	8	25	7	40
KP	8	56	38	102
AJK	10	3	0	13
Overall	**26**	**84**	**45**	**155**



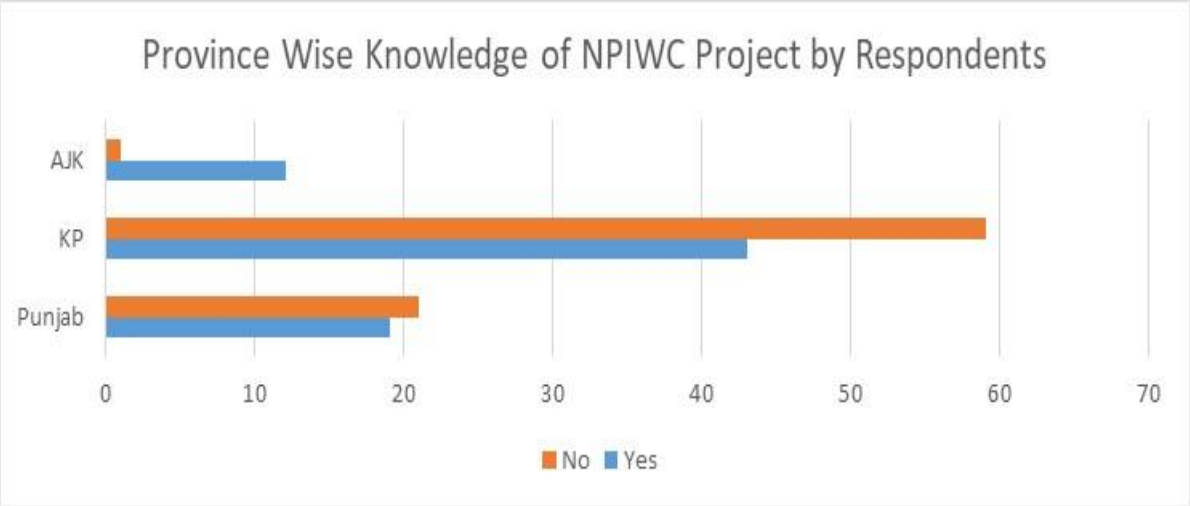


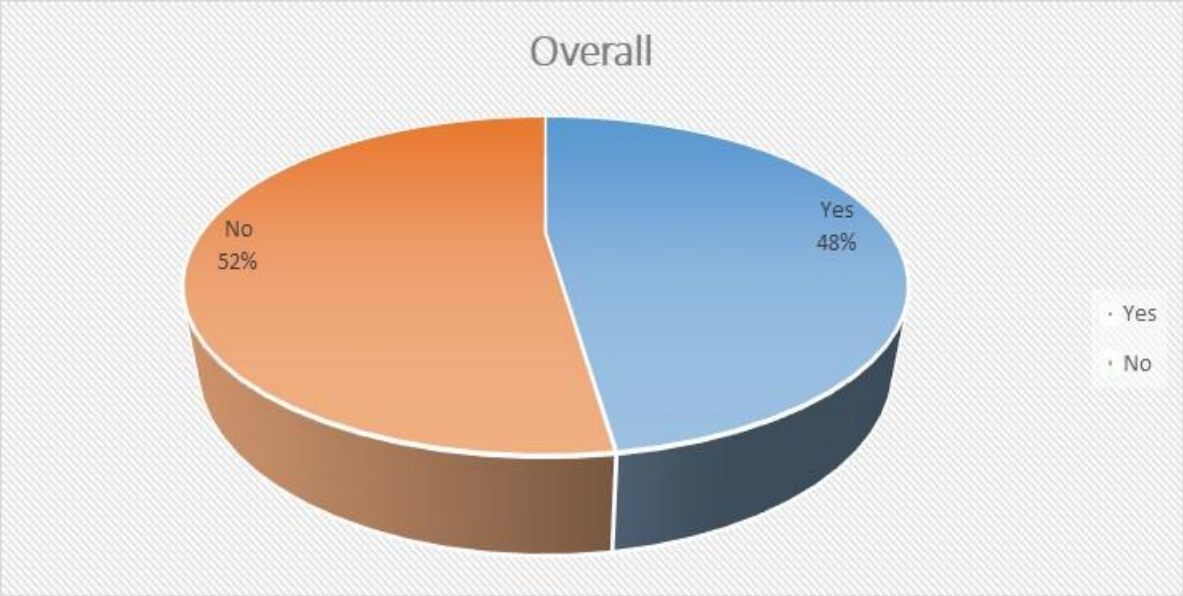
NPIWC-II PROJECT INFORMATION

After the completion of the visit the status clearly portrays that majority of the respondents had no information about NPIWC-II project in the areas of Punjab, KP and AJK. In Punjab, 19/40 responded yes which means only they had information regarding the project while 21 of them did not at all. In KPK 43/102 said yes while 59/102 had no information about NPIWC-II. In AJK, 12/13 said yes while 1/13 said no. Overall 48% people had information about the project.

NPIWC-II Project Information

Zone/Unit	Yes	No	Overall
Punjab	19	21	40
KP	43	59	102
AJK	12	1	13
Overall	**74**	**81**	**155**



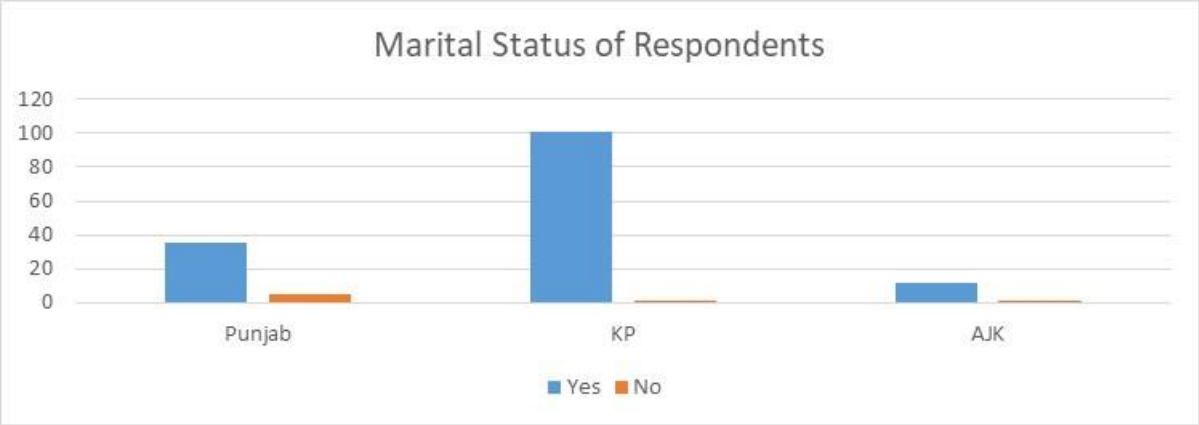


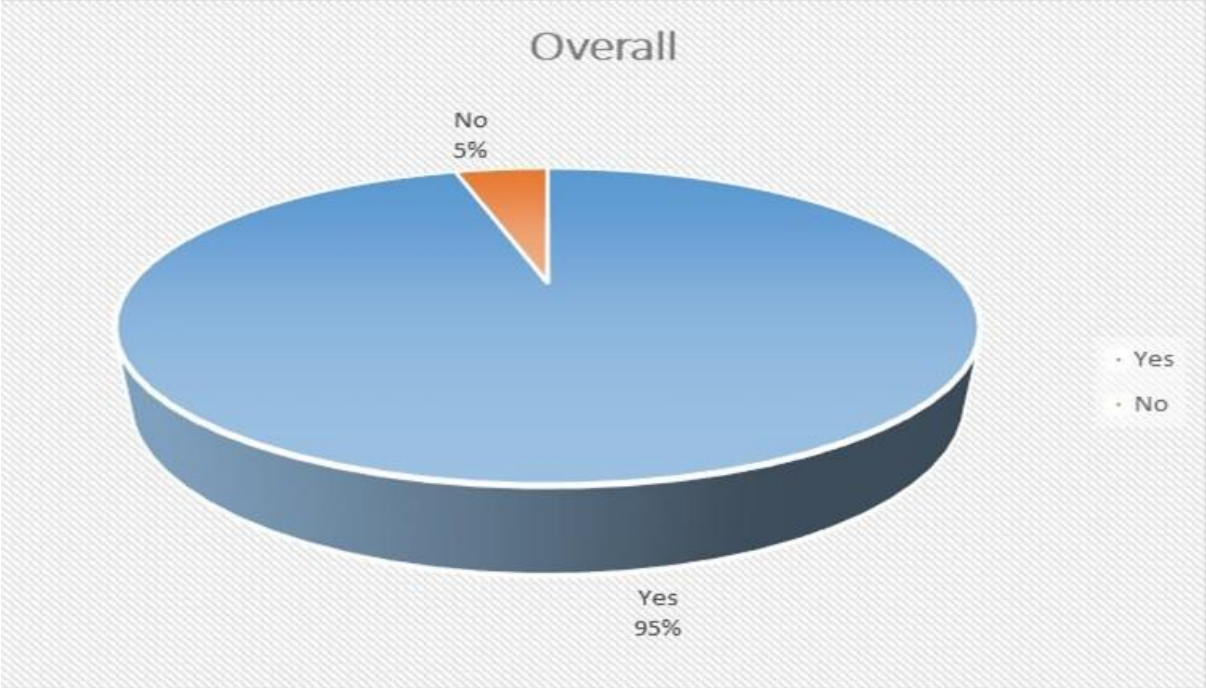
ARE YOU CURRENTLY MARRIED

Social and cultural norms of the project area clearly portray that early marriages are communal norm and culture, 148 answered yes overall 35/40 women in Punjab, 101/102 in KPK and in AJK 12/13 were found married during baseline. During base line different age groups answered the different questions. Early marriages were observed due to local customs can easily be seen only 5 % were found unmarried.

Are you currently married

Zone/Unit	Yes	No	Overall
Punjab	35	5	40
KP	101	1	102
AJK	12	1	13
Overall	**148**	**7**	**155**


Marital Status of Respondents
120
100
80
60
40
20
0
Punjab
KP
AJK
Yes
No


Overall
No
5%
Yes
95%
Yes
No