



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

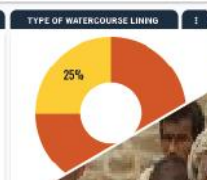
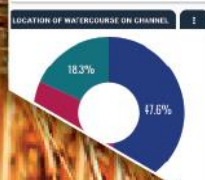
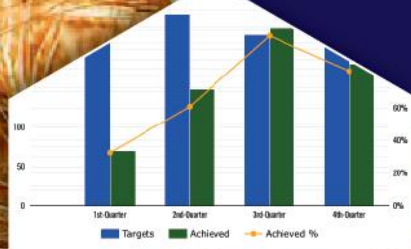
NATIONAL PROGRAM FOR IMPROVEMENT OF WATERCOURSES IN PAKISTAN PHASE-II: (NPIWC-II)

MONITORING, EVALUATION AND IMPACT EVALUATION CONSULTANTS



MONTHLY MONITORING REPORT

SEPTEMBER 2023



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



EASE-PAK

ADA
Consultants Inc.

In Association with **S&S Associates**



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

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

MONTHLY MONITORING REPORT

SEPTEMBER 2023

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ACRONYMS

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

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

EXECUTIVE SUMMARY

The “Monitoring Report for the month of September 2023” comprises five chapters:

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

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

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

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

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

Chapter-3 explains the purpose of the Monthly Monitoring Report (MMR). This current MMR covers the period from 1st September 2023 to 30th September 2023.

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

- Submission of Baseline (Phase I&II) Consolidated Report – Final
- Preparation of Consolidated Mid-Term Monitoring and Impact Evaluation Report
- Validation of Impact Survey
- Regular Monitoring of Interventions in the Field
- Monitoring online data collection and Data entry
- Monitoring Android based Mobile Application under implementation by field staff.
- Data collection of interventions in MIS/GIS database
- Preparation for 3rd-Phase Baseline Survey
- Data entry, cleaning, validation
- Submitted the MMR for the Month of August 2023.
- Meetings of ME&IE Consultants with Stakeholders about Project Progress / Issues

Chapter-4 highlights the quarterly work plan for the period of 1st July 2023 to 30th September 2023. The work plan consists of following activities:

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

The detailed time span for the 3rd quarter of year 2023 is provided in the Tentative Work Plan **Annex-A**.

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

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

No.	Activities Planned for the Reporting Quarter	Status		
1	Pre-Field Activities			
	1.1	Validation of Baseline and Impact Survey	In Progress	
	1.2	Preparation for 3rd-Phase Baseline Survey (Finalization of MTs)	In Progress	
	1.3	Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey	In Progress	
	1.4	Training of Field Staff for Impact Survey and 3rd-Phase Baseline Survey	In Progress	
2	Field Activities:			
	2.1	Regular Monitoring of Interventions in the field	In Progress	
	2.2	Field Visits for Impact Survey	In Progress	
	2.3	Data collection of the interventions in the field	In Progress	
	2.4	Baseline Survey Stage III	Pending	
	2.5	Online data entry in android-based application	In Progress	
3	ICT Assignment:			
	3.1	Development / Improvement of website of NPIWC-II	In Progress	
	3.2	Monitoring online data collection and Data entry	In Progress	
	3.3	Monitoring Android based Mobile Application under implementation by field staff.	In Progress	
	3.4	Data collection of interventions in MIS/GIS database	In Progress	
	3.5	Capacity Building Trainings / Refresher of Departments	In Progress	
	3.6	Data Cleaning. Development & Launching of Dashboard for Client Offices	In Progress	
4	Coordination			
	4.1	Meetings of TL, ME&IE Consultants with NPC regarding Project Progress / Issues	Meetings conducted on regular basis	
	4.2	Meeting of DTLs with respective DTL of NWMC	Meetings conducted on regular basis	
	4.3	Internal Meetings of ME&IE Consultants	Weekly meetings conducted on regular basis	
5	Deliverables:			
	5.1	Monthly Monitoring Reports (MMRs)	31 st MMR (July 2023)	Submitted
			32 nd MMR (August 2023)	Submitted
			33 rd MMR (Sep 2023)	Report in hand
	5.2	Quarterly Monitoring & Evaluation Report (QM&ER)	QM&ER Jul-Sep 2023	Under process
	5.3	Consolidated Baseline Survey Report (Phase-I&II)	Submitted	
		Baseline (Phase I&II) Consolidated Report - Final	Submitted	
5.4	Consolidated Mid-Term Monitoring and Impact Evaluation Report	Under review		

CHAPTER-1: PROJECT INTRODUCTION

1.1 PROJECT PROFILE

This section covers the following detail of the project:

Project Name:	National Program for Improvement of Watercourses in Pakistan Phase-II (NPIWC-II)
Project Areas:	Punjab, Khyber Pakhtunkhwa, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir, and Islamabad Capital Territory (ICT)
Sponsoring Agency	Ministry of National Food Security & Research
Executing Agencies (EAs):	Following are different EAs: Federal Project Management Unit (FPMU), i. DGA OFWM Punjab ii. DG OFWM KP iii. DGA OFWM Baluchistan iv. Director Irrigation and Small Dams, AJ&K v. Director WM, GB vi. Director Agriculture Extension Services (AES) ICT
Project Period:	5 Year (2019-2024)
Total Project Cost:	Rs. 154,542.355 million (Umbrella PC-1, including Sindh)
ME&IE Consultancy Period:	4 years
ME&IE Consultant:	JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering services (Pvt.) Ltd., Centre for Social Research and Development (CSRD), ADA Consultants Inc. Canada, and S&S Associates.
ME&IE Consultant Mobilized:	November 07, 2020

1.2 PROJECT DESCRIPTION

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

1.2.1 Project Development Objectives

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

1.2.2 Project Objectives – General & Quantitative

Following is the project general and quantitative:

1) General Objectives:

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

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

2) Quantitative Objectives' Outputs and Impacts:

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

Project outputs

- i) Mobilization through capacity building of Water Users Associations/Farmers Organizations in improved water management techniques and their registration under On-Farm Water Management and Water User Associations Ordinance [Act] 1981 and organization of 47,278 WUAs.
- ii) Reconstruction/renovation and remodeling of 47,278 watercourses, involving complete earthen renovation, partial lining of critical reaches (50% of the total watercourse length as decided in the high-level meeting), and installation of water control structures. It is expected to save around 5.82 MAF per annum

- (approx. saving of 123 acre-feet (AF) per watercourse per annum).
- iii) Construction of 14,932 water storage tanks with 60% subsidy through cost sharing arrangements with the expectation to save about 50% irrigation water for wheat and about 68% of irrigation water for paddy crops.

Project impacts

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

Project indirect benefits to industry/economic activities

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

Awareness support to farmers

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

1.2.3 Project Beneficiaries

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

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

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

1.2.4 Project Components

The NPIWC-II project comprises four components.

C1: ORGANIZATION OF WATER USERS ASSOCIATIONS:

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

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

C2: WATERCOURSE IMPROVEMENTS:

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

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

C3: CONSTRUCTION OF WATER STORAGE TANKS:

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

- i) Store water during the rainy season and times of no use in the commands of perennial / non-perennial canals for subsequent irrigations at the critical crop growth stages,
- ii) Provide flexibility for storage of plentiful canal and rainfall runoff water for its more expedient use subsequently,
- iii) Collect, store and filter water from:
 - Small Dams, springs, streams, mullahs etc.
 - Rainfall runoff over agricultural catchment during rainy season
 - Tube-wells and dug wells of low flows
 - Tail-waters from agricultural fields

- iv) Regulate the flows so that it can be used efficiently when needed at large flow rates.

C4: PROVISION OF LASER LAND LEVELING UNITS:

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

1.2.5 Project Targets

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

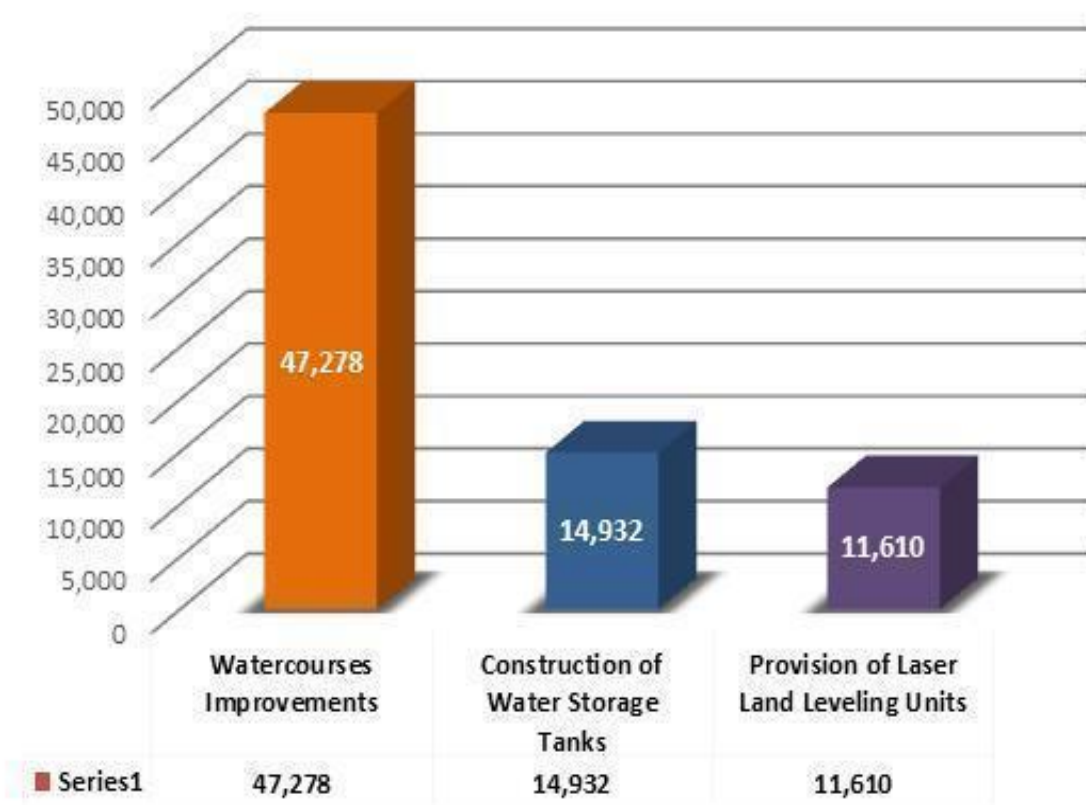


Figure 1.1: NPIWC-II Project WCs, WSTs, and LLL Targets in Pakistan

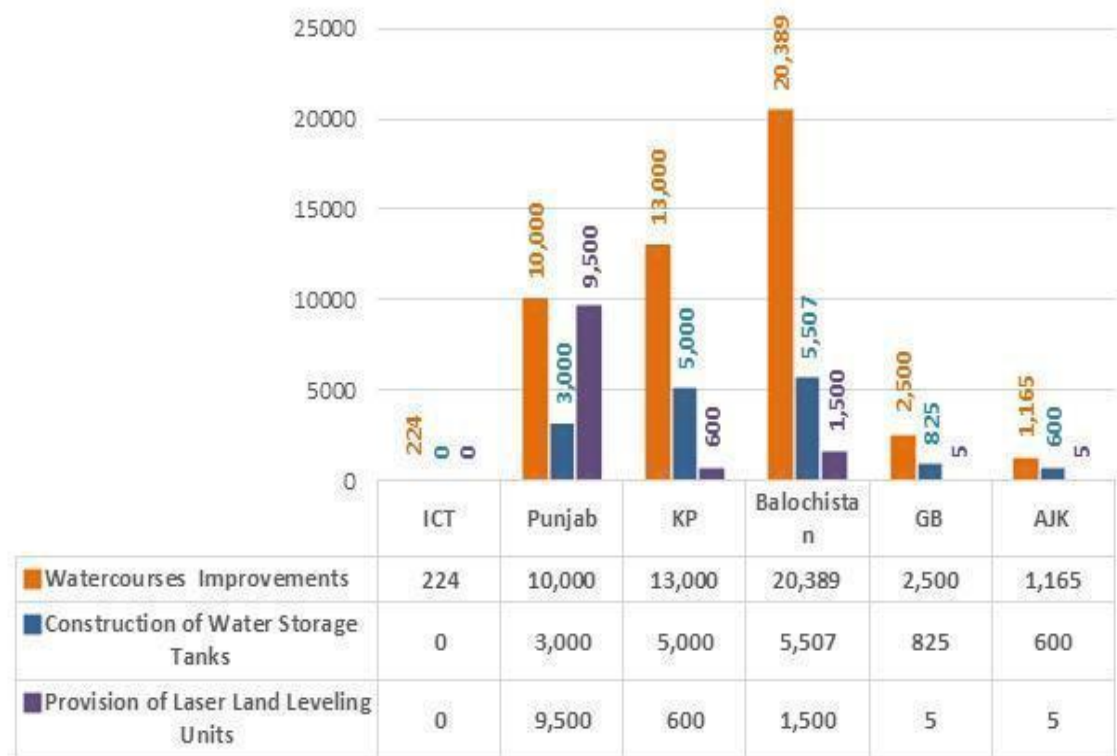


Figure 1 2: Zone-Wise WCs Improvement, WSTs, and LLL Target

CHAPTER 2: SCOPE AND SERVICES OF ME&IE CONSULTANTS

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

2.1 OBJECTIVES OF CONSULTING SERVICES

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

2.2 SCOPE OF CONSULTING SERVICES

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

- i. Undertake baseline, midline and 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's IT staff will maintain the website),
- xi. Provide technical support for the development of a custom-designed mobile application (Android Based) to capture on-site project progress and geo-tagged photos. It should be synchronized with the central MIS/GIS database and application for instant reporting and feedback to the management.

The said requirement is based on the following functional features:

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

2.3 MONITORING STRATEGY OF CONSULTANTS

The monitoring strategy planned to be followed by ME&IE Consultants is briefly described in **Table-2.2**.

However, detailed methodology and procedures to carry out the ME&IE of the project interventions were explained in Chapter 6 of Inception Report.

Table 2: Monitoring Strategy for ME&IE Activities

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
1	Baseline, midline and Endline surveys	Team Leader, Socio-Economic Expert, Agricultural Economist and Deputy Team Leader of the respective Province/Unit.	<ul style="list-style-type: none"> Baseline and impact surveys will be carried out on a sample basis. Data will be collected by field teams on pre-designed data collection tools through an android application on TABs. Baseline and impact surveys will be carried out in phases as target watercourses are not preselected. Baseline will be carried out before launching of the interventions and the impact one year (two crop seasons) after the completion of the intervention. The midterm study will review the project progress in the middle of the project implementation. The end line study will assess the impact of the project interventions.
2	Reporting	All core team members	<p>Following periodic reports will be prepared and submitted:</p> <ul style="list-style-type: none"> Draft Inception Report 45 days after the agreement, Final Inception Report one week after the issuance of comments by the client on the draft, Monthly Monitoring Report on 10th of following month, Quarterly Monitoring Report on 10th of the first month of the following quarter, Annual Monitoring and Evaluation Report during first month of the following year, Baseline Survey Reports (in three phases), First Phase Baseline Survey report will be submitted within the four months after the start of the assignment i.e., Submission of final inception report/Beginning of field activities. Impact Survey Reports (in phases) – two months after the data collection completion for the impact phase, Midline report in the middle of the assignment, Endline Report at the end of end line 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/	<p>Water Saving on Watercourses:</p> <ul style="list-style-type: none"> Water flow will be measured on sample watercourses selected for the baseline and impact surveys

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
		Engineers	<ul style="list-style-type: none"> The flow will be measured at four points of the selected watercourses: close to water outlet, head reach, middle reach and tail reach. The measurements will be done through current meters. Based on water savings on sample watercourses, total water savings will be estimated for all project watercourses. The savings will be reported per watercourse, per annum and aggregate for the project in LPS and Acre feet.
			<p>Water Savings on WSTs</p> <ul style="list-style-type: none"> Since WSTs will be filled and emptied on a continuous basis, the water savings will be assessed on the basis of water pumped from the tank to irrigate the fields. The assessment will be done either by readings on the pump gauge or periodically interviewing the farmer. Based on water savings on sample WSTs, total water savings will be estimated for all project WSTs. The savings will be reported per WST, per annum and aggregate for the project in LPS and in Acre feet. <p>Water savings due to Laser Land Leveling</p> <ul style="list-style-type: none"> Water savings at field level will be assessed through farmers' interviews. The impact survey form will include questions to be asked from the farmers who got their land leveled: <ul style="list-style-type: none"> In how much time an acre was irrigated before watercourse improvement and land leveling In how much time an acre is irrigated after watercourse improvement with land leveling 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	<p>The extent of community mobilization will be assessed by investigating whether:</p> <ul style="list-style-type: none"> WUAs is functional Holds regular meetings and keep record of them Makes decisions democratically The participation in the organization is voluntary It is financially and administratively sustainable Takes steps and ensures maintenance of watercourses, WSTs and laser land leveler
5	Economic benefits assessment for agriculture	Team Leader, Socio- Economist and Agricultural Economist	<ul style="list-style-type: none"> As indicated at serial No. 1, Agriculture data will be collected before (baseline) and after (impact) the watercourse improvement and WSTs construction. In both the surveys same forms will be used and same sampled farmers will be interviewed

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
			<ul style="list-style-type: none"> Data on variables such as crop yields, irrigated area, cropping pattern, cropping intensity, farm income and employment will be collected and analyzed The difference between before and after situations minus natural growth will be assumed as economic benefits to the agriculture.
6	Impact evaluation-on the economy	Team Leader, Agricultural Economist and Socio-Economic Expert	<ul style="list-style-type: none"> The results of the baseline and impact surveys will be used to quantify impact on the economy Additional food produced due to the project will be estimated. It is benefitted towards food security Project costs and benefits will be compared in economic and financial terms to carry out economic and financial analysis. Parameters like IRR, NPV and BCR will be estimated.
7	Impact evaluation-on the stakeholders	Team Leader, Agricultural Economist and Socio-Economic Expert	Analysis as in serial 6 will be carried out with reference to various stakeholders, like community, government, farmers, etc.
8	Spot checking	Team Leader, Deputy Team Leaders & Field teams/Engineers	During the field visits for WUAs baselines impacts of Watercourses, WSTs and laser land leveling units, the interventions will be spot checked for quality of construction, material, functioning and beneficiaries' satisfaction, etc.
9	Process monitoring	Field Teams of Agriculture Deptt., Project Consultants, ME&IE Consultants & ICT/Technology Specialist	<ul style="list-style-type: none"> The processed data for all the interventions will be fed to the MIS/GIS database. Client's field staff and field teams of consultants will furnish data of their activities. The ME&IE will assist in developing mobile application for this purpose From this data reports will be generated for process monitoring All interventions will be fully (100%) covered.
10	Project website and MIS/GIS dashboard development	ICT / Technology Specialist (Including all other core team staff will also coordinate in completing data for the MIS/GIS	<ul style="list-style-type: none"> The State-of-the-art MIS / Progress Monitoring Model will be developed for NPIWC-II. Customized forms will be developed to collect data from the implementing teams on-site for progress monitoring These forms will be made available to the teams on smart phones through an android application The teams will be adequately trained to use the application Data on physical and financial stages with dates will be fed to the system for process monitoring GIS coordinates for watercourses, WSTs, laser units (if available) and WUAs offices will be uploaded to the system and could be viewed / reached by the management online The system will be maintained on GOOGLE server so that it is accessible by the management from anywhere in Pakistan and abroad

Sr. No.	Monitoring Activity	ME&IE Team Responsible	Monitoring Strategy
			<ul style="list-style-type: none"> Custom reports will be possible as the user demands / desires The results could be displayed on small as well as large screens.
11	Development of Android based application	ICT / Technology Specialist	All the data collection forms / tools will be executed through customized developed Android based applications accessible with smart phones / TABs.

2.4 FRAMEWORK AND RESULTS-BASED MONITORING (RBM) INDICATORS

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

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

CHAPTER 3: CONSULTANTS' ACTIVITIES DURING THE REPORTING MONTH

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

3.1 SUBMISSION OF MONTHLY MONITORING REPORT (MMR)

As per contractual obligation, the consultants have submitted thirty second MMR (August 2023). While the thirty third MMR (the Report in hand) for the month of September 2023 (1st September 2023 to 30th September 2023) will be submitted in stipulated time i.e., in the 1st week of the current month.

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

3.2 BASELINE (PHASE I&II) CONSOLIDATED REPORT - FINAL

The final version of requisite consolidated Baseline Report by the Client has been submitted to FPMU during reporting month.

This report consists of the first two phases' baselines. These two baselines include 2,180 sample respondent farmers on 422 sample watercourses and 223 sample Water Storage Tanks. The report is not final as third phase of the baseline is yet to be conducted. The main findings of the report are summarized below:

Monitoring of Component C1 (Organization of WUAs)

On an overall basis, 86% of the sample farmers were found aware about the existence / working of WUAs on their watercourses. About 94% of respondents informed that OFWM used to hold awareness meetings before the formation of the WUAs and were functioning properly. About 73% members had been participating in the meetings of WUAs and 99% members reported that the WUAs were formed through democratic process. On the whole, 92% of respondent farmers were found the members of WUAs of which 42% were located at the head of WC reaches, 31% at middle reaches and 27% at tail reaches and 88% of members were found water users of lined watercourses. Half (50%) of the respondent farmers informed that meetings by WUAs were held regularly whereas, 27% informed that no meeting were held and 23% were of the view that these meetings were held occasionally. Moreover, 38% of respondents informed that they always participated in the meetings, 61% participated occasionally and the rest one percent never participated.

Out of total, 8% respondents informed that the meetings were held every month, 6% told quarterly, 2% once a year and the remaining 84% informed that these meetings used to be held as and when need arose. About 86% of member respondents informed the WUAs were established through democratic process.

About 97% of member farmers responded that they did not face any dispute. Only 3% faced disputes, out of which 55% got their disputes resolved always, 31% to some extent and 14% never got their disputes resolved.

Out of 3% respondents who faced disputes, 31% related to Land Acquisition, 59% on distribution of Naccas, and 10% regarding funding for accounts. About 45% of disputes were solved by WUAs, 50% by OFWM department and 5% by Irrigation Department.

Baseline Results of Component C2 (Watercourses)

Land use intensity on sample farms covered under baseline surveys has varied from 71.5% in Balochistan to 94.5% in the Punjab and averaged at 90.3% for the sample farms and 91.4% for all farms on the 13,777 completed watercourses on the whole. In Canal and Non-Canal Command areas it has been estimated as 92.6% and 84.8% respectively.

Cropping intensity on sample farms covered under baseline surveys has varied from 101.9% in KP to 188.6% in the Punjab and averaged at **157.5%** for sample farms and 170.1% for all farms on the 13,777 completed watercourses on the whole. In Canal and Non-Canal Command areas it has been estimated as 176.4% and 107.6% respectively.

Crop yields per acre on all sample farms have averaged at 30.1 maunds for wheat, 28.0 maunds for rice, 26.4 maunds for cotton, 47.9 maunds for maize, 716.3 maunds for sugarcane, 399.8 maunds for rabi fodder, 339.5 maunds for kharif fodder, varied from 6.0 maunds to 60.5 maunds for minor crops, 66.7 maunds to 82.0 maunds for fruits and 93.4 maunds to 214.8 maunds for vegetables. These crop yields are weighted averages of crop yields in various zones / units included in the project.

Crop area on all sample farms has totaled 10,690 acres for wheat, 4,730 acres for rice, 2,793 acres for cotton, 1,220 acres for maize, 708 acres for sugarcane, 597 acres for other minor crops, 761 acres under vegetables, 466 acres under fruits, 494 acres under

Rabi fodder, and 320 acres under Kharif fodder. Total crop area under all crops reported is 22,780 acres. These crop areas are total of respective crop areas in various zones / units included under the Project.

The cropping pattern on all sample farms or crop share in total crop area is estimated at 47% for wheat, 21% for rice, 12% for cotton, 5% for maize, 3% for sugarcane, 3% for minor crops, 3% for vegetables, 2% for fruits and 4% for fodder.

Farm labor employment on all sample farms on an average has been noted 813,376-man days or 35.7-man days per crop acre or 373 man days per sample farm.

Average gross income per acre on all sample farms has been estimated at PKR 89,373, cost of production at PKR 42,170 and net income at PKR 47,203.

When the results of our 2,180 sample farmers were super imposed on all the 187,440 farmers benefited from the improvement of 13, 777 watercourses in the project area up to June 2023; total farm area, cultivated area and crop area benefited calculates to 1,521,591 acres, 1,391,250 acres and 2,366,203 acres respectively. Gross income from these crop acres comes PKR 211.475 billion and net income PKR 111.692 billion. Zone wise / unit wise detail is given in **Table 1**. These baseline estimates would help us in determining the project benefits and carrying out economic analysis after the impact surveys are completed.

Table 3: Area Benefited and Gross and Net Income of the farms under Completed Watercourses

Zone/Unit	Area Benefited on All Farms under Completed Watercourses			Income of all benefited Farms under Completed Watercourses	
	Farm Area	Cultivated Area	Cropped Area	Gross Income	Net Income
	Acres			Million PKR	
Punjab	1,120,251	1,058,164	199,6200	178,406	94,227
KP	185,329	169,270	172,504	15,417	8,143
Balochistan	147,837	105,661	118,897	10,626	5,612
GB	55,153	46,454	58,632	5,240	2,768
AJ&K	12,907	11,609	19,832	1,772	936
ICT	115	92	138	12	7
Overall	1,521,591	1,391,250	2,366,203	211,475	111,692

Baseline Results of Component C3 (Water Storage Tanks)

Land use intensity on sample farms covered under baseline surveys has varied from 64.6% in Balochistan to 92.2% in the Punjab and averaged at

79.6% for sample farms and 77.5% for all farms in the complete scheme in the Project Area on the whole.

Cropping intensity has varied from 98.7% in KP to 160.9% in the Punjab and averaged at 119.4% for the

sample farms and 122% for all farms under the completed schemes in the project on the whole.

Crop yields per acre on all sample farms have averaged at 31.3 maunds for wheat, 27.4 maunds for rice, 26.5 maunds for cotton, 70.9 maunds for maize, 740.6 maunds for sugarcane, 369.8 maunds for rabi fodder, 340.3 maunds for kharif fodder, 6.0 for pulses, 167.0 for onion, 90.0 for tomatoes, 76.6 for apples.

Crop area on all sample farms has totaled 744.1 acres for wheat, 325.5 acres for rice, 38.6 acres for cotton, 191 acres for maize, 22.4 acres for sugarcane, 49.4 acres for pulses, 411.3 acres under vegetables, 387.1 acres under fruits, 79 acres under fodder. Total crop area under all crops reported is 2248.5 acres. These crop areas are total of respective crop areas in various zones / units included under the Project.

The cropping pattern on all sample farms or crop share in total crop area is estimated at 33.1% for wheat, 14.5% for rice, 1.7% for cotton, 8.5% for maize, 1.0% for sugarcane, 2.2% for pulses, 18.3% for vegetables, 17.2% for fruits and 3.5% for fodder.

Farm labor employment on all sample farms on an average has been noted 88,181 man days or 37.2 man days per crop acre or 395.43 man days per sample farm.

Average gross income per acre on all sample farms has been estimated at PKR 90,931, cost of production at PKR 42,864 and net income at PKR 48,067.

When the results of our 223 sample farmers were super imposed on all the 5,390 farmers benefited from the construction of 5,390 WSTs in the project area up to June, 2023; total farm area, cultivated area and total crop area benefited calculates to 56,817 acres, 44,053 acres and 51,015 acres respectively. Gross income from these crop acres comes PKR 4.639 billion and net income PKR 2.452 billion. Zone wise / unit wise detail is given in **Table 2**. These baseline estimates would help us in determining the project benefits and carrying out economic analysis after the impact surveys are completed.

On 223 spot checked WSTs, 257 trees were reported to be cut down. In their place 926 (more than thrice as per requirement) Saplings were planted out of which 328 survived after one year. WST protection arrangements were about 84% satisfactory and 98% WSTs were properly being maintained.

Out of 223 spot checked WSTs, satisfactory Excavation Certificates were issued by the Consultants to 193 (87%) WSTs.

About 172 (77%) WSTs were completed before receiving the subsidy amount. The rest 51 (23%) were completed after receiving the subsidy from the department.

Out of total 223 spot checked WST, on over all basis, 204 (91%) have been completed as per approved standards and specifications.

Table 4: Area Benefited and Gross and net Income of the farms under completed WSTs

Zone/Unit	Area Benefited on All Farms under Completed Schemes			Income of all benefited Farms under Completed Schemes	
	Farm Area	Cultivated Area	Cropped Area	Gross Income	Net Income
	Acres			Million PKR	
Punjab	10,823	9,982	16,058	1,460	772
KP	14,284	12,345	12,198	1,109	586
Balochistan	22,491	14,531	14,704	1,337	707
GB	4,264	3,411	4,133	376	199
AJ&K	4,956	3,784	3,923	357	189
Overall	56,817	44,053	51,015	4,639	2,452

3.3 DATA VALIDATION OF IMPACT SURVEY

Data validation of Impact survey continued during this month.

3.4 ACTIVITIES ICT UNIT – SEPTEMBER 2023

3.4.1 Overall Progress:

The ME&IE Consultants, Islamabad Unit had completed the Baseline- I & II as well as the Midline Impact surveys from the sampled farmers in the project area to date in coordination with respective regional cooperating departments including Agricultural Extension and On-Farm Water Management (i.e., counted all together 122 which includes 86 WC and 36 WST visits). The respective reports against each survey have been revised and processed in the light of desired comments before submitting to the respective stakeholders including client. Moreover, regular monitoring and spot checking were conducted in the respective on-going as well as in-progress sampled targeted schemes of WC and WST in the project areas (i.e., almost 61 visits paid to accomplish this duty). Altogether, 183 visits of the ME&IE consults of the IC-Unit were performed to monitor and evaluate the sampled activities of ME&IE (i.e., WC, WST, Midline Impact and regular monitoring/spot checking) across all the districts of the project areas of the ICT-Unit.

The key activities performed by the ME&IE consultants of ICT-Unit during the current month are highlighted in the succeeding paragraphs:

- The ME&IE ICT-ZONE consultants have gathered data for the completion of the dashboard that was required before the Baseline-III survey and regular monitoring visits at the regions of ICT-Unit by coordinating with the allied Agricultural department/ OFWM, etc.
- Coordinated with Deputy Director, On Farm Water Management Rawalpindi via phone and email sending a request letter for the required data and arranging a meeting between the M&E consultants and the OFWM team at their office premises (data set presented in **Annex-E**).
- Submitted the MMRs for August-2023 in respect of the ICT-Unit as well as the integrated report comprising of all provincial zones of the project

after editing technically, verifying, and distributing it to the respect stakeholders.

- The quarterly report for July to September 2023 has been prepared, finalized and ready to be submitted.
- Vetted the consolidated report of Baseline- I & II and forwarded to the quarter concerned for their processing and necessary action.
- Scheduled regular meetings are held with Coordinating/Client, cooperating, and internal technical personnel, as well as the Administration and Finance departments of the Zonal and National Offices to ensure timely completion of the targeted deliverables.
- Admin and Financial liabilities were supervised by the Team Leader and Deputy Team Leader of the ICT-Unit in addition to their duties at the National Office, Islamabad.
- Capacity building of the consultants is a regular feature which was also attended by one of its consultants at PPMI, Islamabad.

3.4.2 Quarterly Work/Visit Plan–Islamabad Unit

ME&IE consultants' Field Team of ICT-Unit have developed tentative plan for the Baseline-III survey, which includes regular monitoring, spot checking, and impact surveys. These surveys will be administered with the sampled households exhibiting the targeted schemes of WC, WST and LLL (See details in **Table-1**).

The basic data related to the schemes identification profile along with the status of updated WC improvement and WST construction as well as provision of LLLs' performance have been gathered from the OFWM department of AJK and ICT targeted project area regions through the means of face to face meetings as well as electronic correspondence. In the current monthly report, incomplete required data was available and reported from the Punjab Barani tract. The rest of the desired data will be gathered from this tract during the upcoming month

Table-1: List of Sampled Scheme Survey for the Current Quarter (September-November 2023)

Sr#	Date	Zone	District	Village	Scheme	Purpose
1	18-Sep-23	ICT	ICT	Mauza Nilor	WC	Regular Monitoring+ baseline
2	19-Sep-23	ICT	ICT	Chak Shehzad	WC	Spot check+ baseline
3	20-Sep-23	ICT	ICT	Mauza Chirah	WC	Regular Monitoring+ baseline
4	21-Sep-23	Punjab	Rwp	Chakri	WST	Regular Monitoring+ baseline
5	25-Sep-23	Punjab	Rwp	Mahota	WST	Regular Monitoring+ baseline
6	26-Sep-23	ICT	ICT	Chak Shehzad	WC	Spot check+ baseline

Sr#	Date	Zone	District	Village	Scheme	Purpose
7	27-Sep-23	Punjab	Rwp	Gandian	WST	Regular Monitoring+ baseline
8	28-Sep-23	Punjab	Rwp	Salmon	WST	Spot check+ baseline
9	2-Oct-23	Punjab	Attock	-	WST	Regular Monitoring+ baseline
10	3-Oct-23	Punjab	Hassan Abdal	-	WST	Spot check+ baseline
11	4-Oct-23	AJK	Muzaffarabad	Musa Agarr	WC & WST	Regular Monitoring+ baseline
12	5-Oct-23	AJK	Muzaffarabad	Kund Nagra	WC & WST	Spot check+ baseline
13	9-Oct-23	AJK	Mirpur	Bung	WC & WST	Regular Monitoring+ baseline
14	10-Oct-23	AJK	Jehlum	Chamber	WC & WST	Spot check+ baseline
15	11-Oct-23	AJK	Jehlum	Langla	WC & WST	Regular Monitoring+ baseline
16	17-Oct-23	AJK	Kotli	Narigul Majhan	WC & WST	Regular Monitoring+ baseline
17	18-Oct-23	AJK	Kotli	Naka Numb Choke Sahiba	WC & WST	Spot check+ baseline
18	24-Oct-23	AJK	Poonch	Topa Tower Kheriyan	WC & WST	Spot check+ baseline
19	25-Oct-23	AJK	Poonch	WC-Kanyann	WC & WST	Regular Monitoring+ baseline
20	30-Oct-23	AJK	Bhimber	Khol 1	WC & WST	Spot check+ baseline
21	31-Oct-23	AJK	Bhimber	W/C Sakrana	WC & WST	Spot check+ baseline
22	2-Nov-23	Punjab	Hassan Abdal		WST	Spot check+ baseline
23	5-Nov-23	AJK	Muzaffarabad	Danna Shanwariyan	WC & WST	Regular Monitoring+ baseline
24	6-Nov-23	AJK	Muzaffarabad	Paprang Bheri	WC & WST	Spot check+ baseline
25	12-Nov-23	ICT	ICT	Nilor	WC	Spot check+ baseline

Moreover, we are currently waiting for the finished list of sampling frames and the provision of logistical and financial resources from the client office as well as M&E JV. We have been regularly submitting the revised Baseline-III field visit / work plans to the concerned authorities for its implementation in letter and spirit.

ME&IE consultants assure these plans to be carried out efficiently and effectively. The hurdles in initiating the plans due to lack of necessary resources. Hereafter, we are constrained to revisit the Baseline-III field/ work plans for the ongoing quarter (Sep-Nov. 2023).

3.4.3 Capacity Building/ Refreshing Training Workshop on “Designing M & E Systems for Development Projects”

Dr. Muhammad Islam, Irrigation Agronomist, NPIWC-II Project, National Office, Islamabad participated in the five days training workshop w.e.f., 11 September 2023 to 15 September 2023 at NCRD, Islamabad.

Training Objectives

The objectives of three-day training were as follows:

- Trained the stakeholders to design comprehensive monitoring and evaluation (M & E) with the support of logical framework.
- Develop performance indicators over the life of the project.

- Evaluation of a project against the set results

Participants’ Profile

The training participants were from implementing Agencies and provincial government representatives. The total number of participants was 105 (males: 80; females: 25) who belonged to ICT, KPK, AJK, Sindh and Balochistan areas.

Resource Persons’ Profile

The team that delivered sessions during the training comprised 5 external experts from different organizations of Pakistan. Given below is a brief description of the trainers along with their sessions conducted by them:

#	Name	Designation	Session title
1	Aftab Alam Khan	CEO, Resilient Future International (Pvt.), Ltd.	Logical Framework & Monitoring and Evaluation Framework
2	Akthar Hameed Khan	_____	Designing M & E Systems for Development Projects
3	Saleem Khan Khattak	Ex-Joint Chief Economist, Planning Commission	M & E framework in public sector projects
4	Dr Usman Mustafa	Team Leader, National Program for Improvement of Water Courses- II (NPIWC-II) Federal Project Management Unit, MoFS&R, GoP, Islamabad	Understanding Result-based Monitoring & Evaluation System
5	Dr. M. Faisal Anwar Malik	_____	Key Features and Considerations of Evaluations – KPIs

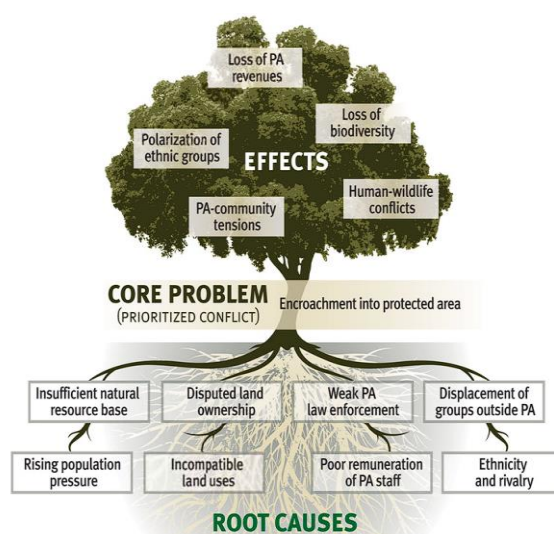
Logical Framework, Monitoring, and Evaluation

Planning is a continuous process of analyzing program information, making decisions and forming plans for future action to achieve the goals. In late 1960s, USAID developed Logical framework to assist in the planning, management, allocation of budget, resources to arbitrate about the effectiveness and

evaluation of development project. Later on the logical framework became necessary to find out better ways to plan because of growing disillusion with problematic and unproductive program. Now LFA learning is an ability to enable managers to think comprehensively about planning skills and confidence. In this regard, Logical Framework essentially consists of a 16 grid box as shown in **Table 2**.

Table 2. The Logical Framework			
Narrative Summary	Objective variable Indicators (OVI)	Means of Verification	Assumptions
Goal			
Purpose			
Output			
Activities Clusters			

The primary log frame is not an easy document to prepare, it requires participatory planning of program delivering staff, who should depend on need assessment (Problem Tree),



discussion with primary stakeholders (beneficiary of the program) and key stakeholders (Government officials, donors, etc.).

The team has to construct the Log Frame by keeping in mind the aim of the work from general to specific, the process begins with the vertical hierarchy when they have to define the goal, purpose, output and activities while in horizontal hierarchy starting with the risk and assumption at every level, then OVIs (Objective variable Indicators) and MOV (means of verification) done. At each point, the linkage between vertical and horizontal hierarchies must be checked and ensure the coherence of the whole design. Always try to keep the log Frame clear and simple.

In Pakistan, for any project we have to follow the rules of Government of Pakistan to develop Project Cycle Documentation:

- PC-I Basic Project Document
- PC-II Proposal for Survey & Feasibility
- PC-III Quarterly Progress Report
- PC-IV Completion Report
- PC-V Annual Operation Report

It is prerequisite to develop an M&E plan, should be developed at the beginning of the program before starting any monitoring activities with a clear plan that how to respond for specific questions regarding project. The M&E plan must be prepared by the experienced research scientists with the collaboration of project staff who are involved in designing and implementing the program. It will clearly identify the way of collecting data to track indicators, the way of data analysis and how the data will be presented according to the program staff and for its improvement. Remember, M&E data alone is not useful until someone puts it to use! The M&E plan will help to use data efficiently for the improvement of the program and in final project reports. In Pakistan, we have specified system in place to monitor the program and evaluate its success as under:

- **Internal Monitoring**
Sponsoring Ministry
- **External Monitoring**
Provincial P & D Department
Projects Wing at Planning Commission
- **Monitoring Cells**
Establishment of Planning and Monitoring Cells in ministries as directed by ECNEC.

Elements of Implementation Monitoring

- Description of the problem or situation before the intervention
- Benchmarks for activities and immediate outputs
- Data collection on inputs, activities, and immediate outputs
- Systematic reporting on provision of inputs and production of outputs
- Designed to provide information on administrative, implementation, and management issues as opposed to broader development effectiveness issues.
- Baseline data to describe the problem or situation before the intervention
- Indicators for outcomes

- Data collection on outputs and how and whether they contribute toward achievement of outcomes
- More focus on perceptions of change among stakeholders
- Systemic reporting with more qualitative and quantitative information on the progress toward outcomes
- Done in conjunction with strategic partners in order to capture information on success or failure of partnership.

Types of Evaluations

- Ex-ante Evaluation (Baseline)
- On-going Evaluation (Mid-term Evaluation)
- Ex-Post-Completion Evaluation (Final Evaluation / End Line)
- Process Evaluation
- Real-time Evaluation.

Evaluation of Criteria

- Relevance
- Efficiency
- Effectiveness
- Impact
- Sustainability.

Evaluation Indicators

- Financial/Economic changes at the project level
- Economic changes in the community (e.g. employment)
- Additional goods and services
- Social changes
- Institutional changes
- Environmental impact.

Performance base Reporting

- Reporting on performance --- Results should reflect:
- Actual results achieved against planned results for various levels of the results' chain, i.e. *output* or short term, *outcome* or medium term and *impact* or long term
- Description of the key activities undertaken during the reporting period that have supported the achievement of results, and any variance of these activities from the approved work plan
- Identification of key management or development factors, issues or challenges affecting the achievement of results
- Status update of recipients partner financial and in-kind inputs and contributions

- Thorough analysis of factors, issues or challenges affecting the achievement of results
- Describing how the project addresses gender equality or environmental issues
- An update of the beneficiary reach at all levels of the results chain
- An update of the identified risks and mitigation plans for high level risks
- Information on required modification to planned project/program results and associated resource allocation.
- Recommend modifications to the approved Annual Work plan.


Advantage and disadvantage of Log Frame

- i. The Log Frame summarizes the entire program on one sheet of paper.
- ii. It makes the program very explicit without any bulky proposals for donors or reviewers.
- iii. The Log frame must be regularly reviewed the in-built monitoring system and changed according to the prevailing situation.
- iv. The weaknesses of the project be carefully re-considered and analyzed.

Conclusion:

Well prepared Log Frame takes time and efforts but the program based upon them are stronger and more sustainable.

3.4.4 Meetings:

Date	18-09-2023
Venue	ME&IEC National Office Islamabad
Participants	
i. Dr. Usman Mustafa, TL, NPIWC-II ii. Dr. Ikram Saeed, DTL, ICT-Unit, National Office. iii. Dr. Muhammad Islam, Irrigation Agronomist iv. Mr. Rasheed Ahmed Zehri, FTI, ICT v. Ms. Sana Gull, ME & IE Officer, ICT. vi. Ms. Hafiza Maryam Iqbal, ME & IE Officer, ICT vii. Ms. Abida Munir, ME&IE Officer, ICT-Unit viii. Salman Khan, Supporting Technical Staff	
Discussions/Decisions of Meeting	
<ul style="list-style-type: none"> • Discussion on field visit plan for • four main purposes: <ul style="list-style-type: none"> ○ Baseline-III, ○ Regular Monitoring, ○ Spot Checks, and ○ Potential Case Studies • Project Progress Review meetings and development of strategies to overcome the prevailing bottlenecks in a way for smooth running of the targeted project activities, etc. 	
	
ME&IE Consultants' Meeting at National Office Islamabad	

3.5 ACTIVITIES PUNJAB ZONE – SEPTEMBER 2023

3.5.1 Consultants Activities during the Reporting Month

The consultant's activities remained as per conduction of their usual functions.

- Pre-Field Activities- Planning stage
- Field Activities-Collection of data/information from project area.
- Post Field Activities-Review of accumulated data and its validation
- Meeting with Stakeholders/Beneficiaries
- Internal Meeting /Capacity Building

3.5.2 Pre-Field Activities

The main Pre-Field Activities were the review of the past performance and designing strategy for the future working. Field teams reviewed the Monitoring tools and a few refreshment courses were organized in order to enhance the efficiency of field teams. Furthermore, the target and achievements of ME&IE consultants were also studied in depth again for managing the upcoming field activities.

Such activities were very useful for planning and working in the field.

3.5.3 Field Activities

During the month under review, the field activities of the ME&IE consultants were very busy. The attention of the field staff remained not only to rectify the missing data but also validation of data as well. This exercise was carried out at field office through telephonic conversations/emails. However, during the whole period, ME&IE consultants remained in touch with department and have taken feedback of ongoing operations and their status, Coordination/Meeting with Stakeholder / Beneficiaries.

3.5.4 Post Field Activities

Review of accumulated data and its validation. The activities were related to the field data on Water User Associations Improvement of water Courses and Construction of Water Storage Tank/Ponds Intervention. Such data pertained to monitoring, baseline and Impact survey of the interventions. So, for the Punjab zonal office has completed the validation task of the followings.

- Improvement of water courses including. Water user Association: 165
- Construction of water storage tank/ponds: 60
- The data has already been submitted to ICT for PMIS Dash-board activities.

3.5.5 Coordination/ Meetings with Stakeholders / Beneficiaries

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

During the month ME&IE consultants could not held any physical meeting with field staff of OFWM due to one or other reasons except coordination through telephonic conversation/ Emails

During this period, a meeting at Director General Agri. (OFWM) office was held between Focal person of D.G office and focal person of ME&IE Consultants and field In-charge of sub-zone-2 Mr. Rizwan Suleman also assisted during the meeting.

Date	21-09-2023
Venue	Director General Agriculture HQ OFWM Davis Road Lahore
Participants	
<ol style="list-style-type: none"> Mr. Tahir Mehmood Focal Person DGA OFWM/DDA Headquarter (OFWM) DDA climate change. Mr. Awais Jahangeer Field Focal Person to DG Office (Team in Charge ME&IE Consultants) Mr. Rizwan Suleman field team in-charge ME&IE consultants. 	
Discussions/Decisions of Meeting	
<ol style="list-style-type: none"> The Focal Person of ME&IE Consultants briefed about the ongoing activities of consultants and shared the overall performance and achievements. Focal Person of DGA OFWM appreciated and endorsed the efforts of ME&IE Consultants. The Focal person of ME&IE Consultant emphasized to initiate training of field staff for data collection and discuss plan. The focal person to DGA office ensured to start this with in week on emergency basis. 	

3. ME&IE Consultants requested Focal Person to DGA OFWM office for the provision of remaining data about all interventions as soon as possible in order to update on PMIS Dashboard. On this matter Focal Person of DGA OFWM responded that all remaining data will be provided to Consultants within a week.
4. Focal Person of DGA OFWM. Shared the intervention wise performance and achievements of the project till 30-06-2023 which is excellent even though there were a lot of limitations like financial constraints.
5. ME&IE Consultants requested Focal Person to DGA OFWM Office for the data provision relevant to Laser Land Leveler to highlight the financial contribution made by the government and to evaluate the economic impact of activity. Focal Person of DGA OFWM ensured his full cooperation for the matter and showed his consent to provide the data at the earliest.



**Meeting of ME and IE Consultants with Focal person to
DGA OFWM Mr. Tahir Mehmood**

3.5.6 Internal Meeting /Capacity Building

The Deputy Team Leader conducts regular meetings with Field Team in-charges as well as Field team members to update the project activities. In these meetings, various suggestions were given for the improvement of monitoring tools and other issues faced by the field teams regarding data collections were discussed. Moreover, in order to combat these issues few training sessions were held in the premises of the office in order to do capacity building of the field teams. These sessions were held under the supervision of DTL and other Core team members.

3.6 ACTIVITIES KP ZONE – SEPTEMBER 2023

3.6.1 Updated Progress – September 2023

The following are the activities performed by the KP zonal office staff Peshawar during the month of September 2023.

Major activities of ME&IE Consultants, KP Zone includes:

- Meetings
- Monitoring of data
- Writing of MMR of July 2023

3.6.2 Meetings:

Frequent routine meetings were held with the OFWM Department relevant official to discuss various issues raised from time to time to the ME/IE Consultants. This is the normal activity of every month. These meetings were held both physically and telephonically for collection of relevant information of undergoing schemes. As per the ME&IE discussions with the OFWM Department official, it was found that schemes were mostly completed under NPIW-II program. New schemes for construction/improvement of water courses and water storage tanks will be initiated after the release of funds by the authorities. In addition to these, formal meetings were also held with special agendas.

A meeting regarding sharing of data and progress of NPIWC-II was held during reporting month, the detail of which is as follows: -

Date	September 11, 2023
Venue	NESPAK, Chinnar Lane. Peshawar
Participants	
i.	Mr. Muhammad Hayat – Focal Person OFWM NPIWC II
ii.	Mr. Fawad Ahmad- ICT Manager M&E Consultants
iii.	Mr. Kaiser Khan – Field Engineer M&E Consultants
iv.	Mr. Muhammad Haris – Tech Support OFWM
v.	Mr. Muhammad Ilyas – Chief Engineer NESPAK
Discussions/Decisions of Meeting	
Agenda: Sharing of Data regarding the project interventions Progress & Missing Data Compilation.	
<ul style="list-style-type: none"> • Mr. Hayat started the meeting with discussion on how to compile and streamline data obtained between stakeholders and stressed the need for a comprehensive approach towards tallying the 	

data to sum up into a cohesive whole for the dashboard.

- Mr. Fawad concurred and deliberated on issues faced to accommodate the missing data as demanded by the PMU.
- Mr. Ilyas gave his input on the issue and agreed that NESPAK is always ready to sit and discuss how to further stimulate the process of data generation and compilation.
- Different issues were discussed during the meeting to ensure the stakeholders coordination regarding data standardization is ensured.
- Preparations for upcoming PMU coordination meeting was discussed and deliberated on how to accommodate the required columns/data into the already existing database.
- All the participants agreed to chalk out a detailed plan for further improvement of the data accuracy and logical analysis of the same to be ensure at each stakeholder's end.

Recommendations, Suggestions and Way Forward

- Stakeholders to coordinate more between themselves to ensure data unity.
- Progress on the subject matter is to be updated with the OFWM, NESPAK, & M&E consultants weekly.

Another meeting regarding co-ordination, cooperation, support, sharing of data and progress of NPIWC-II also held, the detail of which is as follows: -

Date	September 26, 2023
Venue	PMU, Gul Mohar Lane Peshawar
Participants	
i.	Mr. Saeed ur Rehman PD (PMU)
ii.	Mr. Asad (PMU)
iii.	Mr. Muhammad Hayat – Focal Person OFWM NPIWC II
iv.	Mr. Fawad Ahmad- ICT Manager M&E Consultants
v.	Mr. Shakeel Ahmed – PMU
vi.	Mr. Kaiser Khan – Field Engineer M&E Consultants
vii.	Mr. Sajid (M&E Officer PMU)
viii.	Ms. Kulsoom Rehman -DD DAE
ix.	Mr. Imran – Supervisor CAMOES
x.	Mr. Anwar – Focal Person OFWM NP-ECABA
Discussions/Decisions of Meeting	
Agenda: Co-ordination, Cooperation, Support, Sharing of Data regarding the project interventions	

Progress & Follow up of previous meeting NPIWC II & NP-ECABA,

- Mr. Saeed Ur Rehman started the meeting with recitation from the Quran and elaborated on the current meeting agenda.
- Previous meeting decisions were discussed and followed up on the points agreed upon earlier.
- PMU expressed concern at the slow progress of the project as only 27% physical and 20% financial progress has been made so far.
- Mr. Muhammad Hayat discussed the overall implementation and progress at length and expressed concern on the progress of M&E function and stressed the need for expediting the same.
- Mr. Fawad Ahmed deliberated on the data input financial and technical and how the consultant team is working round the clock to upload and streamline the data to be available on the dashboard asap.
- Anomalies of various kinds were highlighted by the PMU during their filed visits regarding technical specs and requested the M&E consultants to ensure a couple of case studies to compare the schemes of different areas. It was decided that M&E consultants will conduct studies in southern, central and northern districts on sample basis.
- Mr. Asad discussed various discrepancies observed in the field where govt share threshold were exceeded in the same districts on the same type of intervention & stressed on the M&E consultant to ensure highlighting such instances during their visits.
- Mr. Asad reiterated the need for data compilation and uploading and requested the OFWM and consultants to coordinate and finalize the data asap.
- Mr. Hayat agreed to have a meeting with NESPAK and M&E consultant to discuss data compilation within the next two days.
- In the end the PMU thanked the participants for attending and hoped to meet at a later date to discuss progress made till that date.
- The PMU staff thanked the participants for attending the meeting and hoped to discuss progress made at a later date.

Recommendations, Suggestions and Way Forward

- ME&IE consultant will conduct case studies at Southern, Central & Northern districts of the

province to ensure comparative analysis of various discrepancies highlighted by the PMU.

- OFWM will arrange a meeting with the consultants for data compilation and accommodating the information requested by the PMU.
- Pace of Project implementation will be expedited at every stakeholder's end.



Pictorial views of the meeting

Date	August 2023
Venue	Office of the Focal Person of NPIWC-II, OFWM Department, KP
Participants	
i. Mr. Hayat Khan, Focal Person NPIWC-II	
ii. Dr. Humayun Khan, DTL ME/IE consultants KP Zone	
iii. Mr. Fawad Ahmad, Manager ICT ME/IE consultants KP Zone	
iv. Mr. Haris, Engineer OFWM Department	
Discussions/Decisions of Meeting	
During the meeting with the Focal person general discussion was made on the data entry by the OFWM officials to the dashboard. The ME/IE consultants offered their services for assisting the concerned staff of the OFWM in data entry to the Dashboard. The meeting was adjourned with a vote of thanks by the Focal Person of NPIWC-II project.	



During the reporting month the OFWM Department staff as usual extend all possible help towards the ME/IE consultants. Close contacts though meetings/Telephone calls with different cadre officials of OFWM department were held regarding the ongoing activities under the NPIWC-II during the current reporting month. The purpose of these meetings was to collect the GPS location-based data for dashboard completion and visits of teams to different destinations for baseline surveys. OFWM directorate extends their usual support and provided all the relevant information. The ME&IE Consultants, KP made frequent visits to the directorate of OFWM for acquainting their-selves about the on-going schemes under the NPIW-II by the concerned department. During these meetings general discussion was also made about the perceptions pf the OFWM Department officials and of the farmers about these schemes. As per the OFWM Departments officials most of the farmers were satisfied from the benefits of these schemes in terms of increase of crop productivity, cropping intensities and time saving.

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

Monitoring of data: Trainings have been imparted to the officials of the OFWM Department for data entry to the Dashboard. Now they are directly entering the data on android application. The ICT Manager KP zone strictly monitors data entries and make necessary rectification by guiding the concerned staff of the various districts of KP.

Verification of WC and WSTs through Google Earth: ME/IE consultants KP zone made verification of all watercourses, and water storage tank schemes coordinate through Google Earth and identified incorrect coordinates.

3.6.3 Field surveys

During the period under review, limited field activities were carried over by the ME&IE consultants due to certain unavoidable circumstance. The Baseline-III survey could not start due to non-provision of complete list of sampling frame. Thus, the survey plan will be rescheduled upon the availability of list from client.

3.6.4 Validation of Impact Survey

Data validation of Impact survey continued during reporting month.

3.6.5 Data Entry and GPS validation

During the month of September 2023, KP Teams entered and validated the GPS locations for hundreds of schemes of Baluchistan and KP province. The activity was distributed among different team members with help of ICT team of KP. OFWM directorate extends their usual support and provided all the relevant information.

3.6.6 Capacity Building of OFWM staff on Android Application

The ICT team of the ME/IE consultants' have trained the officials of OFWM in Southern, Central and Northern zones for entering data directly to the

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

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

3.7 ACTIVITIES DONE BY BALOCHISTAN ZONE – SEPTEMBER 2023

- Updated progress of ME&IE Consultants, Balochistan by September 2023.
- Targets of F.Y. 2022-23
- Validation of Baseline and Impact Survey
- Updated status of Data Validation – Dashboard Balochistan and
- Meetings

3.7.1 Updated Progress Of ME&IE Consultants – Balochistan

The ME&IE Consultants, Balochistan, have monitored 17 sites during the pre-testing of Monitoring Tools in different months. A total of 13 sites were monitored during executive visits with high officials. The ME&IE Consultants, Balochistan have conducted two baseline surveys, the first was conducted in 2021 and

the second was conducted in 2022. A total of 149 sites were monitored during the baseline surveys i.e., 61 Watercourses and 88 Water Storage Tanks. The ME&IE, field teams monitored 07 sites of PLL out of 34 total sites; the percentage of monitored sites is 20%. The Impact Assessment Survey was conducted in the 2022-23 in which 149 sites have been monitored so far. Regular monitoring/spot-checking is another important activity of ME&IE Consultants in which 183 sites of different districts have been monitored until the reporting month. In regular monitoring, ME&IE Consultants monitored ongoing / completed sites covering all financial years i.e., 2019-20, 2020-21, and 2021-22. The Balochistan field teams have so far monitored 78 Watercourses and 105 Water Storage Tanks in regular monitoring. The updated status of the total activities done is given in the below table:

Table: Summary of Field Activities, District-wise

Sr. #	District	Pre-Testing		Executive Visits		Baseline Survey		Impact Assessment Survey		Impact Survey (LLL)	Regular Monitoring / Spot Checking		Total
		WC	WST	WC	WST	WC	WST	WC	WST		WC	WST	
1	Quetta	3	3	1	1	3	15	3	15	-	7	13	64
2	Pishin	3	1	2	5	2	9	2	9	-	6	11	50
3	Killa Abdullah	-	-	-	-	4	2	4	2	-	4	2	18
4	Ziarat	-	-	-	-	2	4	2	4	-	2	4	18
5	Mastung	-	-	2	1	5	8	5	8	-	7	9	45
6	Nushki	1	2	3	1	2	1	2	1	-	6	4	23
7	Sibi	-	-	-	-	1	3	1	3	-	1	3	12
8	Jhal Magsi	-	-	-	-	1	4	1	4	-	1	4	15
9	Kachhi	-	-	-	-	2	10	2	10	-	2	10	36
10	Naseerabad	-	-	-	-	9	6	9	6	-	9	6	45
11	Jaffarabad	1	1	-	-	3	-	3	-	4	4	1	17
12	Sohbatpur	-	-	-	-	10	-	10	-	3	10	-	33
13	Loralai	-	-	-	-	3	7	3	7	-	1	6	27
14	Dukki										2	1	3
15	Zhob	1	1	-	-	2	1	2	1	-	3	2	13
16	Kila-Saifullah	-	-	-	-	3	4	3	4	-	3	4	21
17	Musa khel	-	-	-	-	1	1	1	1	-	1	1	6
18	Sherani	-	-	-	-	2	2	2	2	-	2	2	12
19	Khuzdar	-	-	-	-	3	7	3	7	-	3	7	30
20	Kalat	-	-	-	1	3	4	3	4	-	3	5	23
21	Turbat	-	-	-	-	-	-	-	-	-	-	7	7
22	Pangur	-	-	-	-	-	-	-	-	-	1	3	4
Sub-Total		9	8	8	9	61	88	61	88	7	78	105	522

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

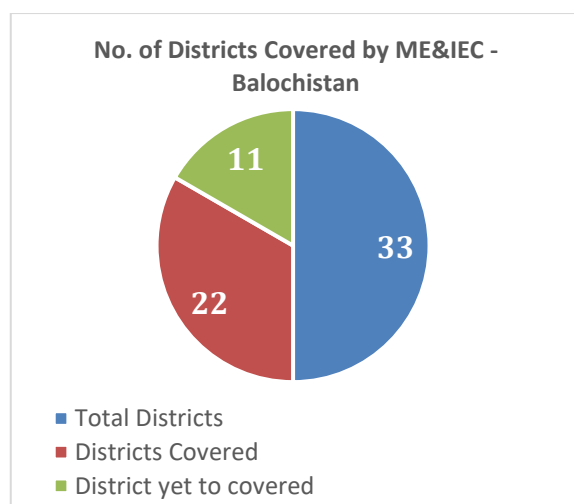


Figure: No of Districts Covered by ME &IE – Balochistan

3.7.2 Validation of Baseline and Impact Survey

Data validation of Baseline and Impact survey continued during reporting month.

3.7.3 Field Visits, Balochistan Zone:

During the period under review, limited field activities were carried over by the ME&IE consultants due to certain unavoidable circumstance. The Department's beneficiaries list of F.Y. 2022-23 is in progress. As soon as the Department initiates the works on F.Y. 2022-23 and finalizes the beneficiaries' lists, the ME&IE, Balochistan will start the "Baseline Survey-III" activities accordingly.

The Baseline-III survey could not start due to non-provision of complete list of sampling frame. Thus, the survey plan will be rescheduled upon the availability of list from client.

3.7.4 Updated Status Of Dashboard Balochistan.

The ME&IE Consultants expressed deep concern regarding the quite weak response from some Deputy Directors, OFWM concerning the data validation process for the Dashboard Balochistan. Despite multiple requests and telephone calls, it is disheartening to note that the necessary tasks have not been completed as yet.

The accurate and reliable representation of data on the Dashboard is of utmost importance to ensure informed decision-making and future planning regarding NPIWC-II sustainability. The delays and inadequate response from the DDs are hindering the progress of this critical initiative. We understand the complexities and challenges involved, but it is imperative that we prioritize the completion of this task as soon as possible for the benefit of the farmers of Balochistan.

The worthy DG, OFWM, Balochistan is requested to direct the concerned teams to expedite the data validation process and provide the necessary support and resources they require. It is also requested to give necessary direction to all DDs and concerned staff to fill the beneficiary data of current F.Y. 2022-23 so that the ME&IE Consultants could be finalized the field visits plan and start the 3rd Baseline activities accordingly.

The updated progress of Dashboard, Balochistan, district-wise is stated below:

Table: District-wise Progress of Dashboard, Balochistan (Watercourses)

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IE	Validated by OFWM	Total Data uploaded by ME&IE	Validated by OFWM	Total Data uploaded by ME&IE	Validated by OFWM	Total Data uploaded by ME&IE	Validated by OFWM
Kalat	Awaran	140	76	22	22	0	0	162	98
Kalat	Kalat	97	0	28	28	158	123	283	151
Kalat	Khuzdar	139	0	17	0	9	6	165	6
Kalat	Lasbela	110	0	35	0	44	35	189	35
Kalat	Mastung	102	93	30	1	66	60	198	154
Kalat	Surab	20	20	11	11	11	11	42	42
Total		608	189	143	62	288	235	1039	486
(%)		31%		43%		82%		47%	
Loralai	Barkhan	61	0	0	0	3	0	64	0
Loralai	Duki	27	27	15	15	1	1	43	43
Loralai	Loralai	158	157	47	43	132	130	337	330
Loralai	Musakhail	100	99	86	44	1	0	187	143
Total		346	283	148	102	137	131	631	516
(%)		82%		69%		96%		82%	

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Makran	Gwadar	12	0	11	0	0	0	23	0
Makran	Kech	68	68	20	20	44	44	132	132
Makran	Panjgur	124	73	25	25	5	5	154	103
Total		204	141	56	45	49	49	309	235
(%)		69%		80%		100%		76%	
Nasirabad	Jaffarabad	53	53	32	32	56	56	141	141
Nasirabad	Jhal Magsi	16	0	6		5		27	0
Nasirabad	Kachi	81	81	18	18	3	3	102	102
Nasirabad	Nasirabad	52	0	35	35	82	82	169	117
Nasirabad	Sohbatpur	14	14	20	20	45	41	79	75
Total		216	148	111	105	191	182	518	435
(%)		69%		95%		95%		84%	
Quetta	Killa Abdullah	106	0	2	0	2	0	110	0
Quetta	Pishin	99	97	39	2	52	52	190	151
Quetta	Quetta	41	25	10		33	26	84	51
Total		246	122	51	2	87	78	384	202
(%)		50%		4%		90%		53%	
Rakhshan	Chaghi	49	49	28	28	0	0	77	77
Rakhshan	Kharan	23	23	3		55	55	81	78
Rakhshan	Nushki	38	38	25	25	40	39	103	102
Rakhshan	Washuk	18	0	2	2	0	0	20	2
Total		128	110	58	55	95	94	281	259
(%)		86%		95%		99%		92%	
Sibi	Dera Bugti	34	0	0	0	65	65	99	65
Sibi	Harnai	23	0	19	15	0	0	42	15
Sibi	Kohlu	41	41	17	17	0	0	58	58
Sibi	Sibi	33	33	6	6	25	25	64	64
Sibi	Ziarat	54	54	17	15	2	2	73	71
Total		185	128	59	53	92	92	336	273
(%)		69%		90%		100%		81%	
Zhob	Killa Saifullah	158	124	38	38	39	39	235	201
Zhob	Sherani	19	18	8	8	39	38	66	64
Zhob	Zhob	55	55	23	20	3	1	81	76
Total		232	197	69	66	81	78	382	341
(%)		85%		96%		96%		89%	
GRAND TOTAL		2165	1318	695	490	1020	939	3880	2747
(%)		61%		71%		92%		71%	

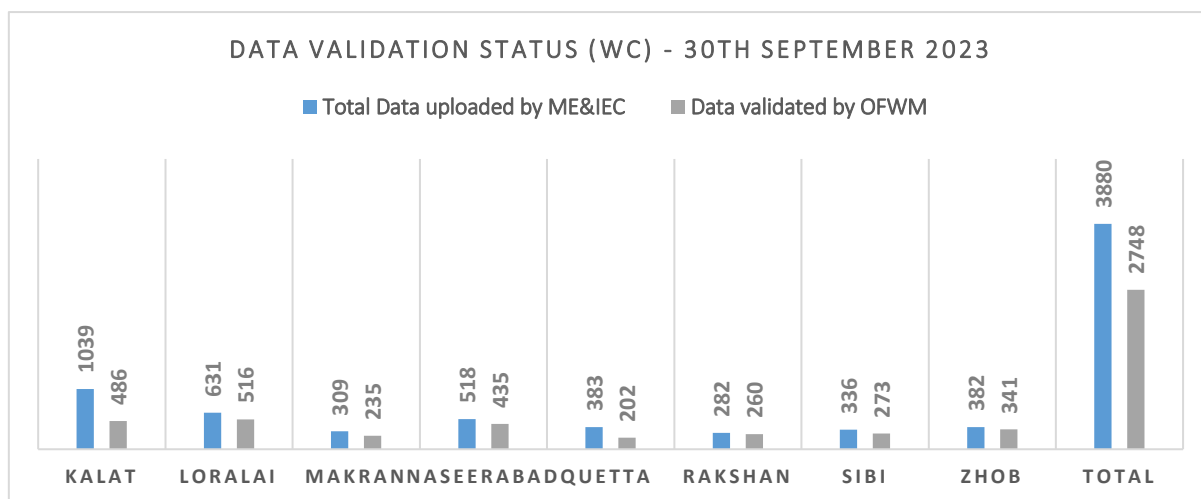


Figure 3. 1: Division-wise Graphical Progress of Dashboard, Balochistan (Watercourses)

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

Division	District	2019-20		2020-21		2021-22		TOTAL	
		Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM	Total Data uploaded by ME&IEC	Validated by OFWM
Kalat	Awaran	12	12	27	27	48	0	87	39
Kalat	Kalat	20	2	32	32	127	65	179	99
Kalat	Khuzdar	20	0	30	0	89	68	139	68
Kalat	Lasbela	20	0	24	0	106	45	150	45
Kalat	Mastung	20	18	32	2	55	12	107	32
Kalat	Surab	3	3	9	9	17	17	29	29
Total		95	35	154	70	442	207	691	312
(%)		37%		45%		47%		45%	
Loralai	Barkhan	15	0	0	0	39	6	54	6
Loralai	Duki	7	7	9	9	13	13	29	29
Loralai	Loralai	22	22	32	3	59	59	113	84
Loralai	Musakhail	11	11	16	16	0	0	27	27
Total		55	40	57	28	111	78	223	146
(%)		73%		49%		70%		65%	
Makran	Gwadar	3	0	4	0	0	0	7	0
Makran	Kech	29	18	24	0	46	46	99	64
Makran	Panjgur	18	18	29	25	122	105	169	148
Total		50	36	57	25	168	151	275	212
(%)		72%		44%		90%		77%	
Nasirabad	Jaffarabad	0	0	8	8	9	9	17	17
Nasirabad	Jhal Magsi	7	0	0	0	23	0	30	0
Nasirabad	Kachi	18	18	24	24	40	40	82	82
Nasirabad	Nasirabad	0	0	8	8	9	9	17	17
Nasirabad	Sohbatpur	4	4	8	8	2	1	14	13
Total		29	22	48	48	83	59	160	129
(%)		76%		100%		71%		81%	
Quetta	Killa Abdullah	22	0	34	0	0	0	56	0
Quetta	Pishin	22	22	36	33	61	61	119	116
Quetta	Quetta	9	9	17		50	32	76	41
Total		53	31	87	33	111	93	251	127
(%)		58%		38%		84%		51%	
Rakhshan	Chaghi	10	10	23	23	14	14	47	47
Rakhshan	Kharan	3	3	12		14	14	29	17
Rakhshan	Nushki	9	9	23	23	30	30	62	62
Rakhshan	Washuk	4		10	10	0	0	14	10
Total		16	12	45	33	44	44	152	136
(%)		75%		73%		100%		89%	
Sibi	Dera Bugti	11	11	0	0	28	28	39	39
Sibi	Harnai	3	3	6	6	12	0	21	9
Sibi	Kohlu	9	9	18	18	0	0	27	27
Sibi	Sibi	8	8	5	5	10	5	23	18
Sibi	Ziarat	4	4	6	6	11	11	21	21
Total		35	35	35	35	61	44	131	114
(%)		100%		100%		72%		87%	
Zhob	Killa Saifullah	30	20	32	32	56	56	118	108
Zhob	Sherani	4	4	6	6	15	15	25	25
Zhob	Zhob	15	10	24	24	46		85	34
Total		49	34	62	62	117	71	228	167
(%)		69%		100%		61%		73%	
GRAND TOTAL		382	245	545	334	1137	747	2111	1343
(%)		64%		61%		66%		64%	

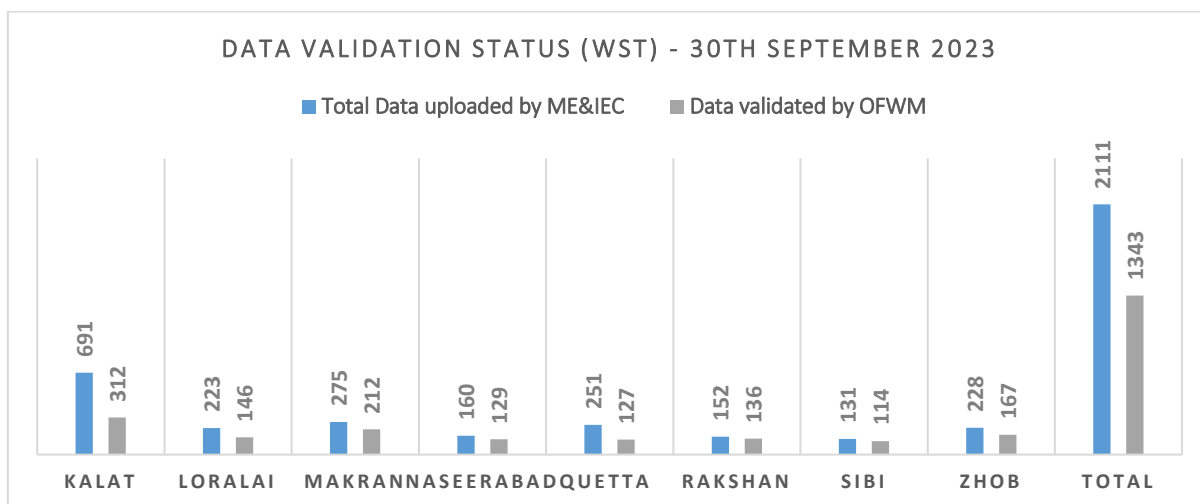


Figure 3. 2: Division-wise Graphical Progress of Dashboard, Balochistan (Water Storage Tank)

Pictorial Views of Meetings at Zonal Office Quetta

Meeting with Mr. Imran Achakzai



Internal Meeting



3.8 SOCIAL & GENDER COMPONENT

In the month of September, the Gender and Social specialist prepared monthly report for further submission activities which were carried out.

The following activities were carried out:

- Monthly report of S&G was prepared and shared.
- The Gender team is working on a Gender Action Plan and will share after finalization.
- Gender team is working on Pictorial data collected from field visit of provinces (Punjab, AJK Balochistan, and ICT).
- Tentative Plan has been prepared to visit Balochistan zone in current Quarter for case study and GRM.
- Meeting held with Team Leader & DTL to review S&G activities gaps and issues which were discussed in detail.

3.9 ICT TEAM ASSIGNMENTS

The ICT Team remained engaged in different activities related to the ME&IE assignment including data collection for Dashboard and training of client staff on Dashboard / MIS for the project. During the Month of September 2023 activities completed by ICT Team are summarized below.

3.9.1 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.

3.9.2 Implementation Of MIS Dashboard

The Dashboard has been implemented in Punjab, KP, Balochistan, AJK and ICT zones:

The progress of Interventions is live on the Dashboard application.

Punjab – WC Data - Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bahawalpur	167	197	326	15	705
D.G Khan	154	78	263	1	496
Faisalabad	88	61	203	35	387
Gujranwala	63	28	109	1	201
Gujrat	44	30	125	0	199
Lahore	72	42	134	7	255
Multan	168	81	311	2	562
Sahiwal	94	86	222	0	402
Sargodha	100	95	357	3	555
Overall	950	698	2050	64	3762

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

Punjab – WSP Data Summary				
Division	2019-20	2020-21	2021-22	Overall
Bahawalpur	23	46	91	160
D.G Khan	27	30	25	82
Faisalabad	24	48	57	129
Gujranwala	0	4	2	6

Punjab – WSP Data Summary				
Division	2019-20	2020-21	2021-22	Overall
Gujrat	2	10	29	41
Lahore	0	9	5	14
Multan	16	25	26	67
Rawalpindi	0	174	194	368
Sahiwal	9	15	15	39
Sargodha	6	32	47	85
Bahawalpur	23	46	91	160
Overall	107	393	491	991

Total **911** Water Storage Ponds data have been received from Punjab zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-G**)

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

So far, Total **5844** PLL data have been received from Punjab zone and available live on GIS Dashboard. All PLL units have been delivered and currently there's no under progress PLL unit as per received data (Detailed Summary attached as **Annex-H**)

KP – WC Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Overall
Bajaur	3	19	39	18	0	79
Bannu	75	35	94	28	0	232
D.I Khan	448	12	106	0	0	566
Hazara	86	71	151	59	0	367
Khyber	6	13	7	1	0	27
Kohat	98	40	57	28	9	232
Kurram	3	5	2	0	0	10
Malakand	182	178	478	62	0	900
Mardan	105	64	88	15	0	272
Mohmand	4	39	18	30	0	91
N.W Agency	2	3	5	1	0	11
Orakzai	0	1	0	0	0	1
Peshawar	141	89	94	38	0	362
S.W Agency	3	12	15	7	0	37
Overall	1156	581	1154	287	9	3187

So far, Total **3187** Watercourses data have been received from KP zone and available live on GIS Dashboard. By which **2994** Watercourses have been lined, **7** Watercourses Work Order Cancelled and remaining **138** watercourses are under progress on different stages like 1st Milestone, 2nd Milestone, and Work Order Issued. The remaining **48** Watercourses are pending with Work Order Approval. (Detailed Summary attached as **Annex-I**)

KP – WST Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Bajaur	1	10	9	1	21
Bannu	13	10	23	2	48
D.I Khan	81	6	35	0	122
Hazara	28	47	84	13	172
Khyber	1	9	12	0	22
Kohat	27	17	32	14	90
Kurram	1	1	0	0	2
Malakand	74	96	195	9	374
Mardan	16	9	26	4	55
Mohmand	1	40	69	0	110
Orakzai	0	2	0	0	2
Peshawar	36	25	65	15	141
S.W Agency	0	15	15	2	32
N.W Agency	0	8	8	1	17
Overall	279	295	573	61	1208

Overall Water Storage Tank data submissions are **1209** of which **1116** WST have been completed and **60** are under progress. While **32** Water Storage Tanks Work Order Pending. (Detailed Summary attached as **Annex-J**)

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

So far, Total **50** PLL have been delivered and partial data received from KP zone and available live on GIS Dashboard. (Detailed Summary attached as **Annex-K**)

Balochistan – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Kalat	597	143	287	0	1027
Loralai	344	148	137	32	661
Makran	204	56	49	0	309
Nasirabad	216	111	191	0	518
Quetta	244	50	87	0	381
Rakhshan	126	58	82	0	266
Sibi	184	59	88	0	331
Zhob	232	69	81	0	382
Overall	2147	694	1002	32	3875

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

Balochistan – WST Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
Kalat	95	154	442	0	691
Loralai	54	57	111	9	231
Makran	50	57	168	0	275
Nasirabad	29	48	83	0	160
Quetta	53	87	111	0	251
Rakhshan	26	66	57	2	151
Sibi	35	34	61	8	138
Zhob	49	61	117	0	227
Overall	391	564	1150	19	2124

A total of **2124** Water Storage Tank data has been received from Balochistan zone of which **1635** Watercourses have been lined, **92** Water Storage Tank at TS Stage and the remaining **397** Water Storage Tanks are under progress. (Detailed Summary attached as **Annex-M**)

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

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

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

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

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

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

AJK – WC Data Summary						
Division	2019-20	2020-21	2021-22	2022-23	2023-24	Overall
MZD	32	94	76	31	0	233
Poonch	31	29	61	25	15	161
Mirpur	38	106	84	21	20	269
Overall	101	229	221	77	35	663

A total of **652** Watercourses data has been received from AJK zone of which **458** Watercourses have been lined, **56** Watercourses are pending at TS & Work Order Stage, **55** watercourses are under progress pending and **94** Watercourses Work Order have been cancelled. (Detailed Summary attached as **Annex-Q**).

AJK – WST Data Summary						
Division	19-20	20-21	21-22	22-23	23-24	Overall
MZD	35	61	82	10	0	188
Poonch	11	42	120	77	25	275
Mirpur	2	16	44	7	13	82
Overall	48	119	246	94	38	545

A total of **545** Water Storage Tank data has been received from AJK zone of which **322** Water Storage Tank have been lined, **80** Water Storage Tanks are pending at TS Stage, **28** Water Storage Tanks are under progress pending and **115** Watercourses Work Order have been cancelled. (Detailed Summary attached as **Annex-R**).

ICT – WC Data Summary					
Division	2019-20	2020-21	2021-22	2022-23	Overall
ICT	0	20	14	0	34
Overall	0	20	14	0	34

A total of **34** completed Watercourses data have been received and available live on Dashboard. (Detailed Summary attached as **Annex-S**).

3.9.3 On-Going Data Validation & Cleaning

Data submission is an ongoing process & will continue till the end of the project. Zonal Field Staff of AJK, KP, and Balochistan is continuously feeding data through customized Android Application provided & trained by the ICT team of ME&IE consultants.

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

CHAPTER 4: QUARTERLY WORK PLAN- ACTIVITIES (JULY 2023 TO SEPTEMBER 2023)

The ME&IE Consultants' activities initiating during the 3rd Quarter of the year 2023 (1st July 2023 to 30th September 2023) are listed below. A tentative Work Plan for the 3rd Quarter of the year 2023 (1st July 2023 to 30th September 2023) showing time span detail is given as **Annex-A**.

4.1 PRE FIELD-ACTIVITIES

- Validation of Baseline and Impact Survey
- Preparation for 3rd-Phase Baseline Survey (Finalization of MTs)
- Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey
- Training of Field Staff for Impact Survey and 3rd-Phase Baseline Survey

4.2 FIELD ACTIVITIES

- Regular Monitoring of Interventions in the Field
- Field Visits for Impact Survey
- Data collection of the interventions in the field
- Baseline Survey stage - 3
- Online data entry in android based application.

4.3 ICT ASSIGNMENT

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

4.4 COORDINATION

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

4.5 DELIVERABLES

- Monthly Monitoring Report
- Quarterly Monitoring Report (Apr-Jun 2023)
- Consolidation of Baseline Survey Phase-I & II Reports
- Consolidation of Mid-Line Monitoring & Impact Evaluation Report

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

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

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

Document	Status
Monthly Monitoring Report-Thirty Second (August 2023)	Submitted
Monthly Monitoring Report-Thirty Third (September 2023)	Report in hand
Quarterly Monitoring & Evaluation Report-1 st Quarter year 2023 (Jul – Sep 2023)	Under preparation
Baseline Survey Report -I	Submitted
Baseline Survey Report - II	Submitted
Baseline Survey Report-II (Updated version WC)	Submitted
Baseline Survey Report -II (Draft version of WSTs)	Submitted
Mid-Line Monitoring & Impact Evaluation Report	Submitted
Consolidated Baseline Survey Report (Phase-I&II)	Submitted
Baseline (Phase I&II) Consolidated Report - Final	Submitted
Mid-Term Monitoring and Impact Evaluation Report	Under Review
Special Reports submitted: 1) Monitoring Tools 2) Survey Manual on MTs 3) PAM 4) Working Paper on Technology and Methodology for Implementation of Android Based Field Progress Data Collection and GIS Based Progress Monitoring Analytical Dashboard. 5) Baseline-Endline Manual Survey Manual 6) Android Application PMIS Dashboard Manual	Submitted

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

4.6 MATRIX OF RESPONSIBILITIES

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

CHAPTER 5: ISSUES / BOTTLENECKS

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

- Due to non-availability of NWMC (NESPAK) deliverables/reports, ME&IE Consultants are facing problems to monitor & evaluate the working of NWMC. In this regard the cooperation and coordination of NWMCs as well as the relevant Directorates are required.
- Non availability of Technical Sanctions of the watercourses i.e., required for performing baseline surveys – III, as well as the required obligatory surveys including Midline and end line
- Non-availability of complete up-to-date inventory / data of all interventions from the Client, Provincial Agricultural Departments (OFWM) & NWMCs (NESPAK) till to date.
- Irregularity in the fund releases is also one of the key difficulties in the completion of the required project assignments / tasks, on time.
- While reviewing Dashboard during our inhouse exercise we have witnessed some stuck-up cases. Following are different levels/stages in term of day's and area of jurisdiction:

<u>Days</u>	<u>Departments</u>
100 to 119	District
120 to 149	Division
150 to 164	NPC/DDPC

As some of the cases has crossed third level which is execution agency DG, therefore, you are hereby intimated for your personal intervention to sort out these stuck ups.

We have already pointed out Stuck-Up Cases of NPIWC II Watercourses through our office letter No. NPIWC-II/ME&IE/NOISD/0623-0256 submitted to your office dated 15 June 2023. Your prompt action is required in this matter.

It is also important to mention that when ME&IE Consultants pointed out certain stuck-up cases to FPMU, a quick response has been observed from FPMU vide its Letter dated 12 July 2023 and raise the issue with executing agencies to settle the issue on priority bases.

ANNEXES A to S

ANNEXURE A: TENTATIVE QUARTERLY WORK PLAN (JULY TO SEPTEMBER 2023)

TENTATIVE WORK PLANNED FOR THE QUARTER (July 2023 To September 2023)												Legend						
												Activity starts	↓					
												Activity Ends	---					
												Activity Span						
No.	ACTIVITIES	3 Months-Year 2023 (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	Pre-Field Activities																	
	1.1	Validation of Baseline and Impact Survey																
	1.2	Preparation for 3rd-Phase Baseline Survey																
	1.3	Internal Meetings of ME&IE Consultants' Zonal Offices for development of Methodology for 3rd Phase Baseline Survey																
	1.4	Training of Field Staff for Impact Survey and 3rd-Phase Baseline Survey																
2	Field Activities																	
	2.1	Regular Monitoring of Interventions in the Field																
	2.2	Field Visits for Impact Survey																
	2.3	Data collection of the interventions in the field																
	2.4	Baseline Survey stage - 3																
	2.5	Online data entry in android based application																
3	ICT Assignment																	
	3.1	Development / Improvement of website of NPIWC-II																
	3.2	Monitoring online data collection and Data entry																
	3.3	Monitoring Android based Mobile Application under implementation by field staff.																
	3.4	Data collection of interventions in MIS/GIS database																
	3.5	Capacity Building Trainings / Refresher of Departments																
	3.6	Data Cleaning, Development & Launching of Dashboard for Client Offices																
4	Coordination																	
	4.1	Meetings of TL with NPC and OFWM Departments regarding Project Progress / Issues																
	4.2	Meeting of DTLs with respective DTL of PC & concerned OFWM Departments																
	4.3	ME&IE Consultants Internal Meetings																
5	Deliverable																	
	5.1	Monthly Monitoring Report																
	5.2	Quarterly Monitoring Report (Jan-Mar 2023)																
	5.3	Consolidation of Baseline Survey Phase-I & II Reports																
	5.4	Consolidation of Midterm Monitoring & Impact Evaluation Report																

ANNEXURE-B: MATRIX OF RESPONSIBILITIES

MATRIX OF RESPONSIBILITIES

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

ANNEXURE-C: MONITORING LOG-FRAME

Project Subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
C1: Organization of Water Users' Associations (WUAs)	Reactivation of existing / organization of water users' associations. Ensuring one on each target watercourse. Total WUAs ensured 47,278.	i. Community mobilization at 47,278 watercourses	i. Total 47,278 WUAs reactivated / established/registered	i. Right of way of 47,278 watercourses available ii. Skilled and unskilled labor required for watercourse improvement available iii. Construction material for civil works of watercourses procured iv. Alternate arrangement for water conveyance during construction made v. Watercourse improved	i. Disputes among the water users settled ii. Farmers branched improved iii. Water allocation made amicably iv. Maintenance of watercourses , WST and laser units done v. Cooperation among farmers increased	i. 47,278 watercourses improved and 15 percentage points conveyance losses reduced ii. Litigation among farmers reduced	i. 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 labor, and 60% funded by project.	<ul style="list-style-type: none"> i. Establishment of 47,278 Water users' associations (WUAs); ii. Registration of 47,278 WUAs; iii. Improvement and realignment of earthen section of 47,278 watercourses ; iv. Lining of up to 50% length of 47,278 watercourses either by: v. Precast concrete parabolic lining (PCPL) segments, or vi. Rectangular brick masonry, 	<ul style="list-style-type: none"> i. 47,278 WCAs established; ii. 47,278 WCAs registered; iii. 47,278 watercourses improved and lined; 	<ul style="list-style-type: none"> i. Conveyance losses for improved watercourses decreased by about 15 percentage points. ii. 1.654 million households benefited from the activity; iii. 11.347 million acres served with improved watercourses 	<ul style="list-style-type: none"> i. Increase in cropping intensity on improved watercourses by 5-24%; ii. Increase in crop yields. iii. Increase in irrigated area iv. Increase in agriculture output per unit of water by about 37% 	<ul style="list-style-type: none"> i. Increase in farm income; ii. Increase in employment for farm labor; iii. Reduction in poverty; iv. Enhanced food security for the country. 	<ul style="list-style-type: none"> i. The water flow measurements will be carried out at before and after watercourse improvement on 2-5% sample basis; ii. Agriculture survey before and after watercourse improvement on 2-5% sample basis; iii. The survey will determine: iv. Cropping pattern before and after the improvement; v. Cropping intensities

Project Subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
		or any other method as approved by the project					<p>before and after improvement;</p> <ul style="list-style-type: none"> • Before and after crop yields; • Before and after employment; <p>vi. The difference between before and after will be considered the result of the intervention after netting out the contribution of the growth pattern of the crop sector otherwise.</p>
C3: Construction of Water Storage Tanks (WSTs)	i. Construction of 14,932	i. 14,932 small farmers mobilized to	i. 14,932 WSTs constructed	i. Water which was otherwise	i. More area irrigated	i. Increased crop yields	i. 2-5% sample of WSTs will be surveyed

Project Subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
	water storage tanks	construct water storage tanks for irrigation ii. They agree to contribute 40% of the cost iii. Agree to first construct the tank with his/her own funds and then received subsidy at 40% on issuance of FCR	ii. 14,932 WSTs operated and maintained	largely going to be wasted is saved i. Irrigation provided at critical stages of the crops ii. Flexibility achieved for irrigation	ii. Increased cropping intensities	ii. Increased total crop output quantum iii. Increased farm income iv. Increased farm employment	ii. A data collection form will be designed to measure water saving due to WSTs iii. The forms used for baseline and impact surveys in case of watercourses will also be used for WSTs iv. Same data analysis will be carried out here as in case of watercourses.
C4: Provision of Land Leveling Units	i. Provision of 11,610 laser land leveling units to farmers and service	i. 11,610 laser units provided to farmers / service providers;	i. 11,610 farmers / service providers received PLL units; ii. Farmers / service providers received	i. Land leveled on Farmers' / service providers' farms;	i. Water application efficiency increased at field level;	i. Increased area under irrigated crops; ii. Enhanced crop yields	i. The land levelling is expected to save irrigation water and result in

Project Subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
	providers on a cost sharing basis: 50% by farmer / service provider and 50% by the project.	ii. Farmers trained in using the units.	training in using the units.	ii. Land leveled on fellow farmers on rent; iii. Total 3.483million acres levelled by 11,610 units.	ii. Even germination of seed. iii. Field application losses reduced by 10 percentage points iv. Water productivity increased by 24%	iii. Increased farm income	<p>better and even germination of seeds which can enhance crop yields. The crop yields thus affected will be reflected in agriculture sample surveys.</p> <p>ii. 2-4% sample units will be visited by ME&IE Consultants teams after one years of delivery</p> <p>iii. The unit will be verified</p> <p>iv. Area treated during the year will be collected</p>

Project Subcomponents	Targets	Activities	Outputs	Outcome-1	Outcomes-2	Goals / Impact	Methodology for measuring results
							v. Farmers' feedback collected on quality of the unit, quality of the after-sale service, etc.

ANNEXURE-D: DELIVERABLES/REPORTING REQUIREMENTS

Deliverables/Reporting Requirements

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

ANNEXURE-E: DASHBOARD DATA FOR DRAWING SAMPLE SIZE FROM OFWM OFFICE RAWALPINDI

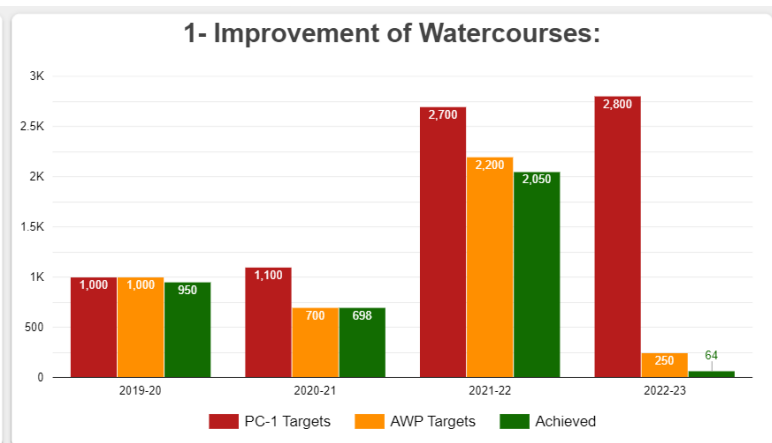
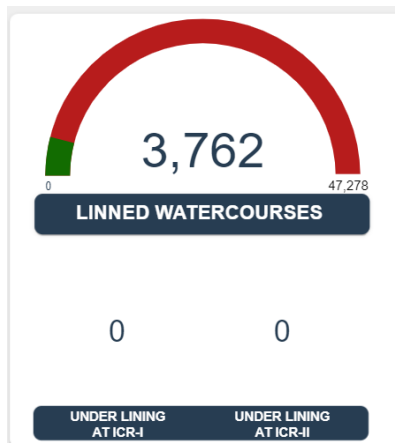
Name of the scheme/ Village	Tehsil/Region	Khasra No.	Total Civil Cost (RS.)
papin	Rawalpindi	363	255475
Habtal	Rawalpindi	510	154350
Chakri	Rawalpindi	3152/2	208799
Chakri	Rawalpindi	3152	294090
Mandhwal	Rawalpindi	1508	270107
Banda	Rawalpindi	3272	154350
Harnian Wala	Rawalpindi	2129	89197
Mahota	Rawalpindi	2061	208933
banda	Rawalpindi	325-1	338109
Gandian	Rawalpindi	826	208908
Gheela	Rawalpindi	159	208908
Salmon	Rawalpindi	356	413059
Jaber Miana	Rawalpindi	453	353298
Chakri	Rawalpindi	397	234440
Rallah/waryama	Rawalpindi	217	198734
Chakri	Rawalpindi	396/1	196389
Chakri	Rawalpindi	396	198734
Chak koka	Rawalpindi	2423	200454
Chak koka	Rawalpindi	2417	156654
Bhutral	Rawalpindi	338	211504
Chua Khalsa	K. Sayedan	4881	345626
Balimah	K. Sayedan	240	154350
Saidout	K. Sayedan	301	208783
Bandot	K. Sayedan	533	339248
Tal Khalsa	K. Sayedan	2565	198734
K. Syedan	K. Sayedan	33	195225
Arazi khas	K. Sayedan	1181	145310
Tal Khalsa	K. Sayedan	2575	187779
Shahbagh	K. Sayedan	1243	248729
Morgha	K. Sayedan	1812	207008
Jhalyarian	G. Khan	1138	257253
Bani khan	G. khan	2018/ 1956	146065
Rokhiyan	G. Khan	427	208427
Bandot	G. khan	2375	100277
Bandot	G. Khan	107	155632
Bandot	G. khan	2080	276316
Manjhota	G. Khan	1365	419305
Bagham	G. khan	413	208271
Banth	G. Khan	757	208416
Devi	G. khan	3147	156436
Guliana	G. Khan		279708
Tal Khalsa	G. khan		357736
Manjhota	G. Khan	1	154576
Gujjar	G. khan	457	156068

Name of the scheme/ Village	Tehsil/Region	Khasra No.	Total Civil Cost (RS.)
Arrazi Morri	G. Khan	8	319498
Narali Jabair	G. Khan	901	208037
Tal Khalsa	G. Khan	525	155261
Guliana Arian	G. Khan	1334	198734
Bandot	G. Khan	255	256913
Tal Khalsa	G. Khan	2557	154800
Thathi	G. Khan	697	263857
Sihal Doltala	G. Khan	519	204222
Kurab Usman	Texila	415	204140
Ghazi Kohli	Texila	1380	259578
Baseera	Texila	126	204140
Chokar	Texila	542	198734
Thatta Khalil	Texila	158	147304
Shah Pur	Texila	203	210324
Thatta Khalil	Texila	1449	164260
Ghazi Kohli	Texila	608	209196
Lab Thathu	Texila	1531	161718
Takhat Pari	Texila	4676	214797
Butral	Texila	382	187362
Dahgal	Texila	1	300000
Karahi	Texila	3027	300000
Karahi	Texila	3017	300000
Bhutral	Texila	47	300000
Chontra	Texila	1735	300000
Tal Khasa	Rawalpindi	495	170238
Jageera Abad	Rawalpindi	215	176535
Tal Khasa	Rawalpindi	593	170238
Tal Khalsa	Rawalpindi	35	300000
Tal Khalsa	Rawalpindi	48	300000
Tal Khasa	Rawalpindi	685/ 686	147358
Dupri	Rawalpindi	2537	231409
Daroha	G. Khan	561	300000
Jhalyari	G. Khan	3771	147289
Mora Bhatian	G. Khan	82	175959
Tal Khalsa	G. Khan	784	223325
Tal Khalsa	G. Khan	52	236558
Bhagwala	G. Khan	29	219767
Theekrian	G. Khan	33	300000
Muradi Janjeel	G. Khan	575	300000
Tal Khala	G. Khan	30	218132
Mohra Bhattin	G. Khan	2476	221390
Pind Fazal Khan	Texila	328	300000
Shahpur	Texila	15	300000
Dhallu	Texila	372	300000
Pind Fazal Khan	Texila	328	300000
Pind Fazal Khan	Texila	328	300000
Thata khalil	Texila	2968	300000

Name of the scheme/ Village	Tehsil/Region	Khasra No.	Total Civil Cost (RS.)
Khurram Paracha	Texila	1400	300000
Pind Noshari	Texila	95	300000
Dhok saidu	Texila	944	300000
Mohra Maradu	Texila	299	300000
Lab Thathu	Texila	1557	128208
Shahpur	Texila	86	270000
Lab Thathu	Texila	1908	270000
Dharek	Texila	734	270000

ANNEX-F: PUNJAB - WATERCOURSE DATA SUBMISSION - SUMMARY

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



ANNEX-G: PUNJAB - WSP DATA SUBMISSION - SUMMARY

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

ANNEX-H: PUNJAB - PLL DATA SUBMISSION - SUMMARY

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

ANNEX-I: KP - WATERCOURSE DATA SUBMISSION – SUMMARY

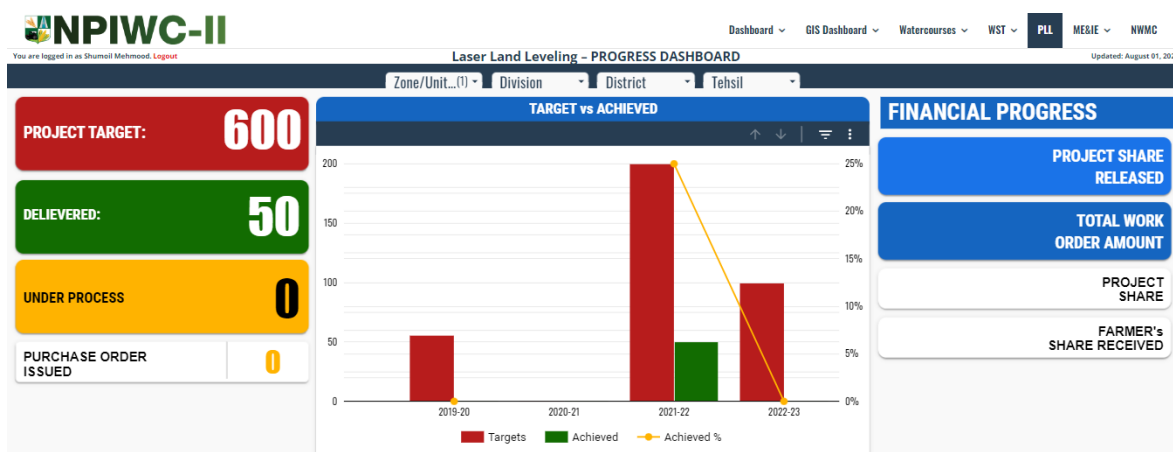
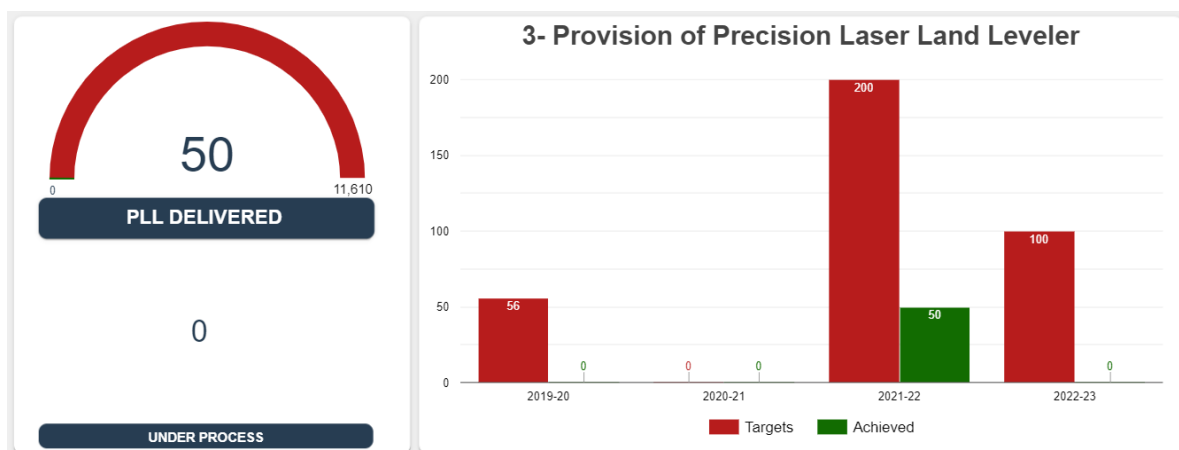
Division	District	Completed	Work Order Cancelled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
Bajaur Agency	Bajaur	60	0	0	0	13	6	0	79
Bajaur Agency Total		60	0	0	0	0	13	6	0
Bannu	Bannu	110	0	0	0	0	0	0	110
Bannu	Lakki Marwat	122	0	0	0	0	0	0	122
Bannu Total		232	0	0	0	0	0	0	232
D.I. Khan	D.I. Khan	507	0	3	0	0	0	0	510
D.I. Khan	Tank	56	0	0	0	0	0	0	56
D.I. Khan Total		563	0	3	0	0	0	0	566
Hazara	Abbottabad	29	0	0	0	0	0	0	29
Hazara	Battagram	49	0	0	0	0	0	0	49
Hazara	Haripur	73	0	0	0	0	0	0	73
Hazara	Lower Kohistan	7	0	0	0	13	1	0	21
Hazara	Mansehra	99	0	0	40	0	0	0	139
Hazara	Torghar	34	2	0	0	1	0	0	37
Hazara	Upper Kohistan	9	0	0	0	0	8	0	17
Hazara	Kolai Pallas	2	0	0	0	0	0	0	2
Hazara Total		302	2	0	40	14	9	0	367
Khyber Agency	Khyber	20	0	0	0	5	2	0	27
Khyber Agency Total		20	0	0	0	0	5	2	0
Kohat	Hangu	49	0	0	0	0	9	0	58
Kohat	Karak	82	0	0	0	0	0	0	82
Kohat	Kohat	92	0	0	0	0	0	0	92
Kohat Total		223	0	0	0	0	9	0	232
Kurram Agency	Kurram	10	0	0	0	0	0	0	10
Kurram Agency Total		10	0	0	0	0	0	0	0
Malakand	Buner	106	0	0	0	0	0	0	106
Malakand	Chitral	94	0	0	0	0	0	0	94
Malakand	Lower Dir	100	0	0	3	26	4	1	134
Malakand	Malakand	106	0	0	0	1	1	0	108
Malakand	Shangla	54	0	2	1	1	1	1	60
Malakand	Swat	282	3	0	2	0	0	0	287
Malakand	Upper Dir	111	0	0	0	0	0	0	111
Malakand Total		853	3	2	6	28	6	2	900
Mardan	Mardan	137	0	0	0	4	0	0	141
Mardan	Swabi	130	0	0	1	0	0	0	131
Mardan Total		267	0	0	1	4	0	0	272
M. Agency	Upper Mohmand	64	0	2	0	0	0	0	66
M. Agency	Lower Mohmand	22	0	2	0	1	0	0	25
M. Agency Total		86	0	4	0	1	0	0	91
Orakzai Agency	Orakzai	1	0	0	0	0	0	0	1
Orakzai Agency Total		1	0	0	0	0	0	0	0
Peshawar	Charsadda	135	1	0	0	15	1	0	152
Peshawar	Nowshera	127	0	0	0	1	2	0	130
Peshawar	Peshawar	73	1	0	0	1	4	1	80
Peshawar Total		335	2	0	0	17	7	1	362
S.W Agency	S.W Agency	37	0	0	0	0	0	0	37
S.W Agency Total		36	37	0	0	0	0	0	0
N.W Agency	N.W Agency	5	0	0	0	0	6	0	11
N.W Agency Total		5	0	0	0	0	6	0	11
Overall		2994	7	9	47	82	45	3	3187

ANNEX-J: KP - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
Bajaur Agency	Bajaur	17	0	0	1	3	21
Bajaur Agency Total		17	0	0	1	3	21
Bannu	Bannu	12	0	0	0	1	13
Bannu	Lakki Marwat	35	0	0	0	0	35
Bannu Total		47	0	0	0	1	48
D.I.Khan	D.I.Khan	83	1	1	5	0	90
D.I.Khan	Tank	32	0	0	0	0	32
D.I.Khan Total		115	1	1	5	0	122
Hazara	Abbottabad	18	0	0	0	0	18
Hazara	Battagram	26	0	0	4	0	30
Hazara	Haripur	40	0	0	0	0	40
Hazara	Kolai Pallas	2	0	0	2	0	4
Hazara	Lower Kohistan	0	0	0	0	1	1
Hazara	Mansehra	40	1	5	2	0	48
Hazara	Torghar	17	0	0	1	0	18
Hazara	Upper Kohistan	7	0	0	0	6	13
Hazara Total		150	1	5	9	7	172
Khyber Agency	Khyber	10	0	0	6	6	22
Khyber Agency Total		10	0	0	6	6	22
Kohat	Hangu	12	0	0	0	0	12
Kohat	Karak	73	0	0	0	0	73
Kohat	Kohat	5	0	0	0	0	5
Kohat Total		90	0	0	0	0	90
Kurram Agency	Kurram	2	0	0	0	0	2
Kurram Agency Total		2	0	0	0	0	2
Malakand	Buner	43	0	0	0	0	43
Malakand	Chitral	21	0	0	0	0	21
Malakand	Lower Dir	18	2	5	12	0	37
Malakand	Malakand	24	0	0	0	0	24
Malakand	Shangla	43	0	0	0	0	43
Malakand	Swat	163	0	0	0	1	164
Malakand	Upper Dir	39	1	1	0	1	42
Malakand Total		351	3	6	12	2	374
Mardan	Mardan	33	0	0	1	0	34
Mardan	Swabi	21	0	0	0	0	21
Mardan Total		54	0	0	1	0	55
M. Agency	Lower Mohmand	28	0	0	0	0	28
M. Agency	Mohmand Agency	33	0	0	0	0	33
M. Agency	Upper Mohmand	49	0	0	0	0	49
M. Agency Total		110	0	0	0	0	110
Orakzai Agency	Orakzai	2	0	0	0	0	2
Orakzai Agency Total		2	0	0	0	0	2
Peshawar	Charsadda	13	0	0	1	0	14
Peshawar	Nowshera	71	0	0	0	0	71
Peshawar	Peshawar	44	0	0	3	9	56
Peshawar Total		128	0	0	4	9	141
S.W Agency	S.W Agency	32	0	0	0	0	32
S.W Agency Total		32	0	0	0	0	32
N.W Agency	N.W Agency	8	0	0	5	4	17
N.W Agency Total		8	0	0	5	4	17
Overall		1116	5	12	43	32	1208

ANNEX-K: KP - PLL DATA SUBMISSION - SUMMARY

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



ANNEX-L: BALOCHISTAN - WATERCOURSE DATA SUBMISSION - SUMMARY

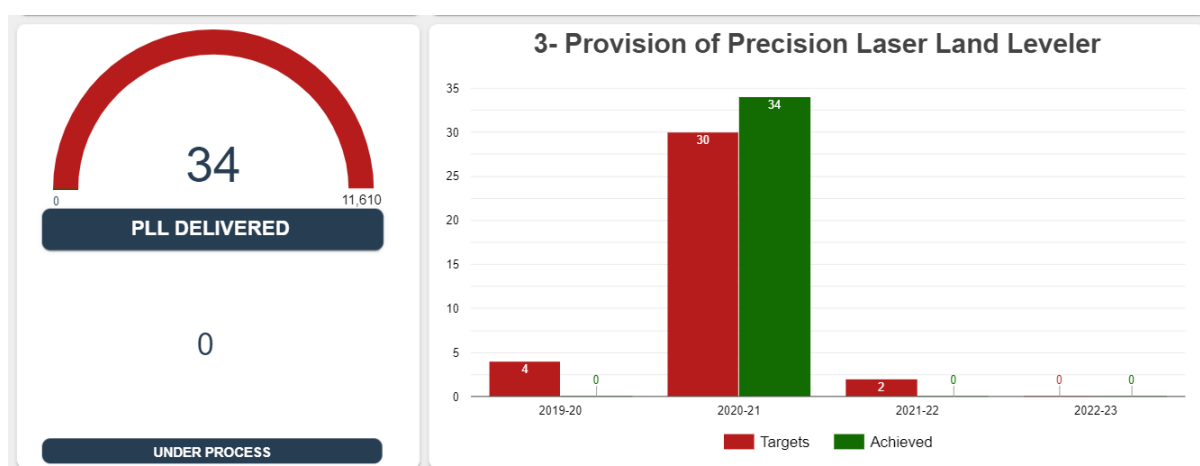
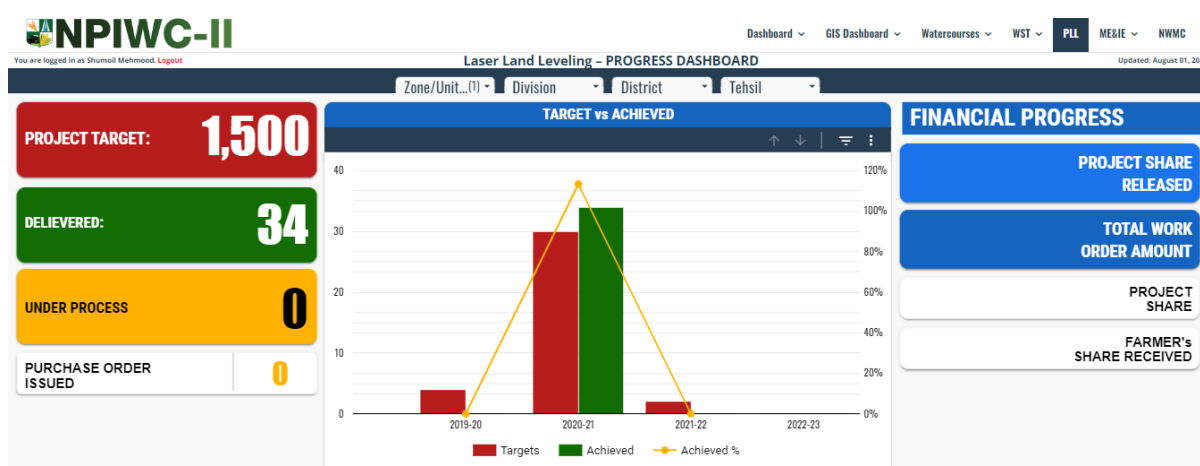
Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	TS Issued	TS Pending	
Kalat	Awaran	150	0	0	0	1	151
Kalat	Kalat	281	0	0	0	1	282
Kalat	Khuzdar	165	0	0	0	0	165
Kalat	Lasbela	154	0	0	35	0	189
Kalat	Mastung	190	0	0	6	2	198
Kalat	Surab	0	0	0	19	23	42
Kalat Total		940	0	0	60	27	1027
Loralai	Barkhan	64	0	0	0	0	64
Loralai	Duki	0	0	0	43	0	43
Loralai	Loralai	335	0	0	0	0	335
Loralai	Musakhail	187	0	0	0	32	219
Loralai Total		586	0	0	43	32	661
Makran	Gwadar	23	0	0	0	0	23
Makran	Kech	59	0	0	9	64	132
Makran	Panjgur	121	0	0	33	0	154
Makran Total		203	0	0	42	64	309
Nasirabad	Jaffarabad	141	0	0	0	0	141
Nasirabad	Jhal Magsi	27	0	0	0	0	27
Nasirabad	Kachi	3	0	0	98	1	102
Nasirabad	Nasirabad	52	0	0	89	28	169
Nasirabad	Sohbatpur	79	0	0	0	0	79
Nasirabad Total		302	0	0	187	29	518
Quetta	Killa Abdullah	110	0	0	0	0	110
Quetta	Pishin	186	0	0	0	1	187
Quetta	Quetta	83	0	0	1	0	84
Quetta Total		379	0	0	1	1	381
Rakhshan	Chaghi	77	0	0	0	0	77
Rakhshan	Kharan	26	0	0	2	40	68
Rakhshan	Nushki	3	0	0	61	37	101
Rakhshan	Washuk	18	0	0	0	2	20
Rakhshan Total		124	0	0	63	79	266
Sibi	Dera Bugti	99	0	0	0	0	99
Sibi	Harnai	42	0	0	0	0	42
Sibi	Kohlu	58	0	0	0	0	58
Sibi	Sibi	60	0	0	0	0	60
Sibi	Ziarat	71	0	0	1	0	72
Sibi Total		330	0	0	1	0	331
Zhob	Killa Saifullah	235	0	0	0	0	235
Zhob	Sherani	51	0	0	0	15	66
Zhob	Zhob	80	0	0	1	0	81
Zhob Total		366	0	0	1	15	382
Overall		3230	0	0	398	247	3875

ANNEX-M: BALOCHISTAN - WST DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress			Pending	Overall
			1st Milestone	2nd Milestone	TS Issued	TS Pending	
Kalat	Awaran	84	0	0	1	2	87
Kalat	Kalat	177	0	0	2	0	179
Kalat	Khuzdar	139	0	0	0	0	139
Kalat	Lasbela	105	0	0	39	6	150
Kalat	Mastung	99	0	0	8	0	107
Kalat	Surab	0	0	0	29	0	29
Kalat Total		604	0	0	79	8	691
Loralai	Barkhan	54	0	0	0	0	54
Loralai	Duki	0	0	0	29	0	29
Loralai	Loralai	113	0	0	0	0	113
Loralai	Musakhel	26	0	0	0	9	35
Loralai Total		193	0	0	29	9	231
Makran	Gwadar	7	0	0	0	0	7
Makran	Kech	35	0	0	18	46	99
Makran	Panjgur	46	0	1	121	1	169
Makran Total		88	0	1	139	47	275
Nasirabad	Jaffarabad	17	0	0	0	0	17
Nasirabad	Jhal Magsi	30	0	0	0	0	30
Nasirabad	Kachi	36	0	0	46	0	82
Nasirabad	Nasirabad	0	0	0	17	0	17
Nasirabad	Sohbatpur	14	0	0	0	0	14
Nasirabad Total		97	0	0	63	0	160
Quetta	Killa Abdullah	55	0	0	0	1	56
Quetta	Pishin	107	0	0	10	2	119
Quetta	Quetta	75	0	1	0	0	76
Quetta Total		237	0	1	10	3	251
Rakhshan	Chaghi	33	0	0	0	14	47
Rakhshan	Kharan	15	0	0	13	2	30
Rakhshan	Nushki	0	0	0	53	9	62
Rakhshan	Washuk	4	0	0	8	0	12
Rakhshan Total		52	0	0	74	25	151
Sibi	Dera Bugti	38	0	0	1	0	39
Sibi	Harnai	21	0	0	0	0	21
Sibi	Kohlu	34	0	0	0	0	34
Sibi	Sibi	23	0	0	0	0	23
Sibi	Ziarat	21	0	0	0	0	21
Sibi Total		137	0	0	1	0	138
Zhob	Killa Saifullah	117	0	0	0	0	117
Zhob	Sherani	25	0	0	0	0	25
Zhob	Zhob	85	0	0	0	0	85
Zhob Total		227	0	0	0	0	227
Overall		1635	0	2	395	92	2124

ANNEX-N: BALOCHISTAN - PLL DATA SUBMISSION - SUMMARY

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



ANNEX-O: GB - WATERCOURSES DATA SUBMISSION - SUMMARY

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

ANNEX-P: GB - WST DATA SUBMISSION - SUMMARY

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

ANNEX-Q: AJK - WATERCOURSES DATA SUBMISSIONS - SUMMARY

Division	District	Completed	Work Order Cancelled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MZD	MZD	89	5	2	4	9	12	0	121
	Jhelum	25	2	1	0	11	5	0	44
	Neelum	44	13	10	1	0	0	0	68
MZD Total		158	20	13	5	20	17	0	233
Poonch	Poonch	39	9	0	0	2	3	1	54
	Bagh	29	15	0	0	0	0	17	61
	Haveli	0	10	0	0	0	0	5	15
	Sudhnoti	8	16	0	0	1	0	6	31
Poonch Total		76	50	0	0	3	3	29	161
Mirpur	Mirpur	76	2	0	0	1	0	1	80
	Bhimber	110	0	0	0	9	0	0	119
	Kotli	38	22	0	0	4	1	5	70
Mirpur Total		224	24	0	0	14	1	6	269
Overall		458	94	13	5	37	21	35	663

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

Division	District	Completed	Work Order Cancelled	Under Progress			Pending		Overall
				1st Milestone	2nd Milestone	Work Order Issued	TS Pending	Work Order Pending	
MZD	MZD	141	3	0	0	4	13	0	161
	Jhelum	17	0	0	0	7	3	0	27
MZD Total		158	3	0	0	11	16	0	188
Poonch	Poonch	54	19	0	1	0	22	0	96
	Bagh	44	38	0	0	1	16	0	99
	Haveli	0	16	3	0	0	19	0	38
	Sudhnoti	13	24	1	0	0	4	0	42
Poonch Total		111	97	4	1	1	61	0	275
Mirpur	Mirpur	11	3	0	0	3	0	0	17
	Bhimber	12	0	0	0	0	0	0	12
	Kotli	30	12	1	0	7	3	0	53
Mirpur Total		53	15	1	0	10	3	0	82
Overall		322	115	5	1	22	80	0	545

ANNEX-S: ICT - WATERCOURSE DATA SUBMISSION - SUMMARY

Division	District	Completed	Under Progress				Overall
			1st Milestone	2nd Milestone	Work Order Issued	Work Order Pending	
ICT	ICT	34	0	0	0	0	34
Overall		34	0	0	0	0	34