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MINISTERY OF NATIONAL
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ANNUAL MONITORING REPORT
JULY-2021-JUNE-2022

WATER CONSERVATION IN BARANI AREAS OF KHYBER PAKHTUNKHWA (WC-KP)

MONITORING, EVALUATION AND IMPACT EVALUATION (ME&IE) CONSULTANTS

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

EASE-PAK

ADA Consultants Inc

In Association with S&S Associates

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

Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants
For
Water Conservation in Barani Areas of Khyber Pakhtunkhwa

ANNUAL MONITORING REPORT
FOR
(1st July 2021 to 30th June 2022)

CONTENTS

LIST OF TABLES

LIST OF ANNEXES

ACRONYMS

ADA	Assistant Director Agriculture
AF	Acre-Feet
AJK	Azad Jammu & Kashmir
ALCI	Agronomic Low-Cost Interventions
AWPB	Annual Work Plan and Budget
AWPs	Annual Work Plans
BCR	Benefit Cost Ratio
CB	Capacity Building
CMS	Content Management System
CSRD	Center for Social Research and Development
DAE	Directorate of Agriculture Engineering
DDA	Deputy Director Agriculture
DGW&SC	Directorate General of Water & Soil Conservations
EAs	Executing Agencies
EIRR	Economic Internal Rate of Return
ES-QPR	Environmental and Social Quarterly Progress Reports
FCR	Financial Completion Report
FCRs	Final Completion Reports
FMFSR	Framework for Federal Financial Management System
FOs	Farmers Organizations
FPMU	Federal Project Management Unit
FWMC	Federal Water Management Cell
GAP	Gender Action Plan
GB	Gilgit Baltistan
GIS	Geographic Information System
GoP	Government of Pakistan
GoKP	Government of Khyber Pakhtunkhwa
HEIS	High Efficiency Irrigation System
IAs	Implementing Agencies
ICR	Intermediate Completion Report
ICT	Islamabad Capital Territory
ICT	Information & Communication Technology
IRR	Internal Rate of Return
KP	Khyber Pakhtunkhwa
LFT	land for Terracing
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
MT	Monitoring Template
MTE	Mid-Term Evaluation
MWA	Micro-Watershed Areas
NPC	National Project Coordinator
NPV	Net Present Value

OFWM	On Farm Water Management
PC	Project Consultants
PC-1	Planning Commission-(Form-One)
PDO	Project Development Objectives
PIC	Project Implementation Committee
PIES	Project Impact Evaluation Study
PPRF	Project Progress Reporting Framework (PPRF)
PQC	Pre-Qualification Committee
RBM	Results-Based Management
RWD	Responsive Web Design
S&WC	Soil & Water Conservation
SBS	Stream Bank Stabilization
SDS	Sand Dunes Stabilization
SOPs	Standardized Operating Procedures
SPS&TW	Solar, Pumping System and Tube Wells
SPSS	Statistical Package for Social Sciences (Software)
SSCs	Supply and Service Companies
TABs	Tablets
TOR	Terms of Reference
TPV	Third Party Validation
TWRD	Tail-Water Recovery Ditch
WCA	Water Conservation Activity
WCBAKP	Water Conservation in Barani Areas of Khyber Pakhtunkhwa
WG	Women Group
WR	Water Reservoir
WSHG	Water Seepage Harvesting Galleries
WSP	Water Storage Pound
WST	Water Storage Tank
WUAs	Water Users Associations

EXECUTIVE SUMMARY

The Annual Monitoring Report (AMR) (1st July 2021 to 30th June 2022) includes 6 Chapters, related to the WCBA project KP. This is comprised of the progress in M&E and impact assessment of the project.

Chapter-1 describes the Objectives and background of Water Conversation in Barani Areas of Khyber Pakhtunkhwa, as following;

The proposed project is in line with the mandate of the government objectives of National Water Policy and the Prime Minister's 100 days agenda then focused on expanding water conservation efforts through smart interventions to reduce water losses. Similarly, National Water Policy of the country aims at: (i) reduction of 33% in 46 MAF river flows that are lost during conveyance –watercourses lining especially in saline and semi-saline areas; and (ii) increase at least 30% in efficiency of water use by producing "more crop per drop of water".

Water is getting scared day by day. There is a serious need to conserve this vital resource to ensure sustainable high level crop production for food security and safeguarding the socio-economic status of the farming community of KP Province.

To mitigate this problem Executive Committee of National Economic Council (ECNEC) approved this project "Water Conservation in Barani Areas of KP" on August 29, 2019 at a cost of Rs. 14.177 billion at 80:20 costs sharing between Government and the beneficiaries/ farmers. The implementation period of the project is 60 months. The aim of the project is to conserve water in Barani Areas of KP through interventions given below.

S.#	Interventions	S.#	Interventions
1.	Construction of 5,000 water ponds	8.	Constructing 370 numbers of water Seepage harvesting Galleries
2.	Construction of 3,000 Check dams	9.	800 numbers of Agronomic low-cost interventions
3.	Construction of 330 Water Reservoir	10.	230 acres of Sand Dunes stabilization
4.	Construction of 2,500 Stream bank stabilization.	11.	500 Nos. Capacity Building
5.	Construction of 1,000 Gated field Inlet Outlet/Spillway	12.	Procurement and installation of 700 Solar, pumping System and 300 Tube Wells.
6.	Development of 370 acres land for terracing	13.	700 on-site training of farmers in adaptation of new techniques for pumping sub-surface water.
7.	Development of 70 numbers of micro-watershed areas		

Chapter-2 provides detail of ME&IE Consultants of the WCBAKP Project. Government has engaged "Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants" through Federal Project Management Unit (FPMU) Federal Water Management Cell, Ministry of National Food Security & Research, Islamabad.

The project has been awarded to the Joint Venture of M/s G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering services (Pvt.) Ltd., Centre for Social Research and Development (CSRD) and ADA Consultants Inc. Canada. Consultants signed contract agreement with the Government of Pakistan on November 27, 2021 and mobilized its staff to start the assignment.

The ME&IE Consultants of WCBA-KP have to carry out, but not limited to the following activities:

i) Undertake baseline, midline and end line surveys of 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 and Evaluation of the project activities.
iv) Assessing the improvement in water availability and soil losses due to project interventions.
v) Assessing the water saving per annum due to the project interventions.
vi) Assessing the economic benefits to the agriculture in terms of changes in irrigated area, area under cultivation, crop yields, cropping pattern, cropping intensity, farm income and employment.
vii) Assessing the extent of community mobilization, financial and administrative sustainability of Soil & Water Conservation Associations (SWCAs) and ensuring the maintenance of project interventions.
viii) Carryout impact evaluation of the project investment on the economy and stakeholders.

Chapter-3 Provides the detail of mobilization of consultants' team through establishment of project office, in Peshawar. Recruiting of HR and train them on M&E in project areas.

Chapter-4 Describes Consultants' Approach and Methodology to conduct the ME&IE activities and explains the development of ICT system of the project to record and analyze M&E.

Chapter-5 Describes the purpose of Annual Monitoring Report (AMR-2), explains the updated status of consultants' activities during the reporting period. This chapter includes details of coordination meetings held by the ME&IE consultants with client and other stakeholders of the project of federal, provincial and district levels.

Chapter-6 This chapter highlights the problems being faced by the ME&IE consultants in execution of the project. This chapter also highlights the importance of ME&IE strategies to effectively complete the WCBA-KP.

1 CHAPTER – 1: INTRODUCTION TO WATER CONSERVATION IN BARANI AREA

This section of the Annual Monitoring Report includes profile and brief introduction and background of Water Conservation in Barani Area of Khyber Pakhtunkhwa (WCB AKP)

1.1 PROJECT PROFILE

Project Name	Water Conservation in Barani Areas of Khyber Pakhtunkhwa
Project Areas	Project covers 35 Districts of Khyber Pakhtunkhwa falling under Malakand, Hazara, Peshawar, Mardan, Kohat, Bannu, and Dera Ismail Khan Divisions.
Sponsoring Agency	Ministry of National Food Security & Research
Executing Agencies (EAs)	Federal Project Management Unit (FPMU), Federal Water Management Cell, Islamabad.
Project Period	5 Year (2019-2024)
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) and ADA Consultants Inc. Canada
ME&IE Consultant Mobilized	December 24, 2020

1.2 INTRODUCTION

The common features of Barani and Arid lands are; low precipitation, high temperature, high evaporation, low humidity, poor rain water efficiency, water percolation and low productivity. These lands can be made more productive for cultivation and crop production through soil and water conservation activities, as this is need of the hour to overcome scarcity of water and food for the human as well as for livestock. Barani areas are facing huge shortage of water. Therefore, to overcome this shortage Govt. of Pakistan has established Provincial Soil & Water Conversation Departments. These Departments are providing services to the farmers for agricultural purpose through district governments. Main tasks of Soil & Water Conservation which are considered important are following:

- To contain soil erosion process in the cultivable area and the adjoining uncultivated lands and to save these areas from further degradation.
- To make maximum use of run-off water by conserving it into the field by various moisture conservation measures.
- To bring more area under cultivation through reclamation and gully control techniques.
- Exploitation of water resource through various means of providing assured water supply for irrigation purposes (mini dams and ponds)

1.3 BACKGROUND OF WCBAKP

Khyber Pakhtunkhwa (KP) borders the mountainous regions except to the South-East portion of the province. Therefore, geographically the province is intertwined with various rivers, floods waterways and hill torrent runoff water resources. Water is the limiting factor in the rain- fed Districts of KP that hinder the production of crops and adversely affects human and animal life. Precipitation received through these mountains of the region drains out of the watershed quickly because of the undulating topography; the uneven terrain of the foothills which drain the areas quickly. Hence enormous amounts of water are being lost through runoff without being utilized, carrying with it fertile top-soil. These waters induce flash floods on one hand and decrease the storage capacity of the dams due to siltation, on the other.

While the plains of Peshawar valley (comprising of district Peshawar, Charsadda, Mardan, Swabi and Nowshera) is irrigated by the river Kabul and its tributaries, D.I. Khan which are being irrigated through the CRBC canal from the Indus and steps being taken for Gomal Zam dam, majority of the agriculture lands of the province need to be supplemented through local water harvesting because of the uneven terrain.

In relation to the scope of the problem and the opportunity at hand, previously the idea of conversion of rain fed agriculture to irrigated agriculture have not

been taken as it should have been. The conservation of these vital resources is a need of the hour to ensure sustainable high level crop production for food security and safeguarding the socio-economic status of the farming community of KP.

The runoff water, if harvested and stored in small units at local level, can be used to supplement irrigation for increase in agriculture production, stabilize the ground water table by inducting ground water recharge, can be used for human and animal use and improve climatic conditions of the rain-fed areas.

The Directorate General Soil & Water Conservation Khyber Pakhtunkhwa is functional in 35 Districts of the province and is striving for the protection and conservation of agricultural lands and rain water through conservation structures like Inlet and outlet structures, field spillways, cemented water storage ponds etc. Establishment of tube wells and their solarization are the major components of irrigation in the Barani areas of KP.

1.3.1 Project Objectives

The main objective of agriculture sector is to make the country self-sufficient in food grains and make raw' material available for agriculture-based industries. The project will be encouraging the farming community through financial assistance for water conservation for ensuring timely irrigation. The project has designed to achieve the following long-run objectives:

- *To conserve land and water resources through various interventions for supplemental irrigation, livestock, farm forestry and fish farming*
- *To increase cropping intensity and per unit of land and water productivity*
- *To improve livelihood standards of poor fanners*
- *To improve socio-economic stability*

The project objectives in quantifiable terms are as follows:

i) To induce aquifer/ground water recharge by pounding water in> 300 water storage reservoirs.
ii) To convert 15,032 acres of culturable wastelands into productive agriculture lands through development of 70 micro-watersheds.
iii) To reduce soil erosion by containing flash floods through provision of soil & water conservation structures and check gulley erosion by plugging gullies through 3,000 check dams.
iv) Minimize the adverse effects of drought by maximizing the irrigation water supplies through exploitation of sub-surface water from tube wells.
v) Conversion of around 43,225 acres of rain fed land into irrigated land through installation of 300 agricultural tube wells and solarization of 700 existing/new tube wells.
vi) To enhance the capacity of the stakeholders in water harvesting and for sustainable use of land and soil resources for increased agriculture production.
vii) To improve the socio-economic status of the farmer community.

The project is in line with specific objectives of National Water Policy and Provincial Implementation Plan of the agriculture sector for enhancing water productivity, efficient and harvesting runoff water to ensure farm productivity, economic uplift of small farmers and improving economy of the country as a whole. The proposed project is closely related to the recently completed water conservation schemes, which form an important element of the integrated rural development program within the agriculture sector.

1.3.2 Description of Sub-Components

The project includes two components; Component - A & B.

- ***Component-A***

Component-A is being executed by the Directorate General Soil & Water Conservation KP through its district departments. It comprises the following activities **(Table 1.1)**.

Table 1.1: Activities under Component A OF WCBAKP Project

Sr. No.	Name of Activity	Sr. No.	Name of Activity
1.	Water Ponds	2.	Check Dams
3.	Water Reservoir	4.	Stream-bank stabilization
5.	Gated field Inlet Outlet/ Spillway	6.	Terracing
7.	Micro-Watershed Development	8.	Water Seepage harvesting Galleries
9.	Agronomic low-cost interventions	10.	Sand Dunes stabilization
11.	Capacity Building		

- ***Component-B***

The Component-B is being implemented by the Directorate of Agricultural Engineering, KP. It comprises of the following activities:

i) Installation of Tube wells.
ii) Solarization of Agricultural Tube Wells.

1.4 PROJECT TARGETS AND OUTPUTS

Project targets and outputs of both components are presented at in **Table 1.2** below.

Table 1.2: Project Targets and Outputs

S.#	Input	Output
1.	Construction of 5,000 water ponds	Approximately 12,500 acres of agriculture land will be irrigated from these interventions.
2.	Construction of 3,000 Check dams	Approximately 7,500 acres of the land will be reclaimed.
3.	Construction of 330 Water Reservoir	Approximately 9,900 acres of land will be irrigated from this intervention.
4.	Construction of 2,500 Stream bank stabilization.	Protecting/ reclaiming about 6,250 acres of agricultural land from erosion with floods water.
5.	Construction of 1,000 Gated field Inlet Outlet/Spillway	Sufficient amount of water will be provided to about 2,500 acres of land for irrigation in rod kohi areas of the province.
6.	Development of 370 acres land for terracing	Farmer's income will be increased by increasing agricultural land due to terraces development.
7.	Development of 70 numbers of micro-watershed areas	Approx. 7,000 acres of the area will be converted into agriculture/ forest land which will improve the aesthetic value of the area.
8.	Constructing 370 numbers of water Seepage harvesting Galleries	Approx. 925 acres of land will be irrigated from this intervention.
9.	800 numbers of Agronomic low-cost interventions	Approx. 2000 acres of land will be protected from erosion by these interventions.
10.	230 acres of Sand Dunes stabilization	Approx. 230 acres land of sand dunes will be stabilized by growing kana plants.
11.	500 Nos Capacity Building	An estimated 500 trainings will be conducted for stakeholders including farmers and departmental staff.

Agricultural Engineering Component		
12.	Procurement and installation of 700 Solar, pumping System and 300 Tube Wells.	Irrigation of 17,500 hectares (43,225 acres) of land.
13.	700 on-site training of farmers in adaptation of new techniques for pumping sub-surface water.	Irrigation water Pumping cost will be reduced by adopting solar technology.

2 CHAPTER – 2: ME&IE CONSULTANTS FOR WCBA-KP PROJECT

This Chapter explains the selection of ME&IE consultants for WCBAKP and scope of consultants' services.

2.1 THE ME&IE CONSULTANTS

Client carried out a competitive bidding process for selection of ME&IE consultants for Water Conservation of Barani Areas in Khyber Pakhtunkhwa (WCBA-KP). A Joint Venture of companies' M/s G3 Engineering Consultants (Pvt.) Ltd., Ease-Pak Engineering Services (Pvt.) Ltd., Centre for Social Research and Development (CSRD) and ADA Consultants Inc. Canada has been selected as ME&IE Consultants of the project. After signing the contract agreement with client, consultants mobilized its staff on December 24, 2020 to start project activities.

2.2 SCOPE OF ME&IE CONSULTANTS' SERVICES

The scope of the ME&IE Consultants is as follow:

The ME&IE Consultants for Water Conservation in Barani Areas of Khyber Pakhtunkhwa (WCBA-KP) will be responsible for monitoring, evaluation and Impact Evaluation (ME&IE) of the project interventions carried out by implementation Consultants and in this context will carry out, but not limited to the following activities:

i) Undertake baseline, midline and end line surveys of 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 and Evaluation of the project activities.
iv) Assessing the improvement in water availability and soil losses due to project interventions.
v) Assessing the water saving per annum due to the project interventions.
vi) Assessing the economic benefits to the agriculture in terms of changes in irrigated area, area under cultivation, crop yields, cropping pattern, cropping intensity, farm income and employment.
vii) Assessing the extent of community mobilization, financial and administrative sustainability of Soil & Water Conservation Associations (SWCAs) and ensuring the maintenance of project interventions.
viii) Carryout impact evaluation of the project investment on the economy and stakeholders.

3 CHAPTER – 3: MOBILIZATION OF ME&IE CONSULTANT' TEAMS

This Chapter provides detail of consultants' team and their mobilization on the assignment.

3.1 MOBILIZATION OF ME&IE CONSULTANTS' TEAM LEADER AND CORE TEAM

The Team Leader of ME&IE consultants joined the project at the head office Islamabad on 24th December 2020. The list of key specialists is shown in **Table-3.1**, **Table-3.2** and is also depicted in **Figure-3.1** organogram while staff on-board is given in **Table-3.3**.

Table 3.1: Team & Planned Time Input (Key Staff)

Sr. No.	Name	Position	Time Input (months)
1	Dr. Usman Mustafa	Team Leader / M&E Specialist (till Oct, 2021)	30
2	Dr. G. R. Kerio	Environment & Social Monitoring Specialist	12
3	Dr. Mansab Ali	Irrigation Agronomist	12
4	M. Akram Khan	Agricultural Economist	8
5	Afzal Hayat Khan	Social & Gender Specialist	8
Total Man-months			**70**

Table 3.2: Team & Planned Time Input (Non-Key Staff)

Sr. No.	Name	Position	Time Input (months)
1	Recruitment in progress	Un-allocated man-months	Misc.
2	Recruitment in progress	Other Supporting Technical and Non-Technical Staff	Various
Total Man-months			**165**

Table 3.3: Project Staff (On-Board)

Sr. No.	Name	Position
1	Dr. Fazli Hakim Khattak	Team Leader
2	Nasir Khan	ICT Manager
3	Khaleeq-uz-Zaman	Field Engineer
4	Muhammad Haroon	Field Engineer
5	M. Shahraz Khan	Office Manager
6	Qaiser Khan	Accounts Manager
7	Amjad Ali	Computer Operator
8	Gul Zamin	Peon
9	Muhammad Noman	Security Guard
10	Sabir-ur-Rehman	Cook
11	Irfan	Sweeper
12	Khurshid Gul	Deputed to NPC office, ISD,

3.2 MOBILIZATION OF DISTRICT TEAMS

For conducting Baseline, Midline and End Line Survey field enumerators have been selected and moved to selected sample districts for field surveys. Before sending the enumerators into the field special trainings were imparted to them.

3.3 ESTABLISHMENT OF ME&IE CONSULTANT OFFICES

Office of ME&IE consultants for WCBA-KP project has been allocated as per PC-I at Peshawar on the address;

House No. 253,
Hadi Lane, Backside Prime Town Apartments
Old Bara Road, University Town, Peshawar, KP.

3.4 Organogram

Organogram of the project includes the following setup.

WCBA-KP PROJECT ORGANOGRAM

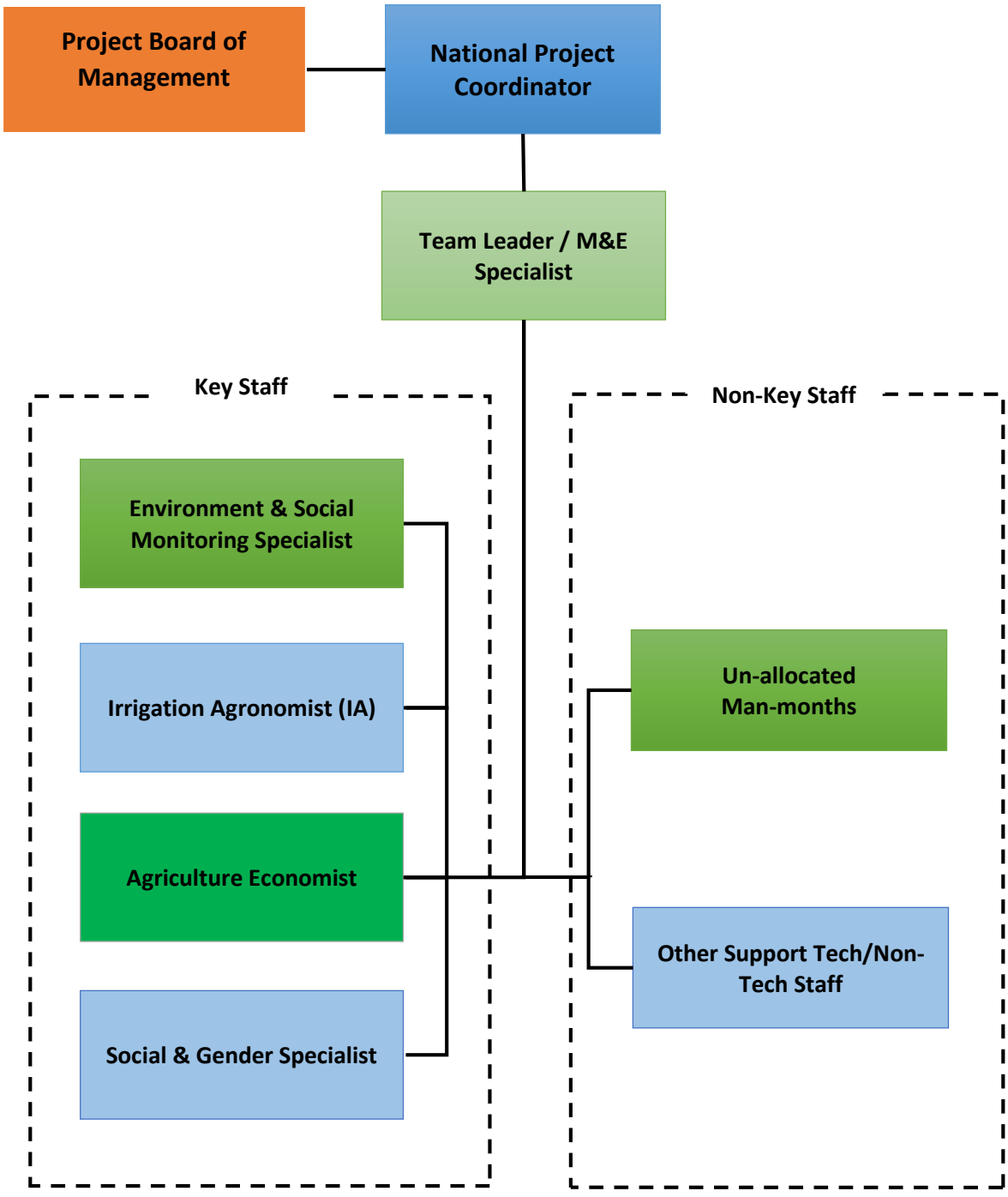

Figure 3.1: The Organogram of the Consultants' Team

4 CONSULTANTS' APPROACH AND METHODOLOGY FOR ME&IE

4.1 BASICS OF ME&IE SYSTEM

The ME&IE at WCBAKP Project is grounded in Results-Based Management (RBM), which is a management strategy focusing on the performance and achievement of results in terms of outputs, outcomes and impacts. It is a tool used for strategic control. It uses feedback loops to help managers monitor and then (hopefully) achieve strategic goals. These goals may take the form of physical outputs, organizational or behavioral changes, workflow changes, or form contribution to some other higher-level goal. A key function of ME&IE is therefore, to test and determine whether or not the project's objectives and causal analysis (i.e., the sequence of expected results based on certain inputs and activities) articulated in the project design holds true; and if not, why not, and what should be done to address this and learn lessons.

The ME&IE systems at WCBA-KP are formulated based upon the project's logical framework (log-frame), which is one type of program logic model. A log-frame is an important tool in project design and management, mapping the multiple levels of objectives and associated results (measured through indicators) in the short, medium, and long term. Indicators are units of measurement in the form of qualitative and quantitative that determines whether the objectives formulated in the log-frame have been achieved or not. Log-frame developed for WCBAKP is placed at **Annex-A**.

The matrix in **Table 4.1** summarizes standard log-frame objectives and results, and the types of indicators used to measure them, which form the basis of a project ME&IE system and plan.

Table 4.1: Matrix for Levels of Log-frame Objectives and Indicators

Log-frame objectives definitions		**Objectively verifiable indicators that measure objectives**	
Impact (Goal/Overall Objective)	Higher level project objectives in terms of long-term benefits to beneficiaries and the wider benefits to society. The goal will not be achieved by the project alone. The project aims to contribute to its goal.	**Project impact indicators**	Impact indicators measure this long-term change in conditions of the community (e.g., % change in household income, reduction in poverty, etc.)
Outcome (Purpose Specific Objective)	The short term and medium-term objectives in terms of benefits to the project beneficiaries due to the intervention's outputs; the project can only indirectly control achievement of outcomes; behavior change is often a key component.	**Outcome indicators**	Outcome indicators describe the medium-term effects of an intervention's outputs (e.g., % change in cropping pattern and intensities, crop yields etc.)
Output (Results)	The output produced by undertaking a series of activities. This is what will be achieved to the intended beneficiaries or target group, and it should be possible for project management to be held accountable for this delivery	**Output (indicators)**	Output indicators describe the immediate effects of an activity, tangible products, goods and services, and other immediate changes that lead to the achievement of outcomes (e.g., number of WSPs, Check dams, WR, SBS, Solar TW, etc.).
Activities	The tangible goods and services delivered by the project (e.g., provision of material inputs, staff, etc.)	**Process indicators**	Process indicators describe the activities undertaken (e.g., process of WSPs, Check dams, WR, SBS, Solar TW, etc.)., process of delivering these activities.
Inputs	The financial, human, and material	**Input**	Indicators used to measure the

Log-frame objectives definitions		Objectively verifiable indicators that measure objectives	
	resources used for the development intervention	**indicators**	utilization of inputs (e.g., utilization of budget, and services of project staff, labour by the communities)

4.2 PARTICIPATORY DESIGN OF THE MIS/GIS ACTIVITIES

The proposed approach to design the MIS/GIS is fully participative. Consultants have made utmost efforts to ensure that all key stakeholders are fully involved throughout the ME&IE MIS/GIS design and implementation process.

Before launching the MIS/GIS database system, multiple feedback and validation sessions are in progress with client and all the stakeholders of the project. Finally, a restitution/validation workshop will be conducted to which the key partners would be invited to get the real feedback on the proposals and achievements.

4.3 MONITORING, EVALUATION AND IMPACT EVALUATION PLAN

4.3.1 Introduction

The monitoring and evaluation functions are related but distinct. Monitoring is the provision of information, and the use of that information, to enable management to assess progress of implementation and take timely decisions to ensure that progress is maintained according to schedule. Monitoring assesses whether project inputs are delivered, used as intended and having the initial effects as planned. It is an internal project activity, an essential part of good management practice and therefore an integral part of day-to-day management. While evaluation assesses both intentional and unintentional, overall project effects, and their impacts. It involves comparisons requiring information from outside the project either in time, area, or population. The relative role of monitoring and evaluation varies with the type of project.

4.3.2 Framework for ME&IE System

The initial steps for designing monitoring and evaluation system are:

i) A review of the project objectives in order to systematize them in sequence.
ii) Identification of the users of both the monitoring and evaluation information. For monitoring, the users will be the hierarchy of project management. The type of information transmittal will be geared to the needs of each level of project management. The users of evaluation analysis range from project management through the responsible directorate/ ministry, to the national planners.

Evaluation will be drawn on the data generated by the monitoring system to help explain the trends in effects and impact of the project. Monitoring data may reveal significant departure from expectations which may warrant the undertaking of an on-going evaluation exercise to examine the assumptions and premises on which the project design was based. Such a review, as also in the case of ex-post evaluation, can be of great value to sectoral management in its policy formulation role.

Monitoring has to be integrated within the project management structure but evaluation, with its wider horizons requiring comparative information, is not necessarily such an integral component. A central evaluation facility may be justified on the grounds that:

i) The demanding professional skills required to interpret evaluation data are either unavailable or uneconomic for each project individually;
ii) The data needed extend from before a project is initiated to a period long past its completion.

Although the design and analytical facility for evaluation may be centralized, the data collection resources within a project will be used to provide much of the required data. If the same unit is collecting data both for eventual evaluation and for quick, timely monitoring, the latter must not suffer due to the greater demands of the former.

4.3.3 Monitoring and Managing of Project Progress

The primary goal is to monitor project progress, given that the project has been carefully appraised; i.e., that there is a strong assumption towards certain stimuli and inputs will achieve specific outputs, effects and its impact. The role of management in the initial implementation phase is to create the conditions that allow this chain of events to be occurred.

In the early years of project implementation, the emphasis will be on monitoring of project progress and the delivery of the inputs to the intended recipients. The main source for this aspect of monitoring is properly organized in project records. The other concerns of management at this stage are to use these inputs and reaction of the recipients.

Adoption rates give management a strong inference whether the project is succeeding or not. Information on the recipients' attitudes and perception is important in order to explain any departure in response behavior to that postulated in the project design. Such unpredicted behavior may determine the success or failure of the project.

The information required for monitoring of project implementation does not require complex data systems. A monitoring system exists even if it is merely a subjective accumulation of impressions by project staff. If common sense rules of good standard management practices are adhered to, the monitoring system can be limited to the minimum of parameters to be recorded regularly over time. The goal is to make the data collection as objective as possible, and to ensure, above all, that the means exist for fast collation, summarization and presentation of the information to the decision makers.

Once management has satisfied itself that the delivery system is working, its attention should shift to the outputs generated; i.e., are they materializing according to expectation. Focus on output measurements must not, however, be at the expense of monitoring the input delivery system. The measurement of outputs is more properly a function of evaluation, for identifying trends is not an easy task in view of the exogenous influences at work, and is often impossible without an extended time series.

The key to successful monitoring is the provision of regular, timely, decision-oriented information to the project management. This can be achieved if the necessary staff is in place early, are seen to be part of the management team, and are given guidance on the priority information needs of the management.

4.3.4 Project Progress Reporting Framework (PPRF)

The Project Progress Reporting Framework (PPRF) placed at **Annex-B**, is a format for reporting summary of physical and financial progress achieved during the period for various interventions. A regular flow of this data is expected from Clients' Field Teams/ Project Consultants. However, detailed data on the processes and beneficiaries' feedback will be gathered / transmitted through Android based application using smart phones.

4.3.5 Evaluation: An Assessment of Results

Evaluation aims to determine whether the project objectives set in the ME&IE of expected outputs, effects and impact are being, or will be, met. This leads to an assessment of the results achieved, and the lessons to be drawn for future improvements in a later phase or in similar projects elsewhere.

Output levels are a measure of the result of the input utilization by the beneficiaries. If the changes in outputs are considerable, they may be detected even during the implementation phase of a project. An evaluation system requires the development of a series of data commencing before the project is implemented and continuing well past the completion of the implementation period. Unlike a monitoring system with its emphasis on rapid assessment, an evaluation system requires a longer time span before even tentative conclusions can be drawn. Work Schedule and Planning for Deliverables is presented **Annex – C.**

4.3.6 Impact: Quantification of Tangible Benefits and Assessment on Intangible Benefits of Project Interventions/Investment

In the ME&IE process, tangible benefits of agricultural projects can arise either from an increased value of production or from reduced costs. The specific forms, in which tangible benefits appear, however, are not always obvious, and valuing them may be quite difficult.

Increased physical production is the most common benefit of the agricultural sector. To maintain better water control so that farmers can obtain higher yields. The project makes resources available for farmers to increase both their operating expenditures for current production-for fertilizers, seeds, or pesticides-and their investment-for water conservations techniques and solar water tube wells. The benefit is the increased production from the farm. In a large proportion of agricultural projects, the increased production will be marketed through commercial channels. In many agricultural projects, however, the benefits may well include increased production consumed by the farm family itself. The home-consumed production from the projects increased the farm families' net benefit and the national income just as much as if it had been sold in the market. Indeed, we could think of the hypothetical case of a farmer selling his output and then buying it back. Since home-consumed production contributes to project objectives in the same way as marketed production, it is clearly part of the project benefits in both financial and economic analysis.

4.3.7 Design and Development of ME&IE GIS Based Information System

Management Information System (MIS) is the tools and techniques used in project management to deliver information. Project managers use the techniques and tools to collect, combine and distribute information through electronic and manual means. it is used by upper and lower management to communicate with each other.

The monitoring and evaluation functions are related but distinct. Monitoring is the provision of information, and the use of that information, to enable management to assess progress of implementation and take timely decisions to ensure that progress is maintained according to schedule. Monitoring assesses whether project inputs are being delivered, are being used as intended, and are having the initial effects as planned. It is an internal project activity, an essential part of good management practice and therefore an integral part of day-to-day management. Whereas evaluation assesses both intentional and unintentional as well as overall project effects and their impacts. It involves comparisons requiring information from outside the project either in time, area, or population. The relative role of monitoring and evaluation varies with the type of project.

Based on the participatory approach, the Information System proposed is being designed and developed as a permanent instrument for the planning, monitoring, evaluation, and adjustment of project management, based on common information tools made available to all stakeholders concerned by the implementation of the project. This approach aims at strengthening the overall results of the project, increasing the sustainability of activities, and improving resource utilization and management of risks and difficulties of the project implementation.

Design & development of ME&IE GIS based Information Management System is based on Agile Methodology as Software Development Process. Under which requirements and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and end user / field experiences. The adaptation of agile development methodology ensured the early completion of task and keeps evaluating it for better results as per the project requirement. It would be helpful to strategize the design and development phase, successful implementation, on-going maintenance, and up-gradation of the GIS based Information System.

Our experience shows that data generated in the field by client, field staff and project consultant is not timely communicated to PMUs. As a result, the dashboard/ Information System remain behind the actual progress on the ground. Therefore, prompt and real time data communication are essential to the Information System. For this purpose, one focal person in each province/ area is required.

4.3.8 Regular Routine Monitoring

We understand that the regular routine monitoring activities started with the ME&IE Consultants on board. This phase of the assignment includes (i) the monitoring of input-output and process as defined in the Annual Work Plan and Budget (AWPB) and (ii) the tracking of the outcome indicators. Regular routine monitoring will look at the extent to which the proposed project activities are being implemented as planned. We also understand that the consultants are responsible for the regular routine monitoring and should work in close collaboration with FPMU-FWMC, PC, and respective KP Departments, Directorate General Soil & Water Conservation & Directorate of Agricultural Engineering KP through their district/ sub-offices & farmers / SWCA etc.

In order to track the indicators' values and measure the project performance, the ME&IE Consultancy have to analyze the relevant ME&IE data and report every quarter, applying the agreed methodology, reporting format and content.

Periodic reports on routine monitoring shall contain, at least: (i) a brief analysis of the results; calculating achievement rates and establishing trends, (ii) a summary with any relevant findings that may help or constraint the future data collection activities in the established periods and, if appropriate (iv) propose specific solutions assessing the advantages and disadvantages of each.

As stated in the TOR, additional special reports are to be produced "as and when required." We propose that some of these special reports ought to be thematic studies and case studies that can be punctually required at different times of the project implementation as to create knowledge on the implementation and its results, to be shared and further implemented.

5 CHAPTER – 5: ANNUAL MONITORING REPORT (AMR)

The following section deals with the introduction and activities of the Annual Monitoring Report:

5.1 INTRODUCTION

Annual Monitoring Report (AMR) explains the understanding towards the all activities carried out as per TORs of ME&IE assignment and their completion within stipulated time frame of the reporting Financial Year (July 2021 – June 2022)..

5.2 OBJECTIVE OF ANNUAL MONITORING REPORT

Reporting is an integral part of monitoring and evaluation framework. The main objective of Annual Monitoring Reports is to update the Client about the activities carried out by the ME&IE Consultants during the reporting period.

The consultants conducted the ME&IE assignments in two parts:

A. **Meetings, Training and Coordination's with Stockholders'.**
B. **Baseline, ME&IE Findings.**

Consultants conducted / performed various meetings / activities during the month of December 2021. The basic objectives of these meetings were development of continuous linkages, coordination, and cooperation in order to run the project activities smoothly and efficiently. Details of these meetings / activities are given in detail below.

During the reporting period, the M&E field teams of ME&IE Consultants conducted monitoring and baseline survey visits for **131 interventions/schemes** across **17 districts** of Khyber Pakhtunkhwa (KPK). A summary provided in the table below.

Table: A summary of schemes visited for collection of field data during reporting period

Date	Team	Survey.#	Zone	District	Activity	Name of Respondent
16-Nov-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Water Pond	Haji wazir
17-Nov-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Gated Field Inlet Outlet/Spillway	Haroon Naseer
18-Nov-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Water Reservior	Muhammad Ali
22-Nov-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Check Dam	Ahmad Saeed
22-Nov-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Check Dam	Asad Zaman
23-Nov-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Check Dam	Muhammad Qasim
24-Nov-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Check Dam	Said Malook Shah
24-Nov-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Stream Bank Stabilization	Bakht Zamin
25-Nov-21	Team-2	Mon & BLS-I	Zone-3	Charsadda	Stream Bank Stabilization	Abdullah Said
26-Nov-21	Team-2	Mon & BLS-I	Zone-3	Charsadda	Stream Bank Stabilization	Aqil Khan
26-Nov-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Stream Bank Stabilization	Isteraj khan
29-Nov-21	Team-2	Mon & BLS-I	Zone-3	Charsadda	Check Dam	Jan Badshah
29-Nov-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Installation of Tube Well	Muhammad Kamal
30-Nov-21	Team-2	Mon & BLS-I	Zone-3	Charsadda	Stream Bank Stabilization	Noor Ahmad Said
1-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Stream Bank Stabilization	Aqal Muhammad
2-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Water Pond	Haji Adam khan
2-Dec-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Check Dam	Muntaz Ali
3-Dec-21	Team-2	Mon & BLS-I	Zone-3	Nowshera	Stream Bank Stabilization	Hazrat Din
6-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Stream Bank Stabilization	Jahan Zeb
6-Dec-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Water Pond	Raj Muhammad
7-Dec-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Water Pond	Ijaz Ali
7-Dec-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Check Dam	Rehman Ali
8-Dec-21	Team-2	Mon & BLS-I	Zone-3	Nowshera	Check Dam	Sherzada
9-Dec-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Stream Bank Stabilization	Umar khayam
9-Dec-21	Team-1	Mon & BLS-I	Zone-3	Swabi	Solarization of Tube Well	Sharafatullah
10-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Water Pond	Muhammad khan
13-Dec-21	Team-1	Mon & BLS-I	Zone-1	Malakand	Check Dam	Faheem Ullah

Date	Team	Survey.#	Zone	District	Activity	Name of Respondent
13-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Water Pond	Sabir Zaman
14-Dec-21	Team-1	Mon & BLS-I	Zone-1	Malakand	Check Dam	Muhammad Naeem
14-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Check Dam	Sher Afzal
15-Dec-21	Team-2	Mon & BLS-I	Zone-3	Nowshera	Water Pond	Iqbal Hussain
16-Dec-21	Team-1	Mon & BLS-I	Zone-1	Malakand	Water Pond	Nowsher
16-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Water Pond	Noor Zaman
17-Dec-21	Team-2	Mon & BLS-I	Zone-3	Peshawar	Stream Bank Stabilization	Raham Sher1
20-Dec-21	Team-1	Mon & BLS-I	Zone-1	Malakand	Water Pond	Hassan Muhammad
20-Dec-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Installation of Tube Well	Syed Aftab Hussain
21-Dec-21	Team-2	Mon & BLS-I	Zone-3	Mardan	Installation of Tube Well	Yasmin
22-Dec-21	Team-2	Mon & BLS-I	Zone-4	Kohat	Solarization of Tube Well	Fazal-e-Haq
23-Dec-21	Team-1	Mon & BLS-I	Zone-2	Haripur	Solarization of Tube Well	Malik Sher Afzal
23-Dec-21	Team-2	Mon & BLS-I	Zone-4	Kohat	Water Pond	Muhammad sabir
23-Dec-21	Team-3	Mon & BLS-I	Zone-5	D.I. Khan	Check Dam	Sona Khan
26-Dec-21	Team-1	Mon & BLS-I	Zone-2	Haripur	Installation of Tube Well	Muhammad Asif
27-Dec-21	Team-2	Mon & BLS-I	Zone-4	Kohat	Water Reservior	Noor Badshah
27-Dec-21	Team-3	Mon & BLS-I	Zone-5	D.I. Khan	Gated Field Inlet Outlet/Spillway	Abdul Satar
28-Dec-21	Team-1	Mon & BLS-I	Zone-2	Mansehra	Stream Bank Stabilization	Faisal khan
28-Dec-21	Team-2	Mon & BLS-I	Zone-4	Kohat	Water Pond	Adil Badshah
29-Dec-21	Team-3	Mon & BLS-I	Zone-5	D.I. Khan	Water Reservior	Muhammad Ali
31-Dec-21	Team-1	Mon & BLS-I	Zone-2	Mansehra	Water Pond	Khan Afsar
31-Dec-21	Team-3	Mon & BLS-I	Zone-5	D.I. Khan	Water Pond	Sarddar Yaqoob
3-Jan-22	Team-1	Mon & BLS-I	Zone-2	Mansehra	Installation of Tube Well	Muhammad Ishaaq
04-Jan-22	Team-3	Mon & BLS-I	Zone-5	D.I. Khan	Solarization of Tube Well	Shafqat Ullah
6-Jan-22	Team-1	Mon & BLS-I	Zone-2	Mansehra	Stream Bank Stabilization	Sajjad
6-Jan-22	Team-3	Mon & BLS-I	Zone-5	Tank	Water Pond	M. Azeem Shah
10-Jan-22	Team-3	Mon & BLS-I	Zone-5	Tank	Stream Bank Stabilization	Ubaid Ullah Jan
12-Jan-22	Team-3	Mon & BLS-I	Zone-5	Tank	Gated Field Inlet Outlet/Spillway	Latif Ahmed
14-Jan-22	Team-3	Mon & BLS-I	Zone-5	Tank	Check Dam	Marshal Khan
18-Jan-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Stream Bank Stabilization	Abdul Jabbar
20-Jan-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Water Reservior	Hashim Khan
24-Jan-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Check Dam	Inam Ullah
26-Jan-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Water Pond	Musa Khan
28-Jan-22	Team-3	Mon & BLS-I	Zone-4	Bannu	Water Pond	Gul wali
1-Feb-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Solarization of Tube Well	Sharina Bibi
2-Feb-22	Team-3	Mon & BLS-I	Zone-5	Lakki Marwat	Gated Field Inlet Outlet/Spillway	Muhammad Din
03-Feb-22	Team-3	Mon & BLS-I	Zone-4	Bannu	Check Dam	Mir saadullah
04-Feb-22	Team-3	Mon & BLS-I	Zone-4	Bannu	Water Reservior	Shoukat khan
08-Feb-22	Team-3	Mon & BLS-I	Zone-4	Karak	Solarization of Tube Well	Zarmarjan
09-Feb-22	Team-3	Mon & BLS-I	Zone-4	Karak	Solarization of Tube Well	Hassan ullah
9-May-22	Team-1	Mon & BLS-II	Zone-2	Abbottabad	Water Pond	Saeed Akhtar
9-May-22	Team-2	Mon & BLS-II	Zone-3	Charsadda	Solarization of Tube Well	Bakhti raz khan
10-May-22	Team-2	Mon & BLS-II	Zone-3	Charsadda	Solarization of Tube Well	Muhammad sareer
11-May-22	Team-1	Mon & BLS-II	Zone-2	Abbottabad	Stream Bank Stabilization	Saqib Khan
11-May-22	Team-2	Mon & BLS-II	Zone-3	Charsadda	Solarization of Tube Well	Murad khan
12-May-22	Team-1	Mon & BLS-II	Zone-1	Swat	Terracing	Dawa Khan
12-May-22	Team-2	Mon & BLS-II	Zone-4	Kohat	Water Pond	Alam zaib
12-May-22	Team-3	Mon & BLS-II	Zone-5	D.I. Khan	Solarization of Tube Well	Hashim
13-May-22	Team-2	Mon & BLS-II	Zone-4	Kohat	Stream Bank Stabilization	Faisal khan
16-May-22	Team-1	Mon & BLS-II	Zone-1	Swat	Water Pond	Muhim Zada
16-May-22	Team-2	Mon & BLS-II	Zone-4	Kohat	Installation of Tube Well	Fazal haq
16-May-22	Team-3	Mon & BLS-II	Zone-5	D.I. Khan	Installation of Tube Well	Hashim

Date	Team	Survey.#	Zone	District	Activity	Name of Respondent
17-May-22	Team-2	Mon & BLS-II	Zone-4	Kohat	Installation of Tube Well	Samar khan
18-May-22	Team-2	Mon & BLS-II	Zone-3	Peshawar	Solarization of Tube Well	Ghulam qadir
18-May-22	Team-3	Mon & BLS-II	Zone-5	D.I. Khan	Solarization of Tube Well	Noor Rehman
19-May-22	Team-1	Mon & BLS-II	Zone-1	Swat	Terracing	Rafi Ullah S/o M. Tayyab
19-May-22	Team-2	Mon & BLS-II	Zone-3	Peshawar	Solarization of Tube Well	Ismail khan
20-May-22	Team-1	Mon & BLS-II	Zone-2	Mansehra	Water Reservior	Naveed
20-May-22	Team-2	Mon & BLS-II	Zone-3	Peshawar	Solarization of Tube Well	Muhammad Hussain
20-May-22	Team-3	Mon & BLS-II	Zone-5	D.I. Khan	Installation of Tube Well	Noor Rehman
23-May-22	Team-1	Mon & BLS-II	Zone-2	Mansehra	Water Pond	Bibi Raffat
23-May-22	Team-2	Mon & BLS-II	Zone-3	Peshawar	Solarization of Tube Well	Yasin khan
24-May-22	Team-2	Mon & BLS-II	Zone-3	Nowshera	Stream Bank Stabilization	Irfan khan
24-May-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Solarization of Tube Well	Shahzar khan
25-May-22	Team-2	Mon & BLS-II	Zone-3	Nowshera	Check Dam	Raees khan
25-May-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Solarization of Tube Well	Suhbat Khan
26-May-22	Team-1	Mon & BLS-II	Zone-2	Mansehra	Installation of Tube Well	Naeem Yaqoob
26-May-22	Team-2	Mon & BLS-II	Zone-3	Nowshera	Solarization of Tube Well	Wajid ali
26-May-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Solarization of Tube Well	Habib Ur Rehman
27-May-22	Team-2	Mon & BLS-II	Zone-3	Nowshera	Installation of Tube Well	Wajid ali
27-May-22	Team-3	Mon & BLS-II	Zone-4	Karak	Water Seepage Harvesting Galleries	Abdul Nawaz
30-May-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Solarization of Tube Well	Adan Shahid
30-May-22	Team-1	Mon & BLS-II	Zone-2	Mansehra	Solarization of Tube Well	Naeem Yaqoob
30-May-22	Team-3	Mon & BLS-II	Zone-4	Karak	Water Pond	Abdul Nawaz
31-May-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Gated Field Inlet Outlet/Spillway	Amjad khan
31-May-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Agronomic Low Cast Intervention	Muhammad Ayub
1-Jun-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Terracing	Danyal Ahmad
1-Jun-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Gated Field Inlet Outlet/Spillway	Muhammad Sajjad
2-Jun-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Terracing	Muhammad Tahir
2-Jun-22	Team-1	Mon & BLS-II	Zone-2	Mansehra	Micro-Watershed Development	Syed Adil Hussain Shah
2-Jun-22	Team-3	Mon & BLS-II	Zone-4	Bannu	Check Dam	Taj Muhammad
3-Jun-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Gated Field Inlet Outlet/Spillway	Rasheed khan
3-Jun-22	Team-3	Mon & BLS-II	Zone-4	Karak	Stream Bank Stabilization	Gulshan Iqbal
6-Jun-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Terracing	Sarfaraz
6-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Terracing	Shabir Ullah
6-Jun-22	Team-3	Mon & BLS-II	Zone-4	Karak	Water Reservior	Khalid Mahmood
7-Jun-22	Team-2	Mon & BLS-II	Zone-1	Malakand	Solarization of Tube Well	Sayed Sardar Ghani
7-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Solarization of Tube Well	Sayed Zia Ali Shah
7-Jun-22	Team-3	Mon & BLS-II	Zone-5	D.I. Khan	Solarization of Tube Well	Noor Rehman
9-Jun-22	Team-3	Mon & BLS-II	Zone-1	Lower Dir	Stream Bank Stabilization	Rehman Uddin
9-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Solarization of Tube Well	Talimond khan
10-Jun-22	Team-3	Mon & BLS-II	Zone-1	Lower Dir	Terracing	Attaullah Khan
13-Jun-22	Team-3	Mon & BLS-II	Zone-1	Lower Dir	Terracing	Attaullah Khan
13-Jun-22	Team-1	Mon & BLS-II	Zone-2	Haripur	Installation of Tube Well	Muhammad Ijaz
14-Jun-22	Team-3	Mon & BLS-II	Zone-1	Lower Dir	Check Dam	Mubarak zeb
14-Jun-22	Team-1	Mon & BLS-II	Zone-2	Haripur	Check Dam	Nishat Ahmed
15-Jun-22	Team-3	Mon & BLS-II	Zone-1	Lower Dir	Stream Bank Stabilization	Rahman uddin
15-Jun-22	Team-1	Mon & BLS-II	Zone-2	Haripur	Check Dam	Shafeeq Ahmed
16-Jun-22	Team-1	Mon & BLS-II	Zone-2	Haripur	Terracing	Zahoor Ellahi
17-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Solarization of Tube Well	M. Shahab khan
20-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Stream Bank Stabilization	Ahmad Jan
23-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Water Pond	Sardar Hussain
27-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Stream Bank Stabilization	Abdullah
29-Jun-22	Team-1	Mon & BLS-II	Zone-1	Swat	Water Pond	Muhammad salar

Table: District wise/Intervention wise detail of activity units performed during Reporting period

Districts & Interventions	Count of Activity Unit
Abbottabad	**2**
Stream Bank Stabilization	1
Water Pond	1
Bannu	**9**
Agronomic Low Cast Intervention	1
Check Dam	2
Gated Field Inlet Outlet/Spillway	1
Solarization of Tube Well	3
Water Pond	1
Water Reservior	1
Charsadda	**7**
Check Dam	1
Solarization of Tube Well	3
Stream Bank Stabilization	3
Dera Ismail Khan	**9**
Check Dam	1
Gated Field Inlet Outlet/Spillway	1
Installation of Tube Well	2
Solarization of Tube Well	3
Water Pond	1
Water Reservior	1
Haripur	**6**
Check Dam	2
Installation of Tube Well	2
Solarization of Tube Well	1
Terracing	1
Karak	**6**
Solarization of Tube Well	2
Stream Bank Stabilization	1
Water Pond	1
Water Reservior	1
Water Seepage Harvesting Galleries	1
Kohat	**8**
Installation of Tube Well	2
Solarization of Tube Well	1
Stream Bank Stabilization	1
Water Pond	3
Water Reservior	1
Lakki Marwat	**6**
Check Dam	1
Gated Field Inlet Outlet/Spillway	1
Solarization of Tube Well	1
Stream Bank Stabilization	1
Water Pond	1
Water Reservior	1
Lower Dir	**4**
Check Dam	1
Stream Bank Stabilization	2
Terracing	1
Malakand	**11**

Districts & Interventions	Count of Activity Unit
Check Dam	2
Gated Field Inlet Outlet/Spillway	2
Solarization of Tube Well	2
Terracing	3
Water Pond	2
Mansehra	**9**
Installation of Tube Well	2
Micro-Watershed Development	1
Solarization of Tube Well	1
Stream Bank Stabilization	2
Water Pond	2
Water Reservior	1
Mardan	**9**
Check Dam	3
Gated Field Inlet Outlet/Spillway	1
Installation of Tube Well	2
Stream Bank Stabilization	1
Water Pond	1
Water Reservior	1
Nowshera	**7**
Check Dam	2
Installation of Tube Well	1
Solarization of Tube Well	1
Stream Bank Stabilization	2
Water Pond	1
Peshawar	**13**
Check Dam	1
Solarization of Tube Well	4
Stream Bank Stabilization	3
Water Pond	5
Swabi	**8**
Check Dam	3
Installation of Tube Well	1
Solarization of Tube Well	1
Stream Bank Stabilization	2
Water Pond	1
Swat	**11**
Solarization of Tube Well	3
Stream Bank Stabilization	2
Terracing	3
Water Pond	3
Tank	**4**
Check Dam	1
Gated Field Inlet Outlet/Spillway	1
Stream Bank Stabilization	1
Water Pond	1
Grand Total	**131**

The processes, timelines and physical progress against targets set in the Annual Work Plans (AWPs) was marked. The monitoring activities include baseline, midline and end-line surveys. The water saving assessment was simultaneously carried out with the improvement activities of Water ponds, Check Dams, Water Reservoir, Stream-bank stabilization, Gated field Inlet Outlet/ Spillway,

Terracing, Micro-Watershed Development, Water Seepage harvesting Galleries, Agronomic low-cost interventions, Sand Dunes stabilization, Capacity Building, Installation of Tube wells and Solarization of Agricultural Tube Wells.

All the checklists were got approved from the client before executing in the field. Additional checklists will be devised if required. The outcome of the monitoring activities is expected in three states, i.e., the progress is on track, lagging behind or faster than planned. Reasons for lagging progress have been identified with possible solutions. In case of faster progress, good practices will be identified to replicate in the project. All the physical progress will be monitored for quality as well.

The second part of the ME&IE assignment is the development, operation, maintenance and handing-over the Management Information System (MIS) to the client at the end of the project.

Main features of the MIS are briefly presented as under:

Planning and input-output process monitoring, as well as the tracking of results indicators, assume a critical role in the management of development projects. We propose to develop, set up and implement a Web Based Monitoring Information System (MIS) useful for:

- Monitor the progress of project implementation and provide timely feedback to all project stakeholders,
- Monitor, assess, and summarize achievements (outputs and outcomes),
- Analyze factors affecting the project's implementation and achievements.

b) The basic functions of the MIS are to:

- Enable the FPMU-FWMC and PC to track the outcome indicators and assess progress in implementation against timescales and targets, and resources used against budgets, based on agreed annual work plans.
- Describe the factors and reasons triggering variations,
- Record and reflect new targets, whenever it is required,
- Draw important lessons to guide the decision-making,
- Enable forecasting for project accomplishment in comparison to the currently reported progress,
- Enable the project management to generate reports to funding partners, project beneficiaries and other stakeholders on the status and progress of the project implementation,
- Integrate GIS components to the MIS to complement field-level surveys and measurements.

c) Potential users' profiles could be the following:

- Federal Ministries
- NPC FPMU-FWMC
- AGES Consultants
- ME&IE Consultants
- Provincial concerned departments / maintaining system administrators.

d) The MIS will allow the project to enter the Annual Work Plan and Budget (AWPB) to enable process monitoring. This interface should facilitate the user to create activities for the current year and go back in previous years.

e) The following project information will be accessible at all times:

- Project description
- Project's objectives
- Implementation partners
- Locations of implementation
- Timelines
- Project activities (and % of accomplishments)
- Budgets (% of spending)
- The dashboard is a "real-time" user interface showing graphical and tabular information of multiple data sets. Dashboards allow users to appreciate a situation at a glance and aids in making informed decisions. The way in which data are presented directly affects how they are understood and interpreted/consequently the decisions that are made because of the data.

f) The kind of data that can be represented in the dashboard includes:

- Activity/indicator completion rates
- Budget expenditures
- Information disaggregated by localities (map views)
- Timelines, etc.

g) Notifications/Alerts

For each type of events (e.g., incoming deadlines, new data input, requests, etc.) the user will receive notifications/alerts of said events within the MIS and via e-mail either:

- As the event is created
- Daily / Weekly/ Monthly/Quarterly updates.

When an alert generated and in what form and frequency will be decided in consultation with users/clients.

h) Change Tracking
The system records actions of users such as creating data, removing data, data entry, data validation, etc. (e.g., latest update to an open quarterly report). The system records the name of the user, the date and time of change, actions made, code of items altered. This function is crucial to monitor the ME&IE processes.

i) Key Principles

- The system provides Excel-like functionality including filtering/sorting columns (reducing data-entry and increasing ease-of-use).
- The data entry and validation of plans and different reports are linked to user profiles
- The system displays an error message when not able to save the data.
- For all operations, the system keeps an audit trail with the user, date and time of the operation.

5.3 REPORTING PERIOD

This 2nd Annual Monitoring Report (AMR) covers the reporting period from 1st July 2021 to 30th June 2022.

The consultants' team remained engaged in several activities related to ME&IE WCBAKP project and also conducted / attended several meetings with client, line departments and other stakeholders of the project.

Detail of meetings and activities carried out by ME&IE consultants during the reporting period is given below.

5.3.1 Mobilization of ME&IE Consultant:

Mobilization of remaining consultants and core technical staff is in progress.

Dr. Usman Mustafa, Team Leader (ME&IE Consultants) joined the project from start who was replaced by Dr. Fazli Hakim Khattak in November 2021. The list of the deployed staff along with their designation is presented at table 5.2.

Sr. No.	Designation	Name of Staff
	Key Staff	
1	Team Leader/ M&E Specialist	Dr. Fazli Hakim Khattak
2	Environment & Social Monitoring Specialist	-
3	Irrigation Agronomist	Dr. Mansab
4	Social and Gender Specialist	Afzal Hayat Khan
	Non Key	
5	ICT Manager	Nasir Khan
6	Field Engineer	Khaleeq-uz-Zaman
	Field Engineer	Muhammad Haroon
	Direct Cost	
7	Office Manager	Muhammad Shahraz Khan
8	Accountant Assistant	Qaisar Khan
9	Computer Operator	Amjad Ali
10	Peon	Gul Zamin
11	Chowkidar	Muhammad Noman
12	Sweeper	Irfan
13	Procurement & Coordination Support for NPC Support	Khursheed Gull

5.3.2 Inception Report

Basic data related to project activities was collected and incorporated in Inception Report.

Inception was submitted and comments on the same from Client were incorporated accordingly.

5.4 ACTIVITIES DURING REPORTING PERIOD

Detail of the project activities conducted by ME&IE consultants during the reporting period of Financial Year July 2021 to June 2022 is as under:

Routine regular monitoring is an important activity of the ME&IE consultants for ME&IE of the WCBA KP Project. Consultants carried out different field activities and coordination meetings with client and other stakeholders of the project including farmers. Detail of consultants' activities / field visits under regular monitoring is given below in detail.

A. Meetings/ Coordination and Training

Consultants conducted / performed various meetings / activities during the month of December 2021. The basic objectives of these meetings were development of continuous linkages, coordination, and cooperation in order to run the project activities smoothly and efficiently. Details of these meetings / activities are given below.

MEETINGS

i) Meeting in Directorate of Soil & Water Conservation, Peshawar, on 10th & 13th July 2021.

Date: 10th & 13th July 2021.

Venue: Directorate of Soil & Water Conservation-KP, Peshawar.

Participants;

Client:
Mr. Khalid Gohar, Dy. Director, S&WC-KP
ME&IE Consultants:
Mr. Afzal Hayat Khan, Social & Gender Specialist, WCBA-KP.

Meeting Agenda;

Provide of the baseline/ benchmark information, impact assessment / outcomes of the project Interventions.

Discussions and Outputs;

Baseline questionnaires and monitoring tools are very important in any ME&IE study. It is also vital to engaged all stakeholders in preparation of these tools. These questionnaires and tools were mailed to the concerned departments.

In this connection two days meeting were held. During first day the WC – KP activities detail list was received on July 10, 2021 (Figure 5.1 and 5.2). Whereas, detailed initial arrangements of undertaking a "Case Study/ In-Depth Analysis of the S&WC selected activities in the project area were discussed on July 13, 2021. It was decided that DG S&WC may be approached for finalization of the selected site, as soon as he returns from a field visit to Swat. A completed file of one of their projects namely, "Cemented Concrete Water Pond" in Tehsil Kabal, district Swat has been received for undertaking the proposed Case Study.

Figure 5.1: Mr. Afzal Hayat Khan, ME&IE Consultant Social & Gender Specialist in meeting with S&WC-KP Officials.

ii) NPC Visit to WCBA-KP on 12th August 2021

Mr. Muhammad Tahir Anwar, National Project Coordinator (NPC), WCBA-KP visited the project office in Peshawar and held long discussion with Dr. Usman Mustafa, TL and Mr. Muhammad Afzal Khan, Social & Gender Specialist to increase efficiency and effectiveness of the project activities in the months to come.

iii) National Project Coordinator (NPC) Visit to WCBA-KP on 1st September 2021

Engr. Muhammad Tahir Anwar, National Project Coordinator (NPC), Federal Project Management Units (Water Projects). Ministry of National Food

Security and Research, paid visit to National Office G3 (JV), Islamabad 1 Sept. 2021 and held very fruitful discussion with Dr. Usman Mustafa, TL WCBA-KP & TL, NPIWC-II and other team members to increase efficiency and effectiveness of the project activities.

Figure-5.2: Engr. Muhammad Tahir Anwar, National Project Coordinator in meeting with Dr. Usman Mustafa, TL and Dr. Muhammad Abdul Qudus, TL, NPIWC II & Team at National Office G3 (JV), Islamabad on 01 September, 2021

iv) 1st Meeting of Project Implementation Inspection Committee (PIIC)

1st meeting of Projects Implementation Inspection Committee (PIIC) of Federal Project Management Unit under Prime Minister Agriculture Emergency Program Project was held on 17 September 2021. Meeting was held in the Committee Room of Federal Project Management Unit, G-7 Markaz Islamabad. The meeting was held to discuss and finalize the Physical Inspection Plan of the completed interventions under three water sector projects namely (i) national Program for Improvement of Water Courses in Pakistan Phase-II (NPIWC-II); (ii) National Program for Enhancing the Command Area Development in Barani Areas of Khyber Pakhtunkhwa (NPECA); and (iii) Water Conservation in Barani Areas of Pakistan (WC-KP).

v) 3rd Meeting of Project Board of Management (PBOM) of ME&IE Consultants under Projects Titled "NPIWC-II and WC-KP"

The subject meeting was held to discuss the circulated agenda items under the National Project Coordinator Engr. Muhammad Tahir Anwar on 9th November, 2021. This was attended by;

i. Mr. Muhammad Tahir Anwar, NPC (In Chair);
ii. Muhammad Naeem Akhtar DPC (WCKP);
iii. Mr. Saiful Islam, DPC, NPIWC-II;
iv. Ch. Saifullah Ijaz BOM ME&IE Consultants;
v. Hafiz Abdul Rauf BOM ME&IE Consultants;
vi. Dr. Usman Mustafa, TL, ME&IE Consultant;
vii. Dr. Mansab Ali, Irrigation Agronomist, ME&IE Consultant;
viii. Mr. Afzal Hayat Khan, Social & Gender Specialist, ME&IE Consultant; and
ix. Mr. Rizwan Saleem, In-charge ICT Specialist, ME&IE Consultants.

It was a very good interaction of client and consultant, and various technical, administrative and financial matters were discussed in detail and decisions were made for smooth functioning of the project's activities.

vi) 10th joint Review Meeting (JRM) of Projects under Prime Minister Agriculture Emergency Program

The subject meeting of 26 November, 2021 was postponed due to un-avoidable circumstances. However, an informal discussion of all stakeholders including Director PMU, DG ONFWM, DG S&W Conservation, Director Agricultural Engineering, and Representative from NESPAK, AGES, G3 Engineering Consultants and FPMU Water Wing NFS&R was held. It was mutually, agreed that precise field data on water and agricultural aspects must be collected and shared with concerned stakeholders.

vii) Meeting at Directorate of Soil & Water Conservation, Peshawar, on 13th December 2021

Date:	13th December 2021
Venue:	Directorate of Soil & Water Conservation, University Road, Peshawar.
Participants:	
i) Mr. M. Yasin Wazir, DG S&WC. ii) Dr. Fazli Hakim Khattak, TL WC-KP. iii) Dr. Mansab Ali, Agronomist WC-KP.	

iv) Mr. Afzal Hayat Khan, Social & Gender Specialist, WC-KP.
Meeting Agenda:
To discuss the project progress and way forward for upcoming events.
Discussions held:
A very constructive meeting was held with Mr. Muhammad Yasin Wazir, Director General, Directorate of Soil & Water Conservation-KP at Peshawar Office on 13 December 2021. All team members from Directorate of S&W Conservation were present while meeting with Dr. Fazle Hakeem Khattak, Team Leader, WC-KP (ME&IE Consultants) along with Dr, Mansab Ali, Irrigation Agronomist and Mr. Afzal Hayat Khan, Social & Gender Specialist. The client and Consultants were able to get set forth targets for the year 2021-22 and review progress to date. The Social and Gender Specialist informed that a pond location in Karak that is very suitable for cultivation/ irrigation purposes and supplied the locals with fresh drinking water, as the seepage of salt water turned into fresh drinking water. This site was not approved by AGES while majority of district Karak areas are comprised of the salt zone. Similarly, the Deputy Director S&WCD Karak informed that 18 out of 22 projects were rejected for minor and or resolvable technical ground. These minor issues may be resolved through joint meeting of all stakeholders. It was also proposed that the under-utilized "capacity building" funds under PC1 should be used to develop skills enhancement programs with a special focus on women in farm inputs, farm processes and technology, agricultural product processing in dairy development, poultry, horticulture, sericulture, etc.

viii) Meeting with Engr. Naeem Akhtar, Deputy Project Coordinator, WC_KP at NPC Office, Islamabad, 15 December 2021

An introductory meeting of Dr. Fazle Hakeem Khattak, TL, WC-KP and Engr. Naeem Akhtar was held in NPC Office on 15 December 2021. Project progress was reviewed and future plan was discussed in details. Moreover, issues and bottle necks also came under discussion.

ix) Meeting Regarding Dashboard & Website developed for the Project on 15 December 2021

Date:	15th December 2021
Venue:	Directorate of Agriculture Engineering, Peshawar.
Participants:	
i) Miss. Kulsoom, Dy. Director, Agriculture ii) Miss. Afshan, Agriculture Engineer iii) Mr. Haroon, Agriculture Engineer iv) Mr. Adnan, Agriculture Engineer v) Mr. Afzal Hayat, Social & Gender Specialist, WC-KP vi) Mr. Rizwan Saleem, ICT Specialist, WC-KP vii) Mr. Fawad Ahmad, ICT Manager WC-KP. viii) Mr. Nasir Khan, ICT Manager WC-KP.	
Meeting Agenda:	
To discuss the dashboard and website development for the project	
Discussions held:	
• Sample dashboard monitoring tool shall be shared with the department to be finalized after feedback from the department. • A standardized monitoring tool shall be finalized after discussion with all the stakeholders.	

x) Meeting Regarding Dashboard & Website developed for the Project

The meeting was held in the office of Director General, Soil & Water Conservation, Peshawar on 15 December 2021. Following topics were under discussion: Structure, functions, and pre requisites of the dashboard activation and ongoing/ live data entry process of project interventions by the S&WC. The procedures were also discussed for live data entry by the field staff and the M&E Consultants' plan for the capacity building/training of the concerned field operation personnel.

Participants:
Mr. M. Yasin Wazir, Director General, S&WC
Mr. Irfan Ullah, Director Planning, S&WC
Mr. Sajid Hussain, SCFO, S&WC
Mr. M. Asif, Hort, S&WC
Miss. Jasmine Kausar, SCFO, S&WC
Miss. Shazia Gulzar, GIS Specialist, S&WC
Miss. Aiman Usman, SCFO Technical, S&WC
Mr. Sowm Khan, SCA (HQ), S&WC
Miss Shagufta Bano, DDP, S&WC
Mr. Abid Sarwar, GIS Specialist, S&WC
Mr. Jamil ur Rehman, DP, S&WC
Mr. Naseem ur Rehman, CSFO-T, S&WC
Mr. Afzal Hayat, Social & Gender Soecialist, WC-KP
Mr. Rizwan Saleem, ICT Specialist, WC-KP
Mr. Fawad Ahmad ICT Manager WC-KP
Mr. Nasir Khan, ICT Manager WC-KP

Following recommendations were made:

- The required files of various project interventions will be made available to the M&E Consultants; after getting these files from the various adjacent districts.
- Based on the information of the project intervention, a sample dashboard will be designed and shared with the department for finalization.
- A standardized dashboard will be finalized after dialogue with all the stakeholders.

xi) Meeting Regarding Co-ordination, Cooperation and Support in Finalization of the Questionnaire Form for the On-line Dashboard on 20 December 2021

The Meeting was held with AGES Consultants WC-KP Project Office, Peshawar

Participants:
Mr. Tahir Kamran, Team Leader, AGES
Mr. Pazir Muhammad, Cons. Engineer, AGES
Mr. Shahid Jan, Construction Engineer, AGES.
Mr. Rizwan Saleem, ICT Specialist, WC-KP
Mr. Afzal Hayat, Social & Gender Specialist, WC-KP
Mr. Fawad Ahmad ICT Manager WC-KP
Mr. Nasir Khan, ICT Manager WC-KP

Following decision were made:

- The M&E Consultants will share the sample monitoring tools with AGES for their review and input as Project Consultants.
- AGES ensure all type of cooperation with M&E consultants to ensure sustainability and durability of the project.

xii) Meeting Soil & Water Conservation Department to Check the Available Digitized data

Meeting was held in AGES Consultants WC-KP Project office, Peshawar on 20 December 2021

Participants:
Miss. Shazia Gulzar, GIS Specialist, S&WC
Mr. Abid Sarwar, GIS Specialist, S&WC
Mr. Rizwan Saleem, ICT Specialist, WC-KP
Mr. Fawad Ahmad ICT Manager WC-KP
Mr. Nasir Khan, ICT Manager WC-KP

A detailed meeting was held to check and discuss about the available digitized data within the GIS Lab of the Soil & Water Conservation Department.

Following discussions were held during the meeting.

- Mr. Rizwan Saleem briefed about the agenda and asked for sharing the available data.
- Mr. Abid assured the provision of data in shape of File format, in Excel Sheets and in Map form.
- Available data: Co-ordinates, Districts/ Tehsils Boundaries, Water Reservoirs (existing + proposed), Watersheds, Stream Orders, Drainage Density of streams/ canals etc. and Flow data.
- Springs are placed in first order with same color, distributaries are placed in second order with different color from springs and so on till fifth order with rivers.
- Catchment areas are also available in layers.

xiii) Meeting of ME&IE Consultants Team Leader with Stack Holders

The Team Leader visited the Peshawar Project office, and convened meetings with the newly recruited technical and non-technical staff. Ta follow-up on the actions decided in the meeting with DG (SWC) were finalized to enhance participation of their staff. Meetings were also held with the Head Office of the Provincial Project PMU.

A meeting was organized with the Director (AE), but he was out for hearing in the Peshawar High Court. The Social & Gender Specialist organized and provided support in all meetings.

xiv) Meeting in the Office of PMU Coordinator in Peshawar

Meeting was held in the office Dr. Afzal, PMU Coordinator on January 11, 22. Following were the participants of the meeting:

i) Dr. Afzal, PMU Coordinator
ii) Mr. Assad Jan Deputy Coordinator PMU,
iii) Mr. Saeed Ur Rehman, Deputy Coordinator PMU

Agenda of the meeting was to discuss preparation of a presentation based on our findings regarding the project interventions been made by the S&WCD and AED. The results of the baseline surveys conducted in all of the five zones in the province were shared with them given as follows:

i) Even in a single project intervention carried out by SWCD and AED, we could not find a farmer association; consequently, this phenomenon is related to the fact that the project's impact is limited to the wealthy elites and influential figures and not to the poor, marginalized and disadvantaged population of the province.
ii) Knowingly, each department does not have the capacity to form “Farmers Associations”; As a result, to achieve the stated goals, the Validation/Implementation Consultants (AGES) were deployed and provided with the necessary resources/ manning for "Social and Community Development", but unfortunately could not form the basis of the Farmers' Association. Even for the intervention of a single project.
iii) We consistently address in all our reports the need and importance of involving the farmer community in the planning, implementation, operation, and maintenance of activities; along with, but not limited to, field visit reports, monthly progress reports, or even special reports have also been submitted to highlight these devastating shortcomings.
iv) They considered that PC1 does not refer to the establishment of farmers' associations.
v) We proposed to review PC1 and add an 'annex' for the implementation mechanism/criteria to implement the project intervention involving the farmers' associations in consultation with stakeholders and relevant authorities.
vi) It was further argued that the benefits/impacts of the project could reach marginalized and disadvantaged farming communities in the province; subsequently, it should enable them to achieve a visible improvement in their standard of living in the most deserving project area.
vii) Furthermore, it has been argued that such collaborative activities will, on the one hand, generate “economies of scale” and, on the other hand, will have broader and larger impacts to improve and enhance the living standards of community members throughout the project area.
viii) It was concluded that if both departments had been able to carry out the project in a gender-sensitive and environmentally friendly manner, involving the community. They may be able to receive donations and grants from UN organizations and international donors and could also receive soft loans from International Financial Institutions (manner) including WB and ADB etc.
ix) Dr. Afzal however felt that this could cause delays and some other complications in achieving the targets, etc.

They also requested that a presentation be prepared on our findings to date on the various interventions undertaken by both S&WCD and AED.

xv) Meeting with Engr. Naeem Akhtar, Deputy Project Coordinator, WC_KP at NPC Office, Islamabad

Discussion for Coordination, and sending information and data regarding HR was shared with NPC office. Project progress was reviewed and

future plan was discussed in details. Moreover, issues and bottle necks also came under discussion.

xvi) Meeting Regarding Dashboard & Website developed for the Project

A follow-up of the meetings with Director General Agriculture, Peshawar to activate the live Dashboard for their progress monitoring and evaluation at the spot, to collect data for some of the district-level project interventions to design appropriate parameters were discussed. Later, the pre designed live dashboard will be shared for their feedback and set various parameters for Agriculture department may need for live monitoring.

Following were the Recommendations, Suggestions and Way Forward:

- Sample dashboard monitoring tool shall be shared with the department to be finalized after feedback from the department.
- A standardized monitoring tool shall be finalized after discussion with all the stakeholders.

xvii) Meeting Regarding On-line Dashboard & Website developed for the Project

Meeting was held to discuss the progress regarding the subject, to collect OFWM data and to discuss the way forward in the office of Directorate OFWM, Peshawar on 5th January 2022.

Participants:
Dr. Rab Nawaz Director OFWM, Peshawar
Mr. Afzal Hayat, Social and Gender Specialist
Mr. Fawad Ahmad ICT Manager WC-KP
Mr. Nasir Khan, ICT Manager WC-KP

Following decisions made:

- The remaining districts data shall be covered within a couple of days, after training of the new staff.
- Sample dashboard/ questioner shall be shared with the department and shall be finalized after feedback from the department.

xviii) Meeting Regarding Co-ordination, Cooperation and Support in Finalization of the Questionnaire Form for the On-line Dashboard

The Meeting was held with AGES Consultants WC-KP Project Office, Peshawar

Participants:
Mr. Tahir Kamran, Team Leader, AGES
Mr. Pazir Muhammad, Cons. Engineer, AGES
Mr. Shahid Jan, Construction Engineer, AGES.
Mr. Afzal Hayat, Social & Gender Specialist, WC-KP
Mr. Nasir Khan, ICT Manager WC-KP

Following decisions were made:

- The M&E Consultants will share the sample monitoring tools with AGES for their review and input as Project Consultants.
- AGES ensure all type of cooperation with M&E consultants to ensure sustainability and durability of the project.

Following the above decisions, the Draft Report of Baseline Survey have been shared with AGES and other Stakeholders.

xix) Meeting in Soil & Water Conservation Department to Check the Available Digitized Data

Meeting was held in AGES Consultants WC-KP Project office, Peshawar.

Following discussions were held during the meeting.

- Mr. Rizwan Saleem briefed about the agenda and asked for sharing the available data.
- Mr. Abid assured the provision of data in shape of File format, in Excel Sheets and in Map form.
- Available data: Co-ordinates, Districts/ Tehsils Boundaries, Water Reservoirs (existing + proposed), Watersheds, Stream

Orders, Drainage Density of streams/ canals etc. and Flow data.

- Springs are placed in first order with same color, distributaries are placed in second order with different color from springs and so on till fifth order with rivers.
- Catchment areas are also available in layers.

xx) Team Leader's visit to Peshawar field office, meeting with WC-KP staff, 10 February 2022.

Dr. Fazal Hakim TL (WC-KP) visited Peshawar office on 10th February 2022 for meeting with the WC-KP staff.

Figure-5.3: WC-KP Team meeting on 10th February 2022.

Participants:
Dr. Fazl Hakim Khattak, TL, WC-KP
Mr. Afzal Hayat, Social & Gender Specialist, WC-KP
Mr. Nasir Khan, ICT Manager, WC-KP.
Mr. M. Shahraz Khan, OM, WC-KP
Mr. Qaiser Khan, AM, WC-KP
Mr. M. Haroon, Field Engineer, WC-KP
Mr. Khaliq uz Zaman, Field Engineer, WC-KP
Mr. Amjid Ali, Computer Operator, WC-KP

During the meeting following matters were discussed:

- Directions about recording every day activities of staff. Every staff member should have a complete record of his daily routine.
- Hiring of new staff members especially female staff as female field enumerators are required to interact with and interview the female beneficiaries of the project interventions.
- Discussions about training new staff.
- Arrangements & venue for training was discussed.
- Training duration discussed. 3 days training schedule decided which will be segregated as two-day in-house training while 1 day will be planned at training in field.

Figure-5.4: WC-KP Team meeting on 10th February 2022.

- Option discussed for arranging field staff to get a short internship at WC department to get a better grip on how things work around there.
- Case-study plan discussed to be performed in North, Central and Southern Districts each. One or two success stories to be developed.
- Exposure visits for, ICT Manager, Office Manager and Accounts Manager to Islamabad Office to get their orientation of job and get acquainted with concerned persons there.
- Office Furniture and Furnishing issue discussed.

xxi) Meeting at DAE Headquarter, Tarnab, Peshawar, on 10th February 2022.

An introductory meeting was held in Directorate of Agriculture Engineering Department, Tarnab Form

Peshawar on 10 February 2022. Project progress was reviewed and future plan was discussed in details. Moreover, issues and bottle necks also came under discussion.

Figure-5.5: *WC-KP Team with the Director AED in AED Directorate on 10 February 2022.*

Participants:
Mr. Nazeer Abbass, Director, Agriculture Engineering Department.
Miss. Kulsoom, Dy. Director, AED
Mr. Naseem Javed, Agri Engr. D. I. Khan.
Mr. Musa Khan, D.D Head Quarter AED, Peshawar.
Mr. Haroon, Agriculture Engineer
Dr. Fazl Hakim Khattak, TL, WC-KP
Mr. Afzal Hayat, Social & Gender Specialist, WC-KP
Mr. Nasir Khan, ICT Manager, WC-KP.

Different aspects of the project like monthly progress Performa (developed by the department), trade ups of the formers, lift irrigation, energy savings due to solarization of the tube wells, departments' setup in newly merged areas of KP etc. were discussed during meeting. WC-KP team asked the department to select a suitable site for a combine visit and case study.

xxii) Meeting in AED Headquarter Tarnab Farm to discuss and edit data collection format for on-line Dashboard, 14 February 2022.

Meeting was held in Dy. Director AED's office in Tarnab Peshawar to discuss, edit and finalize the data collection formats for the AED interventions' back log data. The formats developed by WC-KP team were shared with the AED officials for a quick review, before the meeting.

Participants:
Miss. Kulsoom, Dy. Director, Agriculture
Mr. Haroon, Agriculture Engineer
Mr. Fawad Ahmad, ICT Manager WC-KP.
Mr. Nasir Khan, ICT Manager WC-KP.

During the meeting, each column of the data collection formats was discussed with the AED personnel and edited formats according to the department's comments were shared with the management in Islamabad. Later on, the SFTs provided by the department were entered in the finalized format and the team is now in coordination with the AED for remaining or missing data.

xxiii) WC-KP staff Orientation visit to National Office Islamabad on 15 February 2022.

As per directions from the TL, WC-KP, the staff from Peshawar field office including Mr. Nasir Khan, ICT Manager, WC-KP, Mr. M. Shahraz Khan, Office Manager, WC-KP & Mr. Qaiser Khan, Accounts Manager, WC-KP, visited national office Islamabad. Purpose of the visit was to introduce staff in the national office and orientation sessions for the staff.

MEETING WITH MR. IMRAN ZAFAR

- Discussion of how daily routine work activities are planned and performed.
- Progress of WC-KP project office establishment and procurement of office furniture and fixtures discussed.
- Opening of bank account for WC-KP discussed.
- Different aspects of project, components and staff acquisition for different cadre discussed in details.
- Project dynamics discussed and how to optimize available resources to the maximum.
- Reporting schedule and timelines discussed.
- HR reporting discussed namely Attendance record, leaves, activity reports and other day to day work routine.
- Reporting line discussed as which report should be sent to whom.

Figure-5.6: WC-KP Team in National Office Islamabad on 15 February 2022.

INTERNAL MEETING WITH DR. FAZAL HAKIM KHATTAK, TEAM LEADER, WC-KP.

- Arrangements for proposed training of newly inducted staff of WC-KP discussed. (Tentative date 23-26 Feb, 2022)
- Hiring of Female field enumerators discussed. TL emphasized the need female staff hiring and their participation in the upcoming training/ workshop sessions. Female enumerators are deemed necessary as in the past we face difficulties in collecting data or interviewing female beneficiaries of the project interventions. Without female staff participants interaction with female community members is a task next to impossible due to cultural and social constraints.
- Progress of different aspects of project were discussed and progress of each component analyzed.

MEETING WITH OTHER STAFF MEMBERS IN NATIONAL OFFICE.

- Project discussion and orientation about how things move around in national office.
- Baseline Survey Zero draft discussed, edited reviewed.
- AED's data collection formats were discussed & analyzed.
- Trello Dashboard ID made and discussed.
- Discussions about daily working and meeting deadlines of each task.
- Review and reporting timelines discussed
- ICT WhatsApp Group Established.

xxiv) Meeting Regarding data collection formats for Water Ponds in S&WC Directorate on 21 February 2022.

Meeting was held in presentation room at Soil & Water Conservation Directorate office in Peshawar to discuss, edit and finalize the data collection format for Water Ponds back log data. The formats developed by WC-KP team were shared with the S&WC officials for a quick review, before the meeting.

Participants:
Mr. Jamil ur Rehman, DP, S&WC
Mr. Khalid Gauhar, DD Admin & Field, S&WC
Miss. Aiman Usman, SCFO Technical, S&WC
Mr. Sowm Khan, SCA (HQ), S&WC
Miss Shagufta Bano, DDP, S&WC
Mr. Nasir Khan, ICT Manager WC-KP
Mr. Shahraz Khan, OM WC-KP
Mr. Qaiser Khan, AM WC-KP

During the meeting, each column of the data collection formats was discussed with the S&WC officials and edited formats according to the department's comments were shared with the management in Islamabad. Feedback from national office is now awaited.

xxv) Meeting Regarding data collection formats for Check Dams & Stream Bank Stabilization in S&WC Directorate on 22 February 2022.

Meeting was held in presentation room at Soil & Water Conservation Directorate office in Peshawar to discuss, edit and finalize the data collection format for Check Dams and Stream Bank Stabilization back log data. The formats developed by WC-KP team were shared with the S&WC officials for a quick review, before the meeting.

Participants:
Mr. Jamil ur Rehman, DP, S&WC
Mr. Irfan Ullah, DDP, S&WC
Mr. Khalid Gauhar, DD Admin & Field, S&WC
Miss. Aiman Usman, SCFO Technical, S&WC

Mr. Sowm Khan, SCA (HQ), S&WC
Miss Shagufta Bano, DDP, S&WC
Mr. Nasir Khan, ICT Manager WC-KP
Mr. Khaleeq-uz-Zaman, Field Engineer WC-KP
Mr. Amjad Ali, Field Engineer WC-KP

During the meeting, each column of the data collection formats was discussed with the S&WC officials and edited formats according to the department's comments were shared with the management in Islamabad. Feedback from national office is now awaited. Scanned copies of the files for Terracing, Water Storage Reservoir, Micro Watershed, Agronomic Low-Cost intervention and water Seepage Harvesting Gallery were collected/ received from the department on the same day and was shared with the national office in order to develop data collection formats for these interventions as well.

xxvi) Meeting in AED Headquarter Tarnab Farm to Collect Interventions' Files: 1st March 2022.

Participants of the Meeting:
Miss. Kulsoom, Dy. Director, DAE HQ.
Mr. Haroon, Agriculture Engineer, DAE HQ.
Mr. Adnan, Asstt. Engr. Peshawar Station, DAE
Mr. Nasir Khan, ICT Manager, WC-KP.
Mr. Khaliq uz Zaman, Field Engineer, WC-KP.

The WC-KP team visited HQ DAE, Tarnab to get some files of the interventions in soft/ scanned format as well as in hard form.

- Mr. Adnan, Assistant Engineer, Peshawar Station stated that they cannot provide hard files to take somewhere else, however, can be seen and studied within the office premises.
- Formats for data collection of DAE interventions was shared and discussed with the department officials and asked for scanned files in order to get the formats finalized.

xxvii) Meeting and discussions with Mr. Rizwan Ahmed, National ICT Specialist in WC-KP office Peshawar: 9th March 2022.

Participants of the Meeting:
Mr. Rizwan Ahmed, National ICT Specialist.
Mr. Shumail Mehmood, ICT Specialist.
Mr. Nasir Khan, ICT Manager, WC-KP.

Data Collection formats for the DAE interventions was discussed in detail, each column of the formats was discussed and evaluated for inclusion in the formats or deletion if not necessary. Questions were prepared to be asked from DAE.

Three formats for Water Ponds, Check Dams and Stream Bank Stabilization, that were developed earlier and already discussed with the department were scrutinized, discussed in detail and shared with the S&WC after finalization, however feedback from the department is still awaiting. Later on, data collection formats for Terracing, Water Storage Reservoirs, Micro-watersheds, Water Seepage Harvesting Galleries, and Agronomic Low-Cost interventions were developed and discussed.in detail.

xxviii) Meeting in AED Headquarter Tarnab Farm to discuss the formats for DAE interventions and data collection process for on-line Dashboard: 14th March 2022.

Meeting was held in Dy. Director AED's office in Tarnab Peshawar to discuss, edit and finalize the data collection formats for the AED interventions' back log data. The formats developed by WC-KP team were shared with the AED officials for a quick review, before the meeting.

Participants of the Meeting:
Miss. Kulsoom, Dy. Director, DAE HQ.
Miss Afshan Shareen, Agri Engr. DAE HQ.
Mr. Fawad Ahmad, ICT Manager WC-KP.
Mr. Nasir Khan, ICT Manager WC-KP.

During the meeting, each column of the data collection formats was discussed with the AED

personnel and edited formats according to the department's comments were shared with the management in Islamabad. Later on, the SFTs provided by the department were entered in the finalized format and the team is now in coordination with the AED for remaining or missing data.

xxix) Meeting of Team Leader with WC-KP staff in WC-KP office Peshawar on 29 March 2022.

Team leader Dr. Fazli Hakim Khattak visited WC-KP office in Peshawar to discuss about the project.

Administrative issues, technical issues, financial situation and activities progresses was discussed during the meeting.

xxx) Meeting in DAE Headquarter Tarnab to Collect Interventions' Files: 1st April 2022.

Date:	1st April 2022
Venue:	DAE Headquarter, Tarnab Farm, Peshawar
Participants:	
v) Miss. Afshan Shareen, Project Engineer, DAE HQ. vi) Mr. Nasir Khan, ICT Manager, WC-KP. vii) Mr. Amjad Ali, Field Engineer, WC-KP.	
Meeting Agenda:	
To discuss the missing data in the data collection formats and way forward to fill the missing data.	
Discussions held:	
• Mr. Nasir Khan stated that we can help in searching and sorting out data from the files and we can provide manpower for few days if required. • Miss. Afshan Shareen replied that she will instruct the internees of DAE and they will fill the missing data. • Required formats were discussed in detail and miss Afshan Shareen said that she will guide the internees time to time and will check their working before submitting.	

xxxi) Joint Meeting with Project Consultants for Implementation Assistance, Execution Supervision & TPV and ME&IE Consultants on 8th April 2022.

Date:	8th April 2022
Venue:	NPC office Islamabad
Participants:	
i) Mr. Muhammad Asif Kakar, NPC FPMU MNFS&R ii) Mr. Kifayat Zaman, DG FMWC iii) Mr. Muhammad Naeem Akhtar, Dy PC WCKP, FPMU MNFS&R iv) Mr. Sajid Altaf, WME FMWC v) Mr. Dr. Fazli Hakeem Khattak, TL WCKP ME&IE Consultants vi) Mr. Tahir Kamran Marwat, TL Ages Consultants vii) Mr. Nasir ul Mulk, Managing Partner Ages Consultants viii) Mr. Bilal, FTI NPIWC ME&IE Consultants	
Meeting Agenda:	
To review progress/performance of PC and ME&IE Consultants	
Discussions held:	
• The Chair welcomed the participants in the meeting and briefly explained the purpose of the meeting. Thereafter, the team leader of each consultancy services briefed about their progress made till date under the project. • First of all, Mr. Fazli Hakim Khattak, Team Leader ME&IE Consultants briefed about the activities performed since commencement of their services. During his briefing, he explained that Base line Survey (BSL) has been conducted during December 2021 and January 2022 and zero draft of Base line Survey report was submitted in FPMU for review and comments. The detailed observations were raised by the client and responses were incorporated accordingly. He further	

informed that final draft of BSL is ready and will be shared with the stakeholders in last week of current month. On this, the Chair has recommended that detail meeting with all stakeholders will be conducted after receipt of draft of BSL report and will be discussed in detail before finalization so that an effective BSL report could be produced. The Team Leader further explained that monitoring field visits were conducted of tube wells and solarization installed under the project in different areas of KP. Trainings of newly appointed field and office staff were also conducted. For the purpose, Officials from executing department i.e., Agricultural Engineering Soil and Water Conservation were master trainers and delivered sessions on the relevant components of the project.

- The ME&IE Consultants were asked to prepared a case study report of at least each type of intervention from each zone and record that how much soil and water is being conserved with each intervention and other benefits from the intervention may also be included in this report. The chair further directed that this special report should be prepared within month and submitted to FPMU. In this connection, the PC Consultants were also directed to provide full support where ME&IE consultants required regarding technical information etc. The chair also directed that PC and ME&IE consultants shall work in close coordination as the information generated by the PC is used by the ME&IE Consultants.
- The Team leader, ME&IE Consultants, raised issued about release of payments to the consultants. On this, it was informed by the chair that due to non-provision of joining reports of key staff and other relevant documents in accordance with the contract conditions, the invoices couldn't be materialized. However, after provision of necessary documentation after long period from ME&IE Consultants, the invoices are in process of release of their payments.
- Thereafter, Project Coordinator, WCBA-KP, AGES Consultants briefly explained their scope of work and activities being carried out under the project and explained procedure of their verification /validation. He informed that they are in close coordination with DG, SWC and Director, Agricultural Engineering, Khyber Pakhtunkhwa, Peshawar and provide full support where they required build their capacity regarding improved modular design and now the department are adopting new modular design and prepare their cost estimate accordingly. After that, he gave brief about their zone wise progress. He informed that 1024 numbers of schemes were received from executing agencies out of which 131 were not feasible, 8S schemes were deferred due to minor issues to be resolved at executing agency end and 808 schemes were declared feasible out of which 7S0 sanction order were issued. He further explained that 24 schemes were cancelled by the department due to certain reasons and 249 TPV were issued out of 349 received TPV. He pointed out that 39 schemes were not fit for Third Party Validation (TPV) due to some technical issues which require attention of Executing agency for their TPV to be issued.
- While explaining about the issue he pointed out that mandatory meetings of PSC, PIC- I and PIC-II were yet to be conducted. Further pointed out that schemes were being rejected due to substandard works and procurement of Solar pumping system by DAE was being carried out without prior endorsement/verification by the PCs. The chair ensured that concerned forum will be approached to resolve the issues pending at department level. The Team Leader, PC Consultants, also raised issued about release of payments

to the consultants. About the payments issue, the Chair replied that the invoices of PC Consultants have already been forwarded to AGPR for their release of direct and indirect cost till December, 2021. • At the end, the chair advised both the consultants to meet time line given in their contract agreement. • The meeting ended with a vote of thanks to and from the chair.

xxxii) Meeting in S&WC directorate to discuss and finalize 5 Interventions data collection formats on 13 April 2022.

The WC-KP team shared the data collection formats with the S&WC officials before the presentation for their review. During the presentations of the formats each format was discussed thoroughly and the department's concerns were noted and also highlighted for review and to discuss with the ICT national team.

xxxiii) Meeting in S&WC directorate to discuss and finalize the data collection formats of all the interventions on 22 April 2022.

During the presentations of the formats each format was discussed thoroughly and the department's concerns were noted and also highlighted for review and to discuss with the ICT national team.

xxxiv) WC-KP Team Meeting in Field/ Project Office Peshawar on 10th May 2022

Date:	10th May 2022
Venue:	WC-KP Field/ Project Office, Peshawar
Participants:	
viii) Dr. Fazli Hakim Khattak, TL, WC-KP. ix) Mr. Nasir Khan, ICT-M, WC-KP. x) Mr. M. Shahraz Khan, OM, WC-KP. xi) Mr. Kaisar Khan, AM, WC-KP. xii) Mr. Amjad Ali, CO, WC-KP. xiii) Mr. Khaleeq-uz-Zaman, FE, WC-KP xiv) Mr. M. Haroon, FE, WC-KP.	

Meeting Agenda:
To discuss project progress, activities plan and way forward
Discussions held:
• Staff highlighted their salaries issue as some employees received their two months salaries while serving time is more than 5 months. 3 employees did not receive their salaries at all. The salaries issue is a constant cause of discontent among the staff, leading to demotivation. • TL discussed the meeting schedule for 11th may with PMU and AGES consultants. These meetings are a part of the ongoing drive to push things through various channels to ensure better workings and optimum results. • Budget and forecasting plans were discussed and draft prepared for review. OM & ICT manager both discussed their respective parts of it. Dr. sb emphasized the need for diversification of the districts and interventions as only a selected number of districts and interventions are being focused until now. • Vehicles, logistics and funds availability for site activities were discussed. • Project's bank account opening discussed; HO needs to arrange necessary documents for it. • Establishment of WCBA office discussed • TL asked for individual inputs and ideas to improve things around here. • TL had a detailed discussion with Nasir Khan (ICT Manager) regarding dashboard and other related activities. • Questionnaires were discussed, staff gave their input and pointed out several items that were repetitive, time consuming and cumbersome. • TL emphasized the need for team working and working as a cohesive unit where every component is in support of others.

Picture 5.7: ME&IE Team WCBA KP, in meeting at Project/ Field Office Peshawar on 10th May 2022

xxxv) Meeting in Provincial PMU Office Peshawar on 11th May 2022

Date:	11th May 2022
Venue:	Provincial PMU Office, Peshawar.
Participants:	
i) Mr. Afzal, PD, Provincial PMU. ii) Mr. Saeed, DD, Provincial PMU. iii) Mr. Sajid, Engr, Provincial PMU. iv) Mr. Asad, Monitoring Officer, PMU. v) Dr. Fazli Hakim Khattak, TL, WC-KP. vi) Mr. Nasir Khan, ICT-M, WC-KP. vii) Mr. M. Shahraz Khan, OM, WC-KP. viii) Mr. Kaisar Khan, AM, WC-KP.	
Meeting Agenda:	
To discuss project progress, activities plan, budget and way forward	
Discussions held:	
• Budget spent over the span of the project discussed. • Project activities and the pace of activities was discussed and both agreed that activities need to expediate to ensure maximum impact. • TL discussed the Baseline, Midline Surveys and its role in impact evaluation. • TL emphasized the need of inputs by the PMU as its ultimately their responsibility to ensure the cohesion of the different stakeholders of the project to work as a compact unit. • PD PMU observed that WCBA has its interaction with federal PMU, which causes a disconnect at times with them as some information isn't always shared with them by the federal PMU. • TL suggested that all the stakeholders should arrange to meet at least once every two months on regular basis to ensure the project work as a cohesive unit. • The participants agreed to discuss further the idea of joint visits by the field teams of PMU and WCBA to make sure every stakeholder record the same intervention and avoid un-necessary problems to the farmers and related dept. • TL and PD agreed that the ultimate goal of the project is how much the community is getting from it. Evaluating its impact is of paramount importance. • Agreeing on frequent JRM (Joint Review Meeting) as it will lead to better coordination between stakeholders. • PD noted that S&WC dept has not been intervening in all the districts of the province, and only a limited selected districts are being intervened. Dr. Fazli Hakim sb seconded the observation and emphasized the need to spread the interventions to more backward districts to ensure its maximum impact on the lives of the community. • Afzal sb reiterated the role and importance of M&E component of the project as it serves as the eyes and ears of the management. Without M&E function the project is a lame duck. • Dr. sb expressed that PC1 may have to be revised as the pace of the project spending is far lower than the time span allotted for it. • Dr. sb and participants agreed upon the slow pace of every component of the project and emphasized the need to	

expediate things to get the work done at time

- Agreed upon that there should be frequent visits to each stakeholder's office by the staff working at ground level as they are the core workers and a better liaison between them is of utmost importance for smooth and fast functioning of the project.
- Afzal sb briefed the participants on the working of PMU, he explained how the visit an area along with the concerned dept and the report their finding to secretary agriculture for further action.
- Dr. Fazli Hakim thanked PMU staff for their time and expressed hope to meet very soon at a later date. PMU offered excuse for the short duration as they were going for PIC meeting with DG S&WC and expressed their eagerness to meet again for the next meeting very soon to further discuss and share ideas for improving the routine workings and ensure the project makes its desired impact.

Picture 5.8: ME&IE Team WCBA KP, in meeting at Provincial PMU Office on 11th May 2022

xxxvi) Meeting in Project Consultants (AGES) Office Peshawar on 11th May 2022

Date:	11th May 2022
Venue:	Project Consultants (AGES) Office, Peshawar.
Participants:	
i) Mr. Tahir Kamran, Team Leader WC-KP (AGES).	
ii) Mr. Pazir Muhammad, Construction Engineer, AGES.	
iii) Mr. Shahid Jan, Construction Engineer, AGES.	
iv) Dr. Fazli Hakim Khattak, TL, WC-KP.	
v) Mr. M. Shahraz Khan, OM, WC-KP.	
vi) Mr. Kaisar Khan, AM, WC-KP.	
Meeting Agenda:	
To discuss project progress, activities plan and way forward	
Discussions held:	

- Agreed upon better cooperation between stakeholders.
- JRM discussed and shed light on its importance for the project's progress. Expressed regret at postponement of it.
- Both Team Leaders agreed upon expediating the pace of the project, expressed regret at the current speed of things.
- AGES TL shared some technical anomalies of various nature that were already reported to the concerned by AGES.
- Both Team Leaders agreed upon to meet at a later date for a detailed discussions and inputs on how to make things move around faster and smoothly.

Picture 5.9: ME&IE Team WCBA KP, in meeting at Project Consultants (AGES) Office on 11th May 2022

xxxvii) Meeting in Directorate of Agriculture Engineering, Peshawar on 13th May 2022

Date:	13th May 2022
Venue:	Directorate of Agriculture Engineering, Tarnab.
Participants:	
i) Miss Kalsoom, D.D Head Quarter DAE, Peshawar. ii) Ms. Afshan Shareen, Project Engr. DAE HQ. iii) Mr. Fawad Ahmed, ICT-M, ME&IE. iv) Mr. Nasir Khan, ICT-M, WC-KP. v) Mr. Kaisar Khan, AM, WC-KP.	
Meeting Agenda:	
To discuss the complete process from Application to Completion of the interventions.	
Discussions held:	
• Approval date of intervention is date of commencement, said by the DAE officials. • Application: Application form, CNIC, Land ownership certificate, Fard for land, Shajra-e-Aks by Patwari, Surety bond that land is Barani and farmer has not availed any Govt. grant for tube well or solarization in the last 5 years, Authority letter in case more than one farmer applying, Electric Resistivity Survey report done by the farmer on his own. • Site Feasibility: Zonal officers scrutinize the file, visit the site for feasibility and pitoral record before installation. • Approval: complete file is sent to headquarter for approval. • Work order: After the approval file is back to the zonal office, zonal officers provide a work order to the farmer and share a tentative work plan with the farmer and consultants. • Commencement of work: farmer has to start work in min 15 days and 3 months max, otherwise work order gets cancelled. In case of tube wells, farmers do the work on their own with frequent visits from DAE and consultants. In case of Solarization, the SSC (selected once a year through bidding for the whole target numbers of solarization) installs the solar system and trains the farmer for operation of the system. • Completion Certificate: after completion of work, the file is submitted to consultants through headquarters, consultants visit the site and provide satisfactory work certificate or PTV report. • Payment: in case of tube well, after the FCR or TPV, the department sanctions the amount according to the installed category to the farmer while the department does not assure 20% share of the farmer. Farmers may spend more or less than 20%. In case of solarization, 20% of farmer share is taken as demand draft and this 20% is released to SSC after PTV or satisfactory work certificate while 80% of govt. share is already spent in purchasing the solar panels in bulk for the target number of solarization in one year. Categories: • 200 ft depth: 464,000 Govt. share while farmer share is not known for tube well, for solarization on tube well with 200 ft depth: total amount 1,600,000, Govt. share 1,280,000 and farmers share 320,000. • 250ft depth: Govt. share 580,000 fixed, farmer share not known for tube well, for solarization total 2,000,000, govt share 1,600,000, farmer share 400,000. • 320 ft depth: in tube well govt share is 742,400 fixed, in solarization total 2,598,000, govt share 2,078,000, farmer share 519,600.	

xxxviii) WC-KP Team Meeting in National Office Islamabad on 17th May 2022

Date:	17th May 2022
Venue:	WC-KP national Office, Islamabad.
Participants:	
i) Dr. Fazli Hakim Khattak, TL, WC-KP. ii) Mr. Nasir Khan, ICT-M, WC-KP. iii) Mr. M. Shahraz Khan, OM, WC-KP. iv) Mr. Kaisar Khan, AM, WC-KP.	

Meeting Agenda:
To discuss project progress, activities plan and way forward
Discussions held:
Discussions with the Team Leader WC-KP; • Upcoming monitoring visits starting from 01 June, 2022. • Logistics arrangement and taking up the same with the concerned office. • Establishment of WCBA separate office at Peshawar and initiating process for the same with the relevant office at HO. • Budget forecast and fund arrangement for field visits and office expenses already initiated and continuous follow up. Discussions with Mr. Waseem Ahmed (Financial Specialist) and Mr. M. Irfan (Manager Admin); • SOPs for Statement of Accounts and its dispatch to National Office. Waseem sb directed to send all WCBA documents/dispatch to National Office for further process. • Project Office establishment was discussed, Waseem sb discussed with Irfan sb and assured to address the issue of logistics asap. • Funds arrangements for upcoming field visits and office operating expenses discussed and Waseem sb assured to arrange for it. • Office Manager highlighted the pending salaries of WCBA staff and other arears/adjustments, both Waseem sb, and Irfan sb committed for solving the salary issues once and for all in the month of June, 2022. • Letter of appointment/Job Contracts of WCBA staff discussed, Irfan sb guaranteed to solve this in a few days.

Picture 5.10: ME&IE Team WCBA KP, at National Office Islamabad on 17th May 2022

xxxix) 11th Joint Review Meeting at Agriculture Secretariate Peshawar on 20th May 2022

Date:	20th May 2022
Venue:	Agriculture Committee Room at Agriculture Secretariate, Peshawar.
Participants:	
i) Dr. M. Israr, Secretary Agriculture. ii) Provincial PMU Staff. iii) OFWM KP Staff. iv) Agriculture Extension Staff. v) Soil & Water Conservation Staff vi) Agriculture Engineering Staff. vii) Project Consultants of NPIWC-II (NESPAK). viii) ME&IE Consultants Staff of NPIWC-II. ix) Project Consultants of WC-KP (AGES). x) ME&IE Consultants Staff of WC-KP.	
Meeting Agenda:	
Joint Review Meeting.	
Discussions held:	
• Physical Progress of WC-KP project was discussed. • Disbursement of total expenses, ADP and PSDP shares were discussed. • Some observations by the PMU on physical quality of works were discussed.	

- Number of interventions, in documentation and on ground was discussed.
- Quantities and quality verification of work done was discussed.
- ME&IE payments issues and ME&IE reporting were discussed.
- Impact analysis of the interventions was discussed.
- Rectification deadlines for ill quality works was given by the Secretary Agriculture.
- TPV for solarization was discussed for AGES said that we cannot be the part of procurement committee for solarization.
- Result based monitoring was discussed.

xl) Meeting in Directorate of Agriculture Engineering, Peshawar on 2nd June 2022

Date:	2nd June 2022
Venue:	Directorate of Agriculture Engineering, Tarnab.
Participants:	
vi) Ms. Afshan Shareen, Project Engr. DAE HQ. vii) Mr. Nasir Khan, ICT-M, WC-KP. viii) Mr. Khaliq uz Zaman, FE, WC-KP.	
Meeting Agenda:	
To discuss the formats and to discuss the way out for completion of missing columns in the data collection formats.	
Discussions held:	

- The formats which were revised after discussion with national ICT manager were shared with the department and each column was discussed in detail in order to eliminate the unnecessary columns and to add the certain information that can help in the analysis of data and dashboard requirements.
- The formats were given to the department to fill out the missing columns.
- The filled formats were reshared by the department in mid of June which were forwarded to the national ICT team for further necessary action.

xli) Meetings in Directorate of Soil & Water Conservation, Peshawar on 6th and 7th June 2022

Date:	6th & 7th June 2022
Venue:	Directorate of Soil & Water Conservation, University Road, Peshawar.
Participants:	
i) Mr. M. Yasin Wazir, DG, S&WC. ii) Mr. Khalid Gauhar, DD Admin & Field, S&WC iii) Miss Shagufta Bano, DDP, S&WC iv) Mr. Irfan Ullah, DD Planning, S&WC. v) Ms. Sowm Khan, AD Planning, S&WC. vi) Mr. Nasir Khan, ICT-M, WC-KP. vii) Mr. Khaliq uz Zaman, FE, WC-KP.	
Meeting Agenda:	
To discuss the revised formats and to sort out a mechanism for filling the required data in the formats.	
Discussions held:	

- Revised data formats were presented to Mr. Irfan Ullah, Mr. Khalid Gauhar & Ms. Sowm Khan in Mr. Irfan Ullah's office.
- The changes made were discussed with the department.
- The SFTs provided by the department were edited according to the revised formats.
- Data from SFTs has been shifted to the revised formats and has been shared with the department to fill the missing columns as there are many columns still empty.
- Filling out the missing data was discussed with Mr. M. Yasin Wazir, DG S&WC.
- The WC-KP team stated that hard files of interventions should be shared to collect the required information. DG S&WC replied that we cannot bring the interventions files to the directorate, however, we will share the formats with

our field officers to fill out the missing columns. • Revised data collection formats duly filled with the SFTs data were shared with Ms. Sowm Khan to forward the same to field offices for filling out the missing data.

xlii) Project Board of Management (P-BoM) Meeting at national office, Islamabad on 21st June 2022

Date:	21st June 2022
Venue:	National Project Office, Islamabad.
Participants:	
i) Mr. Ch. Saif Khan, MD G3EC. ii) Mr. Waseem Ch., Director G3EC. iii) Mr. Irfan, MD S&S Associates. iv) Dr. Fazli Hakim Khattak, TL WC-KP. v) Dr. Usman, TL NPIWC. vi) Dr. Humayun Khan, DTL, NPIWC. vii) Mr. Rizwan Ahmed, National ICT Manager.	
Meeting Agenda:	
To discuss the project progress, issues, targets and way forward	
Discussions held:	
• Project progress was discussed. • Financial and technical issues of the project was discussed. • Office operational requirements, logistics for field surveys etc. was discussed. • Upcoming filed surveys and plans were discussed. • Staff salaries issues was discussed.	

xliii) Meeting at NPC office, Islamabad on 27th June 2022

Date:	27th June 2022
Venue:	National Project Coordinator Office, Islamabad.
Participants:	
i) Mr. Muhammad Naeem Akhtar, Dy PC WCKP, FPMU MNFS&R ii) Dr. Fazli Hakim Khattak, TL WC-KP.	
Meeting Agenda:	
To discuss the project progress, issues, targets and way forward	
Discussions held:	
• Project progress was discussed. • Financial and technical issues of the project was discussed. • Office operational requirements, logistics for field surveys etc. was discussed. • Upcoming filed surveys and plans were discussed. • Staff salaries issues was discussed.	

TRAININGS

Training is vital because it represents a good opportunity for employees to grow their knowledge base improve their job skills. In this connection five days training was arranged for field enumerators at WCBA- KP office. The objectives were to equip enumerators with basic monitoring and evaluation tools and baseline questionnaires.

The training was divided into two parts; the first two days training (27 & 28 August 2021) was held. In order to assess participants knowledge a pre-test assessment questionnaire was filled. Same questionnaire will be filled at the end of the training workshop. This will help us in identifying the gaps and success of the training and enumerators' knowledge gap.

In the introduction remarks and brief about WCBA- KP, Baseline Survey, Dr. Usman Mustafa, TL informed workshop participants. Dr. Mansab Ali, Irrigation Agronomist enriched participants with "Land Utilization and Agriculture terminology". Whereas Mr. Muhammad Afzal Hayat, Social and Gender Specialist, enriched participant Gender Role in WCBA – KP.

Similarly, first review of questionnaire has been completed as well. A mock exercise for all trainees will be arranged in September prior to sending them in the field for Baseline Survey and Monitoring Evaluation.

Figure-5.11: Field Team (Enumerators) in Baseline Survey Training at WCBA project Peshawar Office from 27-28 August 2021.

The pre training assessment results showed that the knowledge related to the subject is poor. Overall, the participants obtained 4.5 marks out of 10.

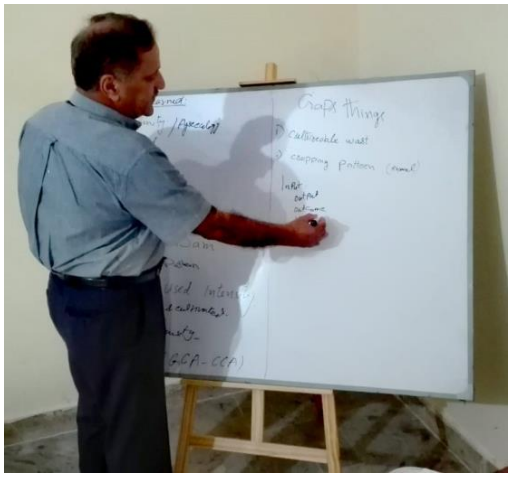

Figure-5.12: Dr. Mansab Ali, Irrigation Agronomist training enumerators in Baseline Survey Training at WCBA project Peshawar Office from 27-28 August 2021.

i) Three Days' Workshop of ME&IE Consultants at National Office Islamabad

In order to filling the gaps of baseline survey of the project, three days' workshop was held. The workshop was started on 30th of August, 2021 at Consultants' National Office, Islamabad. Team Leader WCBA-KP also participated in the workshop to share his experience and pay a role in "Baseline Survey of the project.

Methodology, different variables were identified and finalized in the workshop. Besides, these some administrative and logistic measured were decided.

ii) Training/ Workshop for the new appointees of the project, in Peshawar from 23 to 26 February 2022.

Training was scheduled in Peshawar from 23 to 26 February for the newly appointed staff. Purpose of the training was to educate the staff about the project, requirements of the project, role of ME&IE consultants in project and time

frame of different activities of the project. Officials from the executing departments i.e., Agriculture Engineering Department and Soil & Water Conservation were also invited to deliver lectures about their interventions that are implemented in this project.

The three days training/ workshop was formatted to cover each and every aspect of the project and to get all the staff ready for the project works.

DAY 1:

On the inauguration day, the formal training started after the recitation of Holy Quran by Dr. Fazl Hakim Khattak, Team Leader, WC-KP.

Figure-5.13: *Training Day-1 (Session 1: By Dr. Humayun DTL NPIWC) on 23 February 2022*

Session 1:

The first session of training was delivered by Dr. Humayun Khan, DTL NPIWC. Key points of this session were;

- Necessity of this training.
- Types of training (theoretical, practical, assessment-based training, tolerance assessment during training, attachment for training).
- Training requirements: to understand tasks, to understand required tools and to understand objectives.
- Theoretical knowledge is in books while lab for social sciences is the society.
- Major tool in our case is questionnaire.
- Questionnaire should be developed in such easy language that information collection from a lay-man of society is easy.
- Data collected through questionnaires should be enough for analysis.
- To understand the people, ask extra questions.
- Avoid abnormal data in the questionnaire.
- Beside filling the questionnaire, take general observations as well.
- Objectives, tools, community interaction, terminology of the questionnaire in local language should be clear to each individual.

Figure-5.14: *Training Day-1 (Session 2: By Dr. Fazal Hakim Khattak, TL WC-KP) on 23 February 2022*

Session 2:

The 2nd session of training was conducted by Dr. Fazal Hakim Khattak, TL WC-KP. Key agenda of this session were;

- Introduction of the project.
- Project objectives.
- Time-line of the project.
- Introduction of the stack holders and in-line departments.
- Introduction to the interventions of the project.
- Role of ME&IE consultants in the project.
- Base-line, Mid-line & End-line surveys.
- Impact evaluation of the interventions.
- Issues while collecting field data.

- Accuracy of collected data.
- Data overlooked during field survey.
- Policy: Plan of action/ course of action

Later on, questionnaires for the interventions of Agriculture Engineering Department i.e., Installation of Tube Wells & Solarization of Tube Wells were introduced and discussed with the team.

Figure-5.15: *Training Day-1 (Session 3: By Engr. Adnan, Field Engr. Peshawar Div & Miss. Kalsoom Dy. Director AED Headquarter) on 23 February 2022*

Session 3:

The third session of training was carried out by Engr. Adnan Field Engineer Peshawar Division and Miss Kalsoom Deputy Director Agriculture, AED Headquarter Peshawar. Key points of this session were;

- Interventions executed under Agriculture Engineering Department.
- Requirement of AED are civil engineering + mechanical engineering.
- Agenda for interventions: To conserve water & Soil preparation of agriculture.
- Application process:
    - Advertisement
    - Farmers apply through district office.
    - Application processing + requirement checking.
    - Merit preparation
    - First come first serve basis.
    - Targets from department for each district.
    - Scrutiny on the basis of applications.
- Electric Resistivity Survey
- Tube well requirement: 5000 gallons/ hr.
- Land requirement: 20 kanals minimum.
- The depths are finalized for tube wells i.e., 200 ft, 250 ft and 320 ft. as per approved PC-I of the project.
- 5 to 10 % cases may go down beyond 320 ft, after approval from the consultants and depends on requirement of water.
- After resistivity survey, approval from department.
- Work execution by the farmers.
- Technical support provided by the department.
- Co-ordination with consultants.
- Consultants are added to ensure transparency to the project.
- Agreement is signed with the farmers to share water with other farmers when their own requirement is fulfilled.
- In case of tube wells, the AED department does not ensure 20% famer share, as the works are executed by farmers themselves While in case of solarization, the department ensure 20% farmer share.

Figure-5.16: *Group Photos at end of Training Day-1 on 23 February 2022*

DAY 2:

On the second day, three sessions were taken.

Figure-5.17: *Training Day-2 (Session 1: By Mr. Afzal Hayat, Social & Gender coordinator WC-KP) on 24 February 2022*

Session 1:

The formal training started with the presentation of Agronomy delivered by Mr. Afzal Hayat, Social & Gender coordinator WC-KP. Main points of the presentation were;

- Project zoning done the agronomist for the project.
- Land Utilization:
  - Geographical area,
  - Total area reported,
  - Forest area.
  - Area not available for cultivation
  - Culturable waste
  - Cultivated area
  - Current fallow
  - Net area sown
- Culturable command area
- Cropping intensity
- Crop rotation
- Irrigated/ non-irrigated area
- Crops by season
  - Kharif (Apr-Sep)
  - Rabi (Oct-Mar)
  - Perennial
- Measuring units used in agronomy

Figure-5.18: *Training Day-2 (Session 2: By Mr. Irfan Ullah, DDP S&WC) on 24 February 2022*

Session 2:

In the second session, officials from Soil & Water Conservation delivered their lecture about the interventions executed by S&WC department under WCBA-KP project. Key points of session are as under;

- Indictors of S&WC are;
  - Capacity of Water Storage
  - Conversion of cropping waste to agricultural/ usable land.
- Objective of Check Dams are;
  - Primary purpose: Capacity of water storage, Soil reclamation.
  - Secondary Purpose: Irrigation.
- Water Ponds
- Check Dams
- Stream Bank Stabilization
- Terracing
- Water storage reservoirs
- Micro watersheds
- Agronomic low-cost interventions
- Water seepage harvesting gallery
- Gated field inlet outlet spillways
- Sand dunes stabilization
- Capacity building

Session 3:

After the detailed discussions on the above, questionnaires for the S&WC interventions were presented and discussed in detail in a full session.

Day 3:

On the third day of training, again sessions were delivered.

Figure-5.19: *Training Day-3 (Session 1: By Mr. Afzal Hayat, Social & Gender coordinator WC-KP) on 25 February 2022*

Session 1:

In the first session of day 3, Mr. Afzal Hayat, Social & Gender coordinator WC-KP presented his presentation about Gender & Sex. Key points of session are as under;

- What is gender & sex
- Gender and development
- Women and development
- Gender socialization
- Gender stereotyping
- Gender and development thinking
- Gender division of labour
- Gender awareness
- Gender equality & equity
- Women empowerment

Session 2:

In the second session of day 3, group discussion was done about each intervention of the project and questionnaires developed for each intervention.

Session 3:

In the last session of day 3, training assessment was done. Questions were asked from the trainees to seek their understanding and to assess how well they are trained during these three days training. Each individual took part in this session and all the trainees satisfied with the training.

Certificate Distribution:

Mr. M. Yasin Wazir, Director General, S&WC along with Dr. Fazal Hakim Khattak, TL WC-KP distributed certificates to the training attendees.

Figure-5.20: *Training Day-3 (Certificate Distribution) on 25 February 2022.*

Concluding Remarks:

Mr. M. Yasin Wazir, Director General, S&WC, being the chief guest shared his concluding remarks;

- Pakistan has scarcity of water.
- Underground water is going down and down while no proper mechanism for underground water re-fill/ recharge.
- Pakistan is far lacking of the systematic development for conservation of water.
- European countries have already done the precautionary works for water conservation.
- Being one nation, we have to struggle and work till our level best for our beloved country Pakistan.

Figure-5.21: *DG S&WC Concluding Remarks on 25 February 2022*

B. Baseline, ME&IE Findings

Questionnaires and monitoring tools were prepared and finalized in consultation with the FPMU and Regional OFWM representatives. The baseline questionnaires and monitoring tools are placed at Annex–I. The main parameters included in these templates are WUAs, farmers feedback, family profile of the growers regarding gender, age, education, literacy and occupation, farm area, area owned, area rented in, area rented out, area not cultivated, cropped area and yield for each crop sown, prices received by the farmers for their produce, various inputs and operations used, their prices and custom hire rates etc. Various inputs and cultural operations on which information in tools were also obtained included seed, chemical fertilizers, Farmyard Manure (FYM), pesticides, weedicides, tube well purchased water, cultivation, levelling, sowing, hoeing, harvesting, thrashing, picking and other operations; family and hired labor used thereon, prices paid, and costs incurred thereof.

The salient findings of the Baseline report are summarized as under:

There are total thirteen (13) interventions/components of the WC-KP project, while for the ME&IE purpose the whole project area of KP is divided into five (05) Zones.

Family Size

The family size was 8 persons and the average joint families were 12 in the Project area 02 male and 01 female worker was available for farming.

Literacy Level

Literacy level in the project area is very encouraging. More than 69 % peoples are literate while 31 % are illiterate. It is very interesting to note that literate level is high in zone 1 (Swat area) with 50 %, followed by zone 3 (Peshawar, Mardan area) with 34 %, zone 5 (DI Khan area) with 33 %, zone 4 (Karak, Bannu area) and zone 2 (Abbotabad, Mansehra area) with 17 %.

Employment

Main occupations in the project area are farming, services, labor, shopkeeping, artisan, business and household work. Majority of the people (57 %) were engaged in farming, followed by 8 % in services, 3 % in business, and 2 % as daily wage labor. Presently the rural population was busy in farming, i.e., 75, 63, 53, 50 and 40 % in zones 1, 3, 5, 2 and 4, respectively. The female worked as part time and male worked the whole time. Hiring of Labor for farming was not common.

Water Utilization

The rural communities of the Project Area used water for agriculture, animals drinking and other human consumption as well as daily life operations including cooking, washing cleaning etc. Above 60 % household responded that most of available water used for crop production activities, followed by animals drinking/bathing while rest of the available water resource used for human consumption and other life operations.

Farm Rented and Shared Cropping

Three types of Land utilization were reported in the Project. Total response of the farmers was about 914 acres out of 914; the self-cultivation was 850 acres (93%) 55 acres rented out and 9 acres were rented in. Out of 850 owned Land 70 acres were cultivated on shared crop basis that is 8 % while 6 % was rented out. Land utilization being the important indicator of BSL was analyzed, that provides, 914 acres' land was owned, and 70 acres rented in and cultivated under various crops. The land rented out was 55 acres.

Land Use Intensity

The prevailing overall cropping intensity (CI) based on CCA in the sampled project area is 135.52 %. That is further divided in seasonal cropping intensities that is 124.33 % for Rabi crops, 8.90 % for Kharif crops, 2.10 % for perennial crops (sugarcane, fruit & vegetable crops) and only 0.19 % for mix intercrops. Due to non-availability of water, farmers mostly grow

wheat that is staple crop and require less water. There is lot of room to increase cropping intensity for kharif crops, fruit and vegetable crops as water available through the implementation of Project interventions.

Land Preparation

Land preparation, harvesting and labor cost are the inputs used in the Survey. An average hour per acre of plugging was 02 hours. Cost of for 02 hours was Rs. 1152.5 and Rs.576 per hour. Slight difference of ploughing by tractor was common in the region. The tractor use range as.1.75 to 1.96, hours applied as Rs.643 per hours to Rs.570. The difference between the ploughing costs was Rs.73, (13%) due to non-availability of tractor locally. Cost of ploughing was high in the area where tractors were hired from the far settled areas of the province.

Seed Bedding

Tractors were used in the seed bedding through ploughing with a cost of Rs. 704 per hour. Low cost for the input was Rs. 533 had a difference of Rs.171 in the 05 of the Project area. The cost of seed bedding was Rs.62 high than only ploughing by tractors. The ploughing through tractor cost Rs.1153 per 1.88 hours, whereas 2 ploughing for seed bedding cost for 1.62 hours was Rs.1141.2nd time ploughing for seed bedding was less than 1st time land preparation through ploughing by tractor.

Cost of Harvesting and threshing.

Total average cost of harvesting and threshing was Rs.4007.5 for 03 hours. The average cost was Rs.1336 per hour. Separate cost of harvesting was Rs.1044 per hour, and threshing was Rs.1604 per hour. There was considerable variation in this cost of harvesting and threshing in the different Zones of the project area.

Labor Wages

Labor is one of the crucial factors of production used for assessment of the wages and its comparison at end evaluation of the Project. The locally available labor was from joint family and was cheap. Average wage of male labor per hour, was Rs.105 and female wage was Rs.95, total wages was Rs.382, and female labor worked for 1.32 hours for Rs.125. female average was far less than the male. Female worked in the houses but their cost of domestic work neither monetized nor counted in this Base Line Survey (BLS).

Crop yields and benefits

The overall yields / cropped area under Survey were 5.26 acres. It produced 152.3 Kgs of original product and 825.6 kg by product. The farmer sold price was Rs. 2292 per 40Kg for original product and Rs. 653 per 40Kg. high revenue / sold price came from per acre of the fruit plants.

Installation of tube wells contributed high return of Rs. 1,200,000, followed by solarization of tube wells provided Rs. 910,250 to the farmers. The income from the area irrigated by check dam was Rs. 190,000 and Rs. 170,000 from water pond respectively.

Social analysis

The Women Participation in the farming and meeting is one of the significant indicators of BLS. The overall participation of women in farming activities was 47%, and awareness about the project (WC- KP) was 49%, 34% female knew about the project. The female WCA member was 1.5%, while no female participation in the WCA meeting was noticed during the BLS.

It is concluded that female awareness shall be increased by involvement of the female members from the local body. The WCA shall be organized, and regular meetings held to benefit more female population.

i. Baseline & Monitoring Survey in November December 2021 and January, February 2022.

Consultants organized three field teams for baseline and monitoring survey while each comprises three members. Farmers were interviewed and questionnaires were filled in this round of activity. Mr. Ihsan Ullah explained that after the completion of the Protection Bund (SBS), he reclaimed 2.5 acres of land, therefore, he will grow more crops that will increase his income positively.

Figure-5.22: Mr. Mumtazullah FTI is measuring SBS at farm of Mr. Ihsanullah at village Qaiserabad, Tehsil Rustam, district Mardan on 12 Nov,.21.

Moreover, Mr. Ijaz through Water Pond intervention increased wheat productivity by 17% and increase acreage from 2.5 acres to 11 acres. He was happy to grow maize first time on his land due and expecting more yield from orange plants due to availability of water.

Figure-5.23: Ffarm of Mr. Ijaz Ali at village Barringan, Tehsil Rustam, district Mardan on 12 Nov. 21.

Farmer Mr. Umar Khayam mentioned that Istiraj SBS (Protection Bund) is very valuable to us. Earlier, we use to grow only wheat having low yield of about 800 kg per acre due to nonavailability of water. Now we are planning to grow orange orchard.

Figure-5.24: Istiraj SBS at village Beki Dara, Tehsil Rustam, district Mardan on 12 November, 2021.

After construction of this SBS Protection Bund farmer is expecting more productivity as it was very low in wheat that was about 300 kg per acre stated by John Muhammad.

Figure-5.25: John Muhammad SBS at village Tar Khel, Tehsil Jahangira, district Nowshera on 18 Nov. 2021.

Gulistan Check Dam is expected to save more than 2 acres of land and through available irrigation crop productivity will increase as compared to present yield level that is about 320 kg per acre in wheat as mentioned by farmer Mr. Sher Zada.

Figure-5.26: Gulistan Check Dam at village Tar Khel, Tehsil Jahangira, district Nowshera on 18 Nov. 2021.

According to the farmer Amir Nawab, the completion of Check Dam has solved the main problem of soil erosion and depletion of fertile

agriculture land. Earlier, soil erosion and seasonal flood water use to destroy our homes and this flood water will be used for irrigation purpose.

Figure-5.27: Amir Nawab Check Dam at village Kahi, Tehsil Jahangira, district Nowshera on 18 Nov. 2021.

ME&IE Consultants' field team visited three ponds/reservoirs to harvest rain water for irrigation purposes of farmers namely; Abdullah Jan, Wahid Gul and Zahoor Khan in the remote areas of Karak on 24 November 2021. Ponds/reservoirs can have magical effects on the most deserving Saline Zone and the vulnerable and deprived farmers in the area of Karak. Salt water is distilled to clean fresh water by filtration from ponds and reservoirs in the "salt zone".

Figure-5.28: Ponds use to distilled salt water for agricultural purposes at district Karak on 24 November, 2021.

Mr. Afzal Hayat Khan, Social & Gender Specialist, WCKP along with Engr. Sajjad visited Bannu district on going solarization of Tube Well interventions in the remote areas. These two farmers; Mr. Amjad Fahim and Shukat Khan are happy shifting from subsistence farming to valuable crops. This project may be selected for the case study/ In-depth analysis in the near future.

Figure-5.29: View of the Solarization of Tube Well paradigm shift from subsistence farming to valuable crops at district Bannu on 26 November, 2021.

Training of the field survey teams was conducted during September/October where enumerators were trained with basic monitoring and evaluation tools and baseline questionnaires. Consultants have organized four field survey teams for baseline and monitoring survey while each team comprises of two members. These teams visited Swat, Malakand, Abbottabad, Mansehra, Mardan, Nowshera, Charsadda, Karak, Bannu, DI Khan and Tank and interacted with farmers. More than eighty (80) farmers were interviewed and questionnaires were filled by using Android Application in this round of activity.

Figure-5.30: *Installation of Solar System at farm of Mr. Shoukat Khan, district Bannu on 03 December, 2021*

Ponds/reservoirs have magical effects on farmer's livelihood with high crop productivity in the saline zones of KP.

Figure-5.31: Pond/ reservoir in Saline Zone of district Karak on 04 December, 2021.

Figure-5.32: Check Dam site at village Aman Kot, Tehsil Razar, district Swabi on 23 December, 2021.

Figure-5.33: Check Dam site at village Darban, Tehsil Darban Kalan, district DI Khan on 27 December, 2021.

Figure-5.34: Solarization of Agricultural Tube Well of Shafqat Ullah Khan, Tehsil Paharpur, district DI Khan on 28 December, 2021.

Figure-5.35: SBS site atvillage Sahra Palai, district Charsada on 28 December, 2021.

Figure-5.36: Mr. Fahim Ullah Check Dam site at village Thana, district Swat on 29 December, 2021.

ii. Visit to Walai (Nowshera) for a Case-Study and SWOT Analysis of Agriculture Engineering Department's Interventions on 18 February 2022.

A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was undertaken along with the Team Leader of the WC-KP and his team and the Agriculture Engineering Department (AED) on

February 18, 2022. The purpose of this visit was to visit the intervention for the case study/in-depth analysis through SWOT exercise. The WC-KP team was led by Dr. Fazal-e- Hakeem (Team Leader, WC-KP). Other team members consisting of Mr. Afzal Hayat (Social and Gender Coordinator, WC-KP), Mr. Nasir khan (ICT Manager, WC-KP), Mr. Amjad Ali, Mr. Khaleeq -uz-Zaman, and Ms. Saima (field team members).

Figure-5.37: *WC-KP Team, AED Field Engineer and Local Farmers during case-study field visit to AED's interventions in Walai (Nowshera) on 18 February 2022*

The WC-KP staff was accompanied by Mr. Adnan khan (Assistant Engineer Peshawar Division, AED) for the focus group discussion. One of the WC-KP team members interviewed the farmers. Ms. Saima additionally holds a meeting with the female focus group for undertaking the SWOT analysis exercise. The farmers informed us that the water they get from the AED intervention is used for irrigation purposes, livestock rearing, and human consumption. They additionally informed us that earlier than this intervention, potable water for human consumption was available at an approximate distance of 02 km that is now available on their doorsteps after the intervention. The farmers stated that the size of cultivated land has been extended vastly after the intervention. They additionally claimed that earlier than the intervention, copping pattern was simplest Rabi & Kharif but the intensity of cropping was almost negligible, but after the intervention, types of crops increased, vegetables are added in cropping, and the intensity of cropping additionally increased.

Some of the important information collected from the farmers are given as follows:

1. Source of power: Solar PV System.
2. Depth of Water Table: 500 Ft.
3. Water Discharge: Above Normal.
4. Suction Pipe Dia: 2.5" installed by the department whilst water pumping pipes were modified by the farmer to 3".
5. Water Recharge: Sufficient.
6. Solar Panels Installed: 45 panels of 350 Watts each, installed on separate 9 mounting structures.
7. Total Power Production: 15,750 Watts.

A SWOT Analysis exercise was undertaken with the active involvement of participants; the findings of the exercise are given as follows:

STRENGTHS

- The wasteland was irrigated, resulting in more farmland.
- Farmers could not only become self-sufficient by growing grains, vegetables, and selectively fruit (oranges) for their household needs but also make commercial profits from these commodities.
- Get rid of unbearable irrigation electricity bills by providing all-season irrigation water through solar energy.
- Similarly, the project's intervention ensures the availability of plentiful water for domestic use.
- There is also enough water to meet the needs of the animals.
- Due to the growth of flowering plants and especially orange plantations, beekeeping is also practiced; resulting in the production of high-quality honey in the surrounding areas.
- Farmers do not have to go to remote areas to fetch water as it is now available on their doorstep.

Figure-5.38: *WC-KP Team Leader Interviewing farmers about the strengths and weaknesses of the intervention (Nowshera) on 18 February 2022*

WEAKNESSES

- Batteries are needed for the emergency power supply since the water requirement cannot be met on cloudy days.

OPPORTUNITIES

- Employment opportunities in farm labor, packaging, transport of goods, etc. have been created.
- Trading started after the intervention with the neighborhood market and abroad. Travel and tourism opportunities were created due to the surrounding austenitic environment and vegetation.

THREATS

The continuous use of water lowers the water table. If farmers operate the tube well when water is not needed, it would lower the water table and make it difficult to recharge underground water.

Figure-5.39: *WC-KP Team and farmers discussion about the interventions (Nowshera) on 18 February 2022*

iii. Baseline and Monitoring Survey in March 2022.

The WC-KP team visited DD S&WC office in Nowshera to discuss the visit schedule.

Figure-5.40: *WC-KP Team with DDS&WC (Nowshera) on 15 March 2022*

The WC-KP team shared the field monitoring schedule with S&WC official, discussed all the S&WC interventions within Nowshera and finalized and visited the interventions. Selection of sites for monitoring was thru in order to cover maximum interventions.

Visit to S&WC interventions in District Nowshera on 15 March 2022.

WC-KP team along with the DD S&WC Nowshera set out for the monitoring and evaluation of S&WC interventions.

Intervention 1 (Khan Afzal SBS):

The WC-KP team first visited Khan Afzal Stream Bank Stabilization in Village Garoo, Tehsil Jahangira, District Nowshera. Main points and observations taken during the visit are as under;

- Land owned by the farmer before the intervention was 15 acres while after the improvement, the land has increased half acre and now it is 15.5 acres.
- 0.5-acre area is reclaimed due to the S&WC intervention.
- Irrigated area is 5 acres and source of irrigation is tube well which was installed by the farmer himself.
- Wheat, maize and some vegetables are the crops sown on the irrigated land.

- The cropping intensity is sufficient for the farmer's domestic needs only and the famer does not sale the crops.

Figure-5.41: *WC-KP Team, Monitoring Khan Afzal SBS (Nowshera) on 15 March 2022*

- The farmer was satisfied with the intervention.
- The farmer demanded the team to approve and install solarization of the tube well in order to get rid-off the power issues and billing of electricity.
- The farmer furthered that he has installed tube well by his own but now he has no capacity of installation of solar system for the operation of tube well and therefore, he demanded for the solarization.
- The team expressed the whole procedure of applying for the solarization from the application till installation.

Figure-5.42: *WC-KP Team interviewing the beneficiary of Khan Afzal SBS (Nowshera) on 15 March 2022*

Intervention 2 (Gul Sharaf Check Dam):

After visiting Khan Afzal SBS, the WC-KP team along with the DD S&WC Nowshera moved to Gul Sharaf Khan Check Dam in Village Gandab, Tehsil Gahangira, District Nowshera. Main observations of the WC-KP team are illustrated below;

- Total land owned by the beneficiary of this intervention is 2.4 acres.
- The land is non-irrigated.
- The farmer sow only wheat on this land which has a very limited yield.

Figure-5.43: *WC-KP Team Monitoring Gul Sharaf Check Dam (Nowshera) on 15 March 2022*

- The farmer demanded the team for installation of Tube Well and solarization.
- The farmer said that this area lies in Barani zone and there is no other source of irrigation available in this area. In order to make my land culturable, a tube well and solarization of tube well is demanded.
- The team instructed the farmer about the procedure to apply for the demanded schemes.

Figure-5.44: *WC-KP Team interviewing the beneficiary of Gul Sharaf Khan Check Dam (Nowshera) on 15 March 2022*

Intervention 3 (Said Zaman SBS):

After monitoring and interviewing beneficiary of Gul Sharaf Khan Check Dam, the WC-KP team visited Said Zaman SBS in Village Gandab, Tehsil Gahangira, District Nowshera. The team observed, monitored and noticed the following;

- The owned land of the farmer was 2.5 acres before the intervention while after this SBS, the total owned area has been increased with 0.3 acre and now the farmer owned are is 2.8 acres.
- 0.3 acre of area is reclaimed by the S&WC intervention.
- The area is non-irrigated.
- The farmer sow wheat and oil seeds which has rain as the only source of irrigation and therefore, the cropping intensity is very low.

Figure-5.45: *WC-KP Team Monitoring Said Zaman SBS (Nowshera) on 15 March 2022*

- The farmer was satisfied with the intervention.
- The beneficiary of this scheme is a job holder and therefore he has no time for sowing any crops in his land.

Figure-5.46: *WC-KP Team interviewing the beneficiary of Said Zaman SBS (Nowshera) on 15 March 2022.*

Visit to S&WC interventions in District Mardan on 16 March 2022.

The WC-KP team visited DD S&WC office in Mardan to discuss the visit schedule.

The WC-KP team shared the field monitoring schedule with S&WC official, discussed all the S&WC interventions within Mardan district and finalized and visited the interventions. Selection of sites for monitoring was thru in order to cover maximum interventions.

Intervention 1 (Sultan Zeb SBS):

Sultan Zeb SBS in Village Berouch, Tehsil Rustam, District Mardan.

- Total land owned by the beneficiary of this scheme is 7.5 acres.
- This scheme is under construction.
- The farmer or any representative from his side was not available during the visit.

Figure-5.47: *WC-KP Team Monitoring Sultan Zeb SBS (Mardan) on 16 March 2022*

- The contractor working on the scheme stated that reclaimed area can be calculated after completion of the scheme.

Intervention 2 (Saleem Khan SBS):

The WC-KP team along with DD S&WC Mardan travelled to Saleem Khan SBS in Village Saleem Abad, Tehsil Rustam, District Mardan. Main points and observations during this monitoring visits are as under;

- Total owned area of the beneficiary of this scheme before the intervention was 25 acres, however, after the SBS the owned area has been increased by 0.5 acre and now the farmer owns 25.5 acres.
- Half acre of area is reclaimed due to the intervention.
- The land is irrigated through a tube well.
- Total area is covered with orchard (oranges).

Figure-5.48: WC-KP Team Monitoring Saleem Khan SBS (Mardan) on 16 March 2022

- The farmer was satisfied with the intervention.

Figure-5.49: WC-KP Team interviewing farmers on Saleem Khan SBS (Mardan) on 16 March 2022

Intervention 3 (M. Qaseem Khan SBS):

The WC-KP team along with DD S&WC Mardan travelled to M. Qaseem Khan SBS in Village Saleem Abad, Tehsil Rustam, District Mardan. Main points and observations during this monitoring visits are as under;

- Total owned area of the beneficiary of this scheme before the intervention was 20 acres, however, after the SBS the owned area has been increased by 1.5 acre and now the farmer owns 21.5 acres.
- 1.5-acre area has been reclaimed after the intervention.
- The land is irrigated through a tube well.
- Total area except for the reclaimed area is covered with orchard (oranges).

Figure-5.50: WC-KP Monitoring M. Qaseem Khan SBS (Mardan) on 16 March 2022

Visit to S&WC interventions in District Swabi on 17 March 2022.

The WC-KP team visited DD S&WC office in Swabi to discuss the visit schedule.

The WC-KP team shared the field monitoring schedule with S&WC official, discussed all the S&WC interventions within Swabi district and finalized and visited the interventions. The DD S&WC shared list of all interventions within the District Swabi. After that the team along with the DD S&WC set out for field visits.

Intervention 1 (Imran Khan Check Dam):

The WC-KP team along with DD S&WC Swabi travelled to Imran Khan Check Dam in Village Jhenda, Tehsil & District Swabi. Main points and observations during this monitoring visits are as under;

- Total owned area of the beneficiary of this scheme before the intervention was 25 acres, however, after the check dam the owned area has been increased by 0.5 acre and now the farmer owns 25.5 acres.
- This area is totally non-irrigated.

Figure-5.51: *WC-KP team Monitoring Imran Khan Check Dam (Swabi) on 17 March 2022*

- The famer was satisfied with the intervention.
- The area is not cultivated yet.

Intervention 2 (Irfan Khan Check Dam):

The WC-KP team along with DD S&WC Swabi travelled to Irfan Khan Check Dam in Village Jhenda, Tehsil & District Swabi. Main points and observations during this monitoring visits are as under;

- Total owned area of the beneficiary of this scheme before the intervention was 2.5 acres, however, after the check dam the owned area has been increased by 35 acres and now the farmer owns 37.5 acres.
- 35 acres has been reclaimed by the intervention for which the farmer is very pleased with the intervention.
- The area has been planted with orange plants last year and source of irrigation to these plants is water tanker.

Figure-5.52: *WC-KP team Monitoring Irfan Khan Check Dam (Swabi) on 17 March 2022*

Intervention 3 (Changaiz Khan Terracing):

After visiting Irfan Khan Check Dam, the team travelled to Changaiz Khan Terracing in Village Jhenda, Tehsil & District Swabi. Main points observed during this visit are given below;

- Total owned area after the intervention is 4 acres.
- Before the intervention, there was no culturable area.
- The monitoring team was unsatisfied with the work done.

Figure-5.53: *WC-KP team Monitoring Changaiz Khan Terracing (Swabi) on 17 March 2022*

- The area has been planted with orange plants last year and source of irrigation to these plants is tube well and water is transferred through water tanker.

Intervention 4 (Usman Khan Check Dam):

After visiting Changaiz Khan Terracing, the team travelled to Usman Khan Check Dam in Village Jhenda, Tehsil & District Swabi.

After approaching the site, the team was informed that a check dam was built in this location. Construction of this check dam was completed in Oct 2020 as per S&WC record. However, on the ground no check dam was there. The WC-KP team asked about the check dam, S&WC officials and farmers replied that the check dam is now buried

under ground after filling and leveling of the fields.

Figure-5.54: WC-KP team visiting location of Usman Khan Check Dam (Swabi) on 17 March 2022

iv. Team Leader's monitoring visit to Agriculture Engineering Department's Intervention in Maraje, Mankisharif, Nowshera

The Team Leader of WC-KP visited an intervention in Nowshera for monitoring by his own resources. No other field visits/ monitoring of project interventions has been in April 2022 due to lack of resources and funds.

Intervention: (Mr. Gul Said Tube Well & Solarization of Tube Well, under implementation):

Figure-5.55: Development of Tube Well for Mr. Gul Said Tube Well & Solarization of Tube Well in Maraje Mankisharif, Nowshera

The Team Leader WC-KP visited Mr. Gul Said Tube Well & Solarization of Tube Well (Under implementation) for monitoring in Maraje, Mankisharif, District Nowshera while travelling to WC-KP office in Peshawar. Main observations of the WC-KP team are illustrated below;

- Intervention: Mr. Gul Said Tube Well & Solarization of Tube Well.
- Location: Maraje, Mankisharif, Nowshera.
- Direct beneficiaries: 20 numbers.
- Cost of the intervention: Rs 2.5 million & 0.65 million for Tube Well & Solarization of Tube Well respectively.

Figure-5.56: Development of Tube Well for Mr. Gul Said Tube Well & Solarization of Tube Well in Maraje Mankisharif, Nowshera

C. Preparation of Monitoring Tools

Consultants have prepared Draft Final version of Monitoring Tools (MTs) for Baseline and Monitoring Surveys. The MTs are finalized in close liaison with client.

For preparation of MTs, Consultants have inducted maximum indicators for optimal ME&IE of the Project.

Work on overall field survey questionnaire on macro and micro activities have been finalized. Most of the suggestions received from various stake holders have been incorporated. These baseline and monitoring tools were shared with

different stake holders for comments to make the questionnaire more useful.

D. ICT ASSIGNMENT

The ICT Technology Team of ME&IE Consultants WC-KP team has performed the following activities during the reporting period.

i. Development of Android Based Application

Development of Android Based application for field survey is in progress. About 60% work has been completed on this task.

Android is a mobile operating system based on a modified version of the Linux kernel and other open-source software, designed primarily for touch screen mobile devices such as smart phones and Tablets.

Data collection android application have following features:

i) Well optimized application for better work in online/offline environment User friendly interface.
ii) Consume less internet bandwidth for better connectivity at low internet/remote areas.
iii) Data is automatically uploaded when a connection is detected.
iv) Data immediately available right after it's collected.
v) signatures, photos and much more.
vi) Strong safeguards against data loss.
vii) Synchronize data via SSL, ensures data can't be read by a third party.
viii) Encrypted data will be saved at device and server.

Preparation and testing of android-based application for field survey is in progress.

ii. Finalization of Data Collection Formats for DAE Interventions

The ICT team was thru in consecutive meetings and coordination with the officials of Directorate of Agriculture Engineering. The data collection formats for DAE have been finalized with the department. After the finalization of data collection formats, the data provided by department was fed in to the formats. The formats are now completed.

An Android based app shall be developed for the DAE and the DAE officers shall be trained for the data entry of ongoing project interventions.

STATION & DISTRICTWISE TUBEWELL SCHEMES

Station	Districts	FY 2019-2020		FY 2020-2021	
		Targets	Achievement	Targets	Achievement
Peshawar	Peshawar	1	1	2	2
	Charsadda	1	1	2	2
	Nowshera	3	3	3	3
Mardan	Mardan	3	3	2	2
	Swabi	0	0	2	2
Kohat	Kohat	1	1	2	2
	Hangu	0	0	1	1
Bannu	Karak	1	1	2	2
	Bannu	1	1	2	2
	Lakki Marwat	2	2	1	1
D.I. Khan	D.I.Khan	2	2	2	2
	Tank	0	0	2	2
Mansehra	Mansehra	1	1	3	3
	Battagram	0	0	0	0
	Tor Ghar	0	0	0	0
	Kohistan	0	0	0	0
Haripur	Abbatabad	1	1	0	0
	Haripur	0	0	4	4
Malakand	Malakand	0	0	5	5
	Lower Dir	1	1	0	0
	Upper Dir	0	0	0	0
Chitral	Chitral	0	0	0	0
Swat	Swat	1	1	3	3
	Buneer	0	0	2	2
	Shangla	0	0	0	0
NMAS	Merge Districts	0	0	0	0
Total		*19*	*19*	*40*	*40*

STATION & DISTRICTWISE SOLAR SCHEMES

Station	Districts	FY 2019-2020		FY 2020-2021	
		Targets	Achievement	Targets	Achievemer
Peshawar	Peshawar	9	9	6	6
	Charsadda	6	6	5	5
	Nowshera	14	14	7	7
Mardan	Mardan	5	5	6	6
	Swabi	5	5	5	5
Kohat	Kohat	5	5	7	7
	Hangu	3	3	1	1
Bannu	Karak	5	5	6	6
	Bannu	5	5	5	5
	Lakki Marwat	4	4	4	4
D.I. Khan	D.I.Khan	6	6	4	4
	Tank	2	2	5	5
Mansehra	Mansehra	1	1	6	6
	Battagram	0	0	0	0
	Tor Ghar	0	0	0	0
	Kohistan	0	0	0	0
Haripur	Abbatabad	1	1	0	0
	Haripur	5	5	7	7
Malakand	Malakand	5	5	8	8
	Lower Dir	2	2	3	3
	Upper Dir	0	0	0	0
Chitral	Chitral	0	0	0	0
Swat	Swat	2	2	6	6
	Buneer	5	5	4	4
	Shangla	0	0	0	0
NMAS	Merge Districts	0	0	18	18
Total		*90*	*90*	*113*	*113*

An Android based app shall be developed for the DAE and the DAE officers shall be trained for the data entry of ongoing project interventions after the finalization of data collection formats and on-line dashboard.

iii. Data Collection Formats for S&WC Interventions

Data Collection Formats for the S&WC interventions have also been developed. The formats were shared with the department for their review and comments and have been discussed several times in the S&WC directorate. The department shared their observations and comments which were discussed with the department and the WCKP team. The formats were revised several times and presented to the department. These formats are now revised by national ICT specialist as per the dashboard requirements. These formats are now finalized with the department and duly filled with the SFTs data provided by the department, however, there are a lot of missing columns in the finalized formats which are conversated to the department. Now the team is in coordination with the S&WC officials to fill the missing data columns.

iv. DEVELOPMENT OF MIS/GIS SYSTEM

Geographic Information System (GIS) is computer-based system

v. DEVELOPMENT OF WEBSITE FOR THE PROJECT

Development of Project Website is in progress. A prototype version of this assignment will be shared with client and will be launched soon after approval of Client.

A website is a collection of web pages and related content that is identified by a common domain name and published on at least one web server. All publicly accessible websites collectively constitute the World Wide Web. Nowadays, the website is the primary communication tool as well as the front face of organization. In development projects, the prime purpose of the website is to communicate the project activities, outcome, impact reports and the publication of the notices like; tenders and bid evaluation reports for the transparent procurement processes. To develop the project website, Content Management System (CMS) will be used. By the implementation of CMS based website it will ensure the interactivity at website and easy update page content, images, documents, and integration with analytical systems to track pages and site performance.

Website structure is the main content planning phase. To finalize the structure of website a close consultation with key stakeholders is required. A preliminary structure of the website will have the following pages:

i) Homepage (Landing page)
ii) Project Introduction
iii) Project Components
iv) Project activities

v) Progress Reports
vi) Monitoring Reports
vii) Impact Reports
viii) Project Progress
ix) Procurement
x) Procurement of Goods, Services & works
xi) Evaluations and Results
xii) Career
xiii) Media Gallery
xiv) Contact
xv) FAQs (Frequently Asked Questions)

5.5 WORK SCHEDULE AND PLANNING FOR DELIVERABLE

The project Work Schedule and planning matrix for deliverables is attached to the report as **Annex-C** which shows the progress till the reporting period.

6. MAIN CHALLENGES AND CONSTRAINTS

Following were the main challenges and constraints faced by the ME&IE Consultants:

- Delay in the release of project finance during early stages.
- Poor coordination and cooperation from AGES.
- The low participation of women in the tribal societies of KP is one of the strong cultural challenges.
- Security issues in the newly merged districts of KP.
- Imbalance execution of water conservation activities within districts.
- Lack of Water conservation interventions with the line departments i.e., agriculture engineering, extension, fisheries, livestock, etc.
- Poor and or lack of farmers associations in the field.
- Farmers are lacking adequate trainings.

7. CONCLUSION

The National Water Policy emphasizes water conservation, storage water apportionment and under soil quality. Due importance has been given to construct and renovate the innovative and integrated methods of irrigation. This project is achieving the policy goals by building check dams, water ponds, low agronomic interventions, micro-watershed developments, establishment of tube wells and solarization of tube wells in the KP province.

The impact of the WC-KP interventions observed was, improved household income through integrated water investment in the various crops of the rain fed (barani) areas. The districts were selected due to their high percentage of rain fed agriculture and crops cultivation. The project has helped in poverty reduction and has improved living standard of farmers through education, women participation based on the enhanced purchasing power. The agriculture products and its value addition has resulted in the increase in income of the people and has contributed to the overall GDP.

The successful implementation of the "water conservation" project in Barani Area of KP is focused on agriculture productivity through various farming and irrigation practices. The project will encourage the farmers to establish strong linkages between farmers and market. The sustainable irrigation will improve the skill of livestock breeding and increase the farmers' income.

ANNEXES

ANNEX - A: Monitoring Log-frame

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
Component A. Soil & Water Conservation Component							
1.	- Construction of 5,000 water ponds (WSPs)	a) 5,000 small farmers mobilized to construct water ponds b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Approximately 12,500 acres of agriculture land will be irrigated from these interventions.	2,000 water ponds	Crop production per unit area will increase by conserving runoff water/ water from perennial springs. Livestock will be increased; ultimately farmer's living standards will improve.	Approximately 12,500 acres of the land will be changed into crop fields and fruits orchids, which will increase farmer's income. More than 25,000 farmers will permanently engage in agriculture sector. These will provide short term employment to approximately 40,000 labors during the construction period of the interventions.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to WSPs c) The survey will determine: • Cropping pattern before and after the improvement; • Cropping intensities before and after improvement; • Before and after crop yields; • Before and after employment; d) The difference between before and after will be considered the result of the intervention after netting out the contribution of the growth pattern of the crop sector otherwise.
2.	Construction of 3,000 Check dams (CD)	a) In each Check dam village, (small farmers mobilized will be to construct check dams b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then	Approximately 7,500 acres of the land will be reclaimed.	2,500 check dams	Approximately 7500 acres of the land will conserve; ground water table of the nearby wells will rise.	Land value of the project area will increase; more than 7,500 acres of the land will bring under cultivation. Climatic condition of the area will improve and livestock will be benefited. More than 15,000 people will permanently engage in agriculture activities in the project area. More than 24,000 labors will be	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to check dams c) The forms used for baseline and impact surveys in case of WSP will also be used for Check dams d) Same data analysis will be carried out here as in WSPs (1)

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		received subsidy at 80% on issuance of FCR*				provided with short term employment during the construction period of the intervention.	
3.	Construction of 330 Water Reservoir (WR)	a) In each Water Reservoir village, (small farmers will be mobilized will be to construct It. b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR	Approximately 9,900 acres of land will be irrigated from this intervention.	250 mini dams	Ground water table will be improved; farmer's income will be increased. Livestock will be benefited.	Culturable wasteland will be developed by supplying stored water. Ground water table will rise up. Fish farming, livestock and forestry will be improved. Over all livelihood of the farmer community will improve. Approximately 19,800 people will permanently engage in agriculture, livestock and fish raring etc. More than 2,640 labors will be benefited from the scheme.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to WRs c) The forms used for baseline and impact surveys in case of WSP will also be used for WRs d) Same data analysis will be carried out here as in WSPs (1)
4.	Construction of 2,500 Stream bank stabilization (SBS)	a) In each SBS village, small farmers will be mobilized b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own	Protecting/ reclaiming about 6,250 acres of agricultural land from erosion with floods water.	15,000 stream bank stabilization structures.	Per unit area of crop production will be saved.	Approximately 6,250 acres of agriculture land will be saved directly from floods water. This will further enhance the life of precious dams and reservoirs. This may engage approximately 12,500 farmers for long time in	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to SBSs c) The forms used for baseline and impact surveys in case of WSPs will also be used for SBSs

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		funds and then received subsidy at 80% on issuance of FCR*				agriculture sector.20,000 labors will work during construction period of these intervention	d) Same data analysis will be carried out here as in WSPs (1)
5.	Construction of 1,000 Gated field Inlet Outlet/Spillway (GFIO/S)	a) In each GFIO/Spillway village, small farmers will be mobilized b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Sufficient amount of water will be provided to about 2,500 acres of land for irrigation in rod kohi areas of the province.	1,500 field inlets and spillways.	Farmer's income will increase; fertile land degradation will be minimized.	Approximately 2,500 acres of agriculture land will be benefited directly from this intervention. Approximately 5,000 farmers will permanently engage in agriculture sector for long period of time. These interventions will provide short term employment to about 5,000 labors.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to GFIO/S c) The forms used for baseline and impact surveys in case of WSP will also be used for GFIO/s d) Same data analysis will be carried out here as in WSPs (1)
6.	Development of 370 acres land for terracing (LFT)	a) In each LT village, small farmers will be mobilized b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Farmer's income will be increased by increasing agricultural land due to terraces development.	500 acres	Per unit production of farmers will increase by converting approximately 370 acres of non-culturable waste land into culturable.	Crop production will increase; land sliding will reduce due to terraces formation; rainwater infiltration will increase. Approximately 740 farmers will permanently engage in agriculture. Approximately 1,850 labors will be benefited from these interventions.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to WSPs c) The forms used for baseline and impact surveys in case of WSP will also be used for LFTs d) Same data analysis will be carried out here as in WSPs (1).

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
7.	Development of 70 numbers of micro-watershed areas (MWA)	a) In each MWA small farmers mobilized to construct MWA b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Approx. 7,000 acres of the area will be converted into agriculture/ forest land which will improve the aesthetic value of the area.	02 micro watershed developed	Culturable wasteland will be converted into an agricultural productive land. Farmer's income will be increased through agriculture, livestock, fisheries and forestry etc.	Developing micro-watersheds will improve climatic condition of the area; floods chances will be minimize by harvesting rainwater in water harvesting interventions; land sliding and soil erosion will be minimized. Moreover, aesthetic value of the land will be improved. Approximately 14,000 people will engage in agriculture sector permanently. Approximately 14,000 labors will be directly benefited during the process of micro-watersheds development.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to MWA s c) The forms used for baseline and impact surveys in case of WSP will also be used for WRs d) Same data analysis will be carried out here as in WSPs (1).
8.	Constructing 370 numbers of water Seepage harvesting Galleries (WSHG)	a) In each WSHG farmers will be mobilized to construct water ponds b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at	Approx. 925 acres of land will be irrigated from this intervention.	15 water seepage galleries	More area will bring under cultivation by establishing crop fields and fruits gardens in the project area. Livestock will increase and more people will engage in agriculture sector.	Continuous supply of clean water for agriculture, livestock and human beings will be ensured. Water crises will be minimized in the project area. More than 1,850 numbers of people will engage in agriculture activities for long period of time. About 1,850 labors will be directly benefited during the construction process.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to WSHG s c) The forms used for baseline and impact surveys in case of WSP will also be used for WRs d) Same data analysis will be carried out here as in WSPs (1)

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		80% on issuance of FCR*					
9.	800 numbers of Agronomic low-cost interventions (ALCI)	a) In each ALCI village small farmers mobilized to ALCI b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Approx. 2000 acres of land will be protected from erosion by these interventions.	2000 various low-cost small interventions	More area will bring under cultivation; economic condition of the local community will be improved.	Land will be protected from erosion; infiltration will be improved during rainfall; livestock will be benefited. Approximately 2400 farmers will permanently engage in agriculture. These will also provide short term employment to about 2400 labors.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to ALCI s c) The forms used for baseline and impact surveys in case of WSP will also be used for ALCIs d) Same data analysis will be carried out here as in WSPs (1
10.	230 acres of Sand Dunes Stabilization (SDS)	a) In each SDS locality small farmers mobilized to construct water ponds b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at	Approx. 230 acres land of sand dunes will be stabilized by growing kana plants.	200 acres Sand dunes effects stabilized.	Non-culturable sand dunes will be converted into an economically productive piece of land.	Sand dunes stabilization through plantation will be a direct source of income generation for the local community by making homemade items from the stems of the kana plants. These will also help in improving climatic condition of the project area. Meanwhile about 460 numbers of labor will be benefited.	a) Adopting the Sampling formula/ sample of water ponds farmer will be surveyed b) A data collection form will be designed to measure water saving due to SDS s c) The forms used for baseline and impact surveys in case of WSP will also be used for SDSs d) Same data analysis will be carried out here as in WSPs (1

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		80% on issuance of FCR*					
11.	500 Nos Capacity Building (CB)	500 small farmers capacity will be built on different traits.	An estimated 500 trainings will be conducted for stakeholders including farmers and departmental staff.	2000 Capacity building trainings conducted.	Enhanced capacity for better management of soil and water resources.	Soil and water resources of the province will better be managed with better management practices. The capacity of the stake holder will be enhanced in better management of soil and water resources of the country in general and Khyber Pakhtunkhwa in particular.	a) Pre training and post training evaluation will be conducted from all farmers to estimate the enhancement in their knowledge and skill. b) In this connection same Performa will be used before the conduct of the training after the completion of the training.
Component B Agricultural Engineering Component							
12	Procurement and installation of 700 Solar, pumping System and 300 Tube Wells (SPS&TW).	a) Solar Pumping small farmers mobilized to install SPS&TW b) They agree to contribute 20% of the cost c) Agree to first construct SPS&TW with his/her own funds and then received subsidy	Irrigation of 17,500 hectares (43,225 acres) of land.	> 650 SPS&TW installed.	Conversion of rain fed land into irrigated land will add more value to the land and the enhance production from crops/Orchard will help in improving the socio-economic condition of the	Provision of irrigation water will lead to increase Agriculture production and self-sufficiency in food grain.	a) Adopting the Sampling formula/ sample of SPS&TW farmers will be surveyed b) A data collection form will be designed to measure water saving due to SPS&TW s c) The forms used for baseline and impact surveys in case of WSP will also be used for SPS&TW s Same data analysis will be carried out here as in WSPs (1

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		at 80% on issuance of FCR*			farming community.		
13	700 on-site training of farmers in adaptation of new techniques for pumping sub-surface water.	a) 5,000 small farmers mobilized to construct water ponds b) They agree to contribute 20% of the cost c) Agree to first construct the tank with his/her own funds and then received subsidy at 80% on issuance of FCR*	Irrigation water Pumping cost will be reduced by adopting solar technology.	> 2,000 trainings conducted.	The cropping intensity will be enhanced.	Farmers of the project area will be educated in the modern techniques being adopted in Agriculture and therefore, pay more attention to increase crop yield and Farm income.	d) Adopting the Sampling formula/ sample of trained farmer will be surveyed e) A data collection form will be designed to measure water saving due to trainings f) The forms used for baseline and impact surveys in case of WSP will also be used for trainees Same data analysis will be carried out here as in WSPs (1

ANNEX - B: Project Progress Reporting Framework (PPRF)

Project Title…….

Report Name and Period…….

Area Name ……..

Sr. No.	STRATEGY /ACTIVITIES	Reporting Quarter								Year to Quarter(Cumulative)							
		Physical Progress				Financial Progress				Physical Progress				Financial Progress			
		Unit of Measure	Target/Planned	Actual/Achievement	Variance%	Committed Liability of Previous Year	Budget Allotted (PC-1)	Actual Expenditure	Variance%	Unit of Measure	Target/Planned	Actual/Achievement	Variance%	Committed Liability of Previous Year	Budget Allotted(PC-1)	Actual Expenditure	Variance%
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Area details……..?																	
1	Activity details ……?																
Sub Totals																	
Area details……..?																	
2	Activity details ……?																
Sub Totals																	
Total(s)																	

Note:1-Report Summary will be Prepared Separately from the data consolidated Area wise and Components Wise…..?

2- More columns will be added as per requirements….?

ANNEX - C: Work Schedule and Planning for Deliverables

WORK SCHEDULE AND PLANNING FOR DELIVERABLES

NO.	DELIVERABLE/ ACTIVITY	Years 1												Years 2												Years 3												Years 4											
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	DELIVERABLES																																															
1	Draft Inception Report		↓																																													
2	Final Inception Report			↓																																												
3	Monthly Monitoring Report	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
4	Baseline Survey Report [1]					↓	↓												↓	↓											↓	↓																		
5	Midline Survey Report																								↓	↓																							
6	End Line Survey Report																																												↓	↓		
7	Quarterly Monitoring and Evaluation Report			↓			↓			↓			↓			↓			↓			↓			↓	↓			↓			↓			↓			↓			↓			↓			↓	↓
8	Annual Monitoring and Evaluation Report												↓												↓	↓											↓											↓	↓
9	Draft Assignment Completion Report																																													↓		
10	Final Assignment Completion Report																																													↓	↓
11	Special Reports (As and when required)																																														

(1) The baseline report will be submitted at the end of 4th month provided sites for all interventions are pre-determined and sites are available at the outset. However, if the sites are identified during project implementation then the baseline will be done in phases.

ANNEX - D: The detail of deliverables of ME&IE Consultants

Document	Status
Draft Inception Report	Submitted
Final Inception Report	Submitted
1st Monthly Monitoring Report (DEC 2020-JAN 2021)	Submitted
2nd Monthly Monitoring Report (FEB 2021)	Submitted
3rd Monthly Monitoring Report (MAR 2021)	Submitted
1st Quarterly Monitoring & Evaluation Report (JAN-MAR 2021)	Submitted
4th Monthly Monitoring Report- (APR 2021)	Submitted
5th Monthly Monitoring Report- (MAY 2021)	Submitted
6th Monthly Monitoring Report (JUN 2021)	Submitted
2nd Quarterly Monitoring & Evaluation Report (APR-JUN 2021)	Submitted
7th Monthly Monitoring Report (JUL 2021)	Submitted
1st Annual Monitoring & Evaluation Report (Jan 2021 to June 2021)	Submitted
3rd Quarterly Monitoring & Evaluation Report (JUL-SEPT. 2021)	Submitted
Special Reports submitted: 1) Monitoring Tools 2) PAM Survey Training Report	Submitted
Monthly Monitoring Report-Tenth (OCT 2021)	Submitted
Monthly Monitoring Report-Eleventh (NOV 2021)	Submitted
Monthly Monitoring Report-Twelfth (DEC 2021)	Submitted
Quarterly Monitoring & Evaluation Report-Fourth Quarter year 2021 (OCT – DEC 2021)	Submitted
Monthly Monitoring Report-Thirteenth (JAN 2022)	submitted
Annual Monitoring & Evaluation Report Jan 2021 – Jun 2021 (1st AM&ER)	Submitted
Monthly Monitoring Report-Fourteenth (FEB 2022)	Submitted
Monthly Monitoring Report-Fifteen (MAR 2022)	submitted
Quarterly Monitoring & Evaluation Report-First Quarter year 2022 (JAN – MAR 2022)	submitted
Monthly Monitoring Report-Sixteen (APR 2022)	submitted
Monthly Monitoring Report-Seventeenth (MAY 2022)	submitted
Monthly Monitoring Report – Eighteenth (JUN 2022)	submitted
Quarterly Monitoring & Evaluation Report-2nd Quarter year 2022 (APR – JUN 2022)	submitted
2nd Annual Monitoring & Evaluation Report (July 21 – JUN 22)	Report to be submitted within stipulated time

ANNEX - E: MONITORING TOOLS FOR BASELINE SURVEY

WATER CONSERVATION IN BARANI AREAS OF KHYBER PAKHTUNKHWA (WC-KP)

QUESTIONNARE

A) Baseline Survey ---------- B) Monitoring Survey---------- C) Impact Survey----------

SR. #	DESCRIPTION	
IDENTIFICATION:		
1.	Questionnaire Unique ID	
2.	Division	
3.	District	
4.	Tehsil	
5.	Union Council	
6.	Village	
RESPONDENT INFORMATION:		
7.	Name of Respondent	
8.	Age (Years) (In Completed Years)	
9.	Level of Education (Completed Years)	
10.	Occupation	
11.	Tribe / cast	
12.	Family Members? (Adult equivalent)	
13.	Male-Member full time available for farming (adult equivalent)	
14.	Female-Member full time available for farming (adult equivalent)	
15.	Male-Member part time available for farming (adult equivalent)	
16.	Female-Member part time available for farming (adult equivalent)	

SR. #	DESCRIPTION				
17.	Male-Permanent hired labor (PHL) (adult equivalent)				
18.	Female-Permanent hired labor (PHL) (adult equivalent)				
WATER FROM WC ACTIVITY USED FOR					
19.	Crop production/irrigation		Yes		No
20.	Livestock drinking		Yes		No
21.	Human / community consumption		Yes		No
22.	If Yes in Q 21 - distance & time for fetching water	Before		After	
		Distance (km)	Time (hrs)	Distance (km)	Time (hrs)
LAND UTILIZATION:					
23.	Total gross area (acres) a) Owned b) Shared Cropped c) Rented in d) Rented out	Before Improvement --- --- --- ---		After Improvement --- --- --- ---	
24.	Total culturable area (acres)				
25.	Total Cultivated area (acres) a) Irrigated (Source of irrigation): Tube well = 1, Tank = 2, Pond = 3, Other = 4 b) Non-irrigated	Before Improvement --- ---		After Improvement --- ---	
26.	Tenure Status and area (acres): a) Own (O) b) Tenant (T)	Before Improvement ---		After Improvement ---	

SR. #	DESCRIPTION		
	c) Owner Cum Tenant (OCT)	---------- ---------- ----------	---------- ---------- ----------

27.	Cropped area (acres)	Before Improvement	After Improvement
	a) Irrigated	----------	----------
	b) Non-irrigated	----------	----------
	c) Rabi area	----------	----------
	Wheat (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Barley (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Fodder (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Oilseeds (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Pulses (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Other (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	d) Kharif area	----------	----------
	Maize (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Rice (Area and yield)	-----(Acre)------(Mds	-----(Acre)------(Mds)
	Fodder (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Oilseeds (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Pulses (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	Other (Area and yield)	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	e) Vegetable area	----------	----------
	i. Rabi	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	ii. Kharif	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	f) Sugarcane area	----------	----------
	i. Fresh	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	ii. Ratoon	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	g) Orchard area	-----(Acre)------(Mds)	-----(Acre)------(Mds)
	h) Intercrop/mix crop	-----(Acre)------(Mds)	-----(Acre)------(Mds)

FARM INPUTS & YIELD

28.	Tractor use for ploughing	Hours/acre	Rate (Rs. /hrs)
	a) Deep ploughing	----------	----------
	b) Seed bed preparation ploughing	----------	----------
29.	Harvesting & threshing	Hours/acre	Rate (Rs. /hrs)
	a) Reaper uses for harvesting	----------	----------
	b) Thresher uses for harvesting	----------	----------
	c) Combine use for harvesting	----------	----------
30.	Labour wages	Hours/acre	Rate (Rs. /hrs)
	a) Male	----------	----------
	b) Female	----------	----------

Name of crop	Area (Acres)	31. Land preparation		32. Seedbed preparation		33. Seed sowing / nursery transplanting														34. Seed treatment cost		35. Farm yard manure (FYM)			
		Hr/ acre	Rate/ hr	Hr/ acre	Rate/ hr	Use of seed		Seedling cost/acre		Sowing Broad cast			Sowing Drill			Transplantation (nursery)			Plantation (orchard)			Cost acre	Labour Cost		No. of trollies/ acre)	Cost per trolley (Rs / trolley)	Labour (No.) (Man days)	Labour cost (Rs / acre)
						Kg/ acre	Rs./ kg	Home Grown	Bought (Rs/ac)	Male (MD)	Female (MD)	Cost Rs/acre	Male (MD)	Female (MD)	Cost Rs/acre	Male (MD)	Female (MD)	Cost Rs/acre	Male (MD)	Female (MD)	Cost Rs/acre	Male (MD)	Female (MD)		Male (MD)	Female (MD)				
Rabi wheat																												
Rabi barley																												
Rabi Fodder																												
Rabi Oilseeds																												
Rabi Pulses																												
Rabi Vegetables																												
Other																												
Kharif Maize																												
Kharif Rice																												
Kharif Fodder																												
Kharif Oilseeds																												
Kharif Pulses																												
Kharif Vegetables																												
Sugarcane																												
Orchard																												
Intermix cropping																												
Other																												

Name of crop	36. Use of Fertilizers (No. of bags/acre & price per bag)												37. Number of hoeing/ thinning			38. Mulching / pruning / stalking			39. taxes per crop	40. Tube well irrigation		
	Urea		DAP		Potash (SOP)		NP (23-23)		Other Name		Cost of hired labour		No.	CHL Rs.		No.	CHL Rs.			Hour/acre	Cost/hour	Area irrigated
	Qty bags	Rs/ bag	Qty bags	Rs/ bag	Qty bags	Rs/ bag	Qty bags	Rs/ bag	Qty bags	Rs/ bag	Male (MD)	Female (MD)		Male (MD)	Female (MD)		Male (MD)	Female (MD)				
Rabi wheat																						
Rabi barley																						
Rabi Fodder																						
Rabi Oilseeds																						
Rabi Pulses																						
Rabi Vegetables																						
Other																						
Kharif Maize																						
Kharif Rice																						
Kharif Fodder																						
Kharif Oilseeds																						
Kharif Pulses																						
Kharif Vegetables																						
Sugarcane																						
Orchard																						
Intermix cropping																						
Other																						

Name of crop	41. Spray to control weeds (weedicide)			42. Spray to control diseases (fungicide etc.)			43. Spray to control insects (insecticide)			44. Picking of Cotton / Orchard / Vegetables			45. Harvesting/ picking							46. Crop yield & prices					
	No. of spray (per acre)	Cost of sprays	Cost of hired labour	No. of spray (per acre)	Cost of sprays	Cost of hired labour	No. of spray (per acre)	Cost of sprays	Cost of hired labour	No. of picking	CHL Rs.		Harvest material Cost (Rs)	CHL Rs.		Cost of Reaper (Rs)	Cost of Threshing or Combine	CHL Rs.		Area (acre)	Yield		Prices		In case sold as such Rs. /acre for fruit plants only
											Male (MD)	Female (MD)		Male (MD)	Female (MD)			Male (MD)	Female (MD)		Product (40 Kgs)	By-product (40 Kgs)	Product price	By-Product (Rs. /40 Kg)	
Rabi wheat																									
Rabi barley																									
Rabi Fodder																									
Rabi Oilseeds																									
Rabi Pulses																									
Rabi Vegetables																									
Other																									
Kharif Maize																									
Kharif Rice																									
Kharif Fodder																									
Kharif Oilseeds																									
Kharif Pulses																									
Kharif Vegetables																									
Sugarcane																									
Orchard																									
Intermix cropping																									
Other																									

SOCIAL MOBILIZATION THROUGH CAPACITY BUILDING OF WATER CONSERVATION ASSOCIATION (WCA), REDUCTION IN WATER DISPUTES, MOTIVATION / PARTICIPATION OF FARMERS:					
47.	Is WCA formed at your Water Sources (WS)? Yes / No. If No move to Q 73.		[ ]		
48.	Name of Chairman				
49.	Contact # of Chairman				
50.	Who contributed for improvement of intervention		Govt.	Farmer	Both
51.	Has the WS been useful to you, a) Yes, b) No.				[ ]
52.	If no, what in your view is lacking in WS? a) Personal property, b) Far away, c) Not available/ accessible) Any other pl. specified				[ ]
53.	Are you a member of (WCA)? a) Yes, b) No.				[ ]
54.	Is there any female member in WCA? a) Yes, b) No.				[ ]
55.	Are female members involved in decision making? a) Yes, b) No.				[ ]
56.	Was your participation voluntary? a) Yes, b) No.				[ ]
57.	Who motivated you to be a member?	WCA Member	S&W Ag Engineering	Neighbor Farmer	
58.	Did you pay any membership contribution to become member of WCA? Yes / No.			[ ]	
59.	Do all the WCA members are water users? a) Yes, b) No.			[ ]	
60.	How many water disputes solved by WCA till to-date? (numbers)			[ ]	
61.	Is there any grievances re-dressal committee regarding water disputes? a) Yes, b) No.			[ ]	

62.	Are you willing to contribute your labor or in case affordable money towards the work to be carried out by the organization for the development of your area? a) Yes, b) No., c) Don't Know				[ ]
63.	Does WCA hold regular meetings of the association? a) Yes, b) No.				[ ]
64.	Do you participate in the WCA meetings? a) Yes, b) No.				[ ]
65.	Do you know that the minutes are recorded and got approved in the next meeting? a) Yes, b) No.				[ ]
66.	To what extent are you satisfied with the maintenance of the irrigation system?	Not at all		To some extent	To large extent
67.	Do decisions make democratically? a) Yes, b) No.				[ ]
68.	Do majority of the members participate in the meetings? a) Yes, b) No.				[ ]
69.	What is the frequency of WCA meetings?	Every month	Quarterly	Once a year	As per need arises
70.	Do you aware about functions and responsibilities of the Association? a) Yes, b) No.				[ ]
71.	Do you think WCA helps in solving your farming problems? a) Yes, b) No.				[ ]
72.	Do you Know that your water conservation structure is going to be newly constructed/additionally constructed/ reconstructed? a) Yes, b) No.				[ ]

SOCIAL INFORMATION AND WOMEN PARTICIPATION:		
73.	Do women participate in farming activities? a) Yes, b) No.	[ ]
74.	Have you (female) heard about WC-KP Project? a) Yes, b) No.	[ ]
75.	Do you (female) know about WC-KP. a) Yes, b) No.	[ ]
76.	Are you (female) member of WCA a) Yes, b) No.	[ ]

77.	Do (female) participate in WCA meetings? a) Yes, b) No.		[ ]	
ENVIRONMENTAL ISSUES:				
78.	Total number of trees on the Water Conservation Structure (WCS) before activity?	(Start) [ ]	(Middle) [ ]	(End) [ ]
79.	Will any tree be cut down on this WCS? a) Yes, b) No.		[ ]	
80.	No. of trees to be cut down on this WCS?	(Start) [ ]	(Middle) [ ]	(End) [ ]
81.	No. of trees planted on this WCS after the activity	(Start) [ ]	(Middle) [ ]	(End) [ ]
REDUCTION IN WATER LOGGING AND SALINITY, MINIMIZATION OF CONVEYANCE LOSSES, EQUITY IN WATER DISTRIBUTION:				
82.	Do you know the depth of Water table of your land? a) Yes, b) No.		[ ]	
83.	How much depth of water table was 01 year ago		[ ]	
LIVESTOCK/ ANIMALS:				
	Entity*	**Number**	**Value (Rs)**	
84.	Buffaloes			
85.	Cows			
86.	Bullocks			
87.	Sheep			
88.	Goats			
89.	Camels			
90.	Poultry			
91.	Horses			
92.	Donkeys			
* Two small animal count one				

INCOME & EXPENSES (Rs in thousands)						
93.	Income from crops from whole year					
94.	Income from livestock from whole year					
95.	Income from labor (from outside farm) per annum					
96.	Any other source----------					
97.	Total income (Per year)					
98.	Total family expenditure (Per Year)					
99.	If expenditure more than income how you manage?		Yes	No		
100.	If Yes Q 99 please respond accordingly	Loan (relative)	Loan (friend)	Loan (banks)	Sale of assets	Any other

HOW MANY TIMES HAVE THE FOLLOWING AGENTS OR REPRESENTATIVES OF THE AGENCIES VISITED YOUR FARM OR YOU VISITED THEM DURING THE LAST TWO SEASONS?			
101.	a) S&WC Directorate representative	No of times [ ]	Benefit achieved Yes [ ], No [ ]
102.	b) Agri. Engineering representative	No of times [ ]	Yes [ ], No [ ]
103.	c) AGES Consultants representative	No of times [ ]	Yes [ ], No [ ]
104.	d) Agriculture extension agent	No of times [ ]	Yes [ ], No [ ]
105.	e) Pesticides company agent	No of times [ ]	Yes [ ], No [ ]
106.	f) Fertilizer company representative	No of times [ ]	Yes [ ], No [ ]
107.	g) Agriculture credit officer	No of times [ ]	Yes [ ], No [ ]

AGRICULTURE EQUIPMENTS:			
108.	Do you own a Tractor? a) Yes, b) No.	[ ]	If Yes value Rs----------
109.	Do you own Thresher? a) Yes, b) No.	[ ]	If Yes value Rs----------
110.	Do you own Seed drill? a) Yes, b) No.	[ ]	If Yes value Rs----------
111.	Do you own Rotavator? a) Yes, b) No.	[ ]	If Yes value Rs----------
112.	Do you own Reaper? a) Yes, b) No.	[ ]	If Yes value Rs----------

WATER CONSERVATION & AGRI ENGINEERING ACTIVITIES			
1.	Water Pond	Yes	No, go to next activity
2.	Check Dam	Yes	No, go to next activity
3.	Water Reservoir	Yes	No, go to next activity
4.	Stream Bank Stabilization (SBS)	Yes	No, go to next activity
5.	Gated Field Inlet Outlets / Spillways (GFIO&S)	Yes	No, go to next activity
6.	Terracing	Yes	No, go to next activity
7.	Micro-Watershed Development (MWD)	Yes	No, go to next activity
8.	Water Seepage Harvesting Galleries (WSHG)	Yes	No, go to next activity
9.	i. Agronomic Low-Cost Interventions	Yes	No, go to next activity
	ii. Low-Cost Brush Wood Check Dam	Yes	No, go to next activity
	iii. Loose Stone Check Dam	Yes	No, go to next activity
10.	Sand Dunes Stabilization	Yes	No, go to next activity
11.	Capacity Building	Yes	No, go to next activity
12.	Installation of Tube Wells	Yes	No, go to next activity
13.	Solarization of Tube Wells	Yes	No, go to next activity

Interviewed By: ----------

Checked By: ----------

ACTIVITY 1. WATER POND

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Water Pond Location	Address ----------	Northing ----------	Easting ----------	
2	Water Pond Number				
3	Source of Water & harvested from	Runoff		Perennial springs	
4	Water Pond Size (feet)	Length----	Width ---	Depth ------	
5	Water Pond Shape	Rectangular	Square	----- ---	-------
6	Water Pond Structure	Cemented	Earthen	----- ----	-------
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes	No No		

Water Used For				
8	Crop production / irrigation	Yes	No	
9	Command area of pond (acre)			
10	Community & Livestock Drinking	Yes	No	
11	If Yes in Q 10 (distance & time) for fetching water	Before	Distance Decrease (km)	Time Reduced (hours)
12.	Ground Water Recharge	Yes	No	

Fish Rearing					
13.	Fish Rearing	Yes	No, go to Q 22		
14	Fish Type (Catla, Rohu, Common, Chinese, Silver & Salmon Crap, Trout, Tilapia etc.)				
15	Fish Feed	Roughage	Cow dung	Poultry waste	Other
16	Total cost	----------Rs per year			
17	Production	----------kg per year			
18	Price	----------Rs per Kg			
19	Fish Consumption per year	----------Rs Sold	Home (kg) Before-----	Home(kg) After-----	

20	Problems/issues in fish farming: Plz rank	Yes	Rank	No
	i. Availability of fingerlings, seedlings etc.	----------	----------	----------
	ii. Diseases	----------	----------	----------
	iii. Manuring / feeds	----------	----------	----------
	iv. Marketing	----------	----------	----------
	v. Any other	----------	----------	----------

EMPLOYMENT ENGAGED IN FISH FARMING			
21	Employment	Before	After
	i. Permanent	----------	----------
	ii. Casual	----------	----------
	iii. Daily wages	----------	----------

BENEFICIARY FEED BACK				
22	After submission of application, how much period took to complete the water pond?		Months	Days
23	The Water Pond was completed as per approved standards and specifications		Yes	No
24	If No in Q 23 than any variations in specifications and		Yes	No
25	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
26	How you assess survey and design process	Fast Track	Lengthy	No comment
27	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
28	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
29	How you feel maintenance of Water Pond	Easy	Difficult	No comment
30	Do you think Water Pond encourages mosquito population	Yes	No	No comment
31	If yes what measures you take to control it	Sprays	None	No comment
32	Any comment/observation you want to share?			

MT-01: WATER POND (WP) MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Water Pond (WP) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Water Pond (WP)**
3.1	**Shape of Water Pond (WP)?**
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the WST using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from WST**
1	Reduce ground water consumption
2	Reduce water bills
3	Extend water supply

4	Improve water quality/less salty water
5	Reduce soil erosion
6	Better control on water supply
7	Any other, Specify
4.3	**The WP was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the WP, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in WP exceed 5 feet?**
1	Yes
2	No
4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes

2	No
4.10	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
If yes in Q# 4.10 then continue with Q# 4.10.1	**Otherwise go to End**
4.10.1	**Is the testing of Joints welded parts done before filling the Water Pond (WP)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 2. CHECK DAM

DEMOGRAPHIC, DIMENSIONS & STRUCTURE										
1	Check Dam Location									
2	Check Dam Number									
3	Source of Water & harvested from					Ditches	Stream	Channels	Gullies	Other
4	Check Dam Type					Land filled			Stone Masonry	
5	Check Dam Purpose	Productive -farming	Flood control –flood water	Intercepting sediments -	Water storage-irrigation	Rock check-stabilizing vegetation or reducing bed gradient		Gully check-control gully development		Others
6	Check Dam Structure					Cemented	Gravel bags	Sand bags	Stone Masonry	-------
7	Soil Reclamation (acres)									
8	a. Approval by S&WC Directorate b. Validated by Consultant (AGES)					Yes Yes			No No	
	BENEFICIARY FEED BACK									

9	After submission of application, how much period took to complete the check dam?		Months	Days
10	The Check dam was completed as per approved standards and specifications		Yes	No
11	If No in Q 23 than any variations in		Yes	No
12	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
13	How you assess survey and design process	Fast Track	Lengthy	No comment
14	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
15	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
16	How you feel maintenance of Check Dam	Easy	Difficult	No comment

17	Do you think Check Dam encourages mosquito population	Yes	No	No comment
18	If yes what measures you take to control it	Sprays	None	No comment
19	Any comment/observation you want to share?			

MT-02: CHECK DAM (CD) MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Check Dam (CD) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Check Dam (CD)**
3.1	**Shape of Check Dam (CD)?**
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the Check Dam (CD) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Check Dam (CD)**
1	Reduce ground water consumption
2	Reduce water bills
3	Extend water supply

4	Improve water quality/less salty water
5	Reduce soil erosion
6	Better control on water supply
7	Any other, Specify
4.3	**The Check Dam (CD) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Check Dam (CD), the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Check Dam (CD) exceed 5 feet?**
1	Yes
2	No
4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes

2	No
4.10	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
If yes in Q# 4.10 then continue with Q# 4.10.1	**Otherwise go to End**
4.10.1	**Is the testing of Joints welded parts done before filling the Check Dam (CD)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 3. WATER RESERVOIR

DEMOGRAPHIC, DIMENSIONS & STRUCTURE							
1	Water Reservoir Location	Address ----------		GPS ----------		Coordinate ----------	
2	Water Reservoir Number						
3	Source of Water & harvested from	Rainfall /runoff		Flowing water /perennial springs			
4	Water Reservoir Type	Cemented		Earthen			
5	Water Reservoir Shape	Rectangular	Square	Irregular	-------		
6	Water Reservoir Structure	Stone		Masonry			
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes		No No			
Water Used For							
8	Crop production / irrigation	Yes		No			
9	Command area of pond (acre)						
10	Community & Livestock Drinking	Yes		No			
11	If Yes in Q 10 (distance & time) for fetching for water	Before	Distance Decrease (km)	Time Reduced (hours)			
12.	Water table (feet)	Before (-------)		After (-------)			
Fish Rearing							
13.	Fish Rearing	Yes		No, go to Q 22			
14	Fish Type (Catla, Rohu, Common, Chinese, Silver & Salmon Crap, Trout, Tilapia etc.)						
15	Fish Feed	Roughage	Cow dung	Poultry waste	Other		
16	Total cost	----------Rs per year					
17	Production	----------kg per year					
18	Price	----------Rs per Kg					
19	Fish Consumption per year	----------Rs Sold	Home (kg) Before-----	Home(kg) After-----			
20	Problems/issues in fish farming: Please rank Availability of fingerlings, seedlings etc. Diseases Manuring / feeds Marketing Any other	Yes	Rank	No			
EMPLOYMENT ENGAGED IN FISH FARMING							
21	Employment Permanent Casual Daily wages	Before	After				

BENEFICIARY FEED BACK				
22	After submission of application, how much period took to complete the water reservoir?		Months	Days
23	The Water Pond was completed as per approved standards and specifications		Yes	No
24	If No in Q 23 than any variations in specifications and		Yes	No
25	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
26	How you assess survey and design process	Fast Track	Lengthy	No comment
27	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
28	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
29	How you feel maintenance of Water Reservoir	Easy	Difficult	No comment
30	Any comment/observation you want to share?			

MT-03: WATER RESERVOIR (WR) MONITORING TEMPLATE

1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Water Reservoir (CD) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Water Reservoir (CD)**
3.1	**Shape of Water Reservoir (CD)?**
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the Water Reservoir (CD) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Water Reservoir (CD)**
1	Reduce ground water consumption
2	Reduce water bills
3	Extend water supply

4	Improve water quality/less salty water
5	Reduce soil erosion
6	Better control on water supply
7	Any other, Specify
4.3	**The Water Reservoir (CD) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Water Reservoir (CD), the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Water Reservoir (CD) exceed 5 feet?**
1	Yes
2	No
4.9	**Is the geo-membrane thickness minimum 0.5 mm?**

1	Yes
2	No
4.10	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No

If yes in Q# 4.10 then continue with Q# 4.10.1	**Otherwise go to End**
4.10.1	**Is the testing of Joints welded parts done before filling the Water Reservoir (CD)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 4. STREAM BANK STABILIZATION (SBS)*

DEMOGRAPHIC, DIMENSIONS & STRUCTURE						
1	Stream Bank Stabilization (SBS) Location	Address ----------	GPS ----------	Coordinate ----------		
2	SBS Number					
3	Source of Water & harvested from	Rainfall /runoff	Flood water			
4	SBS Type	a. Vegetative	b. Structural i. Protection bunds ii. Spurs etc.	Combination a & b		
5	SBS Structure	Stone	Gravel bags	Sandbags	Masonry	Any other --------
6	SBS Purpose	To reduce erosion especially in rainy season				
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes	No No			

Water Used For			
8	Erosion control	Yes	No
9	How much land is protected (Acres)		

BENEFICIARY FEED BACK				
10	After submission of application, how much period took to complete the SBS?	Months	Days	
11	The SBS was completed as per approved standards and specifications	Yes	No	
124	If No in Q 11 than any variations in specifications and	Yes	No	
13	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
14	How you assess survey and design process	Fast Track	Lengthy	No comment
15	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
16	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
17	How you feel maintenance of SBS	Easy	Difficult	No comment
18	Any comment/observation you want to share?			

* Protection wall for erosion control

MT-04: STREAM BANK STABILIZATION (SBS) MONITORING TEMPLATE	
IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Stream Bank Stabilization (SBS) Construction?**
1	Technical Sanction (SBS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	Take Picture of Stream Bank Stabilization (SBS)
3.1	Shape of Stream Bank Stabilization (SBS)?
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the** Stream Bank Stabilization (SBS) **using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Stream Bank Stabilization (SBS)**
1	Stop soil erosion

2	Reduce pollution
3	Maintaining the flow or storage capacity of the channel or impoundment.
4	Improving or enhancing the stream corridor for fish and wildlife habitat, aesthetics, and recreation.
5	Reducing the downstream effects of sediment resulting from bank erosion.
6	Better control on water supply
7	Any other, Specify
4.3	**The SBS was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the SBS, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Stream Bank Stabilization (SBS) exceed 5 feet?**
1	Yes
2	No

4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 5. GATED FIELD INLET OUTLETS/ SPILLWAYS

DEMOGRAPHIC, DIMENSIONS & STRUCTURE				
1	Gated field inlet outlets (GFIO) & Field Spillways Location	Address ----------	GPS ----------	Coordinate ----------
2	GFIO & Field Spillways Number			
3	Source of water & harvested from	Rainfall/ Rod-Kohi		Mountains/ Sailaba
4	GFIO & Field Spillways Structure	Cemented		Masonry
5	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes		No No

Water Used For			
6	Crop production / irrigation	Yes	No
7	Command area of GFIO (acre)		
8.	Ground Water Recharge due to GFIO	Yes	No

BENEFICIARY FEED BACK				
9	After submission of application, how much period took to complete the GFIO?	Months	Days	
10	The GFIO was completed as per approved standards and specifications	Yes	No	
11	If No in Q 10 than any variations in specifications and material used	Yes	No	
12	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
13	How you assess survey and design process	Fast Track	Lengthy	No comment
14	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
15	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
16	How you feel maintenance of GFIO	Easy	Difficult	No comment
17	Any comment/ observation you want to share?			

MT-05: GATED FIELD INLET OUTLETS/ SPILLWAYS MONITORING TEMPLATE	
IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Gated Field Inlet Outlets/ Spillways (GFIO) Construction?**
1	Technical Sanction (GFIO) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	Take Picture of Gated Field Inlet Outlets/ Spillways (GFIO)
3.1	Shape of Gated Field Inlet Outlets/ Spillways (GFIO)?
1	Length-1 (Feet)?
2	Length-2 (Feet)?
3	Width 1
4	Width 2
5	Depth
4.1	**The farmer completed the GFIO using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Gated Field Inlet Outlets/ Spillways (GFIO)**
1	Stop soil erosion
2	Harvest runoff water
3	Reduced the velocity of runoff water
4	Improving or enhancing the stream corridor for fish and wildlife habitat, aesthetics, and recreation.
5	Reducing the downstream effects of sediment resulting from bank erosion.
6	Better control on water supply
7	Any other, Specify

4.3	**The GFIO was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the GFIO, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Gated Field Inlet Outlets/ Spillways (GFIO) exceed 5 feet?**
1	Yes
2	No
4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 6. TERRACING

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Terracing Location	Address ----------	GPS ----------	Coordinate ----------	
2	Terracing Activity Field Number				
3	Terracing Type	Contour	Bench	Broad	Etc. .....
4	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes		No No	

Land Used For			
5	Crop production	Yes	No
6	How much area brought under terracing (acre)		

BENEFICIARY FEED BACK				
7	After submission of application, how much period took to complete the terracing?	Months	Days	
8	The terracing was completed as per approved standards and specifications	Yes	No	
9	If No in Q 8 than any variations in specifications and material used	Yes	No	
10	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
11	How you assess survey and design process	Fast Track	Lengthy	No comment
12	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
13	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
14	How you feel maintenance of terracing	Easy	Difficult	No comment
15	Any comment/observation you want to share?			

MT-06: TERRACING MONITORING TEMPLATE	
IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Terracing Construction?**
1	Technical Sanction Terracing Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	Take Picture of Terracing
3.1	Shape of Terracing?
1	Length-1 (Feet)?
2	Length-2 (Feet)?
3	Width 1
4	Width 2
5	Depth
4.1	**The farmer completed the Terracing using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Terracing?**
1	Stop land sliding
2	Harvest runoff water
3	Retained the nutrients in the soil otherwise washed away with runoff water
4	Reducing the downstream effects of sediment resulting from bank erosion.
5	Better control on water supply
6	Any other, Specify
4.3	**The Terracing was completed as per approved standards and specifications?**
1	Yes

2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the terracing, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes
2	No
4.9	**Financial Year**
5.1	**Supervisor Confirmation?**
5.2	**Select Submission Status**
5.3	**Comments of interviewer? (if any) (optional)**

ACTIVITY 7. MICRO-WATERSHED DEVELOPMENT (MWD)

DEMOGRAPHIC, DIMENSIONS & STRUCTURE									
1	Micro-Watershed Development (MWD) Location	Address ----------		GPS ----------		Coordinate ----------			
2	MWD Number								
3	Source of Water & Harvested from	Rainfall/runoff		Flowing water /perennial springs					
4	MWD Type	Small (< 1 acre)		Medium (> 1 acres)		Large (1000 Sq Km)			
5	MWD Purpose	Soil Conservation		Water Conservation		Both			
6	Micro-Watershed Consist of	Water ponds	Mini dams	Check dams	Protection bunds	Spurs	Contour ploughing	Etc.	
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes		No No					

MWD Used For			
8	Land /crop production	Yes	No
9	How much area converted to agriculture land (acres)		

BENEFICIARY FEED BACK				
10	After submission of application, how much period took to complete the MWD?	Months		Days
11	The MWD was completed as per approved standards and specifications	Yes		No
12	If No in Q 11 than any variations in specifications and material used	Yes		No
13	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
14	How you assess survey and design process	Fast Track	Lengthy	No comment
15	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
16	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
17	How you feel maintenance of MWD	Easy	Difficult	No comment

18	Any comment/observation you want to share?	

MT-07: MICRO-WATERSHED DEVELOPMENT (MWD) MONITORING TEMPLATE

IDENTIFICATION

Q#	Field Name
1.1	**Status of Micro-Watershed Development (MWD)?**
1	Technical Sanction of Micro-Watershed Development (MWD) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
	2.SPOT CHECK
2.1	**Collect the coordinates**
2.2	Take Picture of **Micro-Watershed Development (MWD), if available - Aerial**
3.1	Shape of **Micro-Watershed Development (MWD)**?
1	Length-1 (Feet)?
2	Length-2 (Feet)?
3	Width 1
4	Width 2
5	Hight
4.1	**The farmer/association completed the Micro-Watershed Development (MWD) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Micro-Watershed Development (MWD)?**
1	Water conservation
2	Soil conservation
3	Better control on water supply
4	Any other, Specify

4.3	**The Terracing was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the terracing, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**What Watershed Development activities?**
1	Terracing
2	Water pond
3	Mini dam
4	Check dam
5	Any other
4.9	**Financial Year**
5.1	**Supervisor Confirmation?**
5.2	**Select Submission Status**

5.3	Comments of interviewer? (if any) (optional)

ACTIVITY 8. WATER SEEPAGE HARVESTING GALLERIES

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Water Seepage Harvesting Galleries (WSHG) Location	Address ----------	GPS ----------	Coordinate ----------	
2	WSHG Number				
3	Source of Water & harvested from	Sub-surface ground water collection system (tank) with perforated pipes			
4	WSHG Type	Shallow in depth	Constructed in a sloppy area		
5	WSHG Purpose	Irrigation	Drinking		
6	.Approval by S &WC Directorate Validated by Consultant (AGES)	Yes Yes	No No		

WSHG Used For			
7	Land /crop production	Yes	No
8	How much area converted to agriculture land (acres)		

BENEFICIARY FEED BACK				
9	After submission of application, how much period took to complete the WSHG?	Months	Days	
10	The WSHG was completed as per approved standards and specifications	Yes	No	
11	If No in Q 10 than any variations in specifications and material used	Yes	No	
12	How your application was attended by S&WC staff	Promptly	Took lot of time	No Comment
13	How you assess survey and design process	Fast Track	Lengthy	No comment
14	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
15	The subsidy was paid	Within reasonable time	Required lot of efforts	No comment
16	How you feel maintenance of WSHG	Easy	Difficult	No comment
17	Any comment/observation you want to share?			

MT-08: WATER SEEPAGE HARVESTING GALLERIES (WSHG) MONITORING TEMPLATE	
IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Water Seepage Harvesting Galleries (WSHG)?**
1	Technical Sanction of Water Seepage Harvesting Galleries (WSHG) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	Take Picture of Water Seepage Harvesting Galleries (WSHG)
3.1	Shape of Water Seepage Harvesting Galleries (WSHG)?
1	Length-1 (Feet)?
2	Length-2 (Feet)?
3	Width 1
4	Width 2
5	Hight
4.1	**The farmer/association completed the Water Seepage Harvesting Galleries (WSHG) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Water Seepage Harvesting Galleries (WSHG)?**
1	Water conservation
2	Soil conservation
3	Better control on water supply
4	Any other, Specify
4.3	**The Water Seepage Harvesting Galleries (WSHG) was completed as per approved standards and specifications?**

1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the terracing, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Financial Year**
4.9	**Supervisor Confirmation?**
5.1	**Select Submission Status**
5.2	**Comments of interviewer? (if any) (optional)**

ACTIVITY 9 i. AGRONOMIC LOW-COST INTERVENTION (ALCI)

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Agronomic Low-cost Intervention (ALCI) Location	Address ----------	GPS ---------- ----	Coordinate ---------- --	
2	ALCI Number				
3	Cover Crops	Legume cover crops (peas, peanut, gram, beans etc.)	Non-legume cover crops (wheat, barley, rye etc.)	Mustard, radish, turnip etc.	Etc.
4	Cover Crops Availability		Yes	No	
5	ALCI Improve	Livelihood	Conserve soil	Conserve water	All
6	ALCI Purpose	Cover soil surface & control soil erosion			
7	a. Approval by S&WC Directorate b. Validated by Consultant (AGES)		Yes Yes	No No	

Cover Crops to			
8	Conserve soil & water	Yes	No
9	Control soil erosion	Yes	No
10	Increased yield	Yes	No
11	Improve livelihood	Yes	No

BENEFICIARY FEED BACK				
12	After submission of application, how much period took to complete the Agronomic Low-Cost Intervention?	Months	Days	
13	The Agronomic Low-Cost Intervention was completed as per approved standards and specifications	Yes	No	
14	If No in Q 13 than any variations in specifications and material used	Yes	No	
15	The duration of subsidy paid	Within reasonable time	Required lot of efforts	No comment
16	How you assess survey and design process	Fast Track	Lengthy	No comment
17	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
18	How you feel adoption of Agronomic Low-Cost Intervention	Easy	Difficult	No comment
19	Do you think Agronomic Low-Cost Intervention encourages insect/disease spread	Yes	No	No comment

20	If yes what measures you take to control it	Sprays	None	No comment
21	Any comment/ observation you want to share?			

MT-09i: AGRONOMIC LOW-COST INTERVENTION (ALCI) MONITORING TEMPLATE	
IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Agronomic Low-Cost Intervention (ALCI)?**
1	Technical Sanction of **Agronomic Low-Cost Intervention (ALCI)** Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	Take Picture of **Agronomic Low-Cost Intervention (ALCI)**
3.1	Shape of **Agronomic Low-Cost Intervention (ALCI)?**
1	Length-1 (Feet)?
2	Length-2 (Feet)?
3	Width 1
4	Width 2
5	Height
4.1	**The farmer/association completed the Agronomic Low-Cost Intervention (ALCI) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Agronomic Low-Cost Intervention (ALCI)?**
1	Water conservation
2	Soil conservation
3	Better control on water supply
4	Any other, Specify
4.3	**The Agronomic Low-Cost Intervention (ALCI) was completed as per approved standards and specifications?**
1	Yes

2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the ALCI, the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Financial Year**
4.9	**Supervisor Confirmation?**
5.1	**Select Submission Status**
5.2	**Comments of interviewer? (if any) (optional)**

ACTIVITY 9 ii. LOW COST BRUSH WOOD CHECK DAM (LCBWCD)

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Low-cost Brush Wood Check Dam (LCBWC) Location	Address ----------	GPS ----------	Coordinate ----------	
2	LCBWC Dam Number				
3	Material Used	Bushes	trees	--------	
4	LCBWC Structure	Posts	Brush		
5	LCBWC Dam Improve	Livelihood	Conserve soil	Conserve water	All
6	LCBWC Dam Purpose	Hold fine material carried by flowing water in the gully			
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)	Yes Yes	No No		

Low-cost Brush Wood Check Dam to				
8	Conserve soil & water	Soil	Water	Both
9	Control soil erosion	Yes	No	
10	Increased yield	Yes	No	
11	Improve livelihood	Yes	No	

BENEFICIARY FEED BACK				
12	After submission of application, how much period took to complete the Agronomic Intervention?		Months	Days
13	The Agronomic Intervention was completed as per approved standards and specifications		Yes	No
14	If No in Q 13 than any variations in specifications and material used		Yes	No
15	The duration of subsidy paid	Within reasonable time	Required lot of efforts	No comment
16	How you assess survey and design process	Fast Track	Lengthy	No comment
17	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
18	How you feel maintenance of Low-Cost Brush Wood Check Dam	Easy	Difficult	No comment
19	Any comment/ observation you want to share?			

MT-09ii: LOWCOST BRUSH WOOD CHECK DAM (LCBWCD)

MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of** Low-cost Brush Wood Check Dam (LCBWC) **Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of** Low-cost Brush Wood Check Dam (LCBWC)
3.1	**Shape of** Low-cost Brush Wood Check Dam (LCBWC)**?**
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the** Low-cost Brush Wood Check Dam (LCBWC) **using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Low-cost Brush Wood Check Dam (LCBWC)**
1	Reduce ground water consumption
2	Reduce water bills

3	Extend water supply
4	Improve water quality/less salty water
5	Reduce soil erosion
6	Better control on water supply
7	Any other, Specify
4.3	**The Low-cost Brush Wood Check Dam (LCBWC) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Low-cost Brush Wood Check Dam (LCBWC), the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Low-cost Brush Wood Check Dam (LCBWC) exceed 5 feet?**
1	Yes
2	No

4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes
2	No
4.10	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
If yes in Q# 4.10 then continue with Q# 4.10.1	**Otherwise go to End**
4.10.1	**Is the testing of Joints welded parts done before filling the Low-cost Brush Wood Check Dam (LCBWC)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 9 iii. LOOSE STONE CHECK DAM (LSCD)

DEMOGRAPHIC, DIMENSIONS & STRUCTURE					
1	Loose Stone Check Dam Location	Address ----------	GPS ----------	Coordinate ----------	
2	Loose Stone Check Dam Number				
3	Material Used	Stones	----------		
4	Loose Stone Check Dam Area Catchment	100m	<2 ha	--------	
5	Large Stone Check Dam Working / used for	Initial	Small gullies	Gully network	------
6	Loose Stone Check Dam Purpose	Control channel erosion along gully bed	Stop water fall erosion by stabilizing gully heads	Both	
7	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)		Yes Yes	No No	

Loose Stone Check Dam to Control			
8	Channel erosion	Yes	No
9	Waterfall erosion	Yes	No
10	Increased yield	Yes	No
11	Improve livelihood	Yes	No

BENEFICIARY FEED BACK				
12	After submission of application, how much period took to complete Loose Stone Check Dam?	Months	Days	
13	The Loose Stone Check Dam was completed as per approved standards and specifications	Yes	No	
14	If No in Q 13 than any variations in specifications	Yes	No	
15	The duration of subsidy paid	Within reasonable time	Required lot of efforts	No comment
16	How you assess survey and design process	Fast Track	Lengthy	No comment
17	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
18	How you feel maintenance of Loose Stone Check Dam	Easy	Difficult	No comment
19	Do you think Loose Stone Check Dam encourages insect/disease spread	Yes	No	No comment

20	If yes what measures you take to control it	Sprays	None	No comment
21	Any comment/ observation you want to share?			

MT-09iii: LOOSE STONE CHECK DAM (LSCD) MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Loose Stone Check Dam (LSCD) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Loose Stone Check Dam (LSCD)**
3.1	**Shape of Loose Stone Check Dam (LSCD)?**
1	Trapezoidal
2	Rectangular
3	Brick/Masonry
4	Geo-membrane
5	PCC
6	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the Loose Stone Check Dam (LSCD) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Loose Stone Check Dam (LSCD)**
1	Reduce ground water consumption
2	Reduce water bills

3	Extend water supply
4	Improve water quality/less salty water
5	Reduce soil erosion
6	Better control on water supply
7	Any other, Specify
4.3	**The Loose Stone Check Dam (LSCD) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Loose Stone Check Dam (LSCD), the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Loose Stone Check Dam (LSCD) exceed 5 feet?**
1	Yes
2	No

4.9	**Is the geo-membrane thickness minimum 0.5 mm?**
1	Yes
2	No
4.10	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
If yes in Q# 4.10 then continue with Q# 4.10.1	**Otherwise go to End**
4.10.1	**Is the testing of Joints welded parts done before filling the Loose Stone Check Dam (LSCD)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 10. SAND DUNES STABILIZATION (SDS)

DEMOGRAPHIC, DIMENSIONS & STRUCTURE				
1	Sand Dunes Stabilization Location	Address ----------	GPS ----------	Coordinate ----------
2	Sand Dunes Stabilization Number			
3	Stabilization of sand dunes methods	Herbaceous plantation	Kana (Saccharum mujga L.)	----------
4	Stabilization of sand dunes purpose	Controlling of sand dunes through plantation		
5	Stabilization of sand dunes increased	Crop Yield	Value addition (homemade items)	----------
6	a. Approval by S &WC Directorate b. Validated by Consultant (AGES)		Yes Yes	No No

Land Used For			
7	Crop production	Yes	No
8	Fruit / Forest	Yes	No
9	Livestock	Yes	No
10	Community	Yes	No

BENEFICIARY FEED BACK			
11	After submission of application, how much period took to complete Sand Dunes Stabilization?	Months	Days
12	The Sand Dunes Stabilization was completed as per approved standards and specifications	Yes	No
13	If No in Q 12 than any variations in specifications and material used	Yes	No

13	The duration of subsidy paid	Within reasonable time	Required lot of efforts	No comment
14	How you assess survey and design process	Fast Track	Lengthy	No comment
15	Quality of S&WC staff behavior	Friendly / supportive	Indifferent	No comment
16	How you feel maintenance of Stabilization of sand dunes	Easy	Difficult	No comment
17	Do you think Stabilization of sand dunes encourages insect / disease spread	Yes	No	No comment

18	If yes what measures you take to control it	Sprays	None	No comment
19	Any comment/ observation you want to share?			

MT-10: SAND DUNES STABILIZATION (SDS) MONITORING TEMPLATE

1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Sand Dunes Stabilization (SDS) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Sand Dunes Stabilization (SDS)**
3.1	**Material/species used for Sand Dunes Stabilization (SDS)?**
1	Kana plant
2	Herbaceous plant
3	Marram grass
4	Any other
3.1.1	Length-1 (Feet)?
3.1.2	Length-2 (Feet)?
3.1.3	Width 1
3.1.4	Width 2
3.2	Depth
4.1	**The farmer completed the Sand Dunes Stabilization (SDS) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Sand Dunes Stabilization (SDS)**
1	Natural coastal protection against storm surge and high waves
2	Reduce sand erosion
3	Any other, Specify

4.3	**The Sand Dunes Stabilization (SDS) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Sand Dunes Stabilization (SDS), the WC-KP staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8.1	**Is the testing of Joints welded parts done before filling the Sand Dunes Stabilization (SDS)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**

ACTIVITY 11. CAPACITY BUILDING (CB)

1	Capacity Building Location					
2	Capacity Building Number					
3	Number of Participants					
4	Trainee	Farmers	Field staff	Officer/Official	mixed	
5	Resource Person (RP)	Local/district	Provincial	National		
6	Quality of Delivery of RP	Excellent	Good	Average	Poor	Very Poor
7	Capacity Building Type	Training	Exposure visit	----------		
8	Capacity Building in Soil & Water Conservation Techniques	Highway water harvesting	Ground water recharging wells	Sub-surface check dams	Mini dams	------
9	Capacity Building to Solar Pump/TW	a. Solar Pump	b. Tube Well	Both: a+b		
10	How would you rate the trainings?	Excellent	Good	Average	Poor	Very Poor
11	Do you find contents/brochures of the training relevant to your farming and use of technology(s) demonstrated?	Yes	No			
12	Has training enhanced your technical capacity for service provision?	Yes	No			
13	Do you think the training influence adoption of demonstrated technology(s) in this area?	Yes	No			
14	What is the potential within the community for income generating activities using demonstrated technology(s)?	V. High	High	Average	Poor	V. Poor
15	Would this technology resolve Farmers' problems if adopted?	Yes	No			
16	Do you think that demonstrated technology(s) is feasible for your area?	Yes	No			
17	Do you think the technology(s) demonstrated could increase crop productivity and farm income?	Yes	No			
18	Would you invest on your own to adopt the demonstrated technology(s) at your own	Yes	No			
19	What is role of women in using this demonstrated technology(s)?					
20	Do you think that technology is feasible for your area?					

21	Do you think the technology demonstrated could increase crop productivity and farm income?			Yes	No
22	What type of facilitation is available for adoption?				
23	If facilitation is not available, then what type of facilitation is required for adoption	Technical	Loan	Subsidy	Other
24	After attending this training/workshop are you able to install technology by yourself		Yes	No	
25	What are the constraints for adoption?				
26	Are the materials required for installation of ----------available in your area?			Yes	No
27	Do you face any problem regarding your technology?			Yes	No
28	Please explain your problem				

MT-11: CAPACITY BUILDING (CB) MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Capacity Building (CB)?**
1	Approval Issued
2	Final Training Report (FTR) prepared
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the list of all participants and resource person with mobile number**
2.2	**Take Picture of Capacity Building (CB) group or activity**
3.1	**Type of Capacity Building (CB)?**
1	Personal
2	Baseline survey
3	Sampling
4	Management
5	Project formulation
6	Any other
3.1.1	Duration?
3.1.2	Place/location?
4.1	**The farmer completed the** training **used his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from training**
1	Increase in knowledge
2	Skill
3	Performance/efficiency
4	Interaction
5	Linkages with line department

6	Any other, Specify
4.3	**The training was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Training evaluation was done as per standard practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the evaluated and find it as satisfactory?**
1	Yes
2	No
4.6	**Before the training), the WC-KP staff conducted training need assessment?**
1	Yes
2	No
4.7	**Any variations in the training objectives?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates before training?**
1	Yes
2	No
4.8	**Financial Year**
4.9	**Supervisor Confirmation?**
5.1	**Select Submission Status**
5.2	**Comments of interviewer? (if any) (optional)**

ACTIVITY 12. INSTALLATION OF TUBE WELLS (ITW)

DIMENSIONS & STRUCTURE							
1	Tube Well Location	Address ----------	GPS ----------	Coordinate ----------			
2	Tube Well Number						
3	Source of Power	Diesel	Peter pump	Tractor	Electric	Solar	--------
4	Suction pipe diameter (inch)	----------					
5	Depth of water level (boring)	----------					
6	Water discharge	Normal	Below normal	Above normal	-----		
7	Water Re-charge	Sufficient	Insufficient	Delay			
8	a. Approval by Directorate of Agriculture Engineering b. Validated by Consultant (AGES)	Yes Yes	No No				

Water Used For				
9	Crop Production	Yes	No	
10.	Orchard / Forest			
11.	Community & Livestock Drinking	Yes	No	
12.	If Yes (distance & time)	Before	Distance	Time Reduced (hours)
13	Fish Rearing	Yes	No, go to Q 22	

Fish Rearing					
14	Fish Type (Catla, Rohu, Common, Chinese, Silver & Salmon Crab, Trout, Tilapia, etc.)				
15	Fish Feed	Roughage	Cow dung	Poultry waste	Other
16	Total cost	----------Rs per year			
17	Production	----------kg per year			
18	Price	----------Rs per Kg			
19	Fish Consumption per year	----------Rs Sold	Home (kg) Before-----	Home(kg) After-----	
20	Problems/issues in fish farming: Plz rank f) Availability of fingerlings, seedlings etc. g) Diseases h) Manuring/ feeds i) Marketing j) Any other	Yes	Rank	No	

EMPLOYMENT ENGAGED IN FISH FARMING			
21	Employment iv. Permanent v. Casual vi. Daily wages	Before (No.)	After (No.)

BENEFICIARY FEED BACK

22	After submission of application, how much period took to complete the Tube Well installation?			Months	Days
23	The Tube Well installation was completed as per approved standards and specifications			Yes	No
24	If No in Q 23 than any variations in specifications and material used			Yes	No
25	How your application was attended by Agriculture Engineering staff	Promptly	Took lot of time		No Comment
26	How you assess survey and design process	Fast Track	Lengthy		No comment
27	Quality of Directorate of Agriculture Engineering staff behavior	Friendly / supportive	Indifferent		No comment
28	The subsidy was paid	Within reasonable time	Required lot of efforts		No comment
29	How you feel maintenance of Tube Well	Easy	Difficult		No comment
30	Do you think cropping intensity increased on your farm after Tube Well	Yes	No		No comment
31	Do you think your crops / orchards yield increased after Tube Well	Yes	No		No comment
32	Any comment/ observation you want to share?				

MT-12: INSTALLATION OF TUBE WELLS (ITW) MONITORING TEMPLATE

1.IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Installation of Tube Wells (ITW) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2.SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Installation of Tube Wells (ITW)**
3.1	**Shape of Installation of Tube Wells (ITW)?**
1	Depth
2	Diameter
3	Any other
3.2	Depth
4.1	**The farmer completed the Tube Wells (ITW) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Tube Wells (ITW)**
1	Reduce ground water consumption
2	Reduce water bills
3	Extend water supply
4	Improve water quality/less salty water
5	Better control on water supply
6	Any other, Specify
4.3	**The Tube Wells (ITW) was completed as per approved standards and specifications?**
1	Yes
2	No

4.4	**Excavation was done as per standard engineering practices?**
1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Tube Wells (ITW), the AGES staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Tube Wells (ITW) exceed standard feet?**
1	Yes
2	No
4.9	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
4.10.1	**Is the testing of Joints welded parts done before filling the Tube Wells (ITW)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**

5.4	Comments of interviewer? (if any) (optional)

ACTIVITY 13. SOLARIZATION OF TUBE WELLS (STW)

DIMENSIONS & STRUCTURE								
1	Solar Pumping System (SPS) Location	Address ----------		GPS ----------		Coordinate ----------		
2	SPS Number							
3	Source of Power (Solar)	Existing/upgraded		New		Combine		
4	Optimum discharge depends on	Panel type ----------	Panel size ----------	Motor type ----------	Motor size ----------			
5	Suction pipe diameter (inch)	----------						
6	Depth of water level (boring)	----------						
7	Water discharge	Normal	Below normal	Above normal	----------			
8	Water Re-charge	Sufficient	Insufficient	Delay				
9	a. Approval by Directorate of Agriculture Engineering b. Validated by Consultant (AGES)	Yes Yes	No No					

Water Used For					
10	Cropping	Yes	No		
11.	Orchard / Forest				
12.	Community & Livestock Drinking	Yes	No		
13.	If Yes (distance & time)	Before	Distance Decrease (km)	Time Reduced (hours)	
14	Fish Rearing	Yes	No, go to Q 22		

Fish Rearing					
15	Fish Type (Catla, Rohu, Common, Chinese, Silver & Salmon Crap, Trout, Tilapia, etc.)				
16	Fish Feed	Roughage	Cow dung	Poultry waste	Other
17	Total cost	----------Rs per year			
18	Production	----------kg per year			
19	Price	----------Rs per Kg			
20	Fish Consumption per year	----------Rs Sold	Home (kg) Before-----	Home (kg) After-----	
21	Problems/issues in fish farming: Plz rank k) Availability of fingerlings, seedlings etc. l) Diseases m) Manuring / feeds n) Marketing o) Any other	Yes	Rank	No	

EMPLOYMENT ENGAGED IN FISH FARMING			
22	Employment vii. Permanent viii. Casual ix. Daily wages	Before	After

BENEFICIARY FEED BACK

23	The Tube Well installation was completed as per approved standards and specifications	Yes	No	
24	If No in Q 23 than any variations in specifications and material used	Yes	No	
25	How your application was attended by Agriculture Engineering staff	Promptly	Took lot of time	No Comment
26	How you assess survey and design process	Fast Track	Lengthy	No Comment
27	Quality of Directorate of Agriculture Engineering staff behavior	Friendly / supportive	Indifferent	No Comment
28	The subsidy was paid	Within reasonable time	Required lot of efforts	No Comment
29	How you feel maintenance of Tube Well	Easy	Difficult	No Comment
30	Do you think cropping intensity increased on your farm after Tube Well		Yes	No
31	Do you think your crops / orchards yield increased after Tube Well		Yes	No

32	Any comment/observation you want to share?	_____ _____ _____

MT-13: SOLARIZATION OF TUBE WELLS (STW)MONITORING TEMPLATE	
1. IDENTIFICATION	
Q#	**Field Name**
1.1	**Status of Installation of Solarization of Tube Wells (ITW) Construction?**
1	Technical Sanction (TS) Issued
2	Final Completion Report (FCR) Issued
1.2	**Name of Beneficiary/Owner**
2. SPOT CHECK	
2.1	**Collect the coordinates**
2.2	**Take Picture of Solarization of Tube Wells (ITW)**
3.1	**Shape of Installation of Solarization of Tube Wells (ITW)?**
1	Depth
2	Diameter
3	Any other
4.1	**The farmer completed the Tube Wells (ITW) using his/her own funds before subsidy?**
1	Yes
2	No
4.2	**What benefits you can expect from Solarization of Tube Wells (ITW)**
1	Reduce ground water consumption
2	Reduce water bills
3	Extend water supply
4	Improve water quality/less salty water
5	Better control on water supply
6	Any other, Specify
4.3	**The Solarization of Tube Wells (ITW) was completed as per approved standards and specifications?**
1	Yes
2	No
4.4	**Excavation was done as per standard engineering practices?**

1	Yes
2	No
4.5	**The AGES Consultants inspected the excavation and quality of geo-membrane and certified as satisfactory?**
1	Yes
2	No
4.6	**Before filling the Solarization of Tube Wells (ITW), the AGES staff prepared the completion report?**
1	Yes
2	No
4.7	**Any variations in specifications and material used?**
1	Yes
2	No
If yes in Q# 4.7 then continue with Q# 4.7.1	**Otherwise go to Q# 4.8**
4.7.1	**Subsidy was paid as per cost estimates based on geo-membrane design?**
1	Yes
2	No
4.8	**Does the water depth in Solarization of Tube Wells (ITW) exceed standard feet?**
1	Yes
2	No
4.9	**Do all joints weld through fusion welding or other similar techniques?**
1	Yes
2	No
4.10.1	**Is the testing of Joints welded parts done before filling the Solarization of Tube Wells (ITW)?**
1	Yes
2	No
5.1	**Financial Year**
5.2	**Supervisor Confirmation?**
5.3	**Select Submission Status**
5.4	**Comments of interviewer? (if any) (optional)**