FEDERAL PROJECT MANAGEMENT UNIT
MINISTERY OF NATIONAL
FOOD SECURITY & RESEARCH
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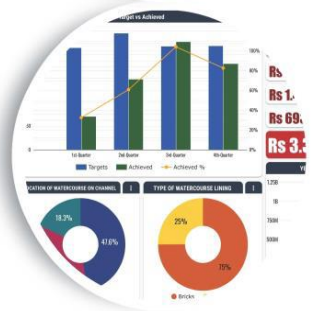


MONTHLY MONITORING REPORT

JUNE 2021

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.

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

MONTHLY MONITORING REPORT
JUNE 2021

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURES

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
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
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 current Monthly Monitoring Report (MMR) for the Month of June 2021 comprises of 6 Chapters.

Chapter-1 describes the Objectives and background of Water Conversation in Barani Areas of Khyber Pakhtunkhwa.

The proposed project is in line with both, the mandate of the government and objectives of National Water Policy. The Prime Minister's 100 days agenda stresses on massively 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 and scarred 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 cost 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 listed below interventions.

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 gives detail of ME&IE Consultants of the WCBAKP Project. To evaluate the impact of this project Government has engaged Consultants "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.

Chapter-3 describes the objectives of Consultancy Services of ME&IE Consultants. 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-4 Describes the purpose of preparation and submission of Monthly Monitoring Report (MMR). The current MMR explained the updated status of consultants' activities upto the reporting month.

Chapter-5 describes the consultants' activities carryout throughout the current month. This chapter also includes details of coordination meetings held by the ME&IE consultants with client and other stakeholders of the project.

Chapter-6 It is fact that execution of a project faces different types of problems. These problems vary from project to project. This chapter highlights the problems being faced by the ME&IE consultants in execution of the project.

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

This section of the Monthly Monitoring Report includes profile and brief introduction of Water Conservation in Barani Area (WCBA) 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 Project Management Unit (FPMU) Federal Water Management Cell
Project Period	5 Year (2019-2024)
ME&IE Consultancy Period	4 year
ME&IE Consultant:	JV of G3 Engineering Consultants (Pvt.) Ltd., EASE PAK Engineering services (Pvt.) Ltd., Centre for Social Research and Development (CSRD) and ADA Consultants Inc. Canada
ME&IE Consultant Mobilized	November 20, 2020

1.2 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)

Some of the works being undertaken for soil and water conservation are:

- Construction of Mini Dams
- Water Storage Tanks
- Construction of Water Outlet Structures
- Retaining Walls
- Land Reclamation through Gully Plugging
- Stream Bank Training
- Moisture Conservation Practices such as Terrace Forming & Deep Ploughing.

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. 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 inducing ground water recharge, can be used for human and animal use and improve climatic conditions of the rain- fed areas.

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 24 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, Spurs and protection bunds/walls cemented, G.I. wire spurs and protection bunds, runoff diversion structures and source development, rain fed water retention reservoirs, earthen ponds and earthen embankments, contours and terraces. In addition water harvesting interventions such as check dams, water reservoirs etc.

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 agro 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 Project Components

The project will have two components; Component - A & B.

- *Component-A*

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

Table 1.1: Activities under Component A Executed by the DG Soil & Water Conservation KP

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 **Table 1.2**.

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

2.1 THE ME&IE CONSULTANTS

Chapter 2 explains the selection of ME&IE consultants for WCBAKP and scope of consultants' services.

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 November 20, 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:

ix) Undertake baseline, midline and end line surveys of the project activities/interventions in all the project areas.
x) Develop monitoring strategy, framework and Result Based Monitoring (RBM) indicators.
xi) Preparation of Monthly, Quarterly and Annual Monitoring and Evaluation of the project activities.
xii) Assessing the improvement in water availability and soil losses due to project interventions.
xiii) Assessing the water saving per annum due to the project interventions.
xiv) 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.
xv) Assessing the extent of community mobilization, financial and administrative sustainability of Soil & Water Conservation Associations (SWCAs) and ensuring the maintenance of project interventions.
xvi) Carryout impact evaluation of the project investment on the economy and stakeholders.

3 CHAPTER – 3: CONSULTANTS' APPROACH AND METHODOLOGY FOR THE ASSIGNMENT

The chapter briefly discusses the basics of ME&IE system being developed by consultants for WCBA KP Project.

3.1 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 WCBAKP 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 3.1** 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 3.1: 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 Wisps, 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 Wisps, Check dams, WR, SBS, Solar TW, etc.), process of delivering these activities.

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

3.2 MIS / GIS FOR ME&IE SYSTEM

For optimal results of ME&IE of the WCBAKP project consultants are developing MIS /GIS for the project. To minimize the complexities and make the MIS/GIS Database a useful tool for Input-output, process and result monitoring, the consultants adopted the following key principles and guidelines during the development and implementation of WCBAKP MIS/GIS Database:

i) Information needs and indicators to capture such information are identified in a participatory manner involving all key stakeholders of the project at all levels;
ii) The potential users of MIS/GIS Database are convinced and understand the usefulness of the MIS/GIS Database and their role in data collection, recording, transmission and use of information;
iii) The system provides a two-way flow of information, such that those who collect and transmit the information receive the feedback;
iv) The MIS/GIS Database does not impose a high work load at any level in PIU and other Implementing Agencies (IAs);
v) There is no information/data 'overload' at any level;
vi) The system is flexible enough to accommodate internal learning changes in future.
vii) The system provides user friendly interfaces to interact with.

The system's outputs are presented in formats that can be easily converted to other formats and data types without human intervention.

3.3 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.

3.4 MONITORING, EVALUATION AND IMPACT EVALUATION PLAN

This section presents brief introduction about the ME&IE and Impact evaluation plan.

3.4.1 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 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. Evaluation also assesses the overall project effects, both intentional and unintentional and their impact. It involves comparisons requiring information from outside the project either in time, area, or population. The relative role of monitoring and evaluation varies with type of project.

3.4.2 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.

3.4.3 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 condition that allows 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 staffs are in place early, are seen to be part of the management team, and are given guidance on the priority information needs of the management.

3.4.4 Project Progress Reporting Framework (PPRF)

The Project Progress Reporting Framework (PPRF) given as **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.

3.4.5 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.

3.4.6 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.

3.4.7 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. Evaluation also assesses the overall project effects, both intentional and unintentional and their impact. 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 is essential to the Information System. For this purpose, one focal person in each province/ area is required.

3.4.8 Regular Routine Monitoring

Consultants are now onboard for the baseline survey and regular routine monitoring to carryout ME&IE of WCBAKP. 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, Project Coordinator (PC), and respective Departments of Province KP.

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;
(iii) Propose specific solutions assessing the advantages and disadvantages of each.

As stated in the Project 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.

4 CHAPTER – 4: MONTHLY MONITORING REPORT

This chapter of the MMR deals with the introduction and purpose of monthly monitoring report WCBAKP.

4.1 INTRODUCTION

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

4.2 OBJECTIVE OF MONTHLY MONITORING REPORT

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

4.2.1 Consultants Procedure for ME&IE Assignment

The Consultants will carry out ME&IE of WCBA KP in two parts.

The First Part of monitoring will be through field visits and surveys of water storage reservoirs, micro-watersheds, check dams, tube-wells and agriculture tube-wells. The processes, timelines and physical progress against targets set in the Annual Work Plans (AWPs) will be marked. The monitoring activities include baseline, midline and end-line surveys. The water saving assessment will be simultaneously carried out with the improvement activities of construction of water storage tanks and installation of tube-wells. The economic benefits to the agriculture sector will also be estimated in addition to the impact evaluation on the stakeholders and economy as a whole. For each monitoring activity one or more checklist(s) will be developed based on planned SOPs (Modus Operandi) and timelines. The activities will be monitored according to the checklists.

All the checklists will get 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 will be 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 will be 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
- NWMC (NESPAK)
- 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:
Following are the 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 CHAPTER – 5: CONSULTANTS ACTIVITIES DURING THE REPORTING PERIOD

This chapter of 6th Monthly Monitoring Report (MMR) covers the progress period from 1st June 2021 to 30th June 2021.

Mobilization of remaining consultant remained in progress. Activities completed during the reporting period are discussed briefly hereunder.

5.1 MOBILIZATION OF CONSULTANTS

Team Leader (ME&IE Consultant) Dr. Usman Mustafa has already joined the project on December 15, 2020 at M&E&IE Consultants, Islamabad. Team leader remained engaged in reviewing available project data and reports.

Irrigation Agronomist Dr. Mansab Ali joined the project in June 2021

Social & Gender Specialist Mr. Afzal Hayat Khan joined the project in June 2021.

5.2 PROGRESS REVIEW AND COORDINATION MEETINGS

5.2.1 Joint Review Meeting of PMU, DoA, KP

The 9th joint review meeting of Project Monitoring Unit (PMU) of Prime Minister Agriculture Emergency Program, Agricultural Department, KP was held at 4:00 pm at the PMU office, KP. The meeting started with the recitation of the Holy Qur'an by Dr. Muhammad Israr Secretary, Agriculture, Livestock and Cooperative, GoKP. Secretary, DoA, welcomed the participants of the meeting. Following officers participated in the meeting:

1. Secretary, Agriculture, Livestock and Cooperative, Peshawar, KP.
2. DG (OFWM), KP
3. DG (Soil & Water Conservation), Peshawar, KP
4. Project Coordinator (PMU), Peshawar, KP
5. Dy. Project Coordinator-1 (PMU), Peshawar, KP
6. Dy. Project Coordinator-2 (PMU), Peshawar, KP
7. Consultant, AGES, Peshawar, KP
8. Muhammad Bilal, Acting DTL, Peshawar, KP Zone
9. Team Leader (Water Conservation in Barani Areas-KP)
10. Team Leader (ME&IE Consultants-NPIWC-II)

There were four presentations first one from Project Coordinator (PC), PMU, followed by AGES, M3 ME&IE consultants of NPIWC-II and Water Conservation in Barani Areas-KP. The Project Coordinator, PMU presentation consists of the monitoring progress report of all the three projects:

1. Command Areas in KP
2. Water Conservation of Barani Areas in KP
3. National Program for Improvement of Watercourse in Pakistan

Secretary, Agriculture appreciated the work done by the PC regarding the monitoring of the above-mentioned projects as well as showed concern about the slow progress of these projects.

During the discussion Secretary desired that the ME&IE Consultants have to start monitoring and evaluation as well as the impact of these projects' interventions as early as possible. It was expressed by the

Team Leader of ME&IE Consultants that the Baseline surveys are ready to start by next week. He further explained that a representative sample size will be determined to cover all the interventions of the NPIWC-II, within time and it will cover 2-5 % data of the interventions of the Baseline survey and 5% for the Monitoring survey, respectively.

However, it was stated by the Secretary, Agriculture that the Government wishes to check the impact of the interventions of NPIWC-II year wise and such surveys would be started as early as possible.

Figure 5.1: Secretary, Agriculture chairing the review meeting.

The official minutes prepared by PMU, DoA, GoKP are Annexed D.

Figure 5.2: Dr. Usman Mustafa, TL, WCBAKP, ME&IE Consultant presenting to Secretary, Agri, GoKP.

The minutes of the meeting prepared by PMU, GoKP are attached at **Annexure D.**

5.2.2 Coordination Meetings of ME&IE Consultants

Consultants conducted a meeting with client during the reporting period. Detail of these meetings is given below.

Date	17th June 2021
Venue	Agency for Barani Area Development (ABAD), Murree Road, Rawalpindi
Participants	
Client: Mr. Jamal Tariq, Dy. Director, Development, ABAD Mr. Sadiq Hussain, Assistant Dir. Planning, ABAD **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP	
Meeting Agenda	
Agenda Item # 1: Soil & water conservation working in Punjab. **Agenda Item # 2:** Monitoring & Evaluation of the Development Projects. **Agenda Item # 3:** Baseline Survey of the development Projects. **Agenda Item # 4:** Sharing of Reports/Material on Soil & Water Conservation.	
Discussions and Outputs	
Agenda Item # 1: Mr. Jamal explain working of ABAD regarding soil & water conservation in Punjab. Farmer's participation and government share in the development projects. **Agenda Item # 2:** Dy. Director Development elaborated the M&E process and is usually carried out by third party. **Agenda Item # 3:** Baseline survey is usually carried out early on the project and later on used for M&E and impact assessment purposes. **Agenda Item # 4:** ABAD shared two reports and promise to more in the coming days. Barani Village Development Project (BVDP) completion & impact evaluation Report. Water Security Issues of Agriculture in Pakistan.	

Figure 5.3: Mr. Jamal Tariq, Deputy Director Development ABAD, Punjab in meeting with Dr. Usman Mustafa, TL and Dr. Mansab Ali, Agronomist, WC-KP.

Date	21st June 2021
Venue	PMU, PM Agriculture Emergency Program
Participants	
Client: Mr. Saeed Ur Rehman Deputy Coordinator **ME&IE Consultants:** Mr. Afzal Hayat Khan Social & Gender Specialist	
Meeting Agenda	

Introduction to ME&IE Consultants and Consultants' Strategy for ME&IE of WCBA KP Project
Discussions and Outputs
Mr. Afzal Hayat Khan Social & Gender Specialist of ME&IE Consultants visited the office of PMU, PM Agriculture Emergency Program and conducted meeting with Deputy Coordinator. Mr. Afzal Hayat Khan introduced the ME&IE consultants and discussed consultants' scope of work for WCBA KP Project. Following were the main discussions held during the meeting. Visited and met with the Dy. Coordinator; we introduced with each other and discussed the various matter regarding the monitoring of the Project activities, given as follows: Deputy Coordinator informed to Social & Gender Specialist that; - His office is the process of inducting and training of monitoring staff for effective monitoring of project activities. They have developed a monitoring mechanism including the baseline information of the Project area, and impact assessment mechanism. He further explained that they have developed monitoring format (forms) for the implementation departments and established record-keeping mechanism in consultation and support of the relevant departments. - Their staff visits various project areas randomly, keep all the updated information, and give feedback to the management of the Project. - They conduct regular monthly meetings to discuss the project updates. The meeting is chaired by Provincial Secretary of the Department and all the relevant staff of implementation and management departments along with the consultants. On questioning of Deputy Coordinator, Social & Specialist of ME&IE Consultants informed that consultants are in process of finalization of Monitoring Tools for Baseline and Monitoring Surveys which will be finalized very soon in consultation with the Client. Social & Gender Specialist informed that consultants are committed to conduct the assignment as per TORs of the assignment. Deputy Coordinator promised to extend all the possible supports to consultants for the effective ME&IE of the WCBA KP Project.

Figure 5.6. Social & Gender Specialist in Meeting with Deputy Coordinator

Date	23rd June 2021
Venue	Federal Water Management Cell (FWMC), NFSR, Islamabad
Participants	
Client: Engr. M. Tahir Anwar, NPC-Water Conservation in Barani Areas of KP **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP	
Meeting Agenda	
Agenda Item # 1: Progress of the Project **Agenda Item # 2:** Mobilization of Field Staff **Agenda Item # 3:** Baseline Survey of the WCBA-KP	
Discussions and Outputs	
Agenda Item # 1: Dr. Usman Mustafa, TL, WCBA-KP shared progress and activities of the ME&IE Consultants of the WC Project with NPC. He appreciated the work and involvement of the consultants. **Agenda Item # 2:** A thorough discussion was carried out for the mobilization Core Team & technical support staff. TL, WC-KP highlighted that two members of the team namely, Dr. Mansab Ali, Irrigation Agronomist and Mr. Afzal Hayat Khan, Social & Gender Specialist joined recently. We hope to have Agri. Economist and technical support staff with us soon. Eng. Tahir Anwar, NPC welcome Dr. Mansab Ali and optimistic that with the inclusion of consultants and technical staff will further boost up the project activities. **Agenda Item # 3:** T.L. WCBA-KP briefed about the "Baseline Survey" that the Questionnaires for baseline survey and 13 monitoring tools for the project activities are under preparation. These will be share with all	

stakeholders before implementing in the field. TL, along with other consultants of WCBA-KP is engaged with line departments and has continuation of the series of meeting with stakeholders in Peshawar. In this connection a series of meetings have been schedule with them in the next week that will help to enhance the efficiency of the project staff and to achieve the targets.

Figure 5.4: Dr. Usman Mustafa, TL and Dr. Mansab Ali, Irrig. Agronomist, WCBAKP in meeting with Engr. M. Tahir Anwar, NPC

Date	23rd June 2021
Venue	Federal Water Management Cell (FWMC), NFSR, Islamabad
Participants	
Client: Engr. Naeem Akhtar, DNPC-Water Conservation in Barani Areas of KP Barani Areas of KP **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP	
Meeting Agenda	
Agenda Item # 1: WC-KP Website/GIS system of the Project Activities **Agenda Item # 2:** Qualitative Data and Research Tools **Agenda Item # 3:** Linkage of Website **Agenda Item # 4:** Project Labeling	
Discussions and Outputs	
Agenda Item # 1: Engr. Naeem Akhtar, DNPC appreciated the work of WC-Website/GIS system by Mr. Rizwan Saleem ITS and involvement of the consultants. He pointed out few additions to be made in the WC-KP website. He emphasized that actual pictures of each intervention must be depicted in it. These pictures also carry comparison of the intervention as "Before" & "After" completion of the project activities. Dr. Usman Mustafa, TL pointed out that ME&IE Consultants will be able to make some videos along with pictures of each intervention. **Agenda Item # 2:** Dr. Usman Mustafa, TL informed that qualitative data along with quantitative data will be also be taken. Moreover, various research tools will be used to measure the impact of the interventions of WC-KP project. **Agenda Item # 3:** Linkage of the various websites of the departments of the KP government was discussed in length. It was agreed that consultant's website must be linked/shared with these websites for better linkage and communication. **Agenda Item # 4:** It was highlighted that project share will be mentioned in such a manner that each one must understand the federal, provincial and farmer sharing. It was stated that farmer share is 20% while remaining 80% is shared equally by the federal and provincial governments as 40:40% each.	

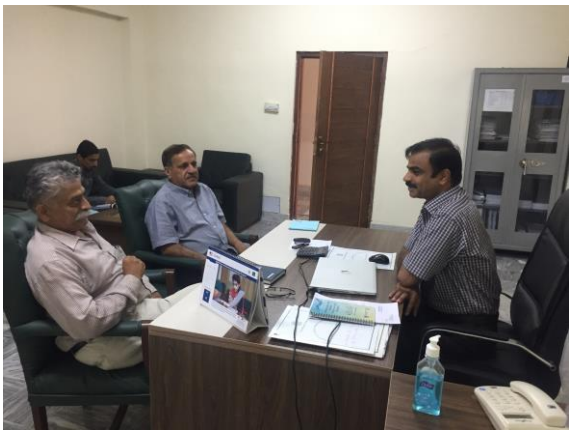


Figure 5.5: Dr. Usman Mustafa, TL and Dr. Mansab Ali, Irrig. Agronomist, WCBA in meeting with Engr. Naeem Akhtar, Dy. NPC

Date	29th June 2021
Venue	WCBA-ME&IE Consultant Office, Peshawar
Participants	
Client: Mr. M. Bilal, Dy Team Leader, NPIWC Shamsul Hayat, Office Manager, NPIWC **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP	

Mr. Afzal Hayat Khan, Social & Gender Specialist, WCBA.
Meeting Agenda
Agenda Item # 1: Office Building and Shifting to New Place **Agenda Item # 2:** Introduction, Qualification and Work Experience **Agenda Item # 3:** Team Leader-WCBA Brief about Project Field Activities
Discussions and Outputs
Agenda Item # 1: Mr. M. Bilal, DTL and Mr. Shams Ul Hayat, Office Manager brief about the status of new office and other related matters. Later we all visited the new office and showed some concern regarding lighting, air circulation, and entry streets etc. **Agenda Item # 2:** This was an introductory meeting of core team and field team of G3 staff of both projects (NPIWC & WCBA). Each member of the field team introduced himself about qualification, experience and work place. TL briefed than that field team will be utilized for both projects' activities. We all are one team and parcel; our aim is to successfully and effectively complete both projects. **Field Team** Inamullah Khan, MSc (Bio Science)-work in DI Khan, South Waziristan Mumtazullah Khan, MBA (Finance) Mahmood Ul Hassan, MSc (Sociology)-work in Swabi Fawad Ali, BSc (Water management)-work in Bunir Aftab Ahmed, MBA (Finance) Matloob Hussain, MA (Urdu)-work in Quetta Arslan Bashir, Diploma in Electrical AE- work in Gujar Khan Abdul Rauf, BSc (Civil Eng.) Farhan Tayyab, Diploma in Elec. Engineer **Agenda Item # 3:** Dr. Usman Mustafa, TL explains to the participants regarding project field activities and way working in the field. We are in the process of finalizing the questionnaires for baseline survey and monitoring tools for field activities. He emphasized that each member must record "Before & "After" scenario of the site/location with pictures.

Figure 5.6: Field team Peshawar in meeting with Dr. Usman Mustafa, TL; Dr. Mansab Ali, Agronomist and Mr. Afzal Hayat, Social & Gender Specialist of WCBA-KP.

Date	29th June 2021
Venue	Directorate of SWC Office, Peshawar
Participants	
Client: Mr. Yaseen Wazir, DG-SWC, KP **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP Mr. M. Bilal, Dy Team Leader, NPIWC Mr. Afzal Hayat Khan, Social & Gender Specialist, WCBA	
Meeting Agenda	
Agenda Item # 1: Introduction and welcome remarks by DG-SWC, KP **Agenda Item # 2:** WCBA Project Activities and Start Up **Agenda Item # 3:** Usage of Dashboard, Online/GIS & Coordinates **Agenda Item # 4:** Nomination of the Focal Person	
Discussions and Outputs	
Agenda Item # 1: Mr. Yaseen Wazir DG-SWC, KP extended warm welcome to the whole team of Monitoring, Evaluation and Impact Evaluation (ME&IE) Consultants for WCBA-KP Project. After introduction of his team, he elaborated the work of Directorate of Soil Water Conservation and its department role across KP. Mr. Yaseen Wazir, DG-SWC, KP ➢ Mr. Khalid Gohar Khan, DD-SWC & Mr. Irfan Ullah, DDP-SWC ➢ Mr. Sajid Hussain, SCFO-SWC & Ms. Aimen Usman, SCFO-SWC	

- Ms. Shazia Gulzar, GIS Specialist & Ms. Sowm Khan, SCO Planning- SWC
- Ms. Jasmeen Kausar, SCFO,-SWC & Mr. Naeem Ur Rehman, SCFO-SWC
- Mr. Abid Samar, GIS-SWC & Mr. Zeshan Khalil, SCFO-SWC

Agenda Item # 2:
Dr. Usman Mustafa, TL-WCBA placed 11 activities related to Directorate of SWC-KP and these are:
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 and Capacity building.
Dr. Mustafa briefed about the project working SOPs. He also described about the G3 (JV) projects and other activities. He emphasized that we are here to facilitate, increase departmental effectiveness and efficiency. This is only possible if we join hands together from the start, therefore, baseline survey is very important for monitoring and impact evaluation of the project. All field members are requested to take pictorial view of the activities with "Before" and "After" with perception of the stakeholders in the project area.

Agenda Item # 3:
DG invited the project team to visit their newly established but highly updated GIS lab. It was observed that GIS team of SWC, KP is doing very good job. DG-SWC is able to acquire GIS data through sensors at 10m gradients from USA and being used for planning, coordinates by GIS and androids Apps for various activities. Dash board will be updated with the help of field team in future.
Agenda Item # 4:
Mr. Yaseen Wazir, DG-SWC, KP nominated two person for liaison with ME&IE Consultants.
- Mr. Khalid Gohar, Dy Director, Cell#0331 995 5220; Email: dgswckp@gmail.com
- Mrs. Jasmeen Kausar, SCFO-0316 015 6043
- Ms. Sowm Khan- 0337 986 8995

Figure 5.7: Mr. Yaseen Wazir, DG-SWC, KP in chair along his staff and with Dr. Usman Mustafa, TL; Dr. Mansab Ali, Agronomist; Mr. Afzal Hayat, Social & Gender Specialist of WCBA-KP; Mr. M. Bilal, DTM-NPIWC.

Date	30th June 2021
Venue	Office of the Director Monitoring & Evaluation-Planning, Ag Ext-KP, Peshawar
Participants	
Client: Malik M. Nasir, Director Planning-Ag Ext., KP Dr. Hayat Zada, Dy Director Planning-Ag Ext., KP **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP Malik M Nasir, Director Planning-Ag Ext., KP Dr. Hayat Zada, Dy Director Planning-Ag Ext., KP	
Meeting Agenda	
Agenda Item # 1: Introduction and Cooperation among Departments	
Discussions and Outputs	
Agenda Item # 1: Dr. Usman Mustafa, TL, WCBA, KP briefed about the WC – KP project and his team. Malik M. Nasir, Director (Planning), Agriculture Extension, KP extended full cooperation to Dr. Usman Mustafa, TL (ME&IE), KP during the life of the project "Water Conservation in the Barani Areas of KP". He also highlighted the importance of M&E in projects.	

Figure 5.8: Malik Nasir, Director Planning, Agri Extension, KP in meeting with Dr. Usman Mustafa, TL; of WCBA-KP.

Date	30th June 2021
Venue	Directorate of Agriculture Engineering, Tarnab- Peshawar
Participants	
Client: Engr. Zaheer Abbas Bangash, Director-Agri. Engineering, KP Engr. Kalsoom Rehman, AE Planning Engr. Hazrat Nabi, AE- Kohat **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP Mr. M. Bilal, Dy Team Leader, NPIWC Mr. Afzal Hayat Khan, Social & Gender Specialist, WCBA	
Meeting Agenda	
Agenda Item # 1: Agricultural Engineering Activities under WCBA-KP **Agenda Item # 2:** Provision of SOPs, Check List and Performa's **Agenda Item # 3:** Documentary, Videos for Success Stories / Case Studies **Agenda Item # 4:** Nomination of the Focal Person	
Discussions and Outputs	
Agenda Item # 1: Dr. Usman Mustafa, TL-WCBA, KP introduced his team to the participants and pointed out that following two activities will be carried out by Directorate of Agricultural Engineering across KP; Installation of Tube Wells Solarization of Agricultural Tube Wells **Agenda Item # 2:** It was agreed upon that Directorate of Agricultural Engineering staff will provide SOPs checklist and Performa's for baseline survey related to agricultural engineering activities. Moreover, Dashboard will be updated and material will be shared as well. **Agenda Item # 3:** The ME&IE Consultants may prepare some documentaries, videos to be used in success stories and case studies, therefore, Directorate of Agricultural Engineering, KP agreed to share the existing/new videos with impact assessment team. **Agenda Item # 4:** Engr. Zaheer Abbas Bangash, Director, AE-KP nominated two person for liaison with ME&IE Consultants. Ms. Kalsoom Rehman, AE-Planning Cell# 0302 905 1794 & 091 296 4063 Email: daekptarnab@gmail.com Engr. Hazrat Nabi Cell# 0312 910 5589 Email: aekohat@gmail.com	

Figure 5.9: Engr. Zaheer Abbas Bangash, Director Agriculture Engineering, KP in chair with Dr. Usman Mustafa, TL; Dr. Mansab Ali, Agronomist; Mr. Afzal Hayat, Social & Gender Specialist of WCBA-KP; Mr. M. Bilal, DTM-NPIWC.

Date	30th June 2021
Venue	Social Sciences Research Institute (SSRI) PARC, Tarnab-Peshawar
Participants	
Client: Mr. Arshad Farooq, PSO/Project Incharge-SSRI, PARC Mr. Abdul Hassan, PSO-SSRI **ME&IE Consultants:** Dr. Usman Mustafa, Team Leader, WCBA-KP Dr. Mansab Ali, Agronomist, WCBA-KP	
Meeting Agenda	
Agenda Item # 1: SSRI Manpower and Research Activities **Agenda Item # 4:** Nomination of the Focal	

Person
Discussions and Outputs
Agenda Item # 1: Mr. Arshad Farooq, Project Incharge, SSRI-PARC, Tarnab-KP explains manpower and research activities under non- development and development schemes. Although they have limited manpower and agreed to help in baseline survey of Water Conservation in Barani areas of KP. **Agenda Item # 2:** Project Incharge, SSRI-PARC nominated two person for liaison with ME&IE Consultants. Mr. Abdul Hassan, Cell# 0344 905 5593 & Email: ab_hsn@yahoo.com Mr. Arshad Farooq, Cell# 0334 923 9305 &Email: farooq_ext@yahoo.com

Figure 5.10: Dr. Usman Mustafa, TL and Dr. Mansab Ali, Agronomist in meeting with PI and PSO SSRI-PARC, Tarnab, KP.

5.2.3 Preparation of Monitoring Tools (Field Survey Questionnaires)

Consultants are in process of finalization of Monitoring Tools (MTs) for Baseline and Monitoring Surveys. The MTs will be finalized in close liaison with client.

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

Work on overall field survey questionnaire (80-90 percent) has been finalized. The questionnaire regarding activities; Water ponds, Check dams, Water reservoir, Stream-bank stabilization, Gated field inlet outlet/spillway and Terracing has been 70 percent completed and remaining will be completed in the coming days.

5.2.4 Development of Android Based Application for Field Survey

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 would 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.

5.2.5 Baseline Survey Training

After finalization of the questionnaire three day training will be imparted to the field team in Peshawar in this month.

5.3 DEVELOPMENT OF MIS/GIS SYSTEM

Geographic Information System (GIS) is computer based system

5.4 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 month.

LIST OF 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	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	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		
		funds and then received subsidy at 80% on issuance of FCR*				24,000 labors will be 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	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	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

Project Sub-component	Target	Activities	Outputs	Outcome		Goal/ impact	Methodology for Measuring Results
				Baseline indicator	Target after completion of Project		
		with his/her own funds and then received subsidy at 80% on issuance of FCR*				farmers for long time in agriculture sector.20,000 labors will work during construction period of these intervention	also be used for SBSs 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 number 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 80% on issuance of	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**		
		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 at 80% on issuance of FCR*	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 farming community.	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		
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…….

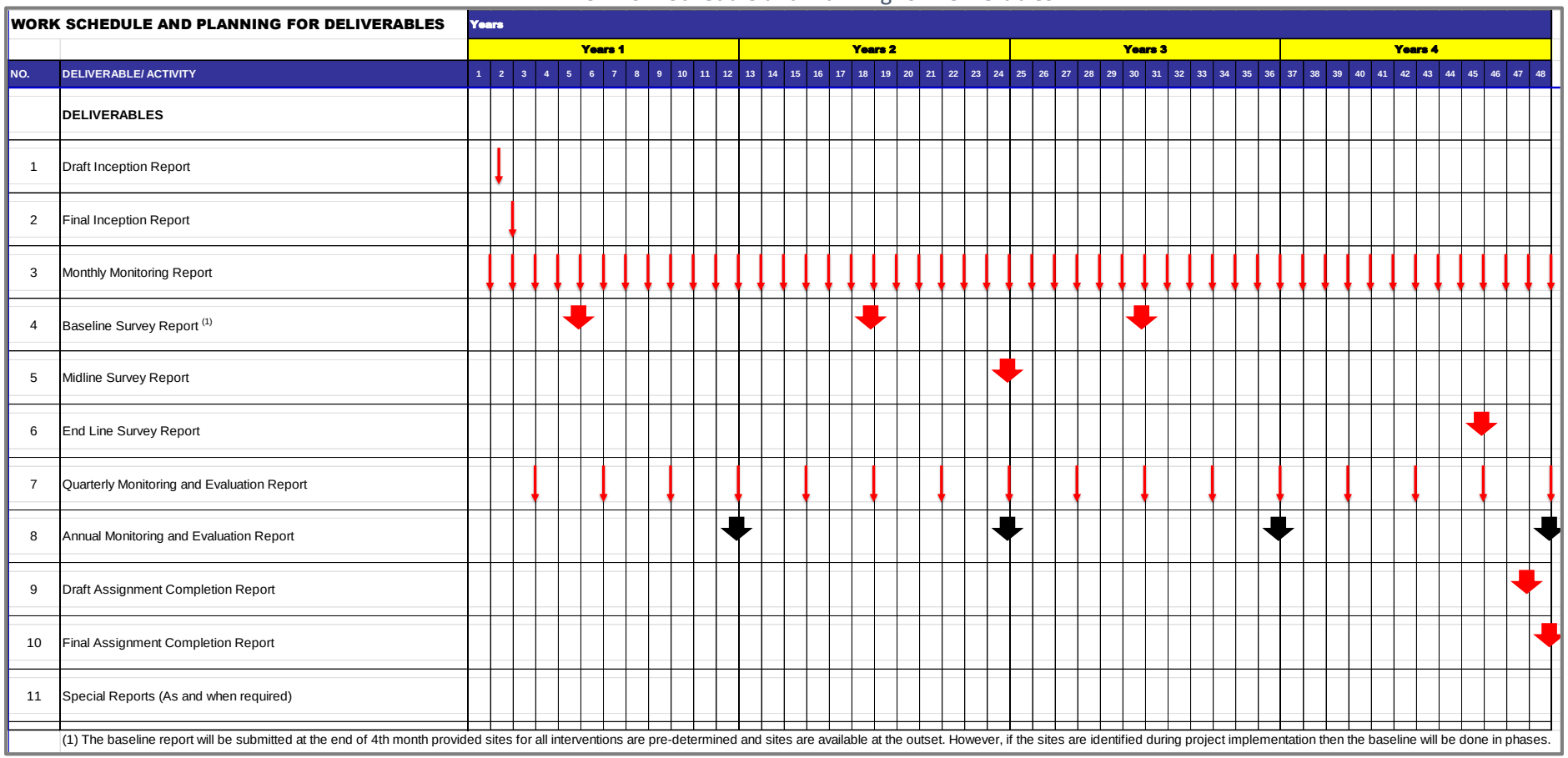
Area Name ……..

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



ANNEX - D: Minutes of the 9th Joint Review Meeting of PMU, DoA, GoKP

PROGRAM MONITORING UNIT
PRIME MINISTER'S AGRICULTURE EMERGENCY PROGRAM
AGRICULTURE DEPARTMENT KHYBER PAKHTUNKHWA
53 C/111, Gul Muhar Lane, University Town Peshawar

No. 0191 / Minutes /PMUKP Peshawar dated the 18/06/2021

1. The Director General, OFWM Khyber Pakhtunkhwa Peshawar
2. The Director General, Soil & Water Conservation Khyber Pakhtunkhwa Peshawar.
3. The Director General, Agriculture Extension Khyber Pakhtunkhwa
4. The Director Agricultural Engineering Khyber Pakhtunkhwa, Tarnab Peshawar
5. Deputy Team Leader, Project Consultant for NPIWC-II
6. Team Leader AGES Consultant for Water Conservation in Barani Area Khyber Pakhtunkhwa.
7. Team Leader, G3 Consultants (Pvt) Ltd M&E Consultant for NPIW & WCBA-KP Components.

Subject: **RECORD NOTE OF 9TH JOINT REVIEW MEETING OF PMU HELD UNDER THE CHAIRMANSHIP OF SECRETARY AGRICULTURE, KP DATED 10.06.2021**

Memo,

Enclosed please find herewith the approved minutes of 9th Joint Review meeting (JRM) of PM's Agriculture Emergency Program projects held under the chairmanship of worthy Secretary Agriculture on dated 10-06-2021 at 4 PM for information and further n/action at your end please.

Encl: As above

Program Coordinator

CC:
1. Chief Planning Officer Agriculture, Livestock and Cooperative Department Government of Khyber Pakhtunkhwa, Peshawar
2. PS to Secretary Agriculture, Livestock and Cooperative Department Government of Khyber Pakhtunkhwa, Peshawar.

RECORD NOTE OF 8th AND 9th JOINT REVIEW MEETING OF PMU HELD UNDER THE CHAIRMANSHIP OF SECRETARY AGRICULTURE, KHYBER PAKHTUNKHWA DATED 10.06.2021

The 8th and 9th Joint Review Meetings for the projects (NPIWCs, WCBA-KP and National Program for Enhancing of Command Area in Barani Areas of Pakistan (NP-ECABA) under PM's Agriculture Emergency Program were held under the chairmanship of Dr. Muhammad Israr, Secretary Agriculture, Khyber Pakhtunkhwa in the office of the Program Monitoring Unit at University Town Peshawar on 10.06.2021 at 4:00 PM. Program Coordinator PMU, senior management of the projects and concerned Project Consultants attended the meeting as per list attached. The M&E Consultants (G-3) for the projects NPIW-II and WCBA were also invited to the meeting on directives of Secretary Agriculture.

2. Meeting started with recitation from the Holy Quran. The PC PMU warmly welcomed the Secretary Agriculture and all other participants for visiting the PMU office for the first ever official meeting in the office of PMU. He further informed that the instant JRM is meant for review of the visits of PMU during the months of April and May 2021. With the permission of chair, the PC PMU presented the overall progress of PMU since its establishment in September 2020. He apprised the forum that during the last nine months, PMU team consisting of only three members, managed to inspect a total of 378 schemes of different projects / department besides checking of documentation and facilitation support being provided to the projects for smooth implementation in the field. He informed that during these monitoring visits a number of observations were recorded and brought to the forum for discussion / rectification thereof. Elaborating the nature of these observations and progress of rectification thereon, the PC PMU informed that in certain cases clear improvement has been observed however there are still a number of grey areas which need special focus of the implementing authorities.

3. The chair appreciated the efforts of PMU regarding the monitoring, facilitation and coordination of project activities and stressed the implementing partners to adhere proper weightage to the PMU recommendations and ensure proper rectification of the observations of PMU as mentioned in the grey list. The chair also inquired about the percentage of schemes visited by PMU. In response, the PC PMU clarified that PMU has set a target of 15% inspection as against the target of the projects, however, the higher percentage of inspection (40%) reflected in the presentation is due to the fact that projects' pace of work remained slow during the period under review.

4. While reviewing the progress of NPIW-II, the overall physical and financial progress of the project was termed as satisfactory, however, the progress of WC verification and validation was reported to be very low as only 456 schemes were verified against the total of 1823. In response, the Deputy Team Leader KP, National WM Consultants, Mr. Muhammad Ilyas referred to some logistic and facilitation issues on part of his organization besides non availability of NPIW staff in

some districts for the purpose. The DG OFWM also assured the availability of one officer / official in each district for speeding up the validation and verification process. The chair also showed his dissatisfaction over the progress and directed to send a letter, reflecting the grave situation, to the Project Coordinator, Federal Project Management Unit and General Manager NESPAK (Water Sector) with the request to look into the matter on top priority basis. Moreover, the chair directed the DG OFWM to speed up the process of staffing in WB assisted project to relieve work load on the staff in districts.

5. Afterwards, the PC PMU presented a detailed overview of the NP-ECABA project. The pace of work was reported to be extremely slow except for the Agriculture Extension component. He further informed that the project is not on proper track and there are a number of administrative and operational issues which need to be settled. He suggested that all concerned HADs may jointly review these concerns as already reported by PMU for settlement and if needed prepare a joint Working Paper for review in PSC. The chair accorded approval to the same and advised the HADs to sort out the way forward on priority basis.

6. The PC PMU while presenting the progress review of WCBA project pointed out that the project is lagging behind its physical and financial targets even in the last month of the fiscal year. Responding optimistically to the same, the Project Director / DG SWC assured that sufficient number of schemes are in the final stages and that the same will be completed by the end of fiscal year to cover the back log. Regarding the qualitative aspect of the project activities, the PC PMU, besides appreciating the efforts of some districts, showed his grave concern over the technically substandard structures of SWC as well as design of tube well installation and solar systems by Agriculture Engineering in most of the districts.

7. During review of the verification and validation progress under WCBA, the chair appreciated the efforts of AGES Consultants with regard to preparation of various modules to be implemented in the next financial year. He also advised that these standards may be circulated and the staff may be trained on the same. He further advised to review the qualitative aspect of the huge structures for water storage already executed by SWC and suggest any corrective measures for structure stability to avoid any complications in future. During the course of review, it was pointed out that Director Agriculture Engineering has not solicited any sanction from the Project Director for the activities related to Agriculture Engineering Component of the project. The chair showed his displeasure over the same and also seriously noticed the absence of Director Agriculture Engineering from the meeting.

8. Afterwards, the Team Leaders Dr. Abdul Quddus and Mr. Usman Mustafa M&E Consultants (G-3) for the projects NPIW-II and WCBA respectively made presentations regarding their organizational structure and activities. They apprised the forum of the so far progress covering the establishment of offices, development of web-based GIS integrated MIS system and

development of different M&E formats. They informed that smart data capturing tools will be used for base line, mid line and end line assessment and that after pre-testing the formats they plan to initiate field work from the next week. The chair remarked that the livestock and fisheries sectors should also be incorporated in the data capturing formats. He advised the team to speed their work and coordinate with the already established Tele-facilitation Centre in Agriculture Extension Department for developing a joint and integrated dashboard for Khyber Pakhtunkhwa.

9. Finally, Mr. Behram Jan, PC PMU informed the forum that the instant JRM was the last official JRM for him as he would shortly be repatriated to his parent department for processing of his retirement papers before 8th August, 2021, the date of his retirement. He exclaimed that during his tenure as PC PMU, the cause of putting things on the right track in the larger public interest remained his prime objective. He also begged apologies of members of the forum if anything had hurt them during this process. Responding to the same, the chair appreciated the untiring and sincere efforts of Mr. Behram Jan for the department of OFWM, providing kick start to various projects and especially for establishing PMU through an exemplary team spirit. He stated that he would not wish him a happy retired life rather he would like to retain his services at an appropriate position in any of the developmental projects in agriculture sector if an opportunity existed.

10. Besides the above discussions and decisions, various other specific decisions were taken after thorough deliberations during the pictorial review of scheme-wise PMU observations regarding NPIW-II, WCBA-KP and NP-ECABA projects;

i. Copies of the PMU presentation along with scheme-wise inspection reports will be shared with the concerned implementing agencies for discussion of the same with the concerned districts for explanation/rectification thereof before next JRM. The rectification report of the departments will be shared with PMU which will be presented in the next JRM.
ii. Director General OFWM to closely follow up the decisions of meeting of ACS regarding the engineering and revenue chakbandis of irrigation systems under National Program for Enhancing Command Area of Barani Areas (NP-ECABA) of Khyber Pakhtunkhwa.
iii. All HADs to submit social, technical and financial data of the completed schemes in all projects to PMU without further delay.
iv. The concerned Project Consultants will ensure the implementation of JRM decision regarding proper identification marks / names of relevant projects on all structures to avoid any chances of duplication / overlapping. No scheme without proper identification mark will be cleared by the Project Consultants. All HADs to issue circulars to their field formations for strict compliance.
v. The Project Consultant for NPIW will ensure the presence of his nominee / Field Engineer in the PCPS Yards for timely quality check on PCPS and other structures.

vi. The Director General OFWM will ensure that rationalized material rates are followed in different zones of the province.

vii. For digitized record keeping, all the completed scheme files will be properly scanned and soft copies of the same should be made available at directorate level. All HADs to circulate instructions to their field formation to this effect.

viii. Farming community is the active partner in all projects. All implementing partners to ensure meaningful and active participation of farming community in the project activities as per PC-I requirement.

ix. All partner HADs in the NP-ECABA project to jointly discuss the various administrative and operational issues and prepare a way forward for giving an effective take off to the project. If needed they may prepare a joint Working Paper for PSC.

x. The DG SWC will issue an appreciation letter to the District Officer SWC Dir Lower for his good performance. All other HADs may also develop a system of acknowledging the outstanding performers in their departments.

xi. The activity of Micro Watershed Development under WCBA is currently focused on single farmers. The forum unanimously agreed to extend this facility to groups of farmers in a watershed. The DG SWC should develop a working methodology for the same.

xii. Installation of TWs and solarization beyond the depth of 320' does not come under the domain of the project WCBA. Therefore, no scheme beyond this limit will be taken up in future by the Agriculture Engineering.

11. Meeting ended with vote of thanks from / to the chair