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Islamic Republic of Afghanistan

Revised Environmental and Social Management Framework (ESMF) for The Irrigation Restoration and Development Project Additional Financing (IRDP-AF)

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Abbreviations and Acronyms

AAIP	Afghanistan Agriculture Inputs Project
AF	Additional Financing
ANDMA	Afghanistan National Disaster Management Authority
AP	Affected Person
ARAZI	Afghan Independent Land Authority
ARTF	Afghanistan Reconstruction Trust Fund
AWARD	Afghanistan Water Resources Management
CDC	Community Development Council
CoC	Certificate of Compliance
CSC	Construction Supervision Consultant
DABS	Da Afghanistan BreshnaSherkat national electric utility
DMC	Disaster Risk Management Committee
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DSR	Dam Safety Report
DSP	Dam Safety Panel
ECOP	Environment Codes of Practice
EIA	Environmental Impact Assessment
EHS	Environmental Health and Safety
EHSG	Environmental Health and Safety Guideline
EMA	External Monitoring Agency
EMC	Environmental Monitoring Consultant
EPP	Emergency Preparedness Plan
ESMF	Environmental and Social Management Framework
ESAP	Environment and Social Advisory Panel
ESMP	Environmental and Social Management Plan
FAO	Food and Agricultural Organization
GoA	Government of Afghanistan
GRM	Grievance redress mechanism
GRC	Grievance Redress Committee
GRS	Grievance Redress Services
HH	Households
HQ	Headquarters
IDA	International Development Association
IEC	Information Education & Communication
IRDP	Irrigation Restoration and Development project
IRDP-AF	Irrigation Restoration and Development project additional financing
IWRM	Integrated Water Resources Management
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
MACA	Mine Action Center for Afghanistan
MAIL	Ministry of Agriculture, Irrigation and Livestock
MAPA	Mine Action Program of Afghanistan
MEW	Ministry of Energy and Water
MRRD	Ministry of Rural Rehabilitation and Development
MTR	Mid-Term Review
NDMC	National Disaster Management Commission
NRVA	National Risk and Vulnerability Assessment
NGOs	Non Government Organizations
NEPA	National Environmental Protection Agency
OFWMP-AF	On-Farm Water Management Project-additional financing
OP/BP	Operational Policy/Bank Procedure of the World Bank
O&M	Operation and Maintenance
PCU	Program Coordination Unit
PSS	Project safeguard staff
RAP	Resettlement Action Plan
RBC	River Basin Committee
RBOs	River Basin Organizations
RPF	Resettlement Policy Framework
SCoLW	Supreme Council of Land and Water.
SIA	Social Impact Assessment
SOP	Standard Operation Procedures
TA	Technical Assistance
WB	World Bank
WHO	World Health Organization
WRD	Water Resources Department
WRM	Water Resources Management

Executive Summary

1. **Project and Background:** The Government of Afghanistan (GoA) through the Ministry of Energy and Water (MEW) is implementing the Irrigation Restoration and Development Project (IRDP) with assistance from the World Bank (WB). The project became effective on June 15, 2011, and the current closing date is December 31, 2017. The IRDP will be restructured with the additional financing of US$70 million in June 2016 with an extension of the closing date to December 31, 2019. Accordingly, this Environmental and Social Management Framework (ESMF) replaces the original ESMF dated January 5, 2011 reflecting the new activities planned under the proposed restructuring and additional financing of the IRDP (IRDP-AF or AF). With the restructuring, project development objective of the IRDP-AF has been revised as follows:

"*to improve access to irrigation in targeted areas, strengthen the capacity to plan and manage dams more safely, and to plan and implement water resources management and development at the basin-level and nationally".*

2. **Project components:** The IRDP-AF activities will be carried out through the following 4 components: (a) Component A. – Rehabilitation of Irrigation Systems and River Bank Protection (Original: US$70 million, Proposed: US$128 million), (b) Component B. – Support for Dam Development, Operation and Maintenance. (Original: US$31.3 million, Proposed: US$21.3 million), (c) Component C - Water Resources Management and Development (Original: US$8.2 million, Proposed: US$30.2 million) comprising the following two subcomponents: (i) *Improvement of Hydromet Services and WRM* (USD 23.2 million), and (ii) *Support for Developing Legal and Institutional Framework for WRM and Strengthening River Basin Planning* (USD 7.0 million), and (d) Component D. – Project Management and Capacity Building (Original: US$39.2 million, no change).

3. ***Potential environmental and social impacts of the Project under IRDP-AF:*** The original project is classified as Category A, primarily because of the planned construction of the dams under Component B; proposed restructuring and IRDP-AF will formally drop the construction of the new dams, and focus on the completion of the preparation works, including environmental and social impacts assessments and detailed design. In addition, the proposed restructuring and IRDP-AF will support the following physical investments: (a) continued rehabilitation works for priority irrigation schemes (Component A), (b) river erosion works (Component A), (c) minor repair works for selected existing dams (Component B), and (d) repair and establishment of hydromet data collection stations. It should be noted that these physical investments are in general of small scale and would be considered to belong to Category B. The Category A was maintained because of the continued engagement for preparation for the new dams.

4. In this sense, overall environmental and social impacts of the IRDP-AF will be positive while some minor investment-specific negative impacts may be incurred. In particular, rehabilitation works for irrigation schemes (Component A) will lead to the increase in agriculture production and subsequent increase in income in direct stakeholders. Further, the rehabilitaion works will benefit environmentally as they will increase efficiency and effectiveness of water services. Erosion protection works at river banks will improve land and slope stability of the rivers in the target areas and reduce turbidity of the rivers as well as protect the livelihood of the concerned stakehoders. Completion of the remedials works in selected dams (Component B) will strengthen stability and safety of the target dams and reduce the risk of ultimate dam failure which would cause catastrophic damages to the population.

5. On the negative side, rehabilitation works for the irrigation schemes and river bank protection may require some land appropriation, including the temporary occupacy of the working spaces. However, such negative impacts will be moderate, locallized, temporary, and can be mitigated through the application of an Environmental Codes of Practice (ECOP) which will be incorporated into bidding and contract documents with close supervision and monitoring. Minor land acquisition may be required for rehabilitation of irrigation canals and river bank erosion protection works (Component A) and in such cases, the investments will be implemented in line with the Resettlement Policy Framework (RPF). Consultations with various stakeholders, including vulnerable groups, especially women, will continue to be prioritised to mitigate potential impacts of project activities. Information disclosure, Grievance Redress Mechanism (GRM), and monitoring and evaluation (M&E) systems have been established to ensure effective implementation of these measures.

6. One of the lessons learned from the implementation of the original project is the need for strengthen the safeguards management. This is particularly the case for the new dams proposed under the original project. As part of the restructuring associated with the IRDP AF, Component B will be restructured to drop the physical construction of the new dams but strengthen the technical assistance, emphasizing the environmental and social impact assessments for the new dams in order to ensure full compliance with the World Bank Safeguards Policy.

7. ***World Bank's safeguard policy and national environmental regulations:*** Similar to the original project, the IRDP-AF is categorized as EA category "A". The following six World Bank (WB) safeguard policies are triggered: Environmental Assessment (OP/BP 4.01), Pest Management (OP/BP 4.09)[1],Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement (OP/BP 4.12), Dam Safety (OP/BP 4.13), and Projects on International Waterways (OP/BP 7.50). The IDRP-AF is also required to comply with the national EIA regulation (2008) and provide adequate information to the National Environmental Protection Agency (NEPA).

8. ***The ESMF:*** Since the extent and location of all investments are not known at appraisal the IRDP-AF is required to prepare an Environment and Social Management Framework (ESMF) in line with the WB's safeguard policies. This ESMF updates the ESMF of the original project taking into account implementation experience to date and the activities proposed to be carried out under the AF. The revised ESMF updates guidelines and procedures set out in the ESMF of the original project and introduce specific guidelines on application of ECOP, dam safety and pest management. This revised ESMF builds on gains in the original project and mainstreams environmental and social measures into overall project planning, implementation, reporting and evaluation, and provides guidance for the preparation of Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs) for individual investments under the IRDP-AF.

9. Given different types of investments being implemented under different components of the IRDP–AF, the ESMF presents a similarly structured and aligned approach in terms of the compliance requirements for each component. For Component A, the ESMF requires the preparation of Environmental and Social Management Plans (ESMP's), including the application of ECOPs for the each irrigation schemes and the river bank protection works. For Component B, for the technical assistance and studies for the priority new Dams, the ESMF requires preparation of all of the requisite plans for compliance with World Bank safeguards policies, including the Environmental and Social Impact Assessments (ESIA), Resettlement Action Plans (RAPs) and Dam Safety Plans (DSPs) and this ESMF contains the

[1] Pest Management (OP/BP 4.09) was not triggered under the original project, but should have been triggered because of the irrigation rehabilitation works.

TORs for ESIA and Resettlement Action Framework (RAF) and TORs for DSPs. For safety repair works on the existing Dams preparation of ESMPs and ECOPs for each identified dam site are required once the dams are identified. For Component C, a simple and easy to apply ECOP is required for all minor civil works under Components C and D. Table 5.2 in the main text summaries ESMF approach for actions to ensure environmental, social and dam safety compliance requirements for each component and activity.

10. ***Stakeholder Consultations and Information Disclosure:*** This will continue to be central to ESMF processes throughout the IRDP-AF to ensure effectiveness and transparency of the ESMF implementation. A communications strategy and plan will be developed to help increase the overall effectiveness of the project.

11. ***Institutional Arrangements:*** The Head of the Program Coordination Unit (PCU) at the MEW will be responsible for ensuring effective implementation and compliance with the ESMF requirements. The FAO technical assistance team will continue to support national and regional safeguards staff to develop Environmental and Social Monitoring Plans (ESMPs) and monitor their implementation as well as ensure compliance with other ESMF safeguards requirements.

12. ***Monitoring and Evaluation:*** Project safeguards staff together with local communities and local government staff will continue to be responsible for monitoring that the mitigation measures proposed in ESMPs are both adequate and implemented satisfactorily. Quarterly reports will be submitted to the PCU management. An External Monitoring Agent (EMA) will be appointed to conduct regular third party monitoring and compliance assessments.

13. ***Grievance Redress Mechanism (GRM):*** To address complaints related to project activities and ensure transparency and accountability of the ESMF process; the existing GRM will be strengthened. Safeguards staff will be responsible for ensuring that affected communities have a full understanding of the GRM, and ways to access it. GRC members will be trained to enhance their capacity to resolve disputes at local level. Information on how to access to WB's corporate Grievance Redresses Service (GRS) is also provided.

14. ***Budget:*** The ESMF outlines an indicative budget of approximately US$1.6 million to ensure effective implementation of the ESMF. The detailed activity would be specified in the investment-specific Environmental and Social Management Plans (ESMPs). All cost to implement the ESMF and ESMPs will be financed by the project.

15. ***The ESMF Consultations and Disclosure:*** The ESMF was consulted in the project regions as follows: (a) Mazar on December 27, 2015, (b) Jalalabad on December 30, 2015, (c) Kandahar on January 3, 2016, (d) Herat on January 7, 2016, and (e) Kabul on January 9, 2016 to confirm broad support for the proposed additional financing project of the target communities and deepen the understanding on the environmental and social safeguards procedures, including the GRM. Outcome of the consultation has been incorporated into the final version of the revised ESMF, and the minutes of these consultations are attached as Annex 9.

16. The ESMF also contains 10 annexes that have the various screening and processing documents, for e.g., the Pest Management Framework (PMF), the ECOPs, TORs, and the Resettlement Policy Framework (RPF) (see Table 5.1).

I. INTRODUCTION

1.1 Project Background

1. Since 2011, the Government of Afghanistan (GoA) through the Ministry of Energy and Water (MEW) has been implementing the Irrigation Restoration Development Project (IRDP) with financial support from the International Development Association (IDA or the World Bank, WB) and Afghanistan Reconstruction Trust Fund (ARTF)[2]. The IRDP aims to increase agriculture productivity and production through (a) rehabilitation of irrigation infrastructure (Component A), (b) small dam development (Component B), (c) establishment of hydro-meteorological facilities and services (Component C), and (d) technical assistance, institutional strengthening and project management (Component D) while the Food and Agriculture Organization (FAO) has been providing technical assistance (TA) services to facilitate the implementation. The IRDP became effective on June 15, 2011 and the current closing date is December 31, 2017. An Environmental and Social Management Framework (ESMF) including a Resettlement Policy Framework (RPF) were prepared and have been applied to the project during implementation. A Mid-Term Review (MTR) conducted in May 2015 suggested that while implementation under Components A and C is satisfactory[3] implementation of Component B is considered moderately unsatisfactory and the actual dam construction is no longer feasible under the project within the current time frame. The MTR recommended for an additional financing with a 2-year extension and a Level 1 Restructuring to facilitate effective implementation of irrigation investment and addressing water resources management.

2. In response to the MTR recommendation and the GoA's request, preparation of an additional financing (AF) of the IRDP has been initiated. The IRDP-AF is proposed to the ARTF to (a) provide an additional fund of about $70 million, (b) extend the closing date to December 31, 2019, (c) refine the project development objective (PDO), and (d) modify/scale up the activities and the results framework to ensure achievement of the PDO. The proposed IRDP-AF will be implemented by MEW through the Project Coordination Unit (PCU) in Kabul office, which is also responsible for implementation of the original project. Section II provides description of the proposed AF project.

1.2 Need for the ESMF

3. To comply with the World Bank's Operational Policy on Environmental Assessments (OP/BP 4.01), preparation and disclosure of an ESMF is required by World Bank appraisal of the AF project as the AF project is adopting a programmatic approach consisting of investment activities that could not be identified by appraisal. This is to ensure that the proposed AF project has concrete plans and processes in place to avoid, minimize, and/or mitigate adverse environmental and social impacts of project investments and interventions when they are identified, planned and implemented. To this end, the ESMF of the original project has been updated to align with the scope and structure of the proposed AF project

[2]Of a total cost of about US$148.7 million about US$73.5 million (about 49 percent of the total grant available) has been disbursed as of July 31, 2015.

[3] Rehabilitation of 98 irrigation schemes covering about 100,000 ha of command area and benefiting about 160,000 farmers has been completed as well as 49 hydrological stations, 56 snow gauges and meteorological stations with telemetry and 40 cableway stations for flow measurement at selected hydrology stations. However achieving the expected rehabilitation target of 300,000 hectares (ha) is not possible due to higher unit cost of rehabilitation works which is about US$500 per hectare compared to US$200 per hectare estimated.

taking into account the implementation experience during the original project.

II. AF PROJECT DESCRIPTION

2.1 AF Project Objective and Components

4. The *Project Development Objective (PDO)* of the proposed IRDP-AF has been revised to reflect core mandate of MEW as follows: *to improve access to irrigation in targeted areas, strengthen the capacity to plan and manage dams more safely, and to plan and implement water resources management and development at the basin-level and nationally.*

5. The proposed IRDP-AF will be implemented through the following 4 components:

Component A. – Rehabilitation of Irrigation Systems and River Bank Protection (Original: US$70.0 million, Proposed: US$128.0 million). The additional US$58.0 million will be used to: (a) cover the financing gap for increased per ha costs of irrigation rehabilitation (US$ 38.0 million); and (b) carry out critical river bank erosion protection works to protect agricultural land (US$20.0 million). As a result of restructuring and additional financing, this component would support the rehabilitation of irrigation schemes covering about 214,000 hectares and about 26.3 kilometers of erosion bank protection. This component would have the following two subcomponents:

> **Component A-1: Rehabilitation of Irrigation Systems (US$108.0 million).** This subcomponent will mainly support the rehabilitation of existing traditional irrigation schemes managed by the traditional community-based organization called *mirab.* Target irrigation schemes will be selected during implementation of the project based on a set of eligibility criteria, and the majority of the schemes will be those with a command area of above 1,000 hectares in order to prevent overlap with the Ministry of Agriculture, Irrigation and Livestock (MAIL), which is responsible for smaller irrigation schemes. This component would comprise: (a) physical rehabilitation with modest modernization (measurement and control structures) and improved flood resilience, and (b) technical assistance to *mirabs* (water management and administration) to facilitate operation and maintenance.
>
> **Component A-2: River Bank Erosion Protection (US$20.0 million).** This subcomponent will comprise the following activities (a) formulation of a national policy and guidelines on riverbank protection based on a rapid assessment, (b) protection of identified riverbanks, and (c) institutional strengthening and capacity development. Target areas will be identified and selected during the implementation period based on economic, technical and social criteria; the majority of the investments will be of small scale (typically less than 1 kilometer) reinforcing the existing river bank through appropriate technologies (gabion, re-sectioning).

Component B. – Support for Dam Development, Operation and Maintenance. (Original: US$31.3 million, Proposed: US$21.3 million). The focus of this component would be shifted from construction of a few dams to support broader capacity development and institutional strengthening for dam development and management, and consequently the name of this component will be changed from the current *Small Dam Development*. The physical construction of the dams, which was planned under the original project, will be formally dropped as there is neither adequate time to complete nor capacity to manage. The restructured component would have the following sub-components:

Component B.1: Preparation studies for a few dams identified under the original project in the Northern River Basin. This subcomponent will continue to support the initiatives taken under the original project, aiming at completion of feasibility studies, environmental and social impact assessments, and detailed designs;

Component B.2: Support for Dam Safety Works. This subcomponent will support: (a) safety and technical analysis on the existing irrigation dams, (b) development of a dam rehabilitation plan (including possible decommissioning of some), and (c) undertaking of critical minor safety works for a few dams such as slope stabilization and repair to the drainage channels in order to mitigate the risks of failure.

Component B.3: Institutional Strengthening of the Dam Unit of MEW. Technical assistance will be provided to the Dam Unit which is established by MEW to assist in developing a sound technical, fiscal, and institutional framework for dam development and operation. The framework will include technical documents (dam safety guidelines, construction supervision guidelines, operation and management plans, asset management plan and rehabilitation plan), guidelines and practical training on dam preparation (feasibility studies, ESIAs and detailed design), and establishment of the permanent Panel of Experts.

Component C. – Water Resources Management and Development (Original: US$8.2 million, Proposed: US$30.2 million). The scope of the original Component C of the original project *(Establishment of Hydro-Meteorological Facilities and Services)* will be expanded in order to address the emerging needs for institutional strengthening and policy development in the broader WRM sector. In particular, this component would have the following two subcomponents:

Component C.1: Improvement of Hydromet Services and WRM (US$ 23.2 million). This is in principle the scaling up of the original Component C, which focuses on improvements in hydromet services. Additional financing is proposed to scale up ongoing activities: (a) rehabilitation of existing hydromet data collection stations and construction of new hydromet data collection stations (scale-up); (b) development of hydrological models and flood forecasting for key river basins (new activity); and (c) capacity building in groundwater management (new activity).

Component C.2: Support for Legal and Institutional Framework for WRM and River Basin Planning (USD 7.0 million). This subcomponent follows up on the Afghanistan Water Resources Development (AWARD) Project, which was closed in 2013. The subcomponent would support the following three sets of activities: (a) support the update of the National Water Management Policy (NWMP) and 2009 Water Law to clarify mandates and roles and the institutional framework, (b) institutional strengthening for the MEW, including the establishment of a transboundary waters unit and support to the Technical Secretariat of the Supreme Council of Land and Water, and (c) support for strengthening river basin management and planning focusing on capacity strengthening of the five General Directorates for River Basin Management, basin planning in the Kabul River Basin and selected sub-

basins of the Northern Basin, and a river bank protection plan for the Panju-Amu River Basin.

Component D. – Project Management and Capacity Development (Original: US$39.2 million, no change). This component primarily supports the project administration, management, monitoring and evaluation. In particular, the project would support: (a) the establishment of the five MEW Regional Offices (including physical construction of small office buildings), (b) office equipment and vehicles essential to carry out project implementation, (c) incremental operating cost, and (d) the FAO technical assistance team. While originally the FAO technical assistance was intended to primarily implement and administer the project, the implementation responsibilities will be gradually transferred to the MEW and the focus of the FAO technical assistance will be focused on and expanded to: overall strengthening of the MEW (e.g., financial management and safeguards), specific technical guidance (e.g., irrigation designs, dam safety) and policy advice.

2.2 AF Project Area

6. The proposed IRDP-AF investments will be implemented nationwide across the entire country of Afghanistan, similar to the original project. The detailed description of the project area can be found in Annex 11.

2.3 AF Project Implementation Approach

7. The proposed IRDP-AF would build on the original project' gains and consolidated impacts with respect to rehabilitation of medium and large irrigation schemes and hydromet related efforts while expanding project scope to rehabilitate irrigation areas damaged by flood and undertaking small river banks protection and remedial works in critical areas. Priority for capacity building and technical assistance has also been shifted to strengthen dam safety and broader water resources management that has become a core mandate of MEW. The AF project management including procurement, financial management, safeguards, and monitoring and evaluation (M&E), will be the same as that in the original project design. MEW will be responsible for overall project implementation through PCU and the six regional offices. FAO will provide technical assistance, including safeguards management, as needed. Efforts will be made to ensure synergies with other development partners and other World Bank financed projects[4].

III. RELEVANT GOVERNMENT LEGAL AND REGULATORY FRAMEWORK

3.1 Key National Laws and Regulations

8. The primary relevant laws and legislations framing social and environmental issues of the IRDP-AF project are: the Environment Law of Afghanistan (2007); the EIA regulations (2008); the Constitution of Afghanistan (2004), Afghan Land Policy (2007), the Law on Managing Land Affairs (2008); the Law on Land Expropriation (2009); the Pesticide Law (draft) 2012; the Water Law (2009) and Water Sector Strategy (2012); the Law on the Preservation of Afghanistan's Historical and Cultural Heritages (2004), and the Law on Disaster Management (2012). Key provisions of these laws/regulations are highlighted as follows:

[4]Especially the Hydromet Capacity Building Project (JICA funded) implemented by the MEW and the Afghanistan On-Farm Water Management Project-Additional Financing (OFWMP-AF) implemented by the MAIL

- *The Environmental Law (2007):* The law was developed based on international standards taken into account the environmental condition in the country and is considered comprehensive. It stipulates for sustainable use, rehabilitation and conservation of biological diversity, forests, land, and other natural resources as well as for prevention and control of pollution, conservation and rehabilitation of the environment quality, active involvement of local communities in decision-making processes including stated that the affected persons must be given the opportunity to participate in each phase of the project. The law requires the proponent of any development project, plan, policy or activity to apply for an environmental permit (called the Certificate of Compliance or CoC) before implementation of the project by submitting an initial environmental impact assessment to the National Environmental Protection Agency (NEPA) to determine the associated potential adverse effects and possible impacts. The law also establishes a Board of Experts that reviews, assesses and considers the applications and documents before NEPA could issue or not issue the permit. The EIA Board is appointed by the General Director of the NEPA and is composed of not more than 8 members. The EIA Board of Expert's decision can be appealed.
- *The EIA regulations (2008):* This was established as the Administrative Guidelines for the Preparation of Environmental Impact Assessment (EIA). It provides a list of project expected to create adverse impacts (category 1) and those that may create significant negative impacts (category 2) and describes specific process/procedures and the required documents for each category (see Table3.1below). Once the application form and other relevant documents are submitted to NEPA according to the requirements, NEPA would: (i) issue a CoC, with or without conditions, (ii) advise the applicant in writing to review the technical reports and address the concern of NEPA, or (ii) refuse the CoC with written reasons. Once permission is granted the proponent needs to implement the project within three years otherwise, the permit expires. Implementation constraints include (i) effective application of EIA procedures by private and public proponents; (ii) monitoring of the implementation of the ESMP; (iii) the expertise and means for quality analysis necessary to determine compliance reports; (iv) the ownership of the EIA process by line ministries; (v) limited knowledge, experience, and capacity of staff; and (vi) the coordination, monitoring, and harmonization of various requirements by international agencies involved in technical and financial supports.

Table 3.1: GOA's EIA regulations during screening of investment project

Category 1:	**Category 2:**
Energy**:** 1) Hydroelectric power generation over 50 MW; 2) Thermal power generation over 200 MW; 3) Transmission lines (11 KV and above) and grid stations; 4) Nuclear power plants (or projects); and Petroleum refineries.	***Energy:*** 1) Hydroelectric power generation less than 50 MW; 2) Thermal power generation less than 200 KW; 3) Transmission lines less than 11 KV, and large distribution projects; 4) Oil and gas transmission systems; 5) Oil and gas extraction projects including exploration, production, gathering systems, separation and storage; and 6) Waste-to-energy generation projects.
Water management, dams, irrigation and flood protection: 1) Dams and reservoirs with storage volume of 50 million cubic meters and above or surface area of 8 square kilometers and above, 2)	***Water management, dams, irrigation and flood protection:*** 1) Dams and reservoirs with storage volume less than 50 million cubic meters of surface area less than 8 square kilometres; 2) Irrigation and

Irrigation and drainage projects serving 15,000 hectares and above.	drainage projects serving less than 15,000 hectares; 3) Small-scale irrigation systems with total cost less than $800,000US.
Environmentally Sensitive Areas: All projects situated in environmentally sensitive areas ***Other projects:*** Any other project likely to cause an adverse environmental effect as determined by the Executive Deputy Director General of the NEPA.	***Other projects:*** Any other project likely to cause an adverse environmental effect as determined by the Deputy Executive Director General of the NEPA.

- *The Constitution of Afghanistan* (2004) contains some articles that relate specifically to compensation and resettlement issues. These include Article 40 'No one's property shall be confiscated without the order of the law and decision of an authoritative court. Acquisition of private property shall be legally permitted only for the sake of public interests and in exchange for prior and just compensation.
- *An Afghan Land Policy* was approved by the cabinet in 2007 but is yet to be operationalized. Important relevant provisions include: *Land Tenure/Land Acquisition* (i) Land policy provides that compensation for the expropriation of ownership or of rights over land as enshrined in the Constitution be strictly enforced by law. Property rights may only be expropriated under defined legal procedures and for defined legal purposes; (ii) it also provides that no law may permit arbitrary deprivation of property rights. In the event that the government decides to implement a development project in the interest of the public, the value that the land had prior to the announcement of the expropriation will form the basis for the amount of monetary compensation to the owners of the property. *Protection of Property Rights* (i) It is a national policy that the national and provincial governments take measures to protect citizens including residents of informal settlements from arbitrary and forcible eviction. Eviction and relocation of unplanned settlement residents shall be undertaken with community involvement only for necessary spatial rearrangement that should take effect in accordance with the public's interest (ii) Compensation for expropriation of rights over land must be provided equitably in accordance with the law.
- *The Law on Managing Land Affairs (2008)* aims to create a legislated unified, reliable land management system. This Law also aims to provide a standard system for land titling, land segregation and registration; prevent illegal land acquisition and distribution; access to land to people; and conditions for appropriation of lands. The Law on Managing Land Affairs provides that, *inter alia*, the management of land ownership and related land management affairs is the responsibility of the Ministry of Agriculture, Irrigation, and Livestock (MAIL) (Article 4). However, in June 2013, the Afghan Independent Land Authority (Arazi) was established as a separate agency, and the mandate on land administration and management transferred from MAIL to Arazi. If no title deeds are possessed, a land settler may claim land ownership providing conditions are met, including that: there are signs of agricultural constructions; land owners bordering the said plot can confirm settlement of the land user for at least 35 years; the land is not under Government projects and is up to a maximum 100 Jeribs (Article 8). The Law is currently under revision with amendments being reviewed by Ministry of Justice. If approved amendments may have implications for compensation in terms of expanded recognizable claims.

- *The Law on Land Expropriation (2009)* provides the legal basis for land acquisition and compensation. The law is under amendment, which will address the major gaps to protect the right of the affected people.
- *The Pesticide Law (draft).* This law is being drafted according to Article 14 of the Constitution of Afghanistan. It calls for sustainable development of agriculture by providing for the environmentally sound management of pests and pesticides through a comprehensive legal framework that establishes all standards of conduct for all public and private entities engaged in or associated with the production, handling, distribution, and use of pesticides. The draft proposed to establish the management authority to be responsible for all aspects of the life cycle of pesticides, including but not limited to the registration, import, manufacture, distribution, packaging, labeling, sale, transportation, storage and use of pesticides, related research, extension services, awareness campaigns, educational curricula, as well as post-registration activities such as marketing, training, licensing, recycling, and disposal. The draft is still under consideration. Currently, the body responsible for pesticide regulation in Afghanistan is the Plant Protection and Quarantine Department (PPQD) of the MAIL. The permitted category is Class II and III. Afghanistan is not a member of the International Plant Protection Council (IPPC), one of the main regulating bodies on pesticides.
- *The Water Law (2009) and Water Sector Strategy (2012).* The Water Law provides legal provisions regarding ownerships, fees, rights, permits, usage, and organizations with respect to water resources management including dam maintenance (art. 33). Both the Water Law and the Water Sector Strategy (WSS) promote an integrated water resources management (IWRM) approach based on a transition towards river basin development and a strong role for local stakeholder participation. The WSS has an explicit commitment to poverty reduction and stresses the need for capacity building of all stakeholders and support for farmers and other poor water users to achieve sustainable livelihoods. It highlights the need for discussions and training of communities during the repair of physical infrastructure not just to improve on-farm water management and structure) but also to determine viable options for different agricultural systems and alternative crops. Active participation of 'end-user' in decision-making relating to water resource management, operation and maintenance of water supply systems and agreeing on the water use allocations is also necessary. Active involvement of NGOs could help enhancing strong links with rural communities in all provinces and the WSS proposes 'broadening' their role to 'coach' Water Users Associations (WUA) and members of Community Development Councils (CDCs) in conservation techniques and water management systems. The water law also encourages stakeholder involvement in overall IWRM planning and management and recognizes that participation is especially important at local level when problems faced by water users can be solved more easily. The law recognizes the key role of local irrigation and water users associations in the protection and management of water resources. MAIL (art. 11) is responsible for establishing Irrigation Associations (IAs) and (art 23) can delegate responsibility for distribution of water within irrigation networks in designated areas to the registered IAs. Linkage between these new associations and the traditional management of irrigation systems is also made which allows IAs to delegate the management and responsibility of water rights to a *MirabBashi* or *Mirab* designated by the IAs. It should be noted that the Water Law

does not clearly define the specific responsibilities of each in the irrigation sector nor clearly sets up the institutional arrangement for user organizations for O&M, resulting in multiple policies and institutional arrangements.

- With respect to dam safety, MEW is responsible for study, design, construction, utilization, safety, stability and maintenance of large water dams. MEW in cooperation with other relevant institutions will prepare the guideline for differentiation of small and medium dams and the role of ministries and relevant institutions and obtain the approval of the Supreme Council of Water Affairs Management. Dam owners are responsible to employ experienced technical staff to fully ensure dam safety and maintenance in accordance with safety norms. If ownership of the dams is unidentified, MEW has to take the responsibility. If dam owners are negligent in the protection, maintenance and safety condition of the dams they will be subject to the approved laws.
- *The National Disaster Management Law (2012):* The new Law regulates activities related to response, preparedness and risk reduction for natural and manmade disasters including the institutional arrangement responsible for implementation. The National Disaster Management Commission (NDMC) and the Afghanistan National Disaster Management Authority (ANDMA) are responsible for decision-making, regulation and coordination of disaster preparedness, response, and enforcement. At provincial and district levels, a separate commission is established to implement the decisions made by the NDMC. With assistance from international communities, a number of policy and planning documents necessary for guiding directions in disaster risk management have been prepared.

3.2 Key International Environmental Conventions and Agreements

9. Afghanistan is a signatory of many international environmental agreements, treaties and conventions. NEPA and MAIL play important roles as the focus points[5]. Afghanistan has signed but not ratified the Basel Convention regarding trans-boundary movement and disposal of hazardous waste, and is in the process of acceding to the Convention on Migratory Species and the Ramsar Convention on Wetlands.

IV. KEY SAFEGUARDS ISSUES AND MITIGATION MEASURES

4.1 World Bank Safeguard Policies Triggered for the AF Project

Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP/BP 4.09)	[X]	[]
Physical Cultural Resources (OP/BP 4.11)	[X]	[]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Indigenous Peoples (OP/BP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[X]	[ ]
Projects in Disputed Areas (OP/BP 7.60)	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[X]	[ ]

[5] NEPA is the focal point for the ozone treaties, the Vienna Convention and the Montreal Protocol, and the UN Framework Convention on Climate Change (UNFCCC) while MAIL is the focal point for the UN Convention on Biological Diversity (UNCBD), the UN Convention to Combat Desertification (UNCCD) and the Convention on International Trade of Endangered Species (CITES).

10. Below provides justification for safeguard policies that are triggered for IRDP-AF.

- *Environmental Assessment (OP/BP 4.01):* This OP is triggered because the types of activities that the AF will finance, such as the large irrigations schemes and the preparation of studies and documents for 2new large dams which when built and operated, are likely to have potential adverse environmental impacts that may be severe, wide spread and long lasting, and would require significant mitigation measures and monitoring arrangements to manage them effectively. Therefore, the IRDP-AF will retain the EA Category A, of the original project. These investments and activities are described in the components in the section under the AF Project Description in Section II. Furthermore, the location and exact details of these types of investments will only be identified and known during implementation of the AF project. Therefore, OP/BP 4.01 requires that MEW update the existing ESMF of the original IRDP to ensure its requirements; procedures and processes are aligned with the re-structured IRDP-AF operation and its planned activities. OP/BP4.01 further requires that the revised ESMF be subject to participatory and culturally appropriate consultations in the project areas and publicly disclosed in both Dari and Pashto languages, locally and at the Banks InfoShop, before appraisal of the project. This document is the revised ESMF for the IRDP–AF, to comply with the requirements of OP/BP 4.01.
- *Pest Management (OP/BP 4.09)*[6]*:* The AF project will not finance any procurement of pesticides, nor support irrigation at on-farm level. This policy was not triggered under the original project but is triggered by the AF project considering that, in general, support to irrigation and agriculture activities would increase the use of pesticides/agro-chemicals. As part of the ESMP and safeguard training, efforts will be made to increase knowledge and understanding of farmers and local communities on the safe use, storage, and disposal of pesticides and agro-chemicals and on pest management regulations[7]. To ensure consistency of the training activities related to pest management during the implementation of the ESMF, a Pest Management Framework (PMF) has been prepared (see Attachment 1(f)) and it will be applied to the irrigation rehabilitation schemes during the implementation of the AF project.
- *Physical Cultural Resources (OP/BP 4.11):* This policy is triggered because the investment activities to be financed under IRDP-AF project may be located in areas and locations that may create negative impacts on local cultural properties and/or historical sites. Although this is unlikely, measures have been incorporated into the ESMF (Attachment 1(b)) and the "chance find" procedure has been incorporated into the ECOP (Attachment 2 (a)).
- *Involuntary Resettlement (OP/BP 4.12)* is triggered based on the possibility of land acquisition in some of the irrigation schemes to be rehabilitated under component A. There has been no compulsory land acquisition to date under the original project, except very few cases where two farmers have made small voluntary land donations in line with the requirements of the Resettlement Policy Framework (RPF). This policy is

[6] This policy was not triggered for the original project, but should have been triggered due to the rehabilitation of irrigation schemes.

[7] Including the pesticides and plant protection and quarantine law being promulgated with support from another WB-funded project (AAIP)

also triggered because of potential negative social impacts arising from dam construction following the preparatory technical assistance studies, including ESIAs, to be carried out under component B. The RPF, which includes guidelines on the scope and content of a Resettlement Action Plan (RAP), has been updated to reflect the restructured project components and is an integral part of the updated ESMF (see Annex 7).

- *Safety of Dams (OP/BP 4.37)* is triggered for primarily two reasons (i) due to the minor remedial works of a few existing dams to be identified during project implementation and (ii) the preparatory studies for the construction of 2 new large dams. OP/BP 4.37 requires that preparation and construction of new large dams will require the oversight of an independent panel of experts. For existing dams, one or more independent dam specialists will be mobilized to (a) inspect and evaluate the safety status, its appurtenances, and its performance history; (b) review and evaluate the operation and maintenance procedures of the dam owner; and (c) provide a written report on findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety. To comply with this policy, the ESMF requires that for activities under Component B, (i) for critical minor safety works for a few existing dams a Dam Safety Report is required and (ii) as part of the Preparatory Studies for the new large dams, 4 dam safety plans are required, which are (a) the Construction Supervision and Quality Assurance Plan, (b) the Instrumentation Plan, (c) the Operations and Maintenance Plan and (d) an Emergency Preparedness Plan. Attachments 6 (a) and (b) include TORs of these documents. Attachment 6 (c) provides a TOR for the dam safety panel (DSP).
- *Projects on International Waterways (OP/BP 7.50),* this is triggered since most major rivers in Afghanistan, on which the IRDP-AF investments would be located, are considered as international waterways. However, given that the proposed activities will involve rehabilitation of existing schemes and does not involve works and activities that would exceed the original scheme, change its nature, or alter or expand its scope and extent to make it appear a new or different scheme, the AF project will not adversely affect the quality or quantity of water flows to and/or water uses by other riparian countries. Further, other activities would also fall into the category for which the notification requirement is waived. With the concurrence of the World Bank, therefore, this AF project would be considered to be an exception for the notification requirement to riparian countries.

4.2 Potential Environmental and Social Impacts and Mitigations

(a) Overall impacts

11. While the large irrigation schemes and new large dams will pose significant safeguards challenges that would require carefully designed and implemented mitigation measures, the overall environment and social impact of the IRDP-AF is expected to be positive. For example, completion of the proposed rehabilitation works of irrigation schemes will increase efficiency and effectiveness of water services to farmers which could increase opportunity for farmers to improve their livelihood and living standards while completing river bank works would strengthen ground stability of the target areas. Completion of the remedials works in a few selected dams will strengthen stability and safety of the target dams

reducing the risk for the concerned communities while implementation of hydromet investment, technical assistance, and additional studies will enhance capacity of the country to better address water resources management issues and ensure accepable quality of dam designs and mitigations of potential negative impacts of the proposed new dams. Potential negative environmental impacts of AF project investments and mitigation measures are described in Section 4.2 (b) below.

12. There are concerns on potential impacts of climate change on irrigated agriculture in Afghanistan including the change on timing for water availability from snow melt (which is the main sources of water) which would occur in the near future. The proposed AF project would help the beneficiary farmers increase resilience to the possible climate change impacts as the rehabilitation of the canals would decrease the leakage and lead time for the distribution. Further, the proposed AF Project would also help improve effectiveness of water resources management under the new activities under Component C-2.

(b) Potential environmental impacts

13. *Rehabilitation/Remedial Works:* Typical environmental issues and mitigation measures related to the proposed rehabilitation of irrigation schemes, river bank protection, and remedial works to be carried out under Components A and B may include:

- *During site clearance and rehabilitation,* increased in dust/air pollution, noise/vibration, water pollution, waste generation, sedimentation/soil contamination, local traffic/accidents, and nuisance to local residents. These impacts could be mitigated through the application of good construction practices with close supervision and monitoring of contractor performance and the required mitigation measures will be prepared and implemented as part of the ESMP. A generic Environmental Codes of Practice (ECOP) has been prepared (see Attachment 2 (a)) and it will be finalized and included in the bidding and contract documents during the final design.
- *During operation*, (a) water-logging, flooding, and/or salinization in some areas; (b) possible conflicting demands on surface or ground water supplies including the potential spread of infection and disease through the inappropriate use of irrigation canals for water supply, bathing or human waste disposal, and/or concerns on safety of dams and/or erosion of river bank in downstream areas; and (c) toxicity to human/animal health and local water/ecology due to improper use, storage, and disposal of pesticides, fertilizers, and other toxic chemicals. These impacts could be mitigated through ensuring that adequate consideration regarding drainage and water need for other water users are considered during detailed design, strengthening consultations among water users upstream and downstream (or head and tail), and improving knowledge and understanding of farmers on toxicity, public health, and safety issues. Consultation during the "Transect Walk" and preparation of an ESMP will pay due attention to these aspects. Training on safe use of pesticides and toxic chemical as well as pest management regulations will be provided as part of safeguard training at project level as well as at investment specific ESMP.

14. Construction and renovation of hydromet station (Component C) will require a small area and is unlikely to create any significant impacts on local environment; however a generic simplified ECOP (Attachment 2 (b)) will be applied to ensure that good construction practice

for small works will be conducted. It is expected that the simplified ECOP will also be applied to all very small works related to construction or renovation of small office buildings. These lands are likely to be publicly owned. However if privately owned the land will be bought outright (willing buyer-willing seller).

15. Undertaking the preparation studies (ESIA and detailed designs) under Component B (a) will provide clear information regarding the potential negative environment and social impacts of the proposed new dams with specific mitigation measures and cost estimates so that decisions could be made to move forward with the implementation of the proposed dams. The generic impacts of new dams during construction and operations would include the following:

- *During construction*, most impacts would include (a) dust, noise, vibration, and other air pollution; (b) soil erosion and water pollution; (c) waste generation; (d) traffic and road safety risk; (e) workers health and safety; and (f) other social issues related to workers/camp and health aspects.
- *During operation,* key impacts would include (a) loss of habitats/biodiversity due to reservoirs, (b) impacts on water quantity/flows, floods/drought, water quality, river bank erosion, water users, and groundwater downstream, (c) impacts on fisheries, navigation, and other water/land uses downstream including dam safety risks, (d) impacts on public health, (e) transboundary impacts, and (f) other indirect and/or cumulative social and environmental issues related to inducted development activities and migration of people.

16. Preparation of guideline on dam safety (Component B) would help build MEW capacity to manage dam safety issues however the effort is only the first small steps toward building technical and management capacity of key agencies to address dam safety issues in Afghanistan.

(c) Potential social impacts

17. No significant adverse social impacts are envisaged under the IRDP-AF. No major resettlement, major land acquisition, and/or asset loss is expected for investments planned under either Components A or B. Very small areas of land may be bought outright (willing buyer- willing seller), or acquired against community compensation, to facilitate the rehabilitation work under Component A. In exceptional cases, minor voluntary land donation may occur in certain areas, but only provided that there are no structures or assets on the land, the livelihood impact of the donation on the landowner will be insignificant (less than 10 per cent) and the voluntary nature of the donation is fully documented and independently verified. Selection of investments will also be screened for land and water disputes in order to avoid the situation where investments in irrigation would fuel such disputes.

18. Mitigation measures to reduce adverse effects of rehabilitation works on communities' health, particularly water-borne and vector borne communicable diseases such as cholera and malaria, would include effective drainage of project areas, liaison with health authorities on early warning communication, and requiring contractors to provide necessary health and sanitation facilities in construction camps, manage the inflows of construction workers and provide equitable sharing of employment opportunities, and initiate/maintain close communications with community. The project would also establish and/or strengthen the

GRM and capacity of village leaders and local government bodies, as well as traditional and new water management associations, to manage any local level land and water conflicts that may arise from, or be exacerbated by, AF project activities.

19. It is anticipated that the various project activities (e.g. improved operation and maintenance of irrigation infrastructure, enhanced capacity of farmers, extended outreach to women and non-irrigation water users) will lead to the expansion of existing, and the development of new, livelihood activities and the generation of new sources of income among local communities. This in turn, it is anticipated, will have a positive impact on communities' health and education status.

4.3 Incorporating 'Lessons Learned' on Safeguards Compliance

20. ***Implementation experience:*** The Mid Term Review (MTR), conducted in May 2015, assessed the social safeguards performance of the original project to be satisfactory with respect to the implementation of the rehabilitation of existing irrigation structures. No activities negatively impacting social conditions have been reported. Social safeguards are also reflected in the IRDP's reporting system on monthly and quarterly basis. However, to further enhance and ensure compliance with safeguard requirements, the following are recommended[8]: (a) more targeted on-the-job training on ESMF requirements for contractors, project technical staff, *Mirabs* (community-based traditional arrangements managing irrigation schemes) in all regions and ensure continued monitoring for ESMF compliance, (b) continued emphasis on consultation with women and other vulnerable groups within communities and the strengthening of the GRM mechanism across all investments, and (c) provide specific training and capacity building to project staff on preparation and implementation of dam safety related works. On the environment safeguards, there are concerns on the quality of consultants to prepare high quality EIAs and relevant ESMPs for the proposed new dams and the need to establish a Panel of Expert to oversee the quality of the ESIA as well as dam safety, and provide viable recommendations that could facilitate a decision making process during the project design including on appropriate trade-off's (if any). Also recommended is environmental safeguard training and capacity building for staff and contractors to ensure that the contractors can perform and comply with the ESMP requirements.

21. These experiences and recommendations have been considered during the update of the ESMF. In addition a review of the ESMPs of the original project, mainly on the irrigation rehabilitation works, suggested that negative impacts are mostly minor with issues and mitigation measures effectively identified through consultations with local communities during the "Transect Walk", women and men's Community Development Council (CDC) meetings, and key informant interviews. The ESMP is prepared as part of the irrigation scheme proposal. Key approaches applied to the revised ESMF are highlighted below:

- ***Clarity of ESMP preparation:*** Technical guidelines and forms to be used for consultation with local agencies and communities during screening and preparation of safeguard documents for irrigation rehabilitation scheme, initial site visits for the riverbank protection, the remedial works, and the construction of new hydromet stations have been updated as (Attachment 1(c)). The ESMP clearly defines the need for (a) incorporating

[8]Recommendations (a) and (b) are already taken place under the original project.

mitigation measures during detailed design, construction, and operations stages and close supervision and monitoring/reporting of contractor performance; (b) consultation and information disclosure of safeguard documents; and (c) incorporation of ECOP into bidding and contract documents and ensuring that the contractors are aware and committed to the compliance with ECOP and the mitigation measures are part of the contract cost.

- ***Application of ECOP:*** To improve effectiveness of the mitigation measures during rehabilitation works, the ESMF provides clarity on safeguard procedures and responsibilities of contractors and project staff/consultants during construction stage through the application of an ECOP approach (see Annex 2). The ECOP incorporates a "chance finds" procedure and recent safeguard policy requiring compliance with the WB group's Environmental Health and Safety Guideline. A generic simplified ECOP is also prepared for mitigation of potential negative impacts due to a very small works such as renovation of small office buildings and/or construction of hydromet/snow station.
- ***Bolstering Citizen Engagement***
    - ***Strengthening GRM:*** More emphasis will be placed on ensuring that all groups within communities are aware of the GRM and how to access it. More training will be given to GRC members so that they can address complaints at the local level more effectively.
    - ***Enhanced stakeholder engagement.*** Priority will continue to be given to outreach to, and consultation with, various stakeholders especially vulnerable groups including women and landless, on all aspects of investment projects. Activities will include: (a) pre-construction consultation with the stakeholders and contractors presenting the content of the ECOP and respective construction plans, (b) in-depth monitoring upon resumption of the irrigation services to confirm fair share of the irrigation water particular among vulnerable households (small holders, women headed families, and landless), and (c) strengthening clarity regarding communication strategy, consultation mechanisms, and dissemination requirements (see more details in Section V). The ESMPs of all investment to be carried out for rehabilitation and remedial works will include a GRM process. The ESMF also includes information on the World Bank Grievance Redress Services (GRS).
- ***Ensure quality of technical assistance:*** The ESMF requires mobilization of two independent panels of experts: one on environment and social safeguards (the Environmental and Social Advisory Panel or ESAP) and one on dam safety (Dam Safety Panel or DSP) and draft TORs have been included as annexes. The ESAP and DSP will further ensure acceptable quality of the studies and implementation of the plans related to Dam Safety and environment and social safeguards issues associated with the dam investments carried out under IRDP-AF.
- ***Safeguard training and capacity building:*** To improve technical and management capacity of project staff both at HQ and regions, specific training will be provided both for social and environmental aspects with a clear budget allocation. Safeguard training and capacity building at project level will be provided through FAO technical assistance services (under Component D) in

addition to the technical advices to component-specific safeguards issues.

V. ESMF OBJECTIVE AND PROCESS

5.1 ESMF Objective, Scope, and Approach

22. Main purpose of the ESMF is to ensure that the investments and activities (technical assistance) to be financed under the IRDP-AF project will not create adverse impacts on the local environment and local communities and the residual and/or unavoidable impacts will be adequately mitigated in line with the WB's safeguard policies. The ESMF prescribes policies, guidelines, procedures, and codes of practice to be considered during the project implementation including a list of attributes that cannot be affected by eligible investments and annexes. All civil works activities to be financed by IRDP-AF will be screened for eligible funding according to Attachment 1 (a), however, different annexes will be applied according to the nature of works (see Table 5.1). Table 5.2 summarizes the ESMF approach and safeguard documents/instruments to be applied by subcomponent of the IRDP-AF. TORs for the technical assistance activities to be carried out under Components B and C will be subject to WB clearance before implementation and this is not included in Figure 5.1

Table 5.1 Applications of ESMF Annexes

Annex #	Content	Application
1 (a)	List of Attributes that Cannot be Affected by Eligible Investments (updated)	All investment schemes
1 (b)	Chance Find Procedures (updated)	All investment schemes
1 (c)	Public Announcement and Local Consultation (updated)	All investment schemes under Components A, B, and C
1 (d)	Project Investments Screening Checklist (updated)	All investment schemes under Components A, B, and C
1 (e)	Environment and Social Management Plan (ESMP) (updated)	All investment schemes under Components A, B, and C
1 (f)	Pest Management Framework (PMF) (new)	All investment related to irrigation rehabilitation works under Component B
2 (a)	Environmental Codes of Practice (ECOP) (new)	All works under Components A, and B
2 (b)	Simplified ECOP (new)	All works under Component C
3	Procedures for Mine Risk Management (original)	All works schemes under Components A, B and C
4	Sample Grievance Registration Form (updated)	All investment schemes under Components A, Band C
5	Organization and Reporting (Project and Investment Levels) (updated)	Whole project
6 (a)	Dam Safety Requirements for the Remedial Works of Existing Dams	Dam safety investments works planned under ComponentB
6 (b)	Dam Safety Requirements for the ESIA Study of New Dams (new)	New dams proposed under Component B
6 (c)	Draft TOR for Dam Safety Panel (DSP) (new)	Dam safety investments works planned under ComponentB
6 (d)	Draft TOR for the Environment and Social	New dams proposed under

	Advisory Panel (ESAP) (new)	Component B
7	Resettlement Policy Framework (RPF) (updated)	All works schemes for the whole project
8	Draft TOR for the Environment and Social Impact Assessment (ESIA) Study for the new dams(new)	The ESIA study under Component B
9	Minutes from Consultations on ESMF and RPF	-
10	Description of Project Area	-

Table 5.2 ESMF Approach for Component activities under IRDP-AF

Components	Activities to be financed by IRDP-AF	Safeguards Documents/ Instruments	Timing for Preparation and Implementation of Safeguards Documents	Reference Annexes
Overall Project level	Components A-D	ESMF	ESMF including TORs for ESAP, DSP, ESIAs, RAPs prepared during preparation of the AF project.	All TORs in ESMF Annexes
Component A **Rehabilitation of Irrigation Systems and River Bank Protection**	(b) rehabilitation of existing irrigation schemes	ESMP including ECOP and Pest Management application	Site-specific ESMPs (including final ECOP and Pest Management activities) will be prepared during implementation. Preparation of the respective ESMPs satisfactory to the Bank is required for the commencement of the investments.	Attachment 1 (a), (b), (c), (d), (e), and (f) + Attachment 2 (a) ,+ Annex 3, 4, 5, and 7
	(c) River bank protection works in critical areas	ESMP including ECOP	Site-specific ESMPs (including final ECOP) will be prepared during implementation. Preparation of the respective ESMPs satisfactory to the Bank is required for the commencement of the investments.	Same as (a) above but exclude Attachment 1 (f)
Component B – Support for Dam Development, Operation, and Maintenance	(a) Preparation of safeguards documents and detailed designs for priority new dams	ESIAs, RAPs, Dam Safety Plans (Construction Supervision and Quality Assurance Plan, Instrumentation Plan, Operations and Maintenance Plan and Emergency Preparedness Plan)	TORs for ESIAs, RAPs, and Dam Safety Plans and TORs for ESAP and DSP have been prepared are in Annexes of the ESMF. The actual plans themselves, i.e. ESIAs, RAPs, and Dam Safety	Annexes 6 and 8

		will be prepared	Plans will be prepared during implementation of the project once the particular dams have been identified. Preparation of the respective ESMPs satisfactory to the Bank is required for the commencement of the investments.	
	(b) Minor safety works for a few dams to be identified	ESMP including ECOP application and dam safety requirements for existing dam	Site-specific ESMPs will be prepared during the project implementation. Preparation of the respective ESMPs satisfactory to the Bank is required for the commencement of the investments.	Attachment 1 (a), (b), (c), (d), and (e) +Annexes 3, 4, 5, 6 (a), and 7
	(c) Technical assistance for development of guidelines on safety of dams, training, and capacity building for a Dam Unit	The guideline will be prepared consistent with OP/BP4.37, while no works involved.	The TOR for dam safety guideline will be prepared during project implementation.	Annexes 4, and 5
Component C - Improvement of Hydrological Services and WRM	Rehabilitation of existing and new hydromet stations	Simplified ECOP if very small works (e.g., construction of measurement stations) is required	The site-specific ECOP will be prepared during the project implementation.	Attachment 2 (b) +Annexes 4, 5, and 7
	Support for Developing Legal and Institutional Framework for WRM and Strengthening River Basin Planning	Not applicable as no civil works involved. However, strategic environmental and social assessment (SESA) would be carried out as part of the river basin management plan.	TORs for the SESA will be developed during project implementation.	Not applicable
Component D - Project Management and Capacity Building	(a) Establish five regional MEW office	Simplified ECOP if very small works is required	The generic simplified ECOP prepared and to be finalized and implemented during the project	Attachment 2(b)
	(b) Office equipment and vehicles	None	None	None
	(c) Incremental operating cost	None	None	None
	(d) FAO technical assistance	None	None	None

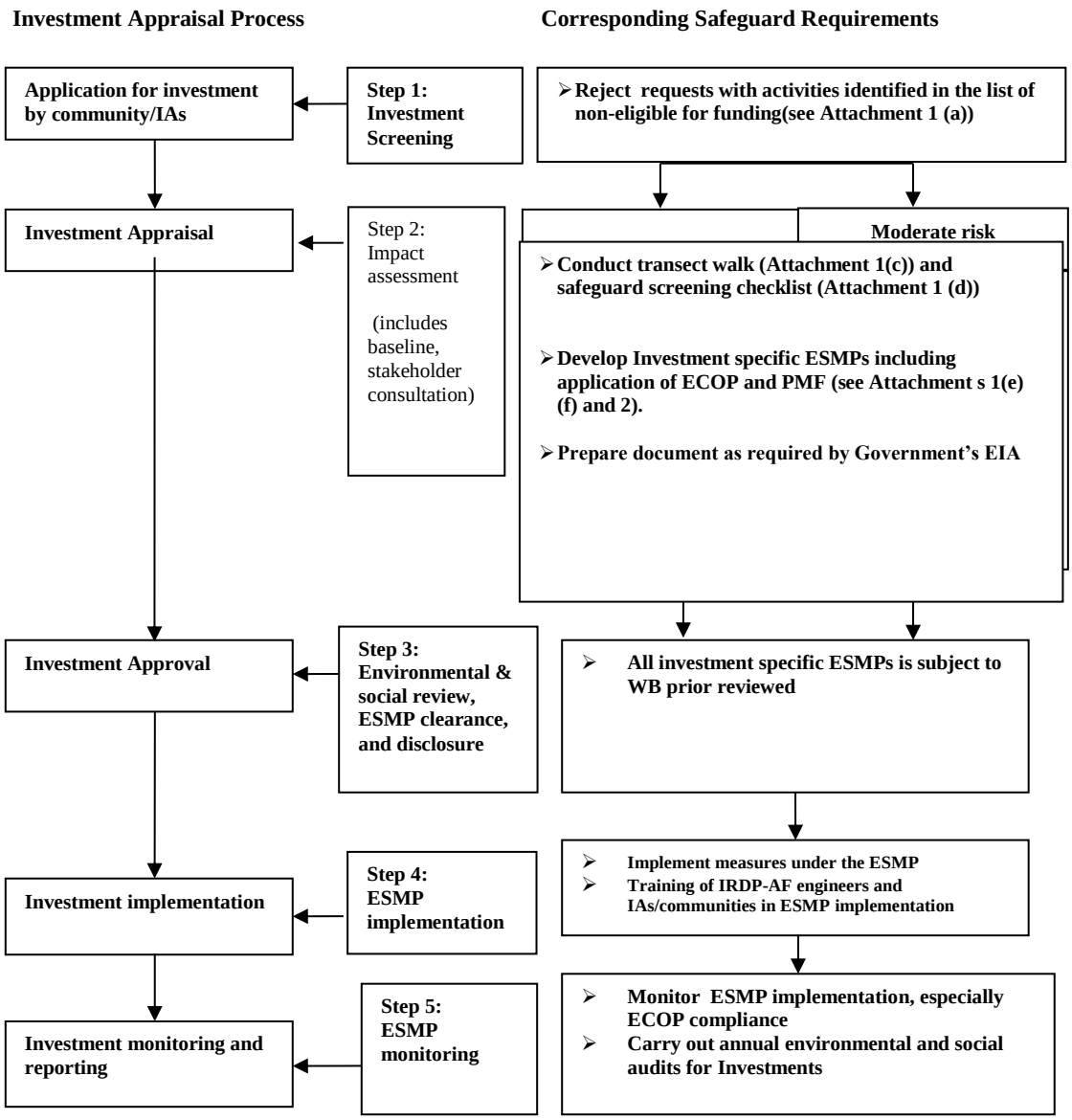
5.2 ESMF Screening and WB Clearance for Investment Schemes

23. Figure 5.1 below schematically summarises the ESMF process and key steps/requirements for WB clearance to be applied to all irrigation schemes to be conducted under Component A of the IRDP-AF[9].

24. For other schemes such as the river bank protection to be implemented under Components A and the small safety works to be implemented under Component B, preparation of the ESMP and/or RAPs will follow the five steps set out in the figure including undertaking initial consultation during the safeguard screening. Given that the small works under Component C is limited to very small construction of hydromet/snow stations, the ESMP could apply the simplified ECOP. Compliance of these investment schemes with the government's EIA regulation and actions to ensure safety and risks due to landmines will also be required.

[9] The process is similar to the ESMF to be used by MAIL under the On-farm Water Management Project additional financing (OFWMP-AF) for the irrigation scheme cost more than $200,000 (B1 type)

Figure5.1: Schematic Diagram of the Environmental and Social Screening & Assessment Procedure for Irrigation Rehabilitation Schemes



5.3 Safeguard Information Disclosure

25. All safeguard documents, including main text and annexes, have been translated into Dari and Pashto and have been publicly disclosed on the project website, in the Kabul project office as well as in the regional project offices.

5.4 Stakeholder Consultations

26. Wide-ranging consultations are essential at all stages of the proposed investments from appraisal to evaluation. Consultations leading to increased participation help: (i) ensure that people, including vulnerable groups such as women, especially female-headed households, and landless, are made aware of a subproject and have the opportunity to comment on it (ii) improve responsiveness, accountability and transparency on the part of project management (iii) promote better decision-making and (iv) increase cooperation between communities and government partners during project design and implementation and (v) build local ownership of sub projects. Initial meetings with stakeholders provide a forum

not just for dissemination of information about the sub project and its potential impacts, but also constitute an important opportunity to hear people's concerns and take on board their recommendations to the extent possible in project design. These meetings also will lay the foundations for systematic consultation and participation of the community in all subsequent stages of an investment scheme's development.

27. The ESMF was consulted in the project regions as follows: (a) Mazar on December 27, 2015, (b) Jalalabad on December 30, 2015, (c) Kandahar on January 3, 2016, (d) Herat on January 7, 2016, and (e) Kabul on January 9, 2016 to confirm broad support for the proposed additional financing project of the target communities and deepen the understanding on the environmental and social safeguards procedures, including the GRM. Outcome of the consultation has been incorporated into the final version of the revised ESMF, and the minutes of these consultations are attached as Annex 9. During implementation of IRDP-AF, stakeholder consultations will be made during the identification of the proposed investment especailly during the preparation of an environmental and social impact assessment and the corresponding ESMP and/or RAP. The ECOPs also require periodic consultation with local communities during construction phase.

28. Broad principles for consultation are outlined below:

- Stakeholders fall into two categories: (i) Direct stakeholders who will be directly affected by an investment scheme (i.e. different groups within communities including upstream and downstream water users) given due attention to identify vulnerable and marginalized groups within communities and (ii) Indirect stakeholders who have an interest in the project, or who could influence its outcome, e.g. national and local government agencies, donors and NGOs.
- Following stakeholder identification, participatory methods such as focus group discussions, semi-structured interviews, key informant interviews will be used by regional safeguards staff and other project staff to conduct meetings with representatives from each group - both to inform the development of safeguards instruments and to consult stakeholders through the lifetime of the project. Meetings, including the Transect Walk, will be arranged at times to ensure the maximum participation of stakeholders.
- Separate meetings will be held with women and the PCU management will ensure that either female regional safeguard staff or a woman is recruited to enable outreach and effective consultation with women. The prevailing security context is likely to determine the location of most meetings. All meetings with stakeholders must be properly documented and filed for easy retrieval.
- Consultation with indirect stakeholders will be conducted in parallel to those with communities. These will include meetings with representatives from relevant government departments/programs and agencies including District Governors, NEPA, and representatives from other related projects and/or NGOs working in the target areas to enhance consistency and potential positive impacts of IRDP-AF project.

29. A particular set of public and stakeholder consultations will apply to potential dam investments in which land acquisition and resettlement of people is unavoidable. This consultation process with affected persons (APs), which will mostly take place as part of the

development and implementation of RAPs, will include the disclosure of the resettlement policy framework through various local-level meetings and distribution of information materials in Dari and Pashto aimed at creating awareness among APs regarding their entitlements, compensation payment procedures and grievances redress mechanisms. This process will also ensure that anyone voluntarily donating land is made fully aware of his or her right to receive compensation for any land which he or she is losing to a project and the specific waiving of that right is properly documented.

30. Meetings will also be held with provincial and local officials to ensure that they are informed and regularly updated on the development and implementation of Resettlement Action Plan (RAPs). The PCU will coordinate with the Afghan Independent Land Authority (ARAZI), responsible for land administration and Management, land valuation committees, district governors, who have jurisdiction over the project areas, and village leaders. Information about the entitlement provisions and compensation packages will be shared with these government officials and other stakeholders.

VI. ESMF IMPLEMENTATION ARRANGEMENTS

6.1 Institutional Responsibilities

31. MEW through the Program Coordination Unit (PCU) in Kabul and the six regional offices will be responsible to ensure effective implementation of the ESMF. The PCU and the project regional offices will continue to assign environment and social safeguard staff for IRDP-AF project, including regional female social inclusion and gender assistants to facilitate the involvement of women in project activities, to be responsible for preparation, implementation, supervision, and monitoring of safeguard activities. The FAO technical assistance team will support the project's safeguards staff to develop, and monitor implementation of ESMPs and ensure compliance with overall ESMF requirements. An independent third party monitoring team reporting directly to the Deputy Minister MEW would be hired to monitor and report on compliance. A partnership would be formed with an NGO to work with the PCU on the implementation and monitoring of Resettlement Action Plan (RAP), if required.

32. Main responsibilities of key agencies/entities are as follow:

- The Director of the PCU will have overall responsibility for ensuring compliance with safeguards requirements as set out in Section V of this ESMF. The Director of PCU will liaise with the head of the regional offices of MEW and other agencies (especially NEPA) to ensure that mechanisms are put in place within MEW at national and regional level to foster knowledge sharing across the organization on: (i) the benefits of including environmental and social safeguards in planning and implementing projects and (ii) the content and requirements of the IRDP-AF ESMF. Consultant organizations and/or NGOs hired to conduct project studies and surveys, including the ESIAs will be required to include women as members of their consultancy teams in order to ensure women's involvement in the various assessments at community level.
- A national safeguards team was established in the PCU Kabul in 2012. The national safeguards team in Kabul includes a national safeguards officer, an environment officer, and a national FAO Social Development and gender officer. Under the IRDP-AF project

the composition of the safeguards team will be expanded to include a communications officer. This team will support the regional safeguards staff during the investment screening, stakeholder consultations and preparation and monitoring the implementation of ESMPs. The national safeguards team will also continue to have specific responsibility for providing guidance on the safeguard issues and preparation of ESMPs including monitoring and reporting on and the implementation of the ESMF provisions during preparation, implementation, monitoring and evaluation of all components of the IRDP-AF project. The safeguards team will continue to be responsible for coordinating the training of local government officials and local communities on environmental and social safeguards and related environment and social issues. They will liaise closely with their counterparts in other related government projects. The team will coordinate with NEPA at national and regional levels on the implementation of environmental laws, policies and regulations and will work closely with the World Bank safeguards specialists to ensure compliance with World Bank safeguard policies.

- ***At regional offices,*** At least two safeguards staff (environmental and social inclusion/gender) will continue to be located within each of the regional project offices. These staff, with support from national safeguards team at PCU will have specific responsibility for stakeholder consultations during the safeguard screening and impact assessment. They will also be responsible for preparation of site specific ESMPs and for regular monitoring of implementation of mitigation measures included in the ESMPs These regional staff will receive training to enable them to carry out their responsibilities to an acceptable standard.

6.2 Safeguard Training and Capacity Building

33. *Training for project staff:* The overall objective is to build and strengthen the institutional capacity of MEW to better support the preparation, implementation, supervision, monitoring, and reporting of safeguard performance with respect to the ESMF implementation and other related technical assistance activities. Under the original project safeguard training has been provided to key staff, contractors, WUAs/community and training manuals have been developed. Under IRDP-AF the training manuals will be updated in line with the ESMF requirements for the project. Safeguard training will be continued on preparation, implementation and supervision of ESMPs. Additional training to improve understanding and enhance knowledge of key issues related to dam safety guidelines and ECOPs will be introduced (see Table 6.1). In close consultation with PCU, the FAO technical team will assist in the preparation of the safeguard capacity building activities of the IRDP-AF project. Involvement of other key project staff and NEPA in the process of safeguard training and capacity building will be strengthened throughout the project implementation process.

Table 6.1 Key trainings for PCU safeguards team and other project staff

Selected Environmental and Social Topics		Key elements
1	Conducting consultations with and providing feedback to local communities and other	Identifying all stakeholder groups (including vulnerable groups), outreach to different groups especially women, developing relevant communication strategy to meet the specific needs of each group.

	stakeholder groups	
2.	Conducting a Transect Walk (for irrigation and river bank erosion)	Purpose of Transect Walk. Types of issues to be raised including Pest Management.
3	Development and Implementation of site-specific Environmental and Social Management Plans (ESMPs)	Consultation with/ feedback to local communities on potential problems and their impacts, identification of appropriate mitigation measures.
4	Monitoring and Evaluation	Identification of relevant social and environmental indicators. Monitoring responsibilities. Preparing monitoring reports
5	Grievance Redress Mechanism	Ensuring communities are aware of mechanism structure and means of accessing it, making and recording of complaints, providing feedback on complaints resolution
6	Policy and Regulatory Environment	Relevant Afghan laws and regulations and World Bank safeguard policies and their application to the Project. The role of NEPA in ensuring safeguards compliance

34. *Training for local authority/community:* Project safeguard staff will work through local Commune Development Councils (CDCs) and other relevant forums to organize practical training to build the knowledge and awareness of local authorities and local communities, including women and pastoral groups, on social and environmental issues related to proposed project activities. Training will also be provided to build the skills of local people to participate actively in identifying appropriate mitigation measures to avoid or reduce potential negative impacts of project activities. Training at the community level will include awareness of the financial, material and technical resources available to the community to enable them to effectively manage their own water resources. It will also include training on basic technical concepts as well as principles of fair and equitable social organization.

6.3 Monitoring and Evaluation (M&E)

35. To ensure effective implementation of the ESMF requirements, MEW will integrate the M&E of safeguards implementation into the project's M&E system. The MEW will assign its M&E unit to be responsible for monitoring compliance with the ESMF. The M&E unit will liaise closely with the PCU and national safeguards team to obtain periodical information on ESMP implementation and overall ESMF compliance.

36. *Internal monitoring and reporting* will be carried out both at national (Kabul) level and regional level. At national level, the safeguard team,supported by the FAO team will be responsible for preparation of a quarterly progress report to be submitted to the PCU director as well as a 6 month safeguard monitoring report for submission to WB. *Monthly monitoring/reporting:* At the regional level, the project safeguards team will continue to be responsible for monitoring the implementation of mitigation measures as set out in ESMPs including actions undertaken to address environment and social safeguard issues. Together with regional technical staff they will be responsible for monitoring and report on contractors' adherence to the ECOP. Relevant practical indicators to enable effective monitoring will be identified by safeguards staff in close liaison with community representatives during consultations on possible impacts of Project activities and the preparation of ESMPs. Monitoring information together with other information collected from various stakeholders

(e.g. representatives of men and women's CDCs, farmers, shopkeepers, local government officials in project districts, local NGOs and contractors) together with observations of project activities will be reported monthly to the safeguards unit in thermions Kabul using standard reporting forms (see Annex 5).

- Monthly monitoring reports from regional safeguards staff will include:

- List of consultations held, including locations and dates, name of participants and occupations
- Main points arising from consultations including any agreements reached
- A record of grievance applications and grievance redress dealt with
- Monitoring data on environmental and social measures detailed in ESMPs/
- Number of construction supervision reports that include assessment of contractor's compliance with safeguards in accordance with ECOP
- Number of trainings of community groups in environmental and social issues

- *Safeguard quarterly reports:* National safeguards staff will prepare a consolidated safeguard monitoring reports from the project regions for the PCU management and MEW's M & E unit every quarter which in addition to the content of the monthly report will include:

- Number of national, regional and provincial staff and counterparts trained on ESMF compliance
- Number of ESMPs/ prepared and number of ESMPs cleared by WB.
- Number of technical audit recommendations that have been implemented.

- These reports will be filed to permit easy retrieval and key indicators will be incorporated into the project's M&E system.

(b) External Monitoring

37. External assessment of compliance with mitigation measures will be carried out on a regular basis by an external monitoring agency (EMA) to be appointed by the MEW in close liaison with the WB. The EMA will *inter alia,* assess whether (i) the ESMF process is being correctly adhered to (ii) relevant mitigation measures have been identified and implemented effectively and (iii) the extent to which all stakeholder groups are involved in sub project implementation. The audit will also indicate whether any amendments are required in the ESMF approach to improve its effectiveness and ensure that the investment-specific ESMPs (and RAPs if required) are developed/cleared and effectively implemented.

6.4 Grievance Redress Mechanism (GRM)

38. In order to ensure transparency and accountability that appropriate actions will be carried out by PCU to mitigate potential negative impacts during the ESMF implementation process, the GRM of the original project will be strengthened with increased priority given to raising awareness of the mechanism and training of GRC members and it will be applied to all proposed investment schemes to be carried out under Components A and B of the IRDP-AF. The basic principles and process are set out below: (see *Figure 6.1).*

- Where an individual has a grievance with regard to a specific investment activities she or he should, in the first instance, be encouraged to make use of existing local-level

structures (e.g. CDCs and village leaders) to try to resolve quickly any concerns or grievances related to project development and implementation.

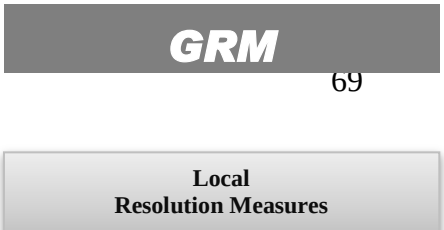
- If intermediation at local level is unsuccessful, the individual or Affected Person (AP) can take his or her complaint to a formal Grievance Redress Committee (GRC) which will record the grievance and try and resolve issues relating specifically to the implementation of the investment projects. A GRC will consist of the Affected Person (AP), the provincial irrigation department manager, regional Environment and Social Safeguards staff, a representative from local government, a representative from the AP's community CDC, which may be a representative from a women's CDC and the contractor(s).
- The AP (or his/her representative) may submit his/her complaint in a number of ways e.g. by written letter, phone, SMS messages and email to the GRC or, alternatively, raise his/her voice in a public or individual meeting with project staff. The GRC will meet to try and resolve the matter at community level and make a recommendation within 7-10 working days from receipt of complaint. If there is no decision after 10 days the AP can refer the complaint to the PCU Director within MEW in Kabul who will then address the complaint and respond to the complainant within 20 days.

39. The GRM procedures to be followed for all investment projects will be translated into Pashto and Dari so that they are easily accessible to all stakeholders and made available by the PCU. Information on the steps to be followed in handling grievances will be incorporated into the process of providing local communities with information about proposed investment projects.

- All submitted complaints and grievances will be added to a database/project files that will be updated regularly. Each complaint and grievance should be ranked, analyzed and monitored according to type, accessibility and degree of priority. The status of grievances submitted and grievance redress will be reported to PCU management through the monthly report.
- Project safeguard staff should include regular updates and analysis of the GRM in their quarterly reports to the PCU and also provides regular feedback to communities and other relevant stakeholders.
- The safeguards team will have an important role in ensuring that communities directly affected by the project have a full understanding of the GRM, ways to access it and (i) the concept of just compensation for any involuntary acquisition of land and/or assets and (ii) ensuring environmental and social mitigation measures in the ESMP's are implemented as planned.

40. *Recording and processing of grievances:* All submitted complaints and grievances will be entered into a database/project files that will be updated regularly. Each complaint and grievance should be ranked, analysed and monitored according to type, accessibility and degree of priority. The status of grievances submitted and grievance redress will be reported by regional safeguards staff to the PCU management through monthly reports.

Figure 6.1: GRM process for IRDP-AF Project



41. ***WB' s Grevance Redress Services (GRS):*** Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanism or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to adddress project-related concerns. Project affected communities and individuals may submit their complaints to the WB's independent Inspection Panel which determines whether harms occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at anytime after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspecition Panel, please visit www.inspectionpanel.org.

6.5 Public Information and Communication

42. The current project emphasises the importance of access to information and communication through (i) consultations with a range of stakeholders on the ESMF and the development of site-specific ESMPs and (ii) liaison with government officials and other development actors on social development, gender and environmental issues at both national and regional levels. A more systematic communications strategy, and plan including a public awareness campaign to inform local communities of their legal entitlements, rights, and responsibilities in respect of water resources management and increase the project's

effectiveness, will be developed under the IRDP AF. The communication officer within the PCU's national safeguards team will take a leading role in implementing the communications plan.

43. In order to ensure that affected communities are made aware of changes and have the opportunity to comment on it and to reduce possible misinformation about proposed activities, it is vital that a communication strategy is put in place early in the project's implementation. Key objectives of the communication strategy are to:

- Provide relevant and up-to-date information to affected communities about the project through appropriate communication channels;
- Facilitate a meaningful two way exchange of information with different groups of stakeholders throughout the lifetime of the project;
- Build trust between project staff and communities and promoting collaboration among all stakeholders; and
- Facilitate collaborative relationships with local and national government departments other development agencies.

44. The strategy includes communication through relevant media: The PCU's national and regional safeguard staff will assess community and other stakeholder's access to, and use of, broadcast and print media and explore how the most appropriate outlets might be used to raise awareness of the project. Key activities may include, but not limited to,:

- Preparation and translation into local languages of relevant and clear information on procedures related to land transactions;
- Distribution of easily understood information to all affected communities;
- Communication through locally relevant channels. Safeguards Officers will identify trusted ways in which different groups within communities, particularly poor and vulnerable groups, receive and communicate information (e.g. Village meetings, mosque, irrigation associations, women CDC, markets etc.) and will make use of these channels to convey and receive information, consult and hold dialogues with the different groups through the life of the project;

- Liaison with relevant regional government departments and other agencies: Regional safeguards staff will meet regularly with government staff in key regional departments such as the Water Management Department, NEPA, DRRD, Department of Health, and Agricultural Extension Services; and
- Safeguards staff participation in various regional forums. Safeguards staff will, where possible, participate in regional NGO meetings to inform local NGOs about the work and explore possible areas of synergy with the NHRP for community level work.

6.6 Indicative Budget for Environmental and Social Safeguards Compliance

45. Table 6.1 presents an indicative budget to ensure effective implementation of ESMF. Detailed activities would be specified in the investment-specific ESMPs and RAPs, and all the social safeguards related costs will be financed by the project.

Table 6.1 Summary of Budget related to implementation of the ESMF

No.	Activities	Cost US$
	(a) Supervision, monitoring, training	
1	External Monitoring Agency	400,000
2	Translation of ESMF into Dari and Pashto	10,000
3	Modification of safeguard training manuals and translation into Dari and Pashto (as needed)	25,000
4	Preparation and Publication of Communications materials in Dari and Pashto	20,000
5	National/regional training for IRDP-AF safeguards staff on safeguards compliance and social inclusion	50,000
6	Training for community and local government representatives on ESMF and other environmental and social issues (gender and social inclusion included).	50,000
7	Training of farmers and local government staff in pesticide use (via transect walk)	50,000
	Subtotal (a)	***605,000***
	(b) Specific training on environmental and social issues (details to be identified during implementation)	
1	Workshops and on-the-job training on supervision of contractors for rehabilitation of irrigation scheme and river bank protection	$40,000
2	Workshops and on-the-job training on supervision of construction of new dams (case studies)	$40,000
3	Workshops and on-the-job training on dam safety guidelines (new dams and existing dams)	$25,000
4	Workshops and training of safe use of pesticides and agro-chemicals	$30,000
5	Workshops and training social safeguards related to land acquisition and RAPs for irrigation projects (RAPs, etc.)	$30,000
6	Workshops and training social safeguards related to land acquisition and social issues related to dams construction and operations	$30,000
7	Workshops and training to raise awareness and understanding of key MEW staff on ESMF producers and safeguard issues (environment and social) at national, regional, and/or local levels	$100,000
	Subtotal (b)	***$ 295,000***
	Total (a) and (b)	***$900,000***
	(c) The Panel members (DSP and ESAP)	
1	12 man months of international DSP member ($25,000/mm including missions)	300,000
2	4 man months of national DSP member ($8,000/mm including missions)	32,000
3	6manmonths of international ESAP member (environment, $25,000/mm including missions)	150,000
4	6manmonths of international ESAP member (social) ($25,000/mm including missions)	150,000
5	6 man month of national ESAP member (environment) ($8,000/mm including missions)	48,000
6	6 man months of national ESAP member (social) ($6,000/mm including missions)	48,000
	Subtotal (c)	***728,000***
	Total (a)+(b)+(c)	***$1,628,000***

VII. ESMF Consultation and Information Disclosure

46. The ESMF was consulted in the project regions as follows: (a) Mazar on December 27, 2015, (b) Jalalabad on December 30, 2015, (c) Kandahar on January 3, 2016, (d) Herat on January 7, 2016, and (e) Kabul on January 9, 2016 to confirm broad support for the proposed additional financing project of the target communities and deepen the understanding on the environmental and social safeguards procedures, including the GRM. Outcome of the consultation has been incorporated into the final version of the revised ESMF, and the minutes of these consultation are attached as Annex 9A total of 374 people participated in the five meetings and every effort was made to encourage participation of women. Officials from river basin agencies were actively involved in the planning of the consultations and a senior official from the respective regional river basin agency chaired each of the consultation events. Important points to emerge from the consultations included the need (a) to strengthen the capacity of RBAs and MEW, (b) to strengthen groundwater management and environmental protection,(c) for greater liaison with NEPA at regional level and (d) for better sharing of information/coordination between line agencies.

47. This ESMF was developed by MEW with assistance from international consultant and in consultation with the WB safeguard specialists. After review and approval by the World Bank, it will be disclosed by MEW in Afghanistan in both *Dari* and *Pashto* in relevant places in the country on xx while the English version of the ESMF will be sent to World Bank for disclosure in the WB's InfoShop (xx).

Annexes to the ESMF

Annex 1: Screening and Checklist for Investment Schemes

This Annex 1 comprises 6 Attachment 1 (a-f) and they will be applied to ***all civil works investment schemes*** to be implemented under Component A, B (B-2), and C (C-1) of IRDP-AF[10]. Attachment (a) provides a list of attributes that cannot be impacted or otherwise affected by activities that are eligible for IRDP-AF financing. Attachments 1(b), (c), (d) and (e) provide the screening forms and guidelines for preparation of an ESMP to be conducted by the project safeguard staff to ensure these attributes are not affected and all applicable safeguards polices are complied with. Attachment 1(f) provides a policy framework on pest management training activities to be carried out for all schemes related to irrigation rehabilitation.

[10] Please note that requirements/documents for the preparation activities for the new dams under Subcomponent B (a) are covered in Annex 6.

Attachment 1 (a): List of Attributes that cannot be affected by eligible Investments

#	List of Attributes that cannot be affected by eligible Project investments
1	Eligible project investments/activities cannot damage or otherwise affect/impact cultural property, including but not limited to, the following sites: – Monuments of Herat (including the Friday Mosque, ceramic tile workshop, Musallah complex, Fifth Minaret, Gawhar Shah mausoleum, mausoleum of Ali SherNavaii, and the Shah Zadehah mausoleum complex); – Monuments of Bamiyan Valley (including Fuladi, Kakrak, Shar-I Ghulghular and Shahr-iZuhak); – Archaeological site of Ai Khanum; – Site and monuments of Ghazni; – Minaret of Jam; – Mosque of Haji Piyada/Nu Gunbad, Balkh province; – Stupa and monastry of Guldarra; – Site and monuments of Lashkar-i Bazar, Bost; and – Archaeological site of SurkhKotal. – Other conservation hot spots
2	Investments/activities that require pesticides that fall in WHO classes IA, IB, or II.
3.	Investments/activities that impact or otherwise affect land is under dispute
4.	(a) Works that leads to the increase in the originally designed water abstraction amount, or (b) construction of new irrigation schemes.

Attachment 1 (b): Chance Find Procedures

1. Chance find procedures are defined in the law on Law on the Preservation of Afghanistan's Historical and Cultural Heritages and Artifacts (Official Gazette, April 16, 2004), specifying the authorities and responsibilities of cultural heritage agencies if sites or materials are discovered in the course of project implementation. This law establishes that all moveable and immovable historical and cultural artifacts are state property, and further:

2. The Archaeology Institute and the Historical Artifacts Preservation and Repair Department are both responsible to survey, evaluate, determine and record all cultural and historical sites and collect and organize all historical documents related to each specific site. No one can build or perform construction on the recorded historical and cultural site unless approved or granted permission or agreement is issued from the Archaeology Institute. (Art. 7)

3. All moveable and Immovable historical and cultural artifacts and heritage items that are discovered or remain buried and not discovered/excavated in Afghanistan are the property of the Islamic Republic of Afghanistan and any kind of trafficking of such items is considered theft and is illegal.(Art. 8)

4. Whenever municipalities, construction, irrigation or other companies (whether they are governmental or private) find or discover valuable historical and cultural artifacts during the conduct of their projects, they are responsible to stop their project and report any findings to the Archaeology Institute about the discovery. (Art. 10)

5. Any finder or discoverer of historical and cultural sites is obligated to report a find or discovery to the Archeology Institute immediately but not later than one week if it is in the city and not later than 2 weeks if it is in a province. All discovered artifacts are considered public properties and the Government of Afghanistan will pay for all lands and sites which are considered to be of historical or cultural value. (Art. 19, 1)

6. Whenever there is an immovable historical and cultural site discovered which includes some movable historical and cultural artifacts, all such movable artifacts are considered public property and the owner of that property will be rewarded according to Article thirteen (13) of this Decree.(Art. 19, 2).

7. A person who finds or discovers a movable historical and cultural artifact is obligated to report the discovery to the Archaeology Department no later than seven (7) days if he/she lives in the capital city of Kabul, and in the provinces they should report the discovery to the Historical and Cultural Artifacts Preservation Department or Information and Culture Department or to the nearest governmental Department no later than fourteen (14) days.

8. Mentioned Departments in this article are responsible to report the issue to the Archaeology Department as soon as possible and the discoverer of the artifact will be rewarded according to Article 13 of this Decree. (Art. 26)

9. Whenever individuals who discover historical and cultural artifacts do not report such discoveries to the related Departments within the specified period according to Articles 19 and 26 of this Decree, they will be incarcerated for a minimum of one (1) month but not more than a maximum of three (3) months. (Art. 75)

10. The above procedures must be referred to as standard provisions in construction contracts, when applicable. During project supervision, the Site Engineer shall monitor that the above regulations relating to the treatment of any chance find encountered are observed.

Attachment 1 (c): Public Announcements and Local Consultation

1. Public announcement and information disclosure of a project investment including its potential impacts (positive and negative) and proposed measures to mitigate the potential negative impacts is good international practice and it is mandatory required by the WB safeguard policy. This attachment provides guidelines on public announcement and consultation with local agencies, communities, and/or NGOs regarding the preparation and implementation of the proposed investments to be carried out with IRDP-AF support. Given different nature of potential impacts of specific investments to be carried out under IRDP-AF, the guidelines are divided into 2 parts:

- ***(Part 1) Public Announcement and the "Transect Walk"***[11]*which will be applied to all investments related to irrigation schemes to be implemented under Component A;*
- ***(Part 2) Public Announcement and Initial Consultation*** *to be applied to all investments related to other works to be implemented under Components A, B (B-2), and C (C-1).*

2. The project safeguard staff (PSS) will be responsible for implementation of this attachment as part of the ESMF of the IRDP-AF. Objectives and expected outputs/forms are provided below.

(Part 1) Public Announcement and the "Transect Walk"

3. This guideline will be applied to *all investments related to irrigation schemes* to be implemented under IRDP-AF (Component A). It provides guidelines on public announcement and information dissemination during the "Transect Walk" including forms and specific requirements[12]and the need for sharing information and knowledge on safe use of pesticides and Government regulations on pest management. Results from the "Transect Walk", together with findings from other consultative forums and techniques such as women's CDC meetings, Village Women Organisers' outreach to women outside the formal CDC meeting, key informant interviews etc. will be used for preparation of site- specific ESMPs for proposed investments including an alignment details showing locations of negative impacts and mitigation measures to be carried out during implementation of the irrigation scheme. *The forms will be filled by PSS.*

4. Under the IRDP-AF, the activities will be implemented before and after the "Transect Walk" to provide and collect information necessary for ensuring effective planning and implementation of the proposed investments. The activities will be designed to complete the following 3 forms:

- *(Form A) Public Announcement –to be conducted prior to undertaking a Transect Walk,*
- *(Form B): Alignment Details for Disclosure –to be prepared and disclosed prior to finalization of the alignment and undertaking of the Transect Walk, and*

[11] The *Transect Walk"* through the proposed target area with different stakeholders is important during the identification of safeguard issues and preparation of a site specific ESMP and/or RAP while the preparation of an alignment sheet which is being used under the original project can facilitate effective monitoring of ESMP implementation.

[12] The requirements are basically similar to that described in the attachment 2(a) "public announcement, 2(b) alignment details for disclosure, and 2(c) outputs of transect walk of the original project.

- *(Form C): Outputs of the Transect Walk –to be prepared after finalization of the alignment and completion of the Transect Walk.*

5. Ground rules to be followed are: The Community Development Council (CDC), representative of government relevant department, project safeguard staff, representative from IA/WUA, local religious scholar, site engineer, and likely owner(s) or their legal representative(s) should participate in the *"Transect Walk"* but each project affected family (PAF) should be consulted individually and separately before written agreement in CDC meeting.

(Form A): Public Announcement (Prior to the Transect Walk)

Province: …….. Project ID:……
District/Village: ……

- What is the Project and its salient features: …….
- Benefits: ……
- Which Agencies are involved: ……..
- What if resentment from community: ……
- Need for additional land: ……
- Likely Impacts and Entitlements: ……..
- Date of the Transect Walk: ……
- Alignment Details along with map of alignment displayed: ……..
- Whom to be invited (upstream & downstream community, IA/WUAs, Mirab, Sub Mirab, ...): ……..

Responsible Agency/Person: PMO Regional Office Team Leader
Contact number, address:

(Form B): Alignment Details for Disclosure (Prior to finalization of the alignment/transect walk)

Province: …….. Project ID:……
District/Village: ……

Name of project investment alignment: …….
Total Length (km): ……
Connected Settlements: ……

- Starting Node/km: **.....**
- Ending Node/km: **.....**

Population Benefited Total: ……
Implementing Agency: …….
Name of Contact Person and Address: …….

Project alignment marked on schematic diagram with socio-environmental features

Socio-environmental Features	Schematic diagram

(Form C): Outputs of Transect Walk (After finalization of the alignment/Transect Walk)

Province: …….. Project ID:……
District/Village: ……
Participants: **.....**

- Identification of Environmental & Social sensitive location: ……..
- Likely location for additional land requirement: ……..
- Issues identified: ……..
- PAFs Identified: …….
- Suggestions from community, including safeguard training needs and the promotion of local environmental quality: …….

Modifications (if any) to minimize land width accretion and incorporating community suggestions through alterations/modifications on alignment
……
……
……
……
……

Responsible Agency/Person: Project safeguard staff, IAs/WUAs/CDC (Chairman and other members), Government officer, if any.

6. ***Application of PMF***. Providing water to farmers for agriculture could increase the use of fertilizers and pesticides may cause serious impacts on safety and health of local people and animal and damage local environment and the WB policy on pest management (OP/BP4.37) is triggered and a Pest Management Framework (PMF) has been prepared for the IRDP-AF(see Attachment 1 (f)). The PMF calls for improving knowledge of farmers and local staff on pest management regulations and good integrated pest management (IPM) practices, especially on sharing and/or training of information and knowledge on the safe use, storage, and disposal of pesticides that are normally used in the target area. During the "Transect Walk" and consultation with local community, the project safeguard staff will also discuss these issues and identify priority need for implementation of the PMF and included them in the ESMP of the proposed investment. At a minimum, sharing of information and basic training on the safe use, storage, and disposal of pesticides and chemical fertilizers should be included as part of the ESMP. Basic information should be collected from responsible agencies of the Ministry of Agriculture, Irrigation, and Livestock (MAIL) as well as other WB support projects. It is expected that promulgation of the pest management law and regulations will be completed with support from the Afghanistan Agriculture and Inputs Project (AAIP) of MAIL while some training materials should be available from the On-Farm Water Management Project Additional Financing (OFWMP-AF) of MAIL as well.

(Part 2) Public Announcement and Initial Consultation

7. Public announcement and initial consultation with local agencies, communities, and NGOs, are considered important for ensuring acknowledgement and acceptability of local agencies and local population. This is important for obtaining the expected benefits of the proposed investment including safety of equipment and/or facilities. Under the IRDP-AF, this guideline will be applied to ***all non-irrigation schemes*** to be implemented under IRDP-AF including those related to rehabilitation of river bank protection(Component A), construction of remedial works (Component B (B-2), and hydromet stations (Component C (C-1)). The activities will be designed to disseminate and collect necessary information for preparation of ESMPs including finalization of ECOP.

8. Forms below will be filled by the project safeguards staff during the initial stage of consultation for the proposed investments.

(Form D): Public Announcement for non-irrigation schemes under Component A (A-2), Component B (B-2), and Component C (C-1))

General information:

Province: …….. Project ID:……
District/Village: ……
Date of the initial consultation: ……
List of participants (including upstream & downstream community, IA/WUAs, Mirab, Sub Mirab, ...): …….

- Location of the proposed investment (with map): ……
- Project description (including implementation time): ……..
- Project benefits: …….

- Project owner: ……
- Need for additional land/resettlement (yes/no): ……..
- Potential environment and social impacts (positive and negative): ……..
- Proposed mitigation measures: ……..

Results from consultation:

- Agreement with the proposed investment (Yes/No): ……
- Suggestions from community (including training needs and promotion of local environmental quality): …….
- Other comments (if any): …….
- Actions to be considered in the ESMP (or the simplified ECOP): ……

Responsible Agency/Person: PMO Regional Office Team Leader

Contact number, address: ……

9. ***Small Remedial Works of Existing Dams:*** For this investment preparation of a Dam Safety Report for each proposed dam will be carried out in line with OP/BP 4.37 requirement and details are provided in Attachment 6 (a).

Attachment 1 (d): Project Screening Checklist for Investment Schemes

1. The attachment presents safeguard screening checklist and forms to be completed for all investment schemes to be implemented under Components A, B (B-2), and C (C-1) with IRDP-AF project support. The project safeguard staff (PSS) will complete the checklist and keep the completed forms in the safeguard projects file for possible review by WB. The activity is part of the ESMF steps 1 and 2. The WB safeguard policy also requires full compliance of the proposed investment schemes with the Government's EIA regulations (see Part2 for actions).

(Part 1) Safeguard Screening Checklist Form

2. The safeguard form responses to the screening questions aiming to ensure that the proposed activities will not create adverse negative impacts on local environment and local people and will not fall into the list of attributes provided in Attachment 1(a) as well as also comply with Government's EIA regulations. Although the IRDP-AF is classified by WB as EA category "A", all the potential negative impacts of the proposed investments would be moderate, localized, temporary, and could be mitigated through good construction practices and close supervision of contractors (see scope in *Box (1)* below). WB's requirement for a full EIA is not expected for the proposed investments.

3. In this context the guidelines for safeguard screening checklist is deemed adequate for identification of key issues to be considered during the preparation of an Environment and Social Management Plan (ESMP)for the investment (see Attachment 1 (e)). For the issues, marked YES, check (i) if in "Negative List", project investment is ineligible for financing and must be dropped and no further action is required related to safeguards, (ii) if item marked YES is not in the "Negative List", ensure appropriate mitigation measures are contained in the ESMP for each item marked YES. Consultation with WB safeguard specialist is highly recommended. PSS must sign and date the safeguard forms.

Box (1): Scope of proposed investments for IRDP-AF that require use of the screening checklist
• *Component A:* (a) Rehabilitation of additional irrigation schemes (about 47 schemes, most medium size of around 2,500 ha) covering about 24,600 ha in total; (b) rehabilitation of 20 flood damage schemes covering about 8,967 ha (with 1,375 ha incremental); and (c) rehabilitation of river bank protection at about 64 sites grouped to seven investment (about 26 km) of which activities will largely involve engineering methods. • *Component B:* remedial works in two priority dams based on safety considerations including improving dam operation and maintenance plan (for the two). • *Component C:* construction of hydromet/snow/cableways stations. □

4. Table (1) below provides the checklist for the proposed investments to be carried out under Components A, B, and C while a simplified form (see Table (2) of this attachment)can be used for the investments related to construction of hydromet stations to be carried out under Component C (a) when construction of new access road in not involved.

(Part 2)Government's EIA requirement and International obligations

5. According to Government's EIA regulations (2008), investment projects are classified as Category 1 and 2 according to its potential adverse impacts and the National Environmental Protection Agency (NEPA) is the national administrator. Given that the proposed investment is of rehabilitation type which is not clearly defined in the EIA categorization, the project safeguard staff (PSS) will consult NEPA regarding the Government's EIA requirements and/or documentation. Agreement with NEPA will be properly filed for possible reviewed by WB. The PSS will be responsible for ensuring that the proposed investment complies with the Government's EIA regulations.

Table (1) Safeguard Response to Screening Questions Form (for Component A and B)

A	**Environmental and Social Impacts**	YES	NO	Explanation
Location				
1	Are there environmentally sensitive areas (forests, pastures, rivers and wetlands) or threatened species that could be adversely affected by the proposed investment?			
2	Does the proposed investment area occur within or adjacent to any protected areas designated by government (national park, national reserve, world heritage site, etc.)?			
3	Will the proposed investment reduce people's access to the pasture, water, public services or other resources that they depend on?			
4	Might the proposed investment alter any historical, archaeological or cultural heritage site or require excavation near such a site?(see Attachment 1 (b))			
Physical and biological environment				
5	Will the proposed investment require large volumes of construction materials (e.g. gravel, stones, water, timber, firewood) that could adversely affect local conditions?			
6	Might the proposed investment lead to soil degradation or erosion in the area?			
7	Might the proposed investment affect soil salinity?			
8	Will the proposed investment create solid or liquid waste that could adversely affect local soils, vegetation, rivers, streams or groundwater?			
9	Might river or stream ecology be adversely affected due to the installation of structures such as weirs etc.?			
10	Will the proposed investment have adverse impacts on natural habitats that will not have acceptable mitigation measures?			
11	Do the proposed investment have human health and safety risks, during construction or later?			
12	Will the proposed investment require pesticides that fall in WHO classes IA, IB, or II.			
13	Will the proposed investment leads to the increase in the originally designed water abstraction amount, or involve construction of new irrigation schemes?			
Alternatives				
12	Is it possible to achieve the objectives of the proposed investment in a different way, with fewer			

	environmental and social impacts?			
B	**Land Acquisition and Social Issues**			
1	Will the proposed investment require acquisition of land (public or private) for its development?			
2	Have any farmers made voluntary land donations to the proposed investment?			
3	Will anyone be prevented from using economic resources (e.g. pasture, community place, forests etc.) to which they have had regular access?			
4	Will the proposed investment result in the involuntary resettlement of individuals or families?			
5	Will the proposed investment result in temporary or permanent loss of crops, fruit trees and household infrastructure such as granaries, toilets, kitchens etc?			
6	Will the proposed investment affect the livelihoods of the affected, especially of the vulnerable groups including women and landless?			
7	Does the proposed investment involve water sources under dispute?			
8	Does the proposed investment impact any lands under dispute or with contested ownership?			
C	**Local Minorities**			
1	Are there any local minority groups within the proposed investment area? If so, how they will be affected (positively or negatively)?			
2	Have women been part of community consultations?			
If any affected people are suffering negative livelihood impact because of the proposed investment or any of their land or assets are impacted, or access to any of these, then further action is required in terms of identifying impacts, consulting with the Affected Peoples (APs), minimizing impacts and finding mitigation measures and compensation. Regarding land acquisition, it is necessary to have documentation for consultations with the APs, and also documentation in case of voluntary land donation, and of community compensation. It is also necessary to stipulate that any acquired land be legally transferred to the community in order to avoid future disputes. The land document should also be certified by local government agency, i.e. local court or district office and a copy of land transformation document should also be kept in local government office.(see Annex 7) In case of dispute over land, then the project investment should either be dropped or the dispute should be resolved first at local level through skilled mediators like the NGOs or similar competent bodies.				
D	**Waste Materials**			
1	Will the proposed investment result in large amount of the production of solid or liquid waste (e.g. water, domestic or construction waste), or result in an increase in waste production, during construction or operation?			

2	Does the proposed investment involve an irrigation scheme? [If Yes, apply PMF (see Attachment 1 (f))			
E	**Safety**			
1	Is there probability of the presence of landmines or unexploded devices at or near the proposed investment area?			
2	Does the proposed investment involve dam safety? [If Yes, apply Attachment 6 (a)]			
F	**GOA's EIA requirements (see Part 2 above)**			
1	Will the project investment be classified as EIA Category 1which required an EIA study?			
2	Has the required document (either for Category 1 or 2) be prepared and submitted to NEPA?			(provide the expected approved date)

Guidance Notes once Checklist is completed

- Checklist needs to be signed and dated by Project Safeguards Staff.
- For those issues, marked YES, check (i) if the proposed investment is listed in Attachment 1(a) which is ineligible for financing and must be dropped and no further action is required related to safeguards, (ii) if item marked YES is not in the list, ensure appropriate mitigation measures are contained in the site-specific ESMP for each item marked YES.

Table (2) Safeguard Response to Screening Questions Form

(For Component C (a) without construction of new access roads)

A	**Environmental and Social Impacts**	YES	NO	Explanation
Location				
1	Are there environmentally sensitive areas (forests, pastures, rivers and wetlands) or threatened species that could be adversely affected by the proposed investment?			
2	Does the proposed investment area occur within or adjacent to any protected areas designated by government (national park, national reserve, world heritage site, etc.)?			
3	Does the proposed investment area occur within or adjacent to any residential area and accepted by local agencies and communities)?			
B	**Land Acquisition and Social Issues**			
5	Will the proposed investments require acquisition of land (public or private) for its development?			
6	Does the proposed investment involve water sources under dispute?			
7	Does the proposed investment impact any lands under dispute or with contested ownership?			
C	**Safety**			
1	Is there probability of the presence of landmines or unexploded devices at or near the proposed investment area?			

Guidance Notes once Checklist is completed

- Checklist needs to be signed and dated by Project Safeguards Staff.

For those issues, marked YES, check (i) if the proposed investment is listed in Attachment 1(a) which is ineligible for financing and must be dropped and no further action is required related to safeguards, (ii) if item marked YES is not in the list, ensure appropriate mitigation measures are contained in the site-specific ESMP for each item

Attachment 1 (e): Environmental and Social Management Plan (ESMP)

1. The attachment presents scope of ESMP to be prepared for all investment schemes to be carried out under Components A, B (b), and C (a). Part1 provides information regarding (a) the ESMP template and scope of ESMP supervision to facilitate effective preparation, implementation, and supervision of the ESMPs. Part2 provides information on sample ESMP matrix of an irrigation scheme being implemented under the original project which was developed based on typical environment and social impacts and mitigation measures to be considered for the proposed investments. The project safeguard staff (PSS) is responsible for preparation of the ESMP while WB clearance of all ESMPs will be required.

(Part 1)ESMP Template

2. Given the proposed scope of works and the screening checklist (*Attachment 1 (d)*) and current practice of the original project that the ESMP is prepared as part of the investment proposal, scope of the ESMP template has been updated to incorporate key monitoring indicators (see Table (1) of this attachment below).In addition to the ESMP matrix, a brief description of proposed investment and results of the checklist and budget for ESMP with reference to project information provided in the proposal.

Table (1) Suggested ESMP Template

Project investment Activity	Potential Environmental and Social Impacts	Proposed Mitigation Measure(s)	Key Monitoring Indicator	Institutional Responsibilities	Cost Estimates	Comments (when it will be implemented)
Pre-Construction Phase (Design)						
Activities						
Etc						
Construction Phase						
Activities						
Etc						
Operation and Maintenance Phase						
Activities						
Etc						

3. **Supervision of the ESMP** will begin during the detailed design stage when the required actions have to be incorporated into the detailed design and the final ECOP will be incorporated into bidding and contract documents. During the bidding and contractor selection processes, the bidders will be informed of their commitment to comply with ECOP including the need to initiate/maintain close communication with local agencies and communities and the mitigation costs will be part of the contract cost. The construction supervision consultant (CSC) or assigned engineer will also be responsible for a day-to-day supervision of contractor performance regarding to ESMP/ECOP and include the result in the project implementation progress report. PSS or an independent monitoring consultant will supervise and monitor the implementation of other activities as described in the ESMP and

include the results in the safeguard monitoring reports for the investments to be submitted to PMO and/or WB (see Annex 5). PSS will develop a supervision plan to facilitate timely implementation and allocation of resources. The following aspects will be considered during the supervision and reporting:

- determine whether the project is being carried out in conformity with environmental and social safeguards and legal agreements;
- identify problems as they arise during implementation and recommend means to resolve them;
- identify the key risks to project sustainability and recommend appropriate risk mitigation measures to the agency/entity responsible for O&M of the proposed investment; and
- if needed, recommend changes in project concept/design as the project evolves or circumstances change.

(Part 2)Sample ESMP for an Irrigation Investment of the Original Project

4. This section provides technical guidelines on typical environment impacts and mitigation measures and typical social impacts and mitigation measures of the proposed investments. For the irrigation investment, the guidelines should be considered during the various consultation processes and finalization of the ESMP, including the ECOP. A capacity building program for the project team, key agencies, and community and farmers should be developed at the same time. Table (2a and 2b) of this attachment shows an example of an ESMP matrix presenting issues and mitigations of an irrigation rehabilitation scheme (Gosara canal in Herat province) during detailed design, construction, and operation which are being implemented under the original project. It is expected that under IRDP-AF, similar ESMP matrix will be prepared with some adjustment to fit the location and scope of the activities of the proposed scheme and nature/scale of potential negative impacts and required mitigation measures. The institutional responsibility will also be updated according the final implementation arrangement.

5. For other type of investment schemes (which is expected to have smaller in scope of works and limited area of influence), the guidelines should be applied during the initial consultation and the issues and mitigation measures can be reduced and/or adjusted to fit the locations and nature of works which could be identified during the project implementation.

Table (2a) Sample Environment and Social Management Plan/Matrix during detailed design, construction, and operation stages(for rehabilitation of a large irrigation scheme –(Gosara canal in Herat province)

Concerns/Issues	Potential Impacts	Mitigation Measures Identified	Indicators	Implementation responsible	Supervision responsible
MANAGING ENVIRONMENTAL IMPACTS					
DESIGN STAGE					
Planning and Design of side intake and canal bank protection wall is not serving the purpose	Diminish the width of the river. A large amount of discharge more than capacity of the canal will enter the canal. Create erosion at upstream of intake on bank of river and damage properties and land.	Proper planning and revision of design of the intake as advised and river bank protection structure up to outside of vulnerable area including aprons and slope protection.	Incorporation of hydrological and morphological issues in planning and design of bank protection structure and slope protection works	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team
No proper outlets wall protections at sites 4, 5, 11 & 12	Unnecessary length of protection walls will result cut down of strong and environmental noteworthy trees	Proper planning and revision of design of the outlets and protection of only necessary weak parts of the canal banks.	Prevent trees to cut down Conserving environmental issues at the site	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team
automatic spillway and escape structure is not at site-36 to spill to spill extra water of the canal	The existing structure will affect cultivable lands at downstream of the wash.	Proper planning and revision of design of escape structure at the selected position in the wash flow direction.	Prevent agriculture lands from damages of flash floods. Incorporation of hydrological and morphological issues in planning and design of bank escape structure.	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team
During flood period maximum discharge at the head of the canal is uncontrolled. No one currently maintains the control	Increased siltation and erosion if not managed by Mirab. At some points along the canal crops close to the canal damaged if gate not closed during flood time.	Design shelter/guard room to facilitate the work of the Mirab and his assistants. Capacity Building of Mirab and gate operators	Mirab shelter at the head of the canal. Training to Mirab and Gate operators imparted	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team, CDCs)

gates at the head of the canal Low discharge at the head of the canal	Water scarcity during periods of low discharge of water	Development and Adoption of System Operation and Maintenance Plan	O&M plan adopted		
CONSTRUCTION STAGE					
Contractor's lack of awareness of environmental and social issues.	Adverse impact on community health, environment and property	(i) A requirement to comply with ESMF provisions must be made clear in tender documentation (ii) As part of the contract with the MEW the contractor must agree to take account of all environmental and social issues detailed in the project ESMP. (iii) Contractor, key construction staff and key members of the community are made aware/ trained on environmental and social protection issues at the sub river basin department prior to the start of the project.	(i) Tender documentation sets out core environmental and social requirements. (ii) Standard environmental and social clauses included in the construction contract. (iii) ESMP attached as an integral part of the contract between MEW and the contractor (iv) Numbers of trainings received by contractors on environmental and social protection issues	PCU Deputy Director Herat Regional Office FAO Regional Environmental and Social Development Supervisor (ESDS) and PCU Regional Environmental and Social Safeguard Assistant (ESSA)	PCU Director FAO team leader, CDCs FAO National Environmental Officer (NEO) and National Social/Gender Officer (NSGO) PCU National Environment and Social Specialist (NESS)
Felling of trees along canal banks during the construction phase	Erosion of canal bank; Increased pollution	Identify suitable land for compensatory plantation Plant at least doubles the number of trees close to the canal.	Land near the canal - not on the right of way - identified for replanting At least double the number of trees are replanted	CDCs/WMD	FAO ESDS PCU ESSA CDCs
Quarrying and borrow pits of construction	Soil erosion; Loss of fertile soil; Obstruction in	1. The contractor has to extract the material from the specified and demarcated borrow areas.	Location of 3 number borrow pits are indicated in scheme layout plan. These locations are selected	Contractor	FAO ESDS PCU ESSA CDCs

materials	natural drainage	2. No agricultural land will be used as a borrow area. 3. Ensure that: i. Excavation of borrow areas is as per instructions of the Supervision Consultant's environmentalist. ii. Top six inches topsoil is removed and stored separately. iii. Land is excavated not more than 3 feet depth as compared to adjacent leveled fields. iv. The field slopes are maintained Top soil has been spread back during restoration process.	because it is near by the project and they are natural big cavities in the natural ground. So, extra excavated material will be put in the cavities. Site selection for quarrying, There is no need for the material to be brought from borrow area because for concrete work the contractor has to use crushed aggregate and cement and steel from the market. Stone will be brought from already barrow areas in the mountains. Protection measures adopted to prepare the contractor comp site equipped with all facilities to not allow wastage to pollute the area, like providing latrines for labour, water supply system, machineries wastages collection and so on. For rehabilitation of sites if required the contractor will restore the site as previous or original.		
Disposal of spoils/ construction waste	(i) Water contamination, pollution, (ii) Change of river regimes (iii) Loss of crops	(i) All waste materials collected and disposed of in safe locations not close to settlements, cultivated land, hand dug wells and river channels. (ii)If possible vegetative cover should be provided to avoid dust and land pollution.	Number of times/frequency waste is collected and disposed of on camp site Location of disposal sites are far from about 10km the villages and cultivable area putting in the excavated place and covering the	Contractor	FAO ESDS PCU ESSA CDCs

	and reduction of fertility		surface at least one meter		
Air/Water/Noise Pollution	Communities' well-being negatively affected.	(i) Prohibit open storage and spillage of loose soil in and around construction site. (ii) Cover stock-piled spoil with erosion control materials (iii)Cover materials during transportation by truck (iv)Sprinkle water on work areas to reduce air pollution caused by dust. (v) Ensure equipment and vehicles are fitted with adequate quality of air filters and proper maintenance. (vi) Avoid disposal of soil, sludge and other wasters into water bodies (vii) Install barriers to prevent soil slippage at edge of stocked areas. (viii) Locate the noisiest installations as far as possible from houses, mosques etc...	Waste management and disposal practices used Number of complaints from construction activities	Contractor	FAO ESDS PCU ESSA CDCs
Inadequate health and safety regime during construction phase	Accidents as well as heightened health risks due to lack of proper water and sanitation facilities at labour camps.	(i) Provide proper drinking water and sanitation facilities at construction camps (ii) Provide adequate safety equipment such as helmet and boots. (iii) Provide first aid kits at construction site and arrange timely medical assistance in case of accident.	Safety measures adopted e.g. provision of boots, helmets, first aid kits, water supply and sanitation in labour camps	Contractor	FAO ESDS PCU ESSA
OPERATION STAGE					
Intrusion of flood water and sediment into the canal	Damage of canal system and surrounding area.	(i) Development and strict implementation of canal operation and maintenance plan.	Canal O&M plan Training sessions Measurement of discharge in	WUA/Mirab	FAO ESDS PCU ESSA CDCs

	Reduction in canal capacity	(ii) Training of gate operators, Mirabs and farmers.	canal, Observation of canal shape		
Improper management of agrochemicals (fertilizer/pesticide/herbicide)	Health threats to farmers; pollution of surface and ground canal water, soils	Link to MAIL extension service through regular technical working group meetings to improve farmers' awareness of human and livestock health hazards of overuse of chemicals and encourage different usage patterns.	Number of TWG meetings attended by WMD and ESDS staff Water quality	FAO ESDS PCU ESSA CDCs MAIL Extension Services.	FAO NEO, NSGO, PCU NESSO

Table (2b) Managing Social Impacts

MANAGING SOCIAL IMPACTS					
Concerns/Issues	**Potential Impacts**	**Mitigation Measures Identified**	**Indicators**	**Institutional Responsibilities**	
DESIGN STAGE					
Proper planning and Design of side intake and canal/river bank protection wall	Create some disputation between canal beneficiaries and adjacent villagers due to diminution wide of river and rising water level during flood period, and damaging their property and lands.	Proper revision of intake design and river bank protection structure up to outside of vulnerable area including aprons and slope protection.	Prevent community property from damages of flash floods. Reduce conflict between canal beneficiaries and adjacent land owners.	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team FAO ESDS PCU ESSA
Non-existence of automatic spillway and escape structure at site-36	Decentred structure from wash centre line and inadequate protection walls will increase operation and maintenance cost and man power. The existing structure will effect human properties at downstream of the wash.	Proper planning and revision of design of escape structure at the selected position in the wash flow direction. Increasing length of protection walls at weak points of canal bank.	Prevent human properties from damages of flash floods. Reduction in operation and maintenance cost and man power Incorporation of hydrological and morphological issues in planning and design of	FAO/PCU Engineers Herat Regional Office	FAO/PCU Senior Engineering Team

			bank and escape structure.		
Losing of trees on canal bank	Owners of trees may feel aggrieved due to loss of assets which is leading to conflict within the community	(i) Identify owners of trees to be cut along the canal bank (ii) Hold discussions with affected farmers to ensure they have been consulted and their consent obtained to cut down trees. (iii) Ensure commitment on the part of local Shura (CDCs) and affected farmers that at least twice as many tress will be replanted compensate those cut ones. (iv) Taking consent latter from the owners.	Document that shows that consent has been obtained from affected farmers to cut down and replant the trees. Document that shows that local shura/CDCs and farmers will ensure that at least twice as many trees will be planted. Number of grievances received by affected farmers	Village CDCs, and Provincial Water Management Department (Sub river basin department)	FAO ESDS PCU ESSA
Construction of canal banks will make it difficult for women and children or animals to cross the canal ,	Women and children cannot cross the canal after construction of canal banks.	Construction of 16 social structures consist of 10 bridges (culverts) 5 river bank protection wall and one canal covering structures have to be considered.	Beneficiaries request letter, and their agreements that show this social structures are for public use.	FAO ESDS PCU ESSA PCU SIGA Women's CDCs	FAO NESO FAO NSGO PCU NESSO
Vulnerable groups, especially women and the landless, have limited awareness of the project and thus their voices are not heard.	Project development not informed by concerns/views, participation of women and other deprived groups. Increase the gap between the marginalized and the more influential and powerful people.	(i) Identify all direct and indirect stakeholders (ii) Hold meetings with all community groups, wherever possible, using women CDCs to encourage participation of women in all stages of the project. (iii) Use group and individual discussions to identify and ensure landless households are consulted. (iv) Explore with each group how they might be involved at each stage of the	(i) List of all stakeholder groups (ii) Regular liaison between leaders of men and women's CDCs. (iii) Individual and/or group meetings which include landless households (iv) Various communication mechanisms used including CDCs, mosques etc.	FAO ESDS PCU ESSA PCU SIGA Women's CDCs	FAO NESO FAO NSGO PCU NESSO

		project. (v) Encourage Sub river basin department and men shura to consult/involve women and landless people. (v) Identify the communication mechanisms most commonly used by women and landless and ensure these are used to impact and receive information throughout the project			
Inequity - Downstream users have less available water.	Cause conflict between mid stream and downstream users	Involve WUAs, Mirabs and farmers throughout the design process: begin discussions on developing a water allocation and development plan or O&M plan.	Regular meetings with people at all levels of the canal to keep them informed of project design.	WMD CDCs WUAs Mirabs	FAO ESDS PCU ESSA PCU SIGA
CONSTRUCTION PHASE					
Limited understanding of community from the nature and proposed schedule of works during implementation.	Unable to monitor the construction work and hold the contractor accountable.	Hold regular meetings with key groups within communities to ensure they are aware of activities taking place and the schedule for implementation. Use loud speakers in village Disseminate through mosque Broadcast on local radio	Monthly meetings with men and women's CDCs, WUAs and Mirabs throughout construction phase	WMD Contractor VWO	FAO ESDS PCU ESSA PCU SIGA
Temporary land donation required for storing construction material.	The contractor will store construction material without consultation and taking any agreement from community / landowner it will cause conflict and sluggish the implementation process.	Identify land owner and taking consent letter and agreement for temporary land donation.	Temporary land donation for construction material is required and the consent letter is attached.	*PCU ESSA* *FAOESDS*	FAO NESO FAO NSGO PCUNESSO
Lack of awareness	Unable to monitor	Hold regular discussions with non-	Regular meetings with	VWO	FAO NESO

by non-irrigation water- users of proposed construction works.	the construction work and hold the contract accountable.	irrigation water users to ensure that they are aware of activities taking place and the schedule for implementation.	women's CDCs and visiting houses of most marginalized people throughout construction phase.	PCU SIGA PCU ESSA FAOESDS	FAO NSGO PCUNESSO
Low sense of community ownership of the subproject.	Irrigation system and structures are not maintained.	Assessing capacity of Mirabs and farmers and develop a plan to strengthen their capacity and promote wider ownership within the community.	Existence of capacity assessment and capacity development plan.	FAO ESDS PCU ESSAPCU SIGA	FAO NESO FAO NSGO NESSO
Inequity of work opportunity.	Farmers at tail end of canal may not benefit from day labouring generated by construction works.	(i) Review with contractors the requirement to ensure that employment opportunities are equally available to downstream and upstream communities. (ii) Employment opportunities will be published widely at local level using the most appropriate communication mechanisms e.g. mosque, CDC meetings, radio (iii) Ensure that contractors are made aware of/pay particular attention to equity issues	Number of employment opportunities for landless households. Types of communication and frequency of communication used to publish available jobs	Contractor Contractor WMD Village CDCs	Regional Director FAO ESDS PCUESSA PCU SIGA
Water-borne diseases	Increased incidence of diseases such as cholera and malaria	Proper drainage of the area	Proper waste management and disposal practices applied.	Contractor	CDCs FAO ESDS PMOESSA PCU SIGA
Health and safety of workers	Negative health impact	Provide adequate protective equipment, drinking water and latrines for workers	Availability of drinking water and latrines on site.	Contractor	FAO/ engineers WMD FAO ESDS PCUESSA PCU SIGA
OPERATION STAGE					
Lack of ownership of project improvements Limited capacity of CDCs ,mirabs and	Poor maintenance and management allow structures to fall into disrepair.	Build capacity or Mirabs, farmers and men and women's CDCs through systematic awareness raising and training to maintain system and resolve problems faced by water users.	Number and types of trainings conducted Project successfully transferred to community	FAO ESDS PCU ESSA PCU SIGA	FAO NESO FAO NSGO PCUNESSO

farmers		Facilitate a formal transfer of project ownership to community			
Inequitable water allocation and distribution along the canal	Spark conflict between water users at different levels of the canal	In close consultation with farmers at all levels of the canal develop, agree and implement water allocation and distribution plan and revise to take account of crops grown, canal systems and soil. Train WUAs/Mirabs/farmers to develop and implement a water management/distribution system that ensures equitable access to water across the length of the canal Agree, publish widely and apply strict penalties for water theft and violation of water allocation and distribution system.	Water Allocation and Distribution plan existence. Type and number of trainings	WUAs/Mirabs /WMD FAO ESDS PCU ESSA PCU SIGA WUAs/mirabs/ WMD	FAO ESDS PCU ESSA PCU SIGA FAO NESO FAO NSGO PCUNESSO
Inequitable labour contribution towards maintenance of irrigation system	Spark conflict between tail end water users, who consider they contribute more to the upkeep of the canal, and mid and head end users.	Strict implementation of agreed operation and maintenance plan	List of farmers contributing their labour to upkeep of canal Number of complaints made by tail enders.	WUAs/mirabs/ WMD	FAO ESDS PCU ESSA PCU SIGA
Water-borne diseases	Use of water channels as waste water drains Increase in incidence of cholera and malaria	Maintain proper drainage of the area Ensure periodic flushing of the channels Liaise with local health centres, local NGOs to promote greater awareness of health issues within the community	Frequency of flushing water channels Number of women's CDC meetings in which health issues discussed.	CDCS/Men's CDCs WAD/Women 's FAO ESDS PCU ESSA	FAO ESDS PCU ESSA PCU SIGA
The sub-project is not mainstreamed within a sustainable livelihood system	Non-irrigation water users unable to take full advantage of improved water supply	Facilitate consultations/ discussions with various non-irrigation water users (individuals and groups) on how best to use enhanced water supply for improved well-being.	Number and thematic focus of discussions with non-irrigation water users in each sub-project village	VWO FAO ESDS PCU ESSA PMOSIGA	PCU SIGA FAO ESDS FAO NESO FAO NSGO PCUNESSO

	Farmers are unable to take full advantage of improved irrigation system.	Promote links using technical working group meetings with relevant government departments e.g. MAIL, WMD, MRRD, NEPA and NGO.	Number and thematic focus of TWGs attended by Regional		

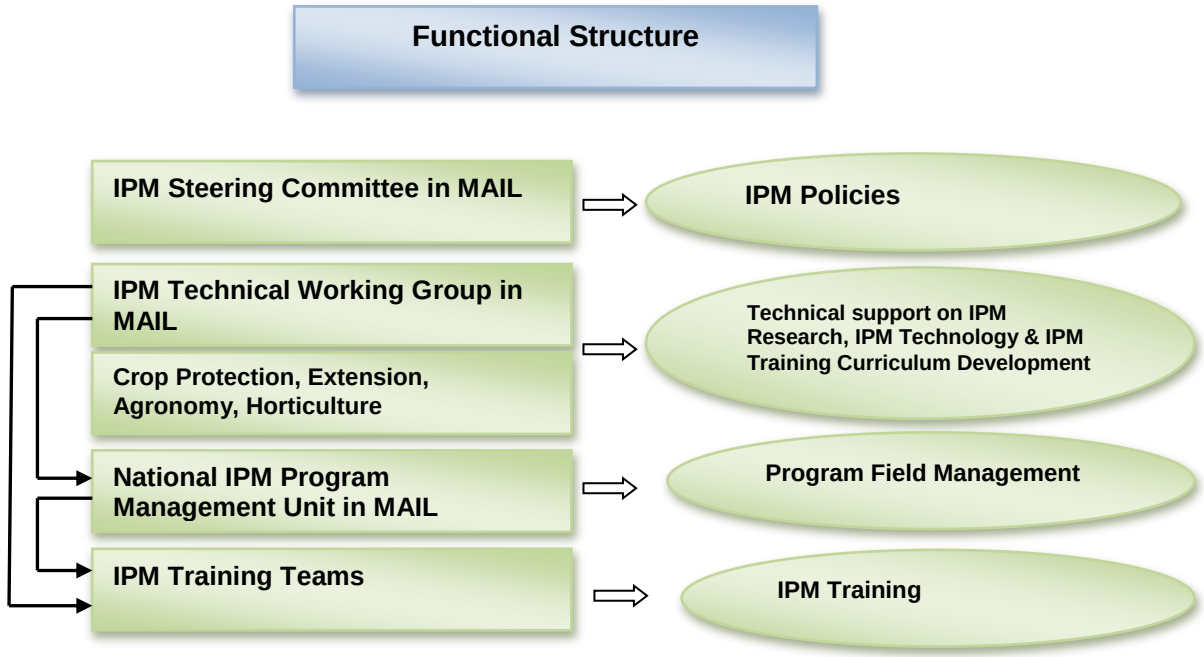
Attachment 1(f): A Pest Management Framework (PMF)

1. This attachment will be applied to ***all irrigation schemes*** to be implemented under Component A (A-1) of IRDP-AF. It presents a Pest Management Framework (PMF) outlining the legal and institutional background and integrated pest management (IPM) practices that are being considered in the country and basically similar to that of the pest management plan being implemented with WB support[13]. (Part 1) presents background on legal and institutional aspects while (Part 2) outlines the approach and (Part 3)activities to be carried out under the IRDP-AF. The activities will be considered during the preparation and implementation of the ESMP of the irrigation schemes. As the primary responsible body for regulation of pesticide trade and application, the Plant Protection and Quarantine Directorate (PPQD) of MAIL will be consulted during the preparation of the ESMP. The project safeguard staff (PSS) in the target areas will be responsible for implementation while the PSS in Kabul office and FAO Teamwill provide guidance and technical support.

(Part 1) Background

2. Pesticides classified under World Health Organization (WHO) of group 1A and 1B are extremely hazardous. The permitted category is Class II and III. Afghanistan is not a member of the International Plant protection Council (IPPC) but has signed the Rotterdam, Stockholm, and Basel conventions. The Pesticides Law of Afghanistan was first formulated and is subsequently redrafted in 2009. The body responsible for pesticide regulation in Afghanistan is PPQD of MAIL and a national IPM program is being implemented with support from AAIP.

Afghanistan National IPM Program



[13] The key projects are the Afghanistan Agriculture Inputs Project (AAIP) and the National Horticulture and Livestock Project (NHLP)

A. Pest Management Approach

2. Right now Afghan agriculture is faced with four threats that impact to the country's food security.

- *Pests and diseases from outside:* The entry of wheat stem rust (Ug99) and corn rootworm will have adverse impact on their production.
- *Pest and diseases from within:* Wheat yellow rust continues to cause significant production losses. Besides these, measures need to be developed to control against Moroccan locust, Colorado potato beetle, Baluchistan melon fly etc.
- *Entry and use of illegal pesticides*. All agrochemicals used in crop protection in Afghanistan are mainly from China, Iran and Pakistan. The absence of adequate pesticide regulations and enforcement personnel facilitates the entry of illegal pesticides.
- *Absence of international trade related standards.* Wheat is the most important staple crop in Afghanistan, making up 80% of all grain production in Afghanistan. Following wheat the most important crops are barley, corn, rice, potatoes and cotton. Nuts and fruits are among Afghanistan's most important exports. Apart from these crops, grapes, apple, appricots, pomegranate, melon and water melon are also important crops grown.

3. Nuts and fruits are the major export crops of Afghanistan. In order to regain market share, it would require development of sanitary and phyto-sanitary (SPSS) measures and Codex-maximum residue levels (MRL) standards pertaining to food safety and plant health regulations of these major export crops.

B. Problems and constraints of pesticide use in Afghanistan

1. Key issues are:

- An average farm size in Afghanistan varies from 2 to 5 ha of land. These farmers cannot afford many of the more high-tech and expensive inputs available in the market.
- Afghanistan has had written regulations on pesticide use since 1989, but these are not enforced and are largely ignored due to lack of resources. A new pesticides act has been drafted in 2009 but is yet to be officially adopted.
- Illegal products, including both non-registered products and internationally banned products, do enter Afghanistan on a regular basis. Many banned pollutants like DDT, dieldrin, HCH, heptachlor and lindane etc. are easily found in retail shops in smaller towns and border towns, because they move easily across land borders.
- Pesticides repackaging by the local traders is not uncommon in Afghanistan. This results in both sellers and farmers coming into contact with concentrated active ingredient. It is also not uncommon for these traders to dilute the active product with water or talc and sell them to illiterate farmers.

- It is common practice with farmers to store their pesticides at home and do not lock them out of reach children. Farmers are also not aware of day-to-day health risks and chronic health risks for pesticides.
- Identification of pests is very important to counter crop diseases. But it is also important to identify beneficial insect pathogens, spiders, predators, and parasites etc.
- Incorrect dosage use of pesticides is a serious issue among farmers. Over and under-dose and use of non-selective pesticides can lead to pesticide resistance.
- There are risks to people eating fruits and vegetables contaminated with pesticide residues. This is especially true with cotton pesticides, which are very often diverted for use on food crops. There is also a likelihood of livestock and domestic animals getting poisoned by accidental exposure to pesticides.
- There is hardly any personal safety protection equipment available in the market. Even if they are available, the farmers feel reluctant to wear them.
- Care is hardly taken by the farmers to dispose of expired pesticides. Many of these pesticides remain active even after the expiry date.

5. If we carefully examine the above-mentioned issues related to use and application of pesticides by the farmers, we find that there are enormous risks of error to occur and farm family members may be acutely or slowly poisoned and their environment polluted and damaged.

Selected List of Crops and Pests identified under On-Farm Water Management Project in Afghanistan (the list may expand based on need)

Wheat (Triticumaestivum)	**Rice (Oryza sativa)**
Pests: • Grasshoppers • Aphids • Corn ground beetle	**Pests:** • Grasshoppers • Fusarium ear rot/Fusarium stalk rot • Common rust/smut
Corn (Zea mays)	**Barley (***Hordeumvulgare)*
Pests: • Bacterial soft rot • Charcoal rot • Common rust/common smut	**Pests:** • Bacterial soft rot • Charcoal rot • Common rust/common smut
Potato (Solanumtuberosum)	**Cotton (Gossypium)**
Pests: • Bacterial ring rot • Cucumber mosaic • Curly top	**Pests:** • Cut worm • Cotton bollworm • Cotton aphid
Apricot (Prunusamericana)	**Peach (Prunuspersica)**
Pests: • Brown rot blossom and twig blight • Ripe fruit rot • Aphids • Branch and twig borer	**Pests:** • Plum moth • Brown peach aphid • Plum scale

Apple (Malusdomestica)	Grapes (Vitisvinifera)
• Powdery mildew • Fire blight • Apple scab	• Downy mildew • Powdery mildew • Armillaria root rot
Almond (Prunusdulcis)	**Melon and Water Melon**
• Aphids • European red mite • Fruit tree leaf roller	• Anthracnose • Fusarium crown and foot rot • Fusarium wilt
Tomato (Solanumlycopersicum)	
• Alternaria stem canker • Fusarium wilt • Beet leafhopper	•

(Part 2) The PMF Approach

5. To address the pest management issues, under the IRDP-AF, sharing of information and knowledge on pest management regulations and IPM practices that may be applicable to the target area including training on the safe use, storage, and disposal of pesticides and chemical fertilizers to local agencies, entities, and farmers are considered important and related to the project objectives.

6. To ensure consistency with other WB-support projects (AAIP and OFWMP-AF), the following background will be taken into account:

- In early 2013 a much larger WB funded project, under the name of Afghanistan Agricultural Inputs Project (AAIP) was approved and initiated to support the MAIL and its relevant directorates in development of physical infrastructure and institutional capacities in different areas such as revision and enforcement of the Pesticides and Plant Protection and Quarantine Laws, establishment of pesticides registration administration, quality control office,13 laboratories for analysis of pesticides, chemicals and pesticide residue; and development of quarantine network and procedures. It is expected that the revised pest management law will be effective in 2015-2016 and training on IPM activities will also be conducted in many areas.
- ***IPM practices:*** To promote the application of improved pest management practices the following tools and techniques will be considered during detailed design and implementation of activities related to pest management under Component 2 for the OFWMP-AF:

Box (2): Possible IPM technology that could be applied in Afghanistan
Soil nutrient, texture and pH testing; Pest-resistant/tolerant seed; Seed treatment with pesticides; Raised-bed planting technique; Use of black plastic and sunlight; Use of organic mulch; Use of organic fertilizers/soil structure amendments (manure, compost);Combinations of organic and mineral fertilizers; Crop rotation with and use of green manure crops; Early/late plantings/harvestings to avoid pests; Use of trap crops to trap and destroy pests; Regular field scouting to assess pest levels/damage; Ability of farmers to identify pests correctly and also to identify predators, parasites, and pest diseases correctly; Pruning and sanitation of diseased plants; Planting parasite-attracting plants on field

margins; Mechanical weed control by hand hoe; Use of herbicides for weed control; Exclude insect pests by using vegetable tunnels and micro-tunnels; Mechanical insect control by hand-picking larvae, pupae, or adults; Use of insecticides for insect control; Use of fungicides for control of fungus; Spot treatment of pest hotspots with insecticides, miticides, or fungicides; Use of pheromone traps to monitor moth levels; Use of pheromone inundation to confuse moth mating; Crop stalks and residue destruction at the end of season; and Apply local plant extracts (neem, parathyroid etc.) to kill pests.

7. *Measures to deal with pesticides*: Some of the measures to be undertaken under pest management issues in Afghanistan are highlighted as follows:

- The AAIP has been providing supports to PPQD in revision of the Pesticides Law that is in its final approval stages. As it becomes enacted, the project (IRDP-AF) will collaborate with AAIP to disseminate the said law in the project target areas. AAIP will also facilitate access of farmers and traders to pesticide residue analysis laboratory in Kabul to check and certify the quality of the products, particularly fruits and vegetable supplied to local and international markets.
- The OFWMP-AF will support expansion of bio-control and IPM technologies developed by the National Horticulture and Livestock Project (NHLP) to the project target areas and also incorporate IPM practices in the planning and implementation of the demonstration site component.

8. *Training and capacity building*: The OFWMP-AF will also raise awareness through formal and informal training sessions, workshops, flyers, posters and practical demonstration on:

a) Purchasing pesticides in single-use sachets

b) Provide information and demonstration to farmers in local languages about the labels, chemical composition, use of dosage, risk reduction, safety pictograms and safety equipment and their protection against health hazards etc

c) Improved storage, handling application of pesticides.

d) Beneficial pests and insects. Farmers will to be introduced with the common beneficial insect pathogens, spiders, predators, and parasites and will oriented on the ways of protecting them.

e) Use of safety equipment and tools including practical demonstration of the improved equipment such as sprayers, protective cloths and tools etc.

9. The pest management law is being revised in line with the International Conventions subscribed by the Government of Afghanistan and the international principles aimed at preserving human and environmental health and conservation with the following specific purposes: (1) To prevent risks to human or animal health, resulting from the use of pesticides; (2) To protect the environment; (3) To facilitate a sustainable crop production and health protection; (4) To improve the health conditions of farmers and workers using pesticides; (5) To foster the implementation of Integrated Pest Management practices; and (6) To facilitate the international trade of agricultural products.

(Part3) PMF Activity to be applied to IRDP-AF

10. It is noted that at present (a) the MAIL is implementing a national IPM program and the following entity exit: the national steering committee on IPM (NSC-IPM), the technical working group on IPM (TWG-IPM), the national IPM program project management unit, and the IPM training team; (b) there are several WB support programs related to IPM practices (such as AAIP, IRDP, NHLP, and OFWMP-AF); and (c) a draft law on pest management (2009) has been prepared and under consideration by the Ministry of Justice. Under the IRDP-AF, the following activities will be carried out to facilitate effective implementation of the PMF and a budget will be part of ESMP cost. In this context, scope of the PMF training activities is identified as follows:

- *Training on basic knowledge and GOA regulations related to pest management.* In consultation with the Technical Working Groups (TWG-IPM) and the national IPM program and in line with production practices and pest management issues in the target areas, the FAO and Project safeguard team will identify a training program that are relevant to the proposed investments and farmers and conduct training including final assessment of the potential impacts. Due attention will be given to protect human/animal health and prevention of water/soil contamination.
- *Training of farmers through the project investment and "Transect Walk".* As discussed training of farmers on safe use of pesticides and agro-chemical through the project investment is an effective means to enhance effectiveness of pest management issues. This effort will be conducted as part of the "Transect Walk" and the training budget will be part of the ESMP budget.

11. Since surface water and groundwater are limited resource Afghanistan, it is necessary to make best efforts to reduce possible contamination. The following measures will be applied during the training on pest management and the preparation of ESMP activities for the IRDP-AF project investments:

- Avoid using pesticides in or near the national parks and where endangered species are known to exist.
- Apply pesticides early in the morning before bees forage.
- Apply pesticides at least 35 meters from drinking water sources and open water.
- Use pesticides with low ground water contamination potential where water tables are high or easy to reach.
- Investigate and promote the use of biological pesticides to replace synthetic pesticides.
- Promote safe pesticide handling, storage and application

Annex 2 Environmental Code of Practice (ECOP)

This Annex has two sections (Attachment 2(a) and 2(b)) setting out the guidelines to prepare for the ECOP to mitigate the social and environmental impacts mainly during the construction Phase.

Attachment 2 (a): Environmental Codes of Practice (ECOP) (New)

1. The attachment presents a generic ECOP to be finalized during the preparation of an Environmental and Social Management Plan (ESMP)and it will be applied to all works contracts to be carried out under Components, A and B under IRDP-AF. It comprises 2 parts: (1) General provision and planning and (2) Construction management and monitoring including a chance find procedures and specific requirements on environmental health and safety as required by WB safeguards. The project safeguard staff (PSS) of the Program Management Office (PMO) in Kabul will be responsible for ensuring full compliance of ECOP.

2. The final ECOP will be incorporated into bidding and contract documents and applied to all rehabilitation works of project investments or other works to be conducted under the IRDP-AF project. The ECOP was developed based on the principle that the potential negative impacts of works could create similar potential impacts (increased in air, noise, vibration, waste generation, safety risks, local traffic, etc.) and could be mitigate through good environmental management practices however the scale and level of issues and the required mitigations and its associated cost are different and require different efforts and expertise during supervision and monitoring. The application of ECOP may be new to WB support project for MEW, and further development is expected so that it could become a standard procedure to be mainstreamed into MEW operations related to works in the near future.

3. ***Application of ECOP:*** According to the criteria established for type of works and the screening criteria for IRDP-AF, all rehabilitation works will apply the generic ECOP describes in this attachment. After the ESMP is approved by WB, the PSS will incorporate the final ECOP into bidding and contract documents and ensure that the bidders/contractors are committed to this obligation and are aware that the mitigation cost is part of the construction cost. Before construction begins the PCU will assign a qualified field engineer or the construction supervision consultant (CSC) to be responsible for the day-to-day supervision and monitoring of safeguard performance of contractor and including the results in the construction supervision progress report. PCU will also mobilize an environmental monitoring consultant (EMC) to conduct periodic monitoring of the contractor performance and report the results and possible complaints from local authorities, communities, and/or other stakeholders. The PCU may assign the responsibility for mobilization of the EMC to a designated community organization e.g. the head of the Irrigation Association.

4. **Scope of ECOP:** ECOP requirements are divided into 2 parts: (1) General Provision and Planning and (2) Construction Management and Monitoring. Part (1) describes roles and responsibility of the project investment owner, contractor, and supervisor including the basic principles for contractor to consider during the construction planning or development of the

contractor's standard operation procedures (SOP) while Part (2) describes standard requirements during execution of works to reduce potential impacts on air, noise, vibration, water, etc. including monitoring indicators and monitoring requirements (if needed).Modifications the generic ECOP can be made to suit specific issues/conditions observed/agreed during the transect walk or the preparation of the ESMP. For the sake of clarity, "construction" in this document includes all site preparation, demolition, spoil disposal, materials and waste removal and all related engineering and construction activities.

5. The following guidelines will be incorporated into the bidding and contract documents of the project investments to be conducted by Contractor.

Part (1): General Provision and Planning

Section (1.1) Contractor responsibility

6. The Contractor is responsible for making best effort to reduce and mitigate the potential negative impacts on local environment and local resident including making payment for all damages that may occur. Performance of the Contractor will be closely supervised and monitored by the CSC and/or qualified field engineer as well as periodic monitored by a qualified consultant to be assigned by the project investment owner. Results of the ECOP compliance monitoring will be included as part of the construction progress report. Compliance with ECOP will be part of the Contractor's construction compliance. **The Contractor will also be responsible for ensuring that any subcontractors will comply with ECOP.**

7. Specifically, the Contractor will be responsible to comply with, but not limited to, the followings:

- The Contractor will install the Work Camp on areas far enough from water points, houses and sensitive areas in consultation with the community and the project investment owner. Good quality sanitary equipment should be selected and installed in the Work Camp.
- The Contractor will manage all activities in compliance with laws, rules and other permits related to site construction regulations (what is allowed and not allowed on work sites), and will protect public properties. Degradation and demolition of private properties will be avoided. Paying compensation to damage to the public facilities and/or private property will be required. The Contractor will inform the project investment owner on issue and/or damages that may unexpectedly occur.
- The Contractor is responsible for protection of local environment against dust, air, noise, vibration, exhaust fuels and oils, and other solid residues generated from the work sites. The Contractor should manage waste properly and do not burn them on site and also should provide a proper storage for materials, organize parking and displacements of machines in the site. Used oil and construction waste materials must be appropriately disposed off and adequate waste disposal and sanitation services should be provided at the construction site next to the generated areas. The Contractor should manage waste properly and do not burn them on site and also

should provide a proper storage for materials, organize parking and displacements of machines in the site. In order to protect soil, surface and ground water the Contractor will avoid any wastewater discharge, oil spi1l and discharge of any type of pollutants on soils, in surface or ground waters, in sewers and drainage ditches. Compensation measures may be required.

- The Contractor has the responsibility for maintaining good hygiene, safety, and security on work sites, including protection of and health and safety of staff and workers. The Contractor has to prevent standing water in open construction pits, quarries or fill areas to avoid potential contamination of the water table and the development of a habitat for disease-carrying vectors and insects.
- The Contractor should use a quarry of materials according to the mining code requirements and compensate planting in case of deforestation or tree felling. When possible, the Contractor should develop maintenance and reclamation plans, protect soil surfaces during construction and re-vegetate or physically stabilize eligible surfaces, preserve existing fauna and flora and preserve natural habitats along streams, steep slopes, and ecologically sensitive areas.
- The Contractor should select sustainable construction materials and construction method, during construction, control dust by using water or through other means and control and clean the construction site daily.
- The Contractor will work with local authority and management local traffic effectively and ensure traffic access of road safety of local residents and road users during the works. Speed limit at work sites and community area will be applied to all vehicles and cars. All vehicles and their drivers must be identified and registered and the drivers are properly trained.
- The Contractor should install signaling of works, ensure no blockage of access to households during construction and/or provide alternative access, provide footbridges and access of neighbors and endure construction of proper drainage on the site.
- The Contractor should respect the cultural sites, ensure security and privacy of women and households in close proximity to the camps and safely dispose asbestos.

Section (1.2) Non-compliance reporting procedures

8. The Contractor (and its subcontractors if any) must comply with the final ECOP. To ensure that necessary action has been undertaken and that steps to avoid adverse impacts and/or reoccurrence have been implemented, the EMCs and/or Contractors must advise the project investment owner within 24 hours of any serious incidents of non-compliance with the final ECOP that may have serious consequence. In the event of working practices being deemed dangerous either by the project investment owners, the local authorities, or the other concerned agencies, immediate remedial action must be taken by the Contractors**.** The Contractors must keep records of any incidents and any ameliorative action taken. The records on non-compliance that could be practically addressed (not cause serious impacts) should be reported to the project investment owner on a monthly basis.

9. The Contractor will be responsible for dealing with any reports/grievance forwarded by the project investment owner, Police or other agencies (by following instruction from the project investment owner representative as appropriate) as soon as practicable, preferably within one hour but always within 24 hours of receipt by either the Contractor. The CSC/EMC will monitor and ensure that the Contractor has taken appropriate action. Where appropriate, approval remedial actions may require an agreement from the local authorities and/or other Government agencies. Procedures should be put in place to ensure, as far as is reasonably practical, that necessary actions can be undertaken to avoid recurrence and/or serious damage.

Section (1.3) Liaising with local authorities and the public

10. Prior to the commencement of project investment activities and throughout the construction duration, the Contractor will work closely with the local authorities and other agencies to ensure full compliance with Government regulations and will also provide adequate information on the Project to the General Public, especially those that may cause public safety, nuisance, and sensitive areas and the locations of storage and special handling areas.The Contractor will provide information and reporting telephone "Hot Line" staffed at all times during working hours. Information on this facility shall be prominently displayed on site hoardings.

Section (1.4) Community relations

11. The Contractor will assign one community-relation personnel, who will be focused on engaging with the community to provide appropriate information and to be the first line of response to resolve issues of concern. Contractors will take reasonable steps to engage with residents of ethnic minority backgrounds and residents with disabilities (or other priority groups as appropriate), who may be differentially affected by construction impacts.

12. The Contractor will ensure that local residents nearby the construction sites will be informed in advance of works taking place, including the estimated duration. In the case of work required in response to an emergency, local residents shall be advised as soon as reasonably practicable that emergency work is taking place. Potentially affected residents will also be notified of the 'Hotline' number, which will operate during working hours. The "Hotline" will be maintained to handle enquiries regarding construction activities from the general public as well as to act as a first point of contact and information in the case of any emergency. All calls will be logged, together with the responses given and the callers' concerns action and a response provided promptly. The helpline will be widely advertised and displayed on site signboards.

13. The Contractor respond quickly to emergencies, complaints or other contacts made via the 'Hotline' or any other recognized means and liaise closely with the emergency services, local authority officers and other agencies (based on established contacts) who may be involved in incidents or emergency situations.

14. The Contractor will manage the work sites, work camps, and workers in a way that is acceptable to local residents and will not create any social impacts due to workers. Any construction workers, office staff, Contractor's employees, or any other person related to the

Project found violating the *"prohibitions*" activities listed in Section (1.7) below may be subject to disciplinary actions that can range from a simple reprimand to termination of his/her employment depending on the seriousness of the violation.

Section (1.5) Implementation of the Environmental Health and Safety (EHS) guideline

15. In line with WB safeguard policy, the Contractor is required to comply with the Environmental Health and Safety Guidelines (EHSG) established for the project investment with financial support from the WB group (WBG). The EHSG provides general guidance on the pollution prevention and abatement measures and workplace and community health and safety guidelines that are normally acceptable in Bank-supported projects, particularly in cases where the borrowing country does not have standards, or when its standards fall significantly short of international or industry-wide norms. The EHSG are divided in two parts: general guidelines on health and safety and pollution prevention and abatement, including general standards for air and water quality, and a set of sector-specific guidelines for various types of development projects. The Contractor will prepare an EHS Plan with an aim to identify the potential impacts and to develop a mechanism for a better management of the environmental health and safety of project activities during construction. The EHS Plan will be incorporated in to the Contractor's own Standard Operating Procedures (SOPs). At a minimum the following EHS rules will be strictly followed:

***Site EHS Rules*:**

- EHS orientation sessions before starting work;
- Wearing of personal protective equipment (gloves, helmets, safety shoes, dungarees, goggles etc);
- Follow the messages and instructions displayed on EHS notice boards installed on site;
- Promptly reporting all accidents to the concerned authority;
- Maintain appropriate barricades as required;
- Vehicles must be driven at a safe speed, observing speed limits of 30 Km/h and designated routes as mentioned in Contractor's Mobility Map;
- Drivers must have a valid driving license for the class of vehicle they are operating;
- Vehicles shall only be parked in designated parking areas; and
- Mine clearance of the project investment area.

***Health and Hygiene*:** The measures should include:

- Provision of adequate medical facilities to the staff;
- Provision of hygienic food to the employees;
- Provision of cooling and heating facilities to the staff; and
- Provision of drainage, sewerage and septic tanks in camp area.

Security: Security measures should include:

- Regular attendance and a controlled time keeping of all employees;
- Restriction of un-authorized persons to the residential and work areas;
- Restriction of carrying weapons and control hunting by employees; and
- Provision of boundary walls/ fences with proper exits to the camp.

Section (1.6) Implementation of *"Chance Find"* Procedures

16. If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor will carry out the following steps:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the National Culture Administration take over;
- Notify the supervisory Project Environmental Officer and Project Engineer who in turn will notify the responsible local authorities and the Culture Department of Province immediately (within 24 hours or less);
- Responsible local authorities and the Culture Department of Province would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of National Culture Administration. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
- Decisions on how to handle the finding shall be taken by the responsible authorities and Culture Department of Province. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
- Construction work could resume only after permission is given from the responsible local authorities or Culture Department of Province concerning safeguard of the heritage.

Section (1.7) Prohibitions

17. The following activities are prohibited on or near the project sites:

- Cutting of trees for any reason outside the approved construction area; Hunting, fishing, wildlife capture, or plant collection; Buying of wild animals for food; Having caged wild animals (especially birds) in camps; Poaching of any description; Explosive and chemical fishing; Disturbance to anything with architectural or historical value;
- Building of fires; Use of unapproved toxic materials, including lead-based paints, asbestos, etc.; Use of firearms (except authorized security guards); Use of alcohol by workers in office hours; Driving in an unsafe manner in local roads;
- Washing cars or machinery in streams or creeks; Maintenance (change of oils and filters) of cars and equipment outside authorized areas: Creating nuisances and disturbances in or near communities; Disposing garbage in unauthorized places; Indiscriminate disposal of rubbish or construction wastes; Littering the site; Spillage of potential pollutants, such as petroleum products; Collection of firewood; Urinating or defecating outside the designated facilities; and Burning of wastes and/or cleared vegetation.

Part (2) Construction Management and Monitoring

Section (2.1) Mitigation measures

18. Table below defines guidelines for the mitigation measures to be carried out by Contractor during implementation of construction works including key monitoring indicators for supervision by CSC/EMC. These requirements should be consistent with the final ESMP.

#	Activities causing impacts	Mitigation measures[Note: Project Owner means the agency responsible for supervision of works]	Monitoring indicators
1	Establishment, operation of labour camps, material and equipment yards and approach roads	• Ensure that the sites for campsite approved by Project Owner (PO); Construction of camp at location shown in the Contractor's Mobility Map • Ensue that washing areas, demarcated and water from washing areas and kitchen is released in sumps. • Ensure septic tanks of appropriate design have been used for sewage treatment and outlets are released into sumps • Ensure that the outlets released into sumps must not make a pond of stagnant water. • Ensure that latrines, septic tanks, and sumps are built at a safe distance from water body, stream, or dry streambed, and the sump bottom is above the groundwater level.	Selected sites through tripartite consultation including community, Contractor and Project Owner representative
2	Provision of camp facilities	Provision of security, septic tanks, latrines, lined wash area, safe water supply, paths, fire prevention equipment etc.	Comfortable living of staff
3	Disposal of waste generated from the camp	• Recycle metallic, glass waste; burry organic waste in impervious pit covered with soil. • Ensure that waste material is properly disposed off in a manner that does not affect the natural drainage.	No health issue occurred

4	Access tracks/haulage routs	• The moving machinery should remain within the project boundary. • Ensure that the access tracks, which are prone to dust emissions and marked on the map, should be maintained by water spraying daily. • After completion of construction work all the damaged roads / tracks will be restored by the Contractor, as it is Contractor's obligations. Ensure that surface run-off controls are installed and maintained to minimize erosion. • Restriction on movement of Contractor's vehicles on designation routes; deploy traffic man at the village to control the traffic.	Usage of the selected tracks
5	Hiring skilled workers from outside of the locality	Hiring of labour from the local communities	Signed Agreement between Project Owner and community for hiring of labour
6	Workers safety and hygienic conditions	Provision of protective clothing and equipment for labourers handling hazardous materials, (helmets, adequate footwear) for concrete works (long boots, gloves), for welders (protective screen, gloves dungaree), etc.	Safe working conditions
7	Water for labours consumption and construction	• Contractor has to make his own arrangements for water.	Water tanker and pump by the Contractor
8	Interruption of canal water supply	• Divert water through pipes at construction places.	Farmers' complain
9	Social issues	• Ensure that conflicts with localpowerholders and local communities are avoided. • Ensure that focus group meetings are conducted with both men and women to identify any water related and other issues related to project implementation.	Conflict, suspension of the project investment work
10	Storage of hazardous material (including waste)	Provide hard compacted, impervious and bounded flooring to hazardous material storage areas; Label each container indicating what is stored within; Train staff in safe handling techniques.	Nil health hazard and water contamination occurred.
11	Construction activities; handling of fuels, oil spell and lubricants	• Ensure that no contaminated effluent is released in to the environment. • Ensure that fuels, oils, and other hazardous substances handled and stored according to standard safety practices such as secondary containment. • Fuel tanks should be labeled and stored in impervious lining and dykes etc • Ensure that vehicle refueling to be planned on need basis to minimize travel and chance spills. • Ensure that operating vehicles are checked regularly	No oil spill observed

		for any fuel, oil, or battery fluid leakage.	
12	Cutting of trees in the right of way where required	To get agreement of the CDC/IA members	Signed Agreement between Project Owner and community
13	Excavation of channels	Proper compaction and water sprinkling	Erosion and dust emission minimized
14	Disposal of excavated material	Stockpile the excavated material to non-agriculture and in a minimum area and away from storm water	Minimum loss of habitat
15	Downstream water availability during project work.	Provision of diversion pipes for continuous water supply during rehabilitation works	Agreement between water users signed.
16	Loss of fertile soil and vegetation; impacts on natural vegetation and embankment erosion along the watercourse.	Remove surface soil of the location, stocked in a proper place and once the construction is finished, put the soil back on that place. The left over spoil soil should be collected and kept aside for rehabilitation of the site at later stage of the work; re-vegetate the embankments with indigenous plant species	Banks stabilized and re-vegetated
17	Dust and smoke emissions	All truckloads of loose materials shall be covered during transportation. Water spraying or any other methods shall be used by the Contractor to maintain the works areas, adjacent areas, and roads, in a dustless condition, as well the vehicle speed not to be exceeded from 30Km/h. Vehicles will be tuned regularly to minimize the smoke emissions.	Dust and smoke controlled
18	Noise pollution	Vehicles and equipment used to be fitted, as applicable, and with properly maintained silencers. Restriction on loudly playing radio/tape recorders etc.	Excessive noise generation controlled
19	Excavation of borrow areas	Excavate borrow soil up to maximum depth of 0.5m; with slope boundaries	Borrow area rehabilitated as per specification
20	Rehabilitation of borrow pits	Proper rehabilitation of borrow pits; Removal and storage of top 15 cm top soil having organic materials and spreading it back during restoration of borrow area	Borrow areas rehabilitated
21	Encountering archaeological sites during earth works	Project Owner field supervisor will halt the work at the site and inform to the regional team leader and Archaeological Department immediately.	The report from the project investment field supervisor, community and contractor

22	Aesthetic/ scenic quality	• Carry out complete restoration of the construction sites. • Remove all waste, debris, unused construction material, and spoil from the worksites.	Risk to the labour and visitor

Section (2.2) Environmental quality monitoring

19. In the case that an environmental quality monitoring is required during construction (as agreed during the transect walk and consultation with local community and/or preparation of the ESMP), the following monitoring program may be considered while specific locations, parameters, and frequency will be included in the Contractor's SOP:

IMPACT	PARAMETERS	EXAMPLE LOCATIONS	FREQUENCY
Air emissions	Dust level	Vicinity of clearing works, materials stockpile, and/or community areas	In windy Conditions or when traffic is heavy
Noise and vibration generation	Noise levels to meet Government requirements	In the vicinity of sensitive receivers	In response to complaints
Erosion and Sedimentation	Turbidity or total suspended solid (TSS)	Receiving water body upstream of other water use that are sensitive to turbidity and/or sedimentation	After heavy rain Events
Contamination of hazardous soils	Pesticides and heavy metals in sediments	In areas of known contamination	Prior to disposal; Prior to reuse
Surface water quality deterioration	TSS, pH, BOD, salinity, coliforms to meet government requirements	Downstream of Works in waterways or water body receiving wastewater from work offices and/or work camp.	Regularly during construction works

Attachment 2 (b) Simplified ECOP

1. This attachment presents a generic good environmental and housekeeping practices aiming to minimize the potential negative impacts during construction for very small civil works given attention to address the issue related to human and environmental safety and minimize disturbance of local residents. The project owner will ensure that the following practices are strictly implemented as relevant to the activities and locations of works. These requirements should be incorporated into the bidding and contract documents and contractor performance should be supervised, monitored, and reported as part of the project progress report.

2. The following "Do" and "Do Not" should be strictly observed:

Do:

- Limited working hour during the day time, especially in residential areas, and control driving speed;
- Minimize earth excavation and appropriate disposal of spoil;
- Minimize opening of new borrow pits and ensure proper closure;
- Minimize traffic congestion, dust and noise generation;
- Proper maintenance of construction equipment and vehicles;
- Provide appropriate safety sign (day and night) and closely inform local residents;
- Avoid spill of used oil and other toxic materials, including safe transportation and storage;
- Apply good housekeeping in the construction and/or storage sites to ensure safety of workers and peoples (collect and remove debris to keep the work site orderly and safe); Plan and implement adequate disposal of scrap, waste and surplus materials; Keep the work area and all equipment tidy; Designate areas for waste materials and provide containers; Keep stairways, passageways and ladders free of material, supplies and obstructions; Secure loose or light material that is stores on roofs or open floors; Keep materials at least 2m (5ft) from openings, roof edges, excavations or trenches; Remove or bend over nails protruding from lumber; Keep hoses, power cords, welding leads, etc from laying in heavily travelled walkways or areas; Ensure structural openings are covered/protected adequately; Provide the appropriate fire extinguishers for the materials found on-site. Keep fire extinguisher stations clear and accessible; etc.)
- Ensure access to clean water and latrines by workers and provide mosquito net.
- Avoid social/cultural conflict between workers and local population.

Do Not:

- Do not permit rubbish to fall freely from any locations of the project and/or access by animals (dogs, cats, pigs, etc.). Use appropriate containers.
- Do not throw tools or other materials.
- Do not raise or lower any tool or equipment by its own cable or supply hose.
- Use grounding straps equipped with clamps on containers to prevent static electricity buildup.
- Do not allow hunting of animals by workers in protected areas.

SPECIAL NOTE ON FLAMMABLE/EXPLOSIVE MATERIALS:

- Store flammable or explosive materials such as gasoline, oil and cleaning agents apart from other materials.
- Keep flammable and explosive materials in proper containers with contents clearly marked.
- Dispose of greasy, oily rags and other flammable materials in approved containers.
- Store full barrels in an upright position.
- Store empty barrels separately.
- Post signs prohibiting smoking, open flames and other ignition sources in areas where flammable and explosive materials are stored or used.
- Store and chain all compressed gas cylinders in an upright position.
- Mark empty cylinders and store them separately from full or partially full cylinders.
- Ventilate all storage areas properly.
- Ensure that all electric fixtures and switches are explosion proof where flammable materials are stored.

Annex 3: Procedures for Mine Risk Management[14]

This annex will be applied to ***all works*** to be implemented under Components A, B (B-2) and C (C-1) of IRDP-AF. Cost for implementation of this annex will be part of the investment cost.

1. ***Background:*** The following procedures are designed to respond to the risks caused by the presence of mines in Afghanistan and it is similar to the original project. The procedures are designed in the context of:

- ***Community rehabilitation / construction works*** to be identified and implemented by the communities themselves (for small projects of up to $100,000 each);
- ***Small and medium-size works*** to be identified by local authorities and implemented by local contractors (for projects up to $5m each);
- ***Works to be implemented directly by Government departments/agencies***, without use of contractors;
- ***Large works*** to be implemented by contractors (for projects above $5m);

2. General comment applying to all following procedures: All risk assessment and clearance tasks shall be implemented in coordination with the Mine Action Center for Afghanistan (MACA). These procedures may need to be amended in the future depending on evolving circumstances.

Procedure for Community-Managed Works

3. Application and procedures are as follows:

Applicability: This procedure applies to community rehabilitation / construction works to be identified and implemented by the communities themselves (for small projects of up to $100,000 each).

Overall approach: The communities should be responsible for making sure that the projects they propose are not in mine-contaminated areas, or have been cleared by MACA (or a mine action organization accredited by MACA).

Rationale: Communities are best placed to know about mined areas in their vicinity, and have a strong incentive to report them accurately as they will carry out the works themselves.

Procedure:

1. Communities are required to submit a reply to a questionnaire regarding the suspected presence of mines in the area where Bank-funded community-managed projects will be implemented. This questionnaire should be formally endorsed by the Mine Action Program for Afghanistan (MAPA). It will be a mandatory attachment to the project submission by the communities and should be signed by community representatives and the external project facilitator. External project facilitators will

[14] This requirement is similar to the original project related to mine risk

receive training from MAPA. Financing agreements with the communities should make clear that communities are solely liable in case of a mine-related accident.

2. If the community certifies that there is no *known* mine contamination in the area, the ministry responsible for the selection of projects should check with MACA whether any different observation is reported on MACA's data base.

- If MACA's information is the same, the project can go ahead for selection. The community takes the full responsibility for the assessment, and external organizations cannot be made liable in case of an accident.
- If MACA's information is different, the project should not go ahead for selection as long as MACA's and community's statements have not been reconciled.

3. If the community suspects mine contamination in the area,

- If the community has included an assessment / clearance task in the project agreed to be implemented by MACA (or by a mine action organization accredited by MACA), the project can go ahead for selection.
- If the community has not included an assessment / clearance task in the project, the project should not go ahead for selection as long as this has not been corrected.
- Mine clearance tasks must be implemented by MACA or by a mine action organization accredited by MACA. Communities will be penalized (subsequent funding by World-Bank funded projects shall be reduced or cancelled) if they elect to clear mines on their own.

Procedure for Small and Medium-size Works Contracted Out

4. Application and procedures are as follows:

Applicability: This procedure applies to small- and medium-size works to be identified by local authorities and implemented by local contractors (for projects up to $5m each).

Overall approach: MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before projects are considered for selection. Only project sites assessed to have a nil-to-low risk would be eligible for selection, unless they have been de- mined by MACA or by a mine action organization accredited by MACA.

Rationale: Neither local authorities nor local contractors have the capacity to assess the mine-related risks in a systematic way, while they may have incentives to underestimate them.

Procedure:

1. Prior to putting up a project for selection, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) to assess mine-related

risks in the area of the project (this should include checking information available in the MACA data base).

2. If MACA provides information suggesting a nil-to-low risk in the proposed project area, the project can go ahead for selection.
3. The contract between the responsible ministry and the contractor will include a clause stating that in case of an accident, legal liability would be fully and solely borne by the contractor.
4. If MACA assesses a potentially high risk in the area (whether due to the presence of mines or uncertainty),
   - If the project includes an assessment / clearance task agreed to be implemented by MACA (or by a mine action organization accredited by MACA), it can go ahead for selection based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization);
   - If the project does not include an assessment / clearance task, it should not go ahead for selection as long as this has not been corrected.

Procedure for Works to be implemented directly by Government Departments/Agencies, without use of contractors

5. Application and procedures are as follows:

Applicability: This procedure applies to works to be implemented directly by Government departments/agencies, without use of contractors.

Overall approach: MACA (or a mine action organization accredited by MACA) should provide detailed information on the mine-related risks (either based on previously done and updated general survey or on a new general survey) before works or installation of goods/materials are carried out in any given area. Work would only be allowed to proceed in areas assessed to have a nil-to-low risk, unless they have been de-mined by a mine action organization accredited by MACA .

Rationale: Government departments and agencies responsible for providing services currently do not have the capacity to assess the mine-related risks in a systematic way, and currently follow a process of consulting with MACA prior to carrying out activities.

Procedure:

1. Prior to carrying out work, the Government department/agency will consult with MACA to assess mine-related risks in the area (this should include checking information available in the MACA data base). If not already done, a general survey should be carried out by MACA (or by a mine action organization accredited by MACA) to assess mine-related risks in the area.

2. If MACA provides detailed information on mine-related risks which suggest a nil-to-low risk in the proposed area, the work can proceed. The Government would be solely liable in case of a mine-related accident.

3. If information provided by MACA cannot support the assessment of a nil-to-low risk in the proposed area (whether due to the presence of mines or uncertainty), works should not go ahead before MACA (or a mine action organization accredited by MACA) carries out the necessary further assessment and/or clearance for risks to be downgraded to nil-to-low, based on agreed funding modalities (clearance may be funded either under a contract with a Bank-funded project or under existing donor agreements with the mine action organization).

Procedure for Large Works Using Contractors

6. Application and procedures are as follows:

Applicability: This procedure applies to large works to be implemented by large contractors (projects above $5m).

Overall approach: The main contractor should be responsible for dealing with mine-related risks, in coordination with the UN Mine Action Center.

Procedure:

1. As part of the preparation of the bidding documents, a general survey should be carried out by MACA (or a mine action organization accredited by MACA) on all the areas where contractors may have to work (broadly defined). This survey should provide detailed information on mine-related risks in the various areas allowing for an un-ambiguous identification of areas that have a nil-to-low risk of mine/UXO contamination and areas where the risk is either higher or unknown. The survey should be financed out of the preparation costs of the bidding documents.

2. All survey information should be communicated to the bidders (with sufficient legal caveats so that it does not entail any liability), as information for the planning of their activities (e.g., location of campsites, access roads to quarries).

3. Depending on the nature and location of the project and on the available risk assessment, two different options can be used.

Option 1 – Mine-clearance activities are part of the general contract

a. Based on the general survey results, a specific budget provision for mine action during construction is set aside as a separate provisional sum in the tender documents for the general contract.

b. As a separately identified item in their bid, the bidders include a provision for a further detailed mine assessment and clearance during construction.

c. On the instruction of the Supervision Engineer and drawing on the specific provisional sum for mine action in the contract, the contractor uses one of several nominated sub-contractors (or a mine action organization accredited by MACA) to be rapidly available on call, to carry out assessment prior to initiation of physical works in potentially contaminated areas, and to conduct clearance tasks as he finds may be needed. The Contractor may also hire an international specialist to assist him in preparing and supervising these tasks. The Contractor is free to choose which of the

accredited sub-contractors to use, and he is fully responsible for the quality of the works and is solely liable in case of accident after an area has been demined.

d. To avoid an "over-use" of the budget provision, the Contractor is required to inform the Supervision Engineer in writing (with a clear justification of the works to be carried out) well in advance of mobilizing the mine-clearing team. The Supervision Engineer has the capacity to object to such works.

Option 2 – Mine-clearance activities are carried out under a separate contract

a. Specific, separately-awarded contracts are issued for further surveying and/or clearing of areas with a not-nil-to-low risk (under the supervision of the Engineer) by specialized contractors (or a mine action organization accredited by MACA). The definition of the areas to be further surveyed / cleared should be limited to those areas where any contractor would have to work, and should not include areas such as camp sites and quarries/material sites which are to be identified by the Contractor during and after bidding of the works. As a result of these further surveys and possibly clearance works, mine-related risk in the entire contract area is downgraded to nil-to-low.

b. The contract with the general Contractor specifies the extent of the portion of the construction site of which the Contractor is to be given possession from time to time, clearly indicating restrictions of access to areas where the mine risk is not nil-to-low. It also indicates the target dates at which these areas will be accessible. Following receipt of the notice to commence works from the Engineer, the Contractor can start work in all other areas.

Annex 4. Sample Grievance Registration Form

This annex applies to all investment schemes to be financed by IRDP-AF.

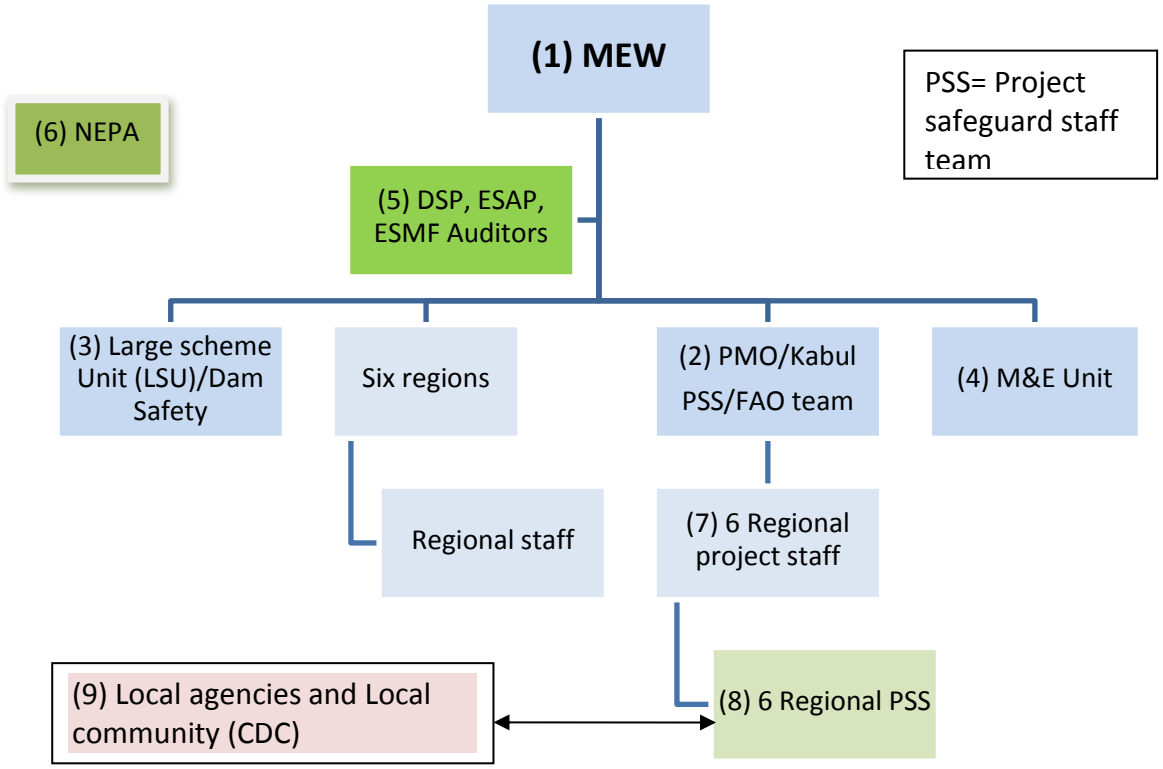
(Refer to ESMF Section 6.4 for information relating to the components and functioning of the GRM)

Grievance Number: _____ LOCATION : District: _____ Village: _____ CDC Name: _____ NAME OF COMPLAINANT: _____ Tazkira number: _____ ADDRESS:_____Telephone #: _____ DATE RECEIVED:
Classification of the grievance (Check boxes) ☐ Water Use ☐ Dispute with contractors ☐CDC formation ☐ Inter-community dispute ☐Land acquisition and Compensation ☐ Technical/operational coordination ☐ Financial ☐ Process delays ☐ Water Quality ☐ Noise ☐ Sanitation ☐ Water Use ☐ Other (specify)_____
Brief description of the grievance:
What is the perceived cause?
Suggested action (by complainant) to address grievance:

Annex 5: Organization and Reporting (Project and Investment Levels)

This annex presents (A) organization and responsibility of key entity related to safeguards monitoring performance as well as the reporting form (B), reporting schedule (C), and reporting format (D). Project safeguard staff will be responsible for monitoring and timely reporting.

(A) Organization structure of safeguard monitoring (see explanation in table below)



Key roles on monitoring and reporting

Locations	Key Functions	Remarks
Kabul	Program Management Office (PMO)	(1) -(6) in diagram
PMO Director	Manage to ensure compliance with ESMF	
Kabul PSS Team	• Take actions to ensure ESMF compliance; • Prepare safeguard quarterly report for submission to PMO director; • Prepare 6 month safeguard monitoring report for submission to WB. • Finalize TOR for ESIA and SESA and supervise/monitor the progress in close consultation with FAO team, ESAP, and DSP. • Provide safeguard support to other MEW units responsible for the project and maintain close coordination with NEPA and other key agencies. • Provide guidance to PSS regional and conduct	FAO will provide assistance; The reports will be filed to permit easy retrieval and indicators will be incorporated into the AF project M&E system; EMC will be mobilized to assist.

	periodic monitoring and training	ESMF implementation auditor will also be mobilized.
Project teams(PMO and Large Scheme Unit (LSU)	• Prepare, appraise, and supervise construction of the irrigation scheme, river bank erosion, remedial works, and other works. • Finalize ECOP and include it in the bidding and contract document. • Supervise/monitor safeguard performance of contractor and include the results in the construction progress report	CSC will be mobilized to assist
M&E Unit staff [(3) in diagram]	Monitoring the overall progress/achievement of the proposed investment	Safeguard performance will be one of the M&E indicator
NEPA/ESMF audit	Participate in monitoring as appropriate	
ESAP/DSP	Review and ensure quality	
(B) Regional offices		(7)-(9) in diagram
Regional director		
Project teams (PMO/LSU)	Identify and prepare the investment scheme and supervise, monitor during construction	
Regional PSS Team	• Coordinate with the project team during identification and preparation of the ESMP; Take lead in consultation with local authority and community. • Monitor and prepare monthly report for the ESS team in Kabul	
Local staff and CDC	Monitor with regional ESS team on the ground	

(B) Monthly Progress Report of Project investments from the IAs

Project Investment Monthly Report

1. **Instructions:** This form must be sent to the Project Director every month without fail. Attach additional information as needed should the form below not provide enough space.

Progress report for the month of:_____

Project Investment Name:_____

Project Investment Number:_____

Village/area:_____

District:_____

Progress: (List all the project investment components and the progress todate (e.g. siltation, salinization, water-logging, conflict over distribution of water, village meetings etc.)

Component	Description of project investment to date
1.	
2.	
3.	
4.	

Comments on Project Investment Progress:

(Report if there have been any problems that require the attention and assistance of the Regional Project Director).

Problem/Issue	Comments

(C) Scheduling and Reporting by Area Environmental and Social Focal Point

Activity	Year 1				Year 2				Year 3				Remark			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Mitigation Measures ---------- ---------- etc.																
Monitoring ---------- ---------- etc																
Institutional Strengthening ---------- ---------- etc																
Training ---------- ---------- etc																

(D) Environmental and Social Progress Report Format

Sl. No	Project investment	Key environmental and social issues	Mitigation measures taken	Implementation and monitoring of ESMP	Training & capacity-building programs implemented	Convergence	Lessons learnt	Remarks

Annex 6: Dam Safety Requirement for Dams

Attachment 6 (a): Dam Safety Requirements for Remedial Works of Existing Dams

1. ***Objective and scope:*** This attachment will be applied *during the preparation of the minor safety works for the proposed existing dams to be identified and implemented* under Component B (b) of IRDP-AF. To ensure full compliance with the WB's Policy on Safety of Dams (OP/BP 4.37), the attachment outlines key requirements of OP/BP 4.37 for ***the existing dams*** (Part 1) and the activities to be carried out during the implementation of IRDP-AF (Part 2). The Program Management Office (PMO) of the Ministry of Energy and Water (MEW) is responsible for ensuring that appropriate measures are prepared and implemented according to these requirements including having necessary human and financial resources and providing training.

(Part 1) WB's Safeguard Policy on Safety of Dam (OP/BP 4.37) Applicable to Existing Dams

2. Main objectives of the OP/BP 4.37 are to protect downstream populations, ecosystems and investments from consequences of dam failure and to ensure that dams are properly designed, constructed, and monitored. Assessment and mitigation requirements distinguish between large or small dams as defined in the policy, reservoir size, and potential hazard to downstream community and ecosystems. OP/BP 4.37 distinguishes between small and large dams as follows:

- Small dams are normally less than 15 meters in height, including farm ponds, local silt retention dams, and low embankment tanks while large dams are 15 meters or more in height.
- Dams that are between 10 and 15 meters in height are treated as large dams if they present special design complexities--for example, an unusually large flood-handling requirement, location in a zone of high seismicity, foundations that are complex and difficult to prepare, or retention of toxic materials.
- Dams below 10 meters in height are treated as large dams if they are expected to become large dams during the operation of the facility.

3. For existing dams, the policy is as follows:

- Mobilize one or more independent dam specialists to (a) inspect and evaluate the safety status of the existing dam, its appurtenances, and its performance history; (b) review and evaluate the owner's operation and maintenance procedures; and (c) provide a written report of findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety.
- The Bank may accept previous assessments of dam safety or recommendations of improvements needed in the existing dam if the borrower provides evidence that (a) an effective dam safety program is already in operation, and (b) full-level

inspections and dam safety assessments of the existing dam, which are satisfactory to the Bank, have already been conducted and documented.

- Necessary additional dam safety measures or remedial work may be financed under the proposed project. When substantial remedial work is needed, the Bank requires that (a) the work be designed and supervised by competent professionals, and (b) the same reports and plans as for a new Bank-financed dam be prepared and implemented. For high-hazard cases involving significant and complex remedial work, the Bank also requires that a panel of independent experts be employed on the same basis as for a new Bank-financed dam.

(Part 2) Action to be Carried-Out under IRDP-AF

(a) Mobilization of dam specialist

4. Review of documents suggested that most of the existing water storage dams in Afghanistan is considered as large dams per OP/BP 4.37. In this context, to comply with OP/BP 4.37, MEW will mobilize at least one independent dam specialist to (a) inspect and evaluate the safety status of the existing dam, its appurtenances, and its performance history; (b) review and evaluate MEW's operation and maintenance procedures; and (c) provide a written report of findings and recommendations for any remedial work or safety-related measures necessary to upgrade the existing dam to an acceptable standard of safety. In order to accelerate the process, it will be best to utilize one or more (depending on the size and complexity of the dam) experts from the established Dam safety panel (DSP). The report, namely a Dam Safety Report (DSR), will be submitted to WB for clearance and will be reflected in the final design of remedial works before tendering. Below provides basic principles to be considered during the inspection and preparation of the DSR.

5. To confirm that the selected dams are large dams the following checklist will be applied for all dams to be implemented under IRDP-AF:

Checklist to determine if the dam is considered as large dam or not

Screening Criteria	Applicable (yes or No)		Remarks*
1. The height of dam is higher than 15m?	Yes □	No □	
2. The height of dam between 10-15m with storage capacity of the dam is larger than 3 million cubic meter?	Yes □	No □	
3. The height of dam is between 10-15m with many complex design features (e.g. require high flood frequency, located in areas affected by serious earthquakes, complex foundation and difficult to build, or keep the toxic materials) and/or pose high risks to human population downstream?	Yes □	No □	

*If the answer to any questions above is "yes", dam is classified as large dam and need to follow specific requirements for large dam; If the first three questions do not have any answer "yes", the dam is considered as a small dam; Specific data should be provided under Remark.

(b) Objective and Scope of DSR Preparation

6. Main objective of the DSR is to review, analyse and make recommendations on: (a) All conditions that could have a bearing on the safety of the dam(s) and ancillary structures; (b) The risk and hazard of potential failure of the dam(s) or ancillary structure(s) due to extreme natural conditions, human error or structural damages; (c) The present and the future institutional framework that is necessary to avoid or mitigate adverse dam safety conditions; and (d) The proposed remedial works of the selected dams.

7. For rehabilitation and/or upgrading of existing dams considered to be large and/or high hazard, the following principles will be applied:

(1) Prior to the site inspection, the dam safety team/consultants will collect, review and briefly summarize available documentation in respect of the existing dam, including design reports, design drawings, as-built drawings, reports on repairs of dam and outlet structures as applicable, inundation maps due to large discharges, flood warning system for the population downstream, etc.

(2) *Carry out the site inspection of all dam components:* read and note the reservoir level, check monitoring equipment including piezometers, check operation & action instructions for the operator that are visibly posted on the outlet structure, make pictures of deficiencies, identify locations with erosion, corrosion, differential settlements, damages, slumping of embankments, all locations where seepage occurs (make pictures) and check whether seepage is turbid or clear, estimate discharges of seepage or leakage, check debris removal facilities, ask field operators about current or recent problems.

(3) After the site inspection the dam safety team/consultant will report as follows on the dam and outlet works:

- Report relevant characteristics and structural dimensions of each of the dam(s) and ancillary structures: length / height / width and elevation of the crest, chainage markers, height of parapet, wave height, freeboard, camber of the crest, gradient of upstream and downstream slopes, elevation and width of berms, dimensions of key trenches (if any), grout screens, impervious blankets, type and thickness of upstream and downstream slope protection, chimney drains, finger drains, drainage blankets, pressure relieve wells, dam safety instrumentation like piezometers, settlement beacons, staff gauges or automatic water level recorder(s), and other structural components as applicable.
- Review and comment on deficiencies or accidents in respect of the dam(s) as applicable (including settlements, cracks, erosion / beaching, sink holes, other damage, slope stability problems, cattle damage, damage due to human activity, public access, security measures, seepage, leakage, traffic damage of dam crest,

previous problems, major previous repairs, vegetation on slopes and berms and possible other adverse conditions).

- Provide relevant data in respect of dimensions and condition of all steel and concrete structures on / in / through / across or underneath the dam sections, including the foundation condition of these structures, height, width, u/s means of flow control (stoplogs, type and number of control gates, type and number of guard gates, valves), d/s flow control equipment, dimensions of stilling basin(s), deterioration or erosion damage etc.
- Review and comment on the condition of structural and electrical components as applicable (including the present condition of each of the concrete structures, control gates, guard gates, gate frames, condition of rubber seals, problems in operation of structures (if any), cracks, leakage, trashracks, corrosion of reinforcement / structural components / lifting equipment, other damage or lack of structural components, e.g. if guard gates in the outlet works are lacking or in case of absence of chainage markers on the dam crest.
- Review the organisation of the dam owner that is in charge of dam (safety) management and assess adequacy and training needs of the managing and operational staff involved. Archiving system and data base of dam (safety) monitoring data as well as communication system used between the dam / spillway / outlet and the head office of the dam owner should be included.
- Review the guidelines for dam safety management which have been established or have been adopted by the dam owner. Check whether and when these guidelines have been followed and specify where this has been reported by the dam owner to the regulator.
- Collect and review the Operation, Surveillance and Maintenance (OS&M) manuals of the dam and the ancillary structures. Present a summary of the findings, comment on the OS&M manuals and propose improvements as applicable.
- Collect and review all existing dam safety reports and summarize relevant findings and recommendations of these reports in a systematic way, including emergency detection / evaluation and classification, allocation of responsibilities, inundation maps, Emergency Preparedness Plans (EPPs), Emergency Action Plans, Emergency Notification Flowcharts, etc.
- Collect and review all documents required for planning and implementation of emergency preparedness measures.
- Specify additional investigations, analysis and other data that are (possibly) required for the dam safety assessment and for formulating further recommendations.

(4) The team/consultant will prepare a summary list with their recommendations for structural and non-structural measures to be implemented to improve the dam safety

conditions including prioritise the proposed measures and preparation of budget needed both for the capital investments and the recurrent cost. In case (part of) the relevant information required for the dam safety analysis is not (yet) available, the team/consultant will specify in the report which additional data have to be collected (if existing) before final conclusions and recommendations are given. If certain relevant information is not (yet) available the team/consultants will prepare recommendations in respect of additional surveys and/or studies to provide lacking parameters or, alternatively, shall select the characteristics that should be adopted in a dam safety analysis.

(c) Scope of the DSR

8. For large and/or high hazard dam, scope of the DSR should include, but not limited to, the following aspects:

- *Background on the existing dams and/or reservoirs.* This should include information on the type and performance of existing dams and the number of local population at risks, including existing instrument, inspection procedure and capacity.
- *Dam safety review result.* The report should summarize observed dam safety issues as well as recommendations on remedial works and indicative cost estimate.
- *Review and guidance for finalizing the four Dam Safety Plans.* In case that Emergency Preparedness Plan (EPP) and Operation and Maintenance (O&M) Plan do not exist – which may be the case for some of the existing dams in Afghanistan – or the Consultant finds the existing ones in need of complete re-doing, there will be a need to engage additional expert/s from the DSP, since the tasks may prove too large for one specialist. Alternative may be that the Consultant engaged for the DSR prepares a TOR for Dam safety plans, which then would be prepared within the dam rehabilitation design consultancy.

(d) Scope of Four Dam Safety Plans

Four Dam Safety Plans should be prepared as follows:

1. *Plan for construction supervision and quality assurance*. It covers the organization, staffing levels, procedures, equipment, and qualifications for supervision of the construction of a new dam or of remedial work on an existing dam. The TORs for construction supervision and quality control for rehabilitation works of selected existing dams should be prepared before appraisal and submitted for bank review.
2. *Instrumentation plan*. This is a detailed plan for the installation of instruments to monitor and record dam behavior and the related hydro-meteorological, structural, and seismic factors. It is provided to an independent panel of experts (DSP) and the Bank during the design stage, before bid tendering, during project implementation.

3. *Operation and maintenance (O&M) plan*. This plan covers organizational structure, staffing, technical expertise, and training required; equipment and facilities needed to operate and maintain the dam; O&M procedures; and arrangements for funding O&M, including long-term maintenance and safety inspections. A preliminary plan is provided to the Bank for use at appraisal. The plan is refined and completed during project implementation; the final plan is due not less than six months prior to the initial filling of the reservoir. The Plan should be prepared as soon as possible during project implementation given that those dams are under operation. Elements required to finalize the plan and initiate operations are to be financed under the project. A preliminary O&M Plan is attached as Attachment 1, as example – the client should prepare final one and submit to the bank for review.

4. *Emergency preparedness plan*. This plan specifies the roles of responsible parties when dam failure is considered imminent, or when expected operational flow release threatens downstream life, property, or economic operations that depend on river flow levels. It includes the following items: clear statements on the responsibility for dam operations decision making and for the related emergency communications; maps outlining inundation levels for various emergency conditions; flood warning system characteristics; and procedures for evacuating threatened areas and mobilizing emergency forces and equipment. The broad framework plan and an estimate of funds needed to prepare the plan in detail are provided to the Bank prior to appraisal. The plan itself is prepared during implementation and is provided to the Panel and Bank for review not later than one year before the projected date of initial filling of the reservoir. The Plan should be prepared as soon as possible during project implementation given that those dams are under operation. Elements required to finalize the plan and initiate operations are to be financed under the project. A framework EPP is attached as Attachment 2, as example – the client should prepare final one and submit to the bank for review.

Attachment 1: Framework for Preliminary Operation & Maintenance Plan

1 Introduction

1.1 Structure of this Document

[Description of structure of Document]

1.2 Key Features of the Dams

[Description of key features of Dams, i.e dam structure (earth embankment dam, concrete dam or mixed material dams etc…), height of dam, reservoir storage capacity etc…]

2 Management Structure

[Dam safety management; Emergency preparedness; Asset management; Dam surveillance; Flood management]

2.1 Staffing

[Indicate the staffing schedule required to carry out the O&M plan]

3 Dam Operating Procedures

[Indicate the dam operation activities that the dam owners/managers are required to carry out]

3.1 Dam Operating Plan

The O&M plan will provide the details of the operating system

4. Maintenance

4.1 Maintenance Program

A maintenance program for the dam and appurtenant structures shall be prepared in line with the O&M Plan shall define all tasks to be undertaken as scheduled or recommended to ensure: Reliable and safe operation; Regular inspection; Early detection of deterioration; Rehabilitation to be carried out in a timely manner to ensure all plant is kept in good condition

Maintenance program identifies components of the dam and appurtenant structures requiring maintenance, schedule maintenance activities and record what is done when and by whom

4.2 Filing of Maintenance and Inspection Reports

Inspection of the dam shall be scheduled and good records maintained.

Following each inspection, the inspection records/reports should be assessed by a maintenance supervisor for organizing the appropriate maintenance activity

Routine maintenance inspections at least monthly are appropriate to identify any maintenance needs and to assess an appropriate maintenance response. A Monthly

Surveillance Check sheet - Dam Safety and Maintenance shall be prepared and included in the Appendix (to be prepared)

4.3 Time Based Maintenance, Inspections and Testing

The aim of the testing program is to confirm that the equipment is in good working order and is capable of normal and emergency operation. In addition it is necessary for operators to be familiar with the performance of this equipment, especially if it is otherwise infrequently used

Typical time based maintenance and testing activities for the equipment installed at the dam is to be provided. It is important that the equipment manufacturers' maintenance recommendations are considered and integrated with the generic tasks described below

5 Dam Safety Surveillance

5.1 Purpose of Surveillance

[Description of purpose of dam safety surveillance]

5.2 Instrumentation Monitoring (to be completed with the Instrumentation Plan)

Instrumentation is required to monitor dam safety particular in the following areas: Deformation and movement of the body of the dam; Seepage monitoring (which includes the monitoring weirs or quantitative visual observations); Piezometer head; Reservoir water levels, etc

5.3 Regular Inspection Program and Frequency

Routine surveillance applies where no known potential safety deficiency exists. The regular inspection program is to be outlined in a table format. Check sheets for inspection of each feature of the project shall be included in the Appendix to the O&M plan

5.4 Data Collection, Storage and Analysis

5.4.1 Data Collection

Surveillance inspectors are responsible for field data collection, visual observations as well as instrument readings which includes river flow, precipitation, water levels, seepage monitoring etc. The inspectors shall therefore be appropriately trained in accurate data collection through data collection sheets

5.4.2 Data Storage

Check sheets used during all inspections should be filed systematically. Copies should be kept on site, as well as being forwarded to the O&M Manager for review. Data recorded this should be stored and analyzed using a spreadsheet. The spreadsheet should be backed up to another office for protection

5.4.3 Data Analysis

Surveillance data and information will be collected, systematized, analyzed, accessed and compared with the design assumptions in order to detect any abnormal conditions and

communication as defined in the communication protocol made. This would enable appropriate actions to be taken in a timely manner

6 Alarm Levels (to be determined)

6.1 Visual observations

6.2 Instrumentation

7 Regular Reporting Program (to be determined)

Indicate the reporting required for surveillance and the frequency of reporting (for example Monthly Dam Safety Reports, Annual Dam Performance Report, Dam Safety Verification, Special Purpose Reports etc…)

Maps, drawings, diagrams, key staff schedule, etc. will be attached to attachment s (to be prepared).

Attachment 2: Framework of Emergency Preparedness Plan

1. Introduction

1.1 Background

[Description of the project]

1.2 Purpose of the EPP Framework

Indicate the purpose of EPP framework:

This EPP framework is prepared to guide the development of the full-fledged EPP including responsible organizations, communication procedures, downstream topographic survey, dam failure modes analysis, inundation simulation, etc

2. General information

Preparation of section on general information will be done in close collaboration of the various agencies involved in the EPP. These agencies would also be responsible for the review of the EPP

2.1 Main features of the Dams

[Description of key features of Dams, i.e dam tructure (earth embankment dam, concrete dam or mixed material dams etc…), height of dam, reservoir storage capacity etc…]

2.2 Roles and Responsibilities

The EPP shall specify the roles and responsibilities of key Government organizations, local authorities and stakeholders which are responsible for execution of the EPP which is proposed under this framework

2.3 Organization of communication

Indicate the procedures of communication in case of emergency

3. Description of dam potential failure modes

This section of the EPP shall present the results of analysis of the likely failure modes of the dam.

4. Inundation Map

This section of the EPP shall present the results of dam break analysis / downstream flooding simulation and delineate the areas which would be affected in case of the dam failure. The inundation maps therefore clearly show the areas which would be affected in the event of dam failure

5. Monitoring systems and early warning system

The EPP shall define the dam surveillance system to be put in place. The plan shall include identifying equipment/facilities requiring physical/visual inspection, remote monitoring, testing etc. The surveillance frequency identifying what requires daily, weekly, monthly, annual inspection etc. shall also be defined. The persons responsible for the various levels of surveillance shall also be clearly defined

* Early warning and identification of emergency conditions

Through the monitoring instruments, the dam operation staffs will be able to identify the abnormal signs and/or emergency conditions. Decription of signs of potential emergency cases

* Communication system

Prepare the contact list of responsible organizations and officials in case of emergencies and the way of communication

6. Warning levels and response matrix

The EPP shall provide a well-defined warning levels and response action in the in the event of an emergency. The warning levels and response matrix suggested in ***Error! Reference source not found.*** *is indicative and subject to further review and finalization in the full-fledged EPP*

7. Evacuation plan

The EPP shall define practical evacuation procedures which shall include evacuation routes to be used in case of emergencies and also locate safe havens where persons at risk shall relocate to in order to be safe from risk of floods in the event of a dam failure. Various agencies would be involved in the event of evacuation and the EPP would define the roles of the various agencies

8. Power supply and safety measures

The EPP prepared shall clearly analyze the implications of a dam failure or an emergency situation on power supply to the dam operations, emergency activities, rescue activities etc. as well as back-up power supply options (such as generator, etc.)

9. Maintenance testing and training

The EPP shall be reviewed and revised annually, and changes made to reflect changes, e.g. personnel, contacts, updating of equipment, facilities, technical skills etc.

Testing is an integral part of the EPP, and provision should be made for this.

The EPP shall also provide for training of project O&M and Surveillance staff, which is an essential component of having effective response to dam safety emergencies

Attachment 6 (b): Dam Safety Requirements for the Design Study of New Dams

1. This attachment will be applied to *the design study to be carried out under Component B (a) and (c) of IRDP-AF*. To ensure full compliance with the WB's Policy on Safety of Dams (OP/BP 4.37), the attachment outlines key requirements of OP/BP 4.37 for new dams (Part 1) and the dam safety actions to be carried out during the implementation of IRDP-AF (Part 2). The Program Management Office (PMO) of the Ministry of Energy and Water (MEW) is responsible for ensuring that appropriate measures are prepared and implemented in line with these requirements including having necessary human and financial resources and providing training.

(Part 1) WB's Safeguard Policy on Safety of Dam (OP/BP 4.37) Applicable to New Dams

2. *Objective and scope:* Main objectives of the OP/BP 4.37 are to protect downstream populations, ecosystems and investments from consequences of dam failure and to ensure that dams are properly designed, constructed, and monitored. Assessment and mitigation requirements distinguish between large or small dams as defined in the policy, reservoir size, and potential hazard to downstream community and ecosystems. OP/BP 4.37 distinguishes between small and large dams as follows:

- Small dams are normally less than 15 meters in height, including farm ponds, local silt retention dams, and low embankment tanks while large dams are 15 meters or more in height.
- Dams that are between 10 and 15 meters in height are treated as large dams if they present special design complexities--for example, an unusually large flood-handling requirement, location in a zone of high seismicity, foundations that are complex and difficult to prepare, or retention of toxic materials.
- Dams below 10 meters in height are treated as large dams if they are expected to become large dams during the operation of the facility.

3. For new dams, the policy requires that:

- The dam be designed and its construction supervised by experienced and competent professionals. It also requires that the borrower[4] adopt and implement certain dam safety measures for the design, bid tendering, construction, operation, and maintenance of the dam and associated works.
- For large dams, the Bank requires (a) reviews by an independent panel of experts (the Panel) of the investigation, design, and construction of the dam and the start of operations; (b) preparation and implementation of detailed plans: a plan for Construction Supervision and Quality Assurance, an Instrumentation Plan, an Operation and Maintenance Plan, and an Emergency Preparedness Plan; (c) prequalification of bidders during procurement and bid tendering, and (d) periodic safety inspections of the dam after completion. For small dams, generic dam safety measures designed by qualified engineers are usually adequate.

- The Panel consists of three or more experts, appointed by the borrower and acceptable to the Bank, with expertise in the various technical fields relevant to the safety aspects of the particular dam.[15] The primary purpose of the Panel is to review and advise the borrower on matters relative to dam safety and other critical aspects of the dam, its appurtenant structures, the catchment area, the area surrounding the reservoir, and downstream areas. However, the borrower normally extends the Panel's composition and terms of reference beyond dam safety to cover such areas as project formulation; technical design; construction procedures; and, for water storage dams, associated works such as power facilities, river diversion during construction, ship lifts, and fish ladders.
- The borrower contracts the services of the Panel and provides administrative support for the Panel's activities. Beginning as early in project preparation as possible, the borrower arranges for periodic Panel meetings and reviews, which continue through the investigation, design, construction, and initial filling and start-up phases of the dam. The borrower informs the Bank in advance of the Panel meetings, and the Bank normally sends an observer to these meetings. After each meeting, the Panel provides the borrower a written report of its conclusions and recommendations, signed by each participating member; the borrower provides a copy of that report to the Bank. Following the filling of the reservoir and start-up of the dam, the Bank reviews the Panel's findings and recommendations. If no significant difficulties are encountered in the filling and start-up of the dam, the borrower may disband the Panel.

(Part 2) Dam Safety Actions to be Carried-Out under IRDP-AF

4. Given the nature of the country, most of the new dams considered feasible in Afghanistan would likely be considered as large storage dams per OP/BP 4.37. In this context, under IRDP-AF PMO/MEW will ensure that the following conditions are met:

(a) Recruit experienced and competent professionals for design of the new dams in terms of planning, investigations, analysis and detailed design;

(b) Mobilize an independent panel of experts (the Panel or DSP) to review the investigation and detailed design from the Dam Safety Perspective, for the new dams. DSP will review the design of new dams, construction plan and 4 dam safety plans (see below) and submit a report summarizing its comments and recommendations.

(c) For each proposed new dam, prepare 4 Detailed Dam Safety Plans comprising (i) a plan for Construction Supervision and Quality Assurance (CSQA), (ii) an Instrumentation Plan, (iii) preliminary Operation and Maintenance (O&M) Plan,

[15] The number, professional breadth, technical expertise, and experience of Panel members are appropriate to the size, complexity, and hazard potential of the dam under consideration. For high-hazard dams, in particular, the Panel members should be internationally known experts in their field.

and (iv) framework Emergency Preparedness Plan (EPP)[16]. In line with OP/BP 4.37 (Annex A), the CSQA Plan will cover the organization, staffing levels, procedures, equipment, and qualifications for supervision of the construction of a new dam. The IP will provide details for the installation of instruments to monitor and record dam behavior and the related hydro-meteorological, structural, and seismic factors. The O&M Plan will cover organizational structure, staffing, technical expertise, and training required; equipment and facilities needed to operate and maintain the dam; O&M procedures; and arrangements for funding O&M, including long-term maintenance and safety inspections. The EPP will specify the roles of responsible parties when dam failure is considered imminent, or when expected operational flow release threatens downstream life, property, or economic operations that depend on river flow levels. It includes the following items: clear statements on the responsibility for dam operations decision making and for the related emergency communications; maps outlining inundation levels for various emergency conditions; flood warning system characteristics; and procedures for evacuating threatened areas and mobilizing emergency forces and equipment; and.

(d) Ensure that comments and required dam safety measures by the DSP would be reflected in the detailed designs and tendering documents of the dam and associated works, as well as aforementioned four dam safety plans.

5. To determine whether the proposed dam is considered large dam or not in the scope of IRDP-AF, the following checklist will be conducted:

Checklist to determine if the dam is considered as large dam or not

Screening Criteria	Applicable (yes or No)		Remarks*
1. The height of dam is higher than 15m?	Yes □	No □	
2. The height of dam between 10-15m with storage capacity of the dam is larger than 3 million cubic meter?	Yes □	No □	
3. The height of dam is between 10-15m with many complex design features (e.g. require high flood frequency, located in areas affected by serious earthquakes, complex foundation and difficult to build, or keep the toxic materials) and/or pose high risks to human population downstream?	Yes □	No □	
*If the answer to any questions above is "yes", dam is classified as large dam and need to follow specific requirements for large dam; If the first three questions do not have any answer "yes", the dam is considered as a small dam; Specific data should be provided under Remark.			

[16] Following the bank policy, during the project preparation (design stage of the dams) preliminary O&M plan and framework EPP will suffice. The full-fledged plans will be deferred to the future project financing and construction stage.

(2.1) Mobilization of a Dam Safety Panel

6. MEW will mobilize a Dam Safety Panel (DSP or the Panel) comprising at least 3 dam safety experts: typically international dam safety expert, geotechnical specialist, and hydrologist. Although the procurement process can begin immediately, the finalization and contract award will be possible after the effectiveness of the IDP-AF project. The DSP will provide the services throughout the implementation of the IRDP-AF. Draft TOR for the DSP has been prepared (see Attachment 6 (c)). MEW will provide administrative support, facilitate meetings and field visits, and will keep WB closely informed.

(2.2) Preparation of Detailed Designs (Component B (b))

7. Under Component B, an ESIA study, detailed designs and Dam Safety Documents of the selected new dams will all be conducted and completed. A draft TOR for the ESIA study has been prepared including a section related to dam safety compliance (see Attachment 8(a) of the ESMF). A draft TOR for detailed designs for each dam will be prepared and implemented in accordance with OP/BP 4.37 requirements. MEW will ensure that the ESIA study, the detailed designs and Dam Safety Documents of the selected new dams will be conducted by experienced and competent professionals/consultants and that the TOR for detailed designs will explicitly incorporate the recommendations from the ESIA study and those from the dam safety panel (DSP). DSP as independent panel will review Dam Safety aspects of th ESIA report.

(2.3) Preparation of the Detailed Dam Safety Plans

8. MEW will ensure that for each proposed new dam, the 4 Detailed Dam Safety Plans comprising (i) the CSQA Plan, (ii) the Instrumentation Plan, (iii) the O&M Plan, and (iv) the EPP are prepared as required by OP/BP 4.37. These plans are separate from the ESIA, due to the confidential / security considerations. Draft generic TORs of these 4 Plans will be prepared and submitted for WB clearance before finalizing the detailed design of selected dams during project implementation, as the consultation of the selected new dams will not be covered by this project. Other plans will also be prepared during project implementation as below considering that the construction of the new dams are not covered by this project.

A. Construction Supervision and Quality Assurance Plan

This plan covers the organization, staffing levels, qualification, key tasks, procedures, etc. for supervising the rehabilitation and dam safety improvement works of existing dams. The TORs for CSQA Consultancy will be submitted during project implementation before finalizing the detailed design of selected new dams.

B. Instrumentation Plan

This is a detailed plan for the installation of instruments to monitor and record dam behavior as well as hydro-meteorological, structural, geological, seismic and other relevant factors. This plan is to be prepared as part of detailed design/bidding package during project implementation. It is provided to an independent DSP and the WB for review at detailed design stage.

C. O&M Plan

This plan covers organizational structure, staffing, technical expertise, and training required; equipment and facilities needed to operate and maintain the dam; O&M procedures; and arrangements for funding O&M, including long-term maintenance and safety inspections. The preliminary plan is to be submitted to the WB for review during project implementation. The final plan is to be submitted to the DSP and WB not later than six months prior to the completion of rehabilitation works (not under this project).

D. Emergency Preparedness Plan

This plan specifies the roles of responsible parties when dam failure is considered imminent, or when expected operational flow release threatens downstream life, property, or economic operations that depend on river flow levels. It includes the following items: clear statements on the responsibility for dam operations decision making and for the related emergency communications; maps outlining inundation levels for various emergency conditions; flood warning system characteristics; and procedures for evacuating threatened areas and mobilizing emergency forces and equipment. The broad framework plan and an estimate of funds needed to prepare the plan in detail are provided to the WB for review during project implementation. The full-fledged plan is prepared during implementation and is provided to the DSP and WB for review no later than one year before the projected date of initial filling of the rehabilitated dam/reservoir (not under this project).

Attachment 6 (c): TOR for Dam Safety Panel (DSP)

Irrigation Rehabilitation and Development Project Additional Financing (IRDP-AF)

DAM SAFETY PANEL (DSP)

Terms of Reference

A. Introduction

1. *The IRDP-AF Project:* The Ministry of Energy and Water (MEW) of the Government of Islamic Republic of Afghanistan (GoA) has received a grant from the International Development Association (IDA or the World Bank or WB) for implementation of the Irrigation Restoration and Development Project (IRDP) and preparation of an additional financing (IRDP-AF) to be implemented during 2017-2019. The IRDP-AF activities will include rehabilitation of existing irrigation schemes, undertaking river bank protection, building capacity on hydromet, undertaking simple remedial works of 2 existing dams, preparation of detailed designs and environmental and social impact assessment (ESIA) of the priority new dams, development of national dam safety guideline, and other technical assistance related to water resources management and enhancing MEW capacity to effectively plan and manage water resources. These activities will be implemented through the following five components: (A) Rehabilitation of Irrigation Systems and River Bank Protection; (B) Support for Dam Development, Operation, and Maintenance; (C) Improvement of Hydrological Services and WRM; (D) Project Management and Capacity Development; and (E) Improved Basin Planning and Management (see details in Attachment 1). The Program Management Office (PMO) of MEW will be responsible for implementation of IRDP-AF.

2. *The WB Safeguards Requirements:* The IRDP-AF is classified by WB safeguard policy as EA category A and the six WB's safeguards polices triggered are as follows: (i) Environmental Assessment OP/BP 4.01, (iii) Pest Management (OP/BP 4.09); (iii) Involuntary Resettlement OP/BP 4.12; (iv) Safety of Dams OP/BP 4.37; (vi) Physical Cultural Resources (OP/BP4.11); and (v) Projects on International Waterways OP7.50. To ensure compliance with these policies an Environmental and Social Management Framework (ESMF) was prepared outlining the principles, the processes, and specific requirements for the environmental and social management of each of the five components including compliance with the Environmental Impacts Assessment (EIA) regulation of Afghanistan. The ESMF also includes specific requirements on dam safety according to OP/BP 4.37 which will be applied to Component B and a revised Resettlement Policy Framework (RPF) in line with OP/BP4.12 which will be applied when land acquisition, resettlement and/or loss of livelihoods occurs in the IRDP-AF project. Main objective of OP/BP 4.37 is to protect downstream populations, ecosystems and investments from consequences of dam failure and ensure that dams are properly designed, constructed, and monitored and also requires that an advisory panel on safety of dam will be engaged during the preparation and construction of new large dams. The OP/BP 4.01 also requires that the project owner of either Category A

projects that are highly risky or contentious or that involve serious and multidimensional environmental and social concerns will engage an advisory panel of independent, internationally recognized environmental specialists to advise on all aspects of safeguard activities to be carried out under the project.

3. ***DSP:*** To comply with these requirements (OP/BP4.01 and OP/BP 4.37) MEW is establishing an Environmental and Social Advisory Panel (ESAP) and a Dam Safety Panel (DSP) for the IRDP-AF. ***This TOR is for the establishment of the DSP line with OP/BP 4.37.***

B. Objectives of the Services

4. The main purpose of the DSP is to review and advise PMO/MEW on matters relative to dam safety and other critical aspects of dams (including its appurtenant structures, the catchment area, the area surrounding the reservoir, and downstream areas) to be carried out under IRDP-AF including review of TOR and detailed design of the proposed 2 new dams to be undertaken with due consideration to ensure full compliance with OP/BP 4.37 applicable to a new large dam. (The DSP will also review the dam safety and rehabilitation design of selected existing dams.) However, PMO/MEW wish to also assign the Panel's responsibility to cover the technical issues related to project formulation, technical design, construction procedures, and other associated works such as power facilities[17].

5. Specific objectives will be, but not limited to, the followings:

- Under Component B (a) and in coordination with ESAP, the DSP will review and comment on the scope and quality of the detailed designs of the proposed new dams including review and comment on the TOR and the various outputs/reports at phases. The DSP will provide independent recommendations on quality, safety, improvement (if any), and next steps to ensure compliance with OP/BP 4.37 of the proposed dams.
- Under Component B (b) and in coordination with ESAP, the DSP will review the Dam Safety Report (DSR) to be prepared for each proposed dam to ensure adequacy of the report in line with OP4.37 requirements and relevant laws of Afghanistan. During the implementation of remedial works, the DSP will advise on the effectiveness of the DSR implementation and ways to improve it (if any), therefore the client will not have to recruit another individual dam specialist for this task.

- Under Component B (c) and in coordination with ESAP, the DSP will review the TOR and documents related to the development of dam safety guideline from engineering and other technical aspects taken into account the need to comply with OP/BP 4.37, OP/BP 4.01, and other related WB's safeguard policies as well as the relevant laws and regulations of Afghanistan.

C. Scope of the Services

[17] When necessary an electro-mechanical expert will be included in the panel.

6. The DSP experts will:

1. Share information with and advise the PMO/MEW project team on the best international practices on detailed design of new large dams taken recommendations and findings from ESIA study into account and provide independent advice on all aspects related to dam safety.
2. Provide independent confidential advice (due to security concerns) to the PMO/MEW, guidance, and quality assurance services on all dam safety aspects of the ESIAs and related ESMPs and unanticipated possible environmental and social impacts (if any) which may arise during the construction and operational phases.
3. Review and provide comments to improve the quality of: the TOR for the detailed design and the ESIA's for the 2 new dams to be identified and the draft and final detailed design and ESIAs reports related to dam safety for the 2 new dams;
4. Review the decisions of MEW regarding detailed design and other issues which may arise during the implementation of IRDP-AF related to dam safety.
5. Prepare an independent panel reports after each mission visit summarizing its findings and recommendations including the review result of new dams design report (and rehabilitation design of existing dams), including a final review report before the final draft of the detailed design has been cleared.
6. Urgent DSP meetings may be called in situations where PMO/MEW needs immediate advice.
7. The scope (and duration of assignment) of the DSP will be extended to advise on the activities related to existing dams as requested by PMO/MEW.
8. The DSP members shall not reveal any information about the project that he/she might receive from MEW or from other Afghan agencies.

D. Mode of Operation

7. The DSP shall comprise internationally recognized (i) dam safety engineer, (ii) engineering geologist, (iii) hydrologist and (iv) national dam safety engineer (i.e. four panel members in total). The DSP will work closely with the ESAP to be established and operational during the implementation of IRDP-AF.

8. Overall, the DSP will act as an independent advisor, rather than a consultant or provider of technical assistance to PMO/MEW. In terms of organization, the international dam safety expert will take the lead with support from the international engineering geologist, international hydrologist and national dam safety expert and they will work closely with PMO/MEW detailed design team and other project staff. He/she will ensure the objectivity of the Panel and its members, and provide a balance in the Panel's reviews and recommendations and ensure timely reporting of the Panel.

9. The DSP will liaise with PMO/MEW to collect information and exchange views on an ongoing basis throughout the IRDP-AF project. It is anticipated that the DSP will make field visits at key points of the detailed design and the ESIA process to be determined by PMO/MEW in consultation with the international expert. The DSP will establish the

schedule for these reviews in coordination with PMO/MEW. The DSP is expected to have the ability to conduct its work with open access to all project areas that it may be interested in and all four project sites – assuming security permits. The DSP will also be provided with access to all relevant documents, drawings, and sites in the project areas to facilitate its work. The DSP shall be included on routine distribution lists of all relevant project communications about the detailed design and ESIAs in order to increase their effectiveness during infrequent visits.

10. PMO/MEW will make arrangements for any meetings between the DSP, the ESAP, and the detailed design and/or ESIA Consultants. PMO/MEW will also provide administrative and logistical support for field visits including sufficient security and office space to facilitate the work of the DSP. The PMO Director will serve as the regular contact point between PMO/MEW and the DSP.

11. The DSP will carry out its work and may meet with the full range of stakeholders: potentially affected populations, national and local government, community organizations, civil society organizations and nongovernmental organizations if need arises. The DSP may meet with local communities without interference from PMO/MEW or any Beneficiary Party. The views and opinions of all stakeholders will continue to be actively solicited through the ESAP process. The ESAP may, at its discretion, invite PMO/MEW and the World Bank to accompany it during field visits.

12. PMO/MEW shall upon recommendation of the International Dam Safety expert appoint short-term specialists beyond the membership of the DSP, on an ad-hoc basis, for specific assignments to deal with issues that may arise for which the DSP member has insufficient expertise (i.e. hydrology). PMO/MEW will also be able to hire translators/interpreters to assist the DSP in undertaking its work and to ensure that its findings and recommendations are disseminated in Dari and Pasthto.

E. Qualities of Members of the DSP

13. The members of the DSP will constitute a group of high-level, internationally-recognized professionals[18]. The members of the DSP should among them share cutting edge expertise and profound experience within their areas of expertise. Most importantly, the DSP members shall be of international stature with unimpeachable personal integrity, able to resist any pressure that might be brought to bear on their conclusions.

F. Panel Composition

14. Based on the preliminary understanding of the project issues, the DSP will have four (04) key permanent members, 01 International Dam Safety Expert (chair), 01 International Engineering Geologist, 01 International Hydrologist and 01 National Dam Safety Expert. Additional members will be invited and approved on an as-needed basis by MEW upon request by the International Dam Safety Expert of the DSP.

G. Selection Criteria

[18] Efforts will be made to try to include national specialists with international class expertise and familiarity with international practices and standards.

15. To ensure the complete independence of the DSP in addition to satisfying the requirements of high integrity, substantive knowledge and broad experience its members should:

- Should have international class expertise in their respective fields and experiences of dams and large hydraulic infrastructure projects for more than 20 years.
- not have a conflict of interest with the project or perceived to have one. International Experts shall not be nationals of any of the riparian countries and
- not have been engaged in positions/consultancies with any of the consultancy firms to undertake the Feasibility Study or detailed design of the proposed projects.

H. Overall Key Competencies

16. The DSP members as a team should have extensive knowledge on dam safety, hydrology and geology required for detailed engineering design of a complex water resources management and infrastructure programs / projects with a broad knowledge and experience regarding environmental and social issues associated with them. Other type of expertise, such as on transboundary issues, governance issues, local communities, and Afghan or regional context, may be necessary and for that additional panel members may be required. All DSP members should be familiar with and have relevant working knowledge of and experience with World Bank Safeguards Policies related to safety of dams (OP/BP 4.37), have relevant practical and technical expertise in reviewing project reports produced by consulting firms, and have strong analytical and reporting skills and ability to work in teams. The dam safety experts will have a demonstrated capacity to prepare reports in English. The national dam safety expert will be familiar and have relevant working knowledge of national laws and regulations related to dam design and dam safety of Afghanistan.

I. Minimum Expert Qualification Requirements

(i) International Dam Safety Expert

17. The Expert should possess a post graduate degree in civil engineering or other related engineering fields. Additional training and/or experience related to dam safety aspects related to hydropower, irrigation, and/or other aspects related to water resources management will be an added advantage.

18. The candidate should have at least twenty (20) years of continuous practical experience with the preparation and implementation or supervision of detailed design of large dams. Preferably, he/she should be a registered or certified engineer in his/her home country and should have served as a dam safety expert or equivalent position for a minimum of 10 large-scale projects, 5 of which should be related to large-scale water resources.

19. The candidate should also have significant experience in (a) preparation of detailed design for large scale infrastructure projects including dams; (b) methods and model studies for analyses and prediction of environmental impacts, particularly for hydropower projects, (c) design and implementation issues during construction and operations of dams including management and monitoring plans, and (d) experience on cost estimated related to detailed

design and various options of ways to minimize potential negative impacts downstream of a dam.

20. The candidate should be familiar with the World Bank policy related to dam safety (OP/BP 4.37) and should have strong implementation experience and analytical and reporting skills as well as an ability to work as a member of a team. He/She should have fluency in spoken and written English.

(ii) International Engineering Geology Expert

21. The Expert should possess a post graduate degree in civil engineering, geotechnical engineering or other related engineering fields. Additional training and/or experience related to engineering geology aspects related to hydropower, irrigation, and/or other aspects related to water resources management will be an added advantage.

22. The candidate should have at least twenty (20) years of continuous practical experience with the preparation and implementation or geotechnical investigations for detailed design of large dams. Preferably, he/she should be a registered or certified engineer in his/her home country and should have served as a geotechnical expert or equivalent position for a minimum of 10 large-scale projects, 5 of which should be related to large-scale water resources.

23. The candidate should be familiar with the World Bank policy related to dam safety (OP/BP 4.37) and should have strong implementation experience and analytical and reporting skills as well as an ability to work as a member of a team. He/She should have fluency in spoken and written English.

(iii) International Hydrology Expert

24. The Expert should possess a post graduate degree in civil engineering, water resources engineering or other related engineering fields. Additional training and/or experience related to hydrology aspects related to hydropower, irrigation, and/or other aspects related to water resources management will be an added advantage.

25. The candidate should have at least twenty (20) years of continuous practical experience with the preparation and implementation or hydrology analysis and modelling for detailed design of large dams. Preferably, he/she should be a registered or certified engineer in his/her home country and should have served as a hydrology expert or equivalent position for a minimum of 10 large-scale projects, 5 of which should be related to large-scale water resources.

26. The candidate should be familiar with the World Bank policy related to dam safety (OP/BP 4.37) and should have strong implementation experience and analytical and reporting skills as well as an ability to work as a member of a team. He/She should have fluency in spoken and written English.

(iv) National Dam Safety Expert

27. The candidate shall have a minimum of Master's degree in civil engineering or other related engineering field. Higher degree or qualification is preferred. He/she should have a

minimum of 20 years of working experience related to detailed design of a complex dam; have participated in detailed design and various workshops/meetings related to dam safety issues; and have participated in at least 5 infrastructure projects financed by WB or other international financiers like ADB, JICA. The expert should be computer literate and should have a good command of English (listening, speaking, reading, and writing).

28. The national dam safety expert will be familiar and have relevant working knowledge of national laws and regulations related to dam design and dam safety of Afghanistan.

J. Specific Reporting Requirements.

29. During the IRDP-AF implementation the DSP shall review and provide comments on all relevant key documents and reports related to dam safety (draft TOR for detailed design, draft TOR for ESIA, mid-term report, draft final detailed design reports, ESMPs if required). Security permitting, the DSP members will make at least one field visits to dam sites. The DSP shall prepare a Review Reports following each visit and after the detailed design is completed. These reports will provide specific and practical recommendations on the detailed design taken the ESIA process into account. The DSP shall submit the Review Reports to PMO/MEW on time to ensure that PMO/MEW and any other parties adopt the recommendations as soon as possible in order to correct any noncompliance issues. The Review Reports shall be submitted by DSP or transmitted by PMO/MEW to the World Bank for its review and for public disclosure.

30. The Review Reports signed by all DSP members, will normally cover, but not be limited to the following: (i) status of the detailed design and issues related to dam safety; (ii) actions taken on previous recommendations made earlier in the detailed design review process; (iii) issues which need to be addressed as identified by the ESIA/ESAP, relevant consultants and contractors, or by affected parties and local nongovernmental organizations, etc.; (iv) DSP's recommendations of specific issues and actions to be taken.

31. All DSP reports following missions shall become public documents once PMO/MEW and the World Bank have had a reasonable time to comment. If the DSP wants to reject such comments, that shall be its prerogative. However, they shall be added as an attachment to the final report along with the DSP's response. The public shall be given access to the reports to increase transparency, independence and public engagement.

32. Final draft report of DSP shall be published by PMO/MEW when it is received from DSP and in most of the cases, within 20 days of completion of DSP's site visit. If preferable, the World Bank shall disseminate the DSP reports on its Website or Infoshop as it may find appropriate.

33. The DSP shall submit 5 copies in English language and 5 copies in Dari/Pashtu[19] language of which 1 is original and 4 are duplicates together with 2 CDs (English and Dari/Pashtu languages).

K. Length of Assignment

[19] The PMU/MEW will provide translation to Dari and Pashtu as necessary.

34. The assignment is expected to require the services of each panel member for up to 4 manmonths over the project period, which could be extended depending on the complexity and duration of the design works. In addition, the International Experts will have two weeks allowance for home-based work to finalize reports, as needed.

L. Responsibilities of MEW

35. MEW shall be responsible for:

- Providing the DSP with materials, data relating to the project including reports, figures and information relating to environmental and social activities and aspects of the project.
- Granting unrestricted, access to the entire project area, as well as surroundings or other such areas relevant, as may be requested by the DSP members and facilitate travel to and within Afghanistan, security and orientation.
- During the missions to Afghanistan and site visits and meetings, MEW shall assign relevant staff as may be requested by the DSP.
- Interpreting as necessary and translation of reports into Dari and Pashtu as required.

M. Qualification

36. All three DSP members should have at least a professional Degree with 20 years of work experience.

Skills: All aspects of Dam Safety, Hydrology, Geology, as specified under I. above.

Language(s) required: English

Submission Guideline:

Please send your CVs electronically to PCU mentioning the specific position below and vacancy number

1. International Dam Safety Expert
2. International Engineering Geology Expert
3. International Hydrologist
4. National Dam Safety Expert

Keyword to search this job on jobs.af

1. International Dam Safety Expert
2. International Engineering Geology Expert and
3. International Hydrologist
4. National Dam Safety Expert

Attachment 1: Project Description and WB Safeguard Requirements

(a) Project Objective and Component

1. The Project Development Objective (PDO) of the IRDP-AF is "to improve access to irrigation services in targeted areas and strengthen infrastructure and institutions responsible for water resources management". To measure achievement of the PDO during implementation a set of project results framework has been established.

2. The project activities will be implemented through the following components:

Component A. – Rehabilitation of Irrigation Systems and River Bank Protection (Original: US$70 million, Proposed: US$128 million). The additional US$58 will be used to: (a) cover the financing gap for increased per ha costs of irrigation rehabilitation (US$ 30 million); (b) carry out priority rehabilitation works of the priority irrigation schemes damaged by 2014 floods (US$8 million); and (c) carry out critical river bank erosion protection works to protect agricultural land (US$20 million). After restructuring and additional financing, this component would support the rehabilitation of irrigation schemes covering about 268,000 hectares and about 64 kilometers of erosion bank protection. In order to avoid overlap with the MAIL, irrigation schemes supported by this component would be those whose command areas are larger than 2,500 hectares. This component will be implemented in an annual program, which will be the part of the National Irrigation Program prepared by the MAIL. Further, procedures of implementation will be defined as outlined in paragraph 14.

Component B. – Support for Dam Development, Operation and Maintenance. (Original: US$31.3 million, Proposed: US$21.3 million). This component will support the following: (a) *preparatory studies* for the two dams identified under the original project in the Northern River Basin (completion of feasibility studies, environmental and social impacts assessment, and detailed designs); (b) critical minor safety works for a few existing dams to be identified, and (c) support to develop a technical, fiscal, and institutional framework for dam development and operation, including preparation of technical documents (dam safety guidelines, operation and management plans, emergency action plans) and asset management plan, provision of practical training on dam preparation (dam safety, feasibility studies, ESIA and detailed design) as well as the operation and maintenance plan, and set up of the Dam Unit within the MEW including the Panel of Expert. Training and capacity building for the Dam Unit.

Component C-1. – Improvement of Hydrological Services and WRM (Original: US$8.2 million, Proposed: US$23.2 million). Additional financing is proposed to scale up ongoing activities: (a) rehabilitation of existing hydromet data collection stations and construction of new hydromet data collection stations (scale-up); (b) development of hydrological models and flood forecasting for key river basins (new activity); and (c) capacity building in groundwater management (new activity).

Component C-2. – Improved Basin Planning and Management (New Component, Proposed: US$7 million). This new component is, in principle, a follow-up and scaling up of the Afghanistan Water Resources Development (AWARD) Project, which was closed in 2013. The component will comprise the following three activities:

(1) *Support for Water Resources Program, Policy, and Legal Framework*, aiming at developing the Water Resources Management Program, updating the Water Resources Policy developed in 2013, and drafting the amendment to the Water Law and implementation decree;

(2) *Institutional Strengthening for the MEW.* This activity includes technical assistance and investment support for: (a) the Water Resources part of the MEW as a follow up on the recent ADB study on Water Resources Plan identifying priority re-organization and training, (b) the Technical Secretariat of Water for the Supreme Council of Land and Water as an inter-ministerial coordinating body for overall WRM, and (c) the Transboundary Water Unit/Inter-ministerial Group to be established involving the MEW, the Ministry of Finance (MoF), and the Ministry of Foreign Affairs (MoFA).

(3) *Support for River Basin Management.* This activity includes mainly technical assistance to help operationalize the River Basin Management Authority and develop river basin management plans for the Upper Kabul River Basin, the Balkhab Basin and a river bank protection plan for the Panju-Amu River Basin, which are considered to be of high priority for the Government.

Preparation of a Strategic Environmental and Social Assessment (SESA) of the planned activities in this component, as listed above, to review and analysis any policy, regulatory, institutional and investment planning social and environmental implications, and to prepare recommendations that need to be addressed at the strategic level (i.e. above the individual investments/projects level).

Component D. – Project Management and Capacity Development (Original: US$39.2 million, no change). This component primarily supports the project administration, management, monitoring and evaluation. In particular, the project would support: (a) establishment of the five MEW Regional Offices, (b) office equipment and vehicles essential to carry out project implementation, (c) incremental operating cost, and (d) the FAO technical assistance team. While originally the FAO technical assistance was intended to primarily implement and administrate the project, the implementation responsibilities will be gradually transferred to the MEW and the focus of the FAO technical assistance will be focused on and expanded to: overall strengthening of MEW (e.g., financial management and safeguards), specific technical guidance (e.g., irrigation designs, dam safety) and policy advice.

(b) World Bank Safeguards Requirements

3. As indicates in the ESMF, below list safeguard requirements by component.

Table 1: ESMF Approach by Subcomponent of IRDP-AF

Components	Activities to be financed by IRDP-AF	Safeguards Documents/ Instruments	Timing for Preparation and Implementation of Safeguards Documents	Reference Annexes
Overall Project level	Components A-D	ESMF	ESMF including TORs for ESAP, DSP, ESIAs, RAPs and for the 4 Dam Safety Plans for the new dams prepared prior to Bank appraisal of the IRDP – AF	All TORs in ESMF Annexes
Component A - Rehabilitation of Irrigation Systems and River Bank Protection	(a) Financing gap of rehabilitation of existing irrigation schemes	ESMP including ECOP and PMF application	Site specific ESMPs (including final ECOP and PMF activities) will be prepared and implemented during implementation of the project.	Attachment 1 (a), (b), (c), (d), (e), and (f) + Attachments 2 (a), 3, 4, 5, and 7
	(b) Rehabilitation of priority irrigation schemes damaged by 2014 flood	Same as (a) above	Same as (a) above.	Same as (a) above
	(c) River bank protection works in critical areas	ESMP including ECOP	Site specific ESMPs (including final ECOP) will be prepared and implemented during the project.	Same as (a) above but exclude Attachment 1 (f)
Component B – Support for Dam Development, Operation, and Maintenance	(a) Preparation of safeguards documents and detailed designs for priority new dams	ESIA's, RAP's, 4No. Dam Safety Plans (which, Construction Supervision and Quality Assurance Plan, Instrumentation Plan, Operations and Maintenance Plan and Emergency Preparedness Plan.	Draft TORs for ESIA's, RAPs, and 4No Dam Safety Plans and TORs for ESAP and DSP will all be prepared by Bank appraisal of the IRDP – AF. The actual plans themselves, i.e. ESIA's, RAPs, 4No. Dam Safety Plans will be prepared during implementation of the project.	Attachment s 6 (b) and (d) and Attachment s 8 (a) (b)
	(b) Minor safety works for a few dams to be identified	ESMP including ECOP application and dam safety requirements for existing dam	Site specific ESMPs will be prepared and implemented during the project. A Dam Safety Report (DSR) will be	Attachment 1 (a), (b), (c), (d), and (e) + Attachment s 3, 4, 5, 6 (a),

			submitted for WB clearance prior to tendering.	and 7
	(c) Technical assistance for development of guidelines on safety of dams, training, and capacity building for a Dam Unit	The guideline will be prepared consistent with OP/BP4.37 If very small works are involved the simplified ECOP will be applied.	The generic simplified ECOP prepared and will be finalized and implemented during the project; The TOR for dam safety guideline will be prepared during the project	Attachment 2 (b) Annexes 4, 5, and 7
Component CImproveme nt of Hydrological Services and WRM	(a)Rehabilitation of existing and new hydromet stations	Simplified ECOP if very small works is required	The generic simplified ECOP prepared and to be finalized and implemented during the project	Attachment 2 (b) +Annexes 4, 5, and 7
	(b) Development of hydrological and flood models	None	None	None
	(c) Capacity building in groundwater management	None	None	None
	(d) Support Water Resources Program, policy, legal frameworks	SESA	TOR for SESA and SESA itself to be prepared and during implementation of the project	Annex 11
	(e) Institutional Strengthening for the MEW	Same as (1) above	Same as (1) above	Same as (1) above
	(f) Support for River Basin Management	Same as (1) above	Same as (1) above	Same as (1) above
	(g) SESA	None	None	None
Component D - Project Management and Capacity Building	(a) Establish five MEW office	Simplified ECOP if very small works is required	The generic simplified ECOP prepared and to be finalized and implemented during the project	Attachment 2(b)
	(b) office equipment and vehicles	None	None	None
	(c) Incremental operating cost	None	None	None
	(d) FAO technical assistance	None	None	None

Annex 7: Draft TOR for Environment and Social Impact Assessment (ESIA) Study and Environment and Social Advisory Panel (ESAP)
(To be finalized during implementation of the AF- IRDP and after stakeholder consultations on these Tors)

Attachment 7 (a): Draft TOR for Environmental and Social Assessment (ESIA) Study

1. This attachment contains the (draft) Terms of Reference (TOR) for the Environmental and Social Impact Assessment (ESIAs) which would be carried out by an independent consulting firm to assess the social and environmental impacts of the proposed new dams to be selected under Component B, including scope of the preparation of an Environmental and Social Management Plan (ESMP) and a Resettlement Action Plan (RAP) for each dam site expected to be selected in Mazar Region, Afghanistan.

A. INTRODUCTION

2. *Project Background:* The Ministry of Energy & Water (MEW) of the Government of Islamic Republic of Afghanistan (GoA) has received a grant from the International Development Association (IDA) for implementation of an additional financing of the Irrigation Restoration and Development Project (IRDP-AF) and intends to apply a portion of the fund for a consultancy service for undertaking an Environment and Social Impact Assessment (ESIA) of each selected dams considered high priority for ensuring adequacy of water resources for irrigation development which will be implemented during a follow-up project. Project Development Objective (PDO) of the IRDP-AF is *"to improve access to irrigation services in targeted areas and strengthen infrastructure and institutions responsible for water resources management"*. The project investments will include rehabilitation of the irrigation schemes, river bank erosion, building capacity on hydromet, undertaking simple remedial works of a few existing dams, preparation of detailed designs and environmental and social impact assessment (ESIA) of the selected priority dams, development of national dam safety guideline, and other technical assistance related to water resources management and enhancing MEW capacity to effectively plan and manage water resources. These activities will be implemented through the following four components: (A) Rehabilitation of Irrigation Systems and River Bank Protection; (B) Support for Dam Development, Operation, and Maintenance; (C) Water Resources Management and Development; and (D) Project Management and Capacity Building. The Project Coordination Unit (PCU) of MEW will be responsible for implementation of IRDP-AF. An Environment and Social Management Framework (ESMF) including Resettlement Policy Framework (RPF), specific requirements on safety of dams, Environment Code of Practices (ECOP), Pest Management Framework (PMF), and other guidelines have been developed for IRDP-AF and will be applied to all project activities. The IRDP-AF is expected to be implemented in mid 2016.

3. In 2014, under the IRDP original project, a prefeasibility study and ranking of 22 small/medium dams and feasibility studies (FS) of 10 priority dams were carried out with scope covering flood protection works, micro or mini-hydropower development, and other associated infrastructure and implementation of four high priority dams are recommended.

The FS studies also include Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) of the proposed project as well as project benefit and justification. Comments from the Panel of Expert (POE) responsible for review of these studies suggested that while most information with respect to engineering and conceptual design including alternative study of the proposed dam site is considered technically acceptable there are issues to be addressed during detailed design and follow-up ESIA study including more extensive consultation with affected population and local communities. Below provides background on priority dam sites in Marza region being proposed for review and consideration:

- **Sheer Aba dam site:** This is located in Sar-e-Pul district of Sar-e-Pul province at the latitude and longitude of 36^0 07'51.89" and $66^0$10' 8.62" respectively. The feasibility study suggested that the height of the dam is 63 meters (m) above the deepest river bed level, the command area of the project is 6,250 hectares (ha), reservoir storage volume is 41.86 million cubic meters (MCM) with the maximum surface area of the reservoir as 3.94 square kilometers (km^2), and the installed capacity is 4.56 megawatts (MW). About 41 project affected families with a population of 300 would be displaced and 13 households (HH) will be lost after construction of the project.
- **Dahan-e-Daradam site:** This is located in Pashtoonkot district of Faryab province at the latitude and longitude of 35° 49' 50.27" and 64° 51' 57.7" respectively. The feasibility study suggested that the height of the dam is 64.5m above the deepest river bed level, Culturable command area of the project is 3,000 ha., reservoir storage volume is 19.88 MCM with the maximum surface area of the reservoir as 1.014 km^2, and the installed capacity is 1.56 MW. About 75 HHs with a population of 304 in Chartoot village will be affected.
- **Ab-e-Keli dam site:** This is located in KhuramWaSarbagh district of Samangan province at the latitude and longitude of 35°52' 31.77" and 67°58' 5.35" respectively. The feasibility study suggested that the height of the dam is 64mabove the deepest river bed level, culturable command area of the project is 1,700 ha, reservoir storage volume is 8.85 MCM with the maximum surface area of the reservoir as 0.36 km^2, and the installed capacity is 1.92 MW. Potential submergence of houses and lands of 3 HHs with an affected population of 36.
- **TangiShadyan dam site:** This is located in Char Kint district of Balkh province at the latitude and longitude of $36^0$33'55.34" and $67^0$08'42.7" respectively. The feasibility study suggested that the height of the dam is 67m above the deepest river bed level, Culturable command area of the project is 670ha., reservoir storage volume is 4.31 MCM with the maximum surface area of the reservoir as 0.25 km^2, and the installed capacity is 1.08 MW. Submergence would result land loss of one land owner. The loss of the access road would be avoided after connecting the road with the dam crest on the new axis.

4. To move forward the implementation of the priority dams (all are large dams), MEW will mobilize an independent consulting firm to prepare an Environment and Social Impact Assessment (ESIA) for each dam to be selected during the implementation of IRDP-AF project including an Environmental and Social Management Plan (ESMP) acceptable to international financing.

Objective and scope of this assignment is described in this TOR.

B. OBJECTIVE OF THE TOR

5. To carry out an ESIA study for each of the selected dams with specific ESMP that could be implemented in line with international practices and acceptable for WB clearance including undertaking adequate consultation with affected communities in inundated areas, upstream area, and downstream areas and in close consultation with national agencies and local authorities responsible for approval, planning, and management of the proposed dams during construction and operation. Key deliverable outputs for each dam site are (a) specific site ESIA including ESMP that is ready for implementation and acceptable to WB and (b) specific site Resettlement Action Plan (RAP) or abbreviated RAP acceptable to WB should decision to implement the dam is made.

C. SCOPE OF THE ASSIGNMENT

6. The assignment has 3 distinct parts i.e. Part 1: Scope of the ESIA, Part 2: Scope of the ESMP, and Part 3: Scope of RAP which will only be prepared should a decision be made to proceed with construction of the dams.

7. The Consultant will be required to provide services in accordance with internationally recognized practices for consultancy services. The period of service may be extended, if found necessary and on the basis of the performance of the Consultant, for a period mutually agreed upon by both parties (MEW and the Consultant). MEW will be responsible for supervision of this assignment and ensuring effective and timely production of the key outputs. International consultants will be mobilized to assist MEW in the review and supervision of this assignment.

8. The objective and scope of the ESIA, the ESMP, and RAP describes in this section are generic in nature and they will be applied during the assignment. It is noted that most information on the environment and social background (mostly from secondary data and remote analysis due to limited access to the target areas), the potential impacts and mitigation measures, and the proposed mitigation plan is available in the 2014 FS/EIA/SIA study of the proposed priority dams, including some consultation with local authority and agencies and POE comments and recommendations.

9. In this context, the ESIA study should focus on (i) updating the information and analysis in close consultation with agencies and key stakeholders; (ii) undertaking meaningful consultation aiming to enhancing knowledge and understanding of key agencies/stakeholders at/near the proposed dam site and downstream/upstream areas regarding the proposed investment, the potential impacts (positive and negative), and the proposed mitigation measures including identification of key issues and/or concerns of the agencies and people; (iii) exploring alternatives/options for addressing issues related to water balance and potential impacts on other water users and dam safety risks including an evaluation of existing legal, policy and institutional practices in the project area related to dam safety, natural disaster, and emergency preparedness plan being conducted by MEW and/or other agencies; (iv) addressing the issues related to minimum flow and measures to be carried out to minimize downstream negative impacts and/or compensation (if needed) in

close consultation with key stakeholders; (v) assessing effectiveness of the proposed Catchment Area Treatment (CAT) proposed for each dam; (vi) identifying need for training and/or capacity building of agencies, local authorities, and communities to reduce potential negative impacts upstream and downstream of the proposed dam; (vii) describing dam safety measures to be undertaken for each dam site in line with the ESMF; and (viii) discussing issues related to the cumulative impacts as well as the potential impacts on transboundary (if any) and proposed mitigation measures as needed.

10. *The Consultant will review the FS/EIA/SIA study, the POE comments of the IRDP, the ESMF for IRDP-AF including the RPF as well as the WB safeguard policies triggered for the IRDP-AF project carefully during the preparation of proposal and identify activities and approach to be carried out during the assignment with clarity on scope and key outputs incl*uding action plan to move forward. *During inception, at least one field visit and initial consultation will be conducted and the proposed scope and activities will be confirmed.*

C1. Objectives of the ESIA

11. The principal objectives of each of the ESIA are to:

- Determine, analyse and evaluate all potential environmental and social impacts likely to result from constructing dams at each proposed dam location;
- Identify feasible and cost-effective mitigation measures for all impacts identified;
- Conduct meaningful and participatory consultations with all project stakeholder groups, including potentially affected persons, ensuring their views and comments are documented and taken into consideration;
- Facilitate the preparation of an ESMP and other relevant management plans to guide environmental and social management of the project during implementation;
- Provide recommendations to ensure overall environmental and social sustainability of the project;
- Meet the requirements or recommendations of the applicable national and international regulations and standards.

C2. Scope of the ESIA

12. The assessment will ensure compliance with the relevant environmental and social laws of Afghanistan and the triggered safeguards policies of the World Bank (see ESMF)).Key activities at each of the selected sites will include, but are not limited to, the following:

- Identify, analyze and evaluate beneficial and adverse environmental and social impacts;
- Examine the significance of environmental and social implications;
- Identify and analyze feasible alternatives that can also be considered not only during the construction and operational stages, but also during the detailed engineering design;

- Assess whether adverse impacts can be avoided, and beneficial impacts can be enhanced;
- Assess whether adverse impacts can be successfully mitigated
- Recommend feasible preventive and corrective mitigating measures;
- Record ESIA findings in the report for submission to MEW
- Advise whether development should proceed as proposed or with modifications.

C3. Specific ESIA tasks

13. Taken the generic scope mentioned above into account, the Consultant will carry out, but not limited to, the following specific tasks:

Task 1: Literature Review

The Consultant shall perform a comprehensive literature review of key documents related to environmental, social, security, occupational health and safety legislation, policies, guidelines, manuals, procedures, local practices and international best practices related to the project. Special focus will be on the applicable World Bank Safeguard Policies and Afghan laws (Afghan environment law, land management law, land expropriation law, law on preservation of Afghanistan historical and cultural artifact etc.) to get a deeper understanding of the project implications. Existing water sharing agreements should also be reviewed. A review of the environmental and social prefeasibility and feasibility studies of each proposed site/subproject, the ESMF, Resettlement Policy Framework (RPF) and other related documents of the IRDP-AF is required. The appropriate field tools including questionnaires, data collection forms etc. shall then be developed by the Consultant.

Task 2: Analysis of Alternatives

Each ESIA will include a description of the need for the dam, including an evaluation of the respective alternatives and the null or the "do nothing alternative". The Consultant will review the analysis conducted during the FS and provides opinion and/or additional options taken into account the environment and socials aspects.

The ESIA process should contribute to generation of alternatives to the construction of the proposed dams. Alternatives based on different approaches to the realization of the respective objectives of constructing dams at each of the selected from the environmental and social point of views will be considered by the Consultant. The comparative analysis should address (and quantify where possible): the environmental and social impacts, the feasibility of impact mitigation, capital and recurrent costs, the suitability of options under local conditions, and related institutional, training and monitoring requirements. The Consultant will have to clearly indicate in each of the ESIA the basis for selecting the proposed designs. To the extent possible, the Consultant will quantify the costs and benefits of each alternative, incorporating the estimated costs of any associated mitigating measures and the alternative of not implementing the whole or subcomponents of the proposed investment in order to

demonstrate environmental and social conditions without it. After completion of the analysis of alternatives and on selection of the respective final designs for the investment, the Consultant will complete and finalize the ESIA.

Task 3: Description of the baseline information

The Consultant will assemble, evaluate and present baseline data on the relevant environmental and social characteristics of each of four selected locations based on the FS/EIA/SIA study in 2014, including identification of any information on changes anticipated before the project commences and any on-going and/or future activities that may create cumulative and/or transboundary impacts. In addition to the data being used for determining and assessing impacts, it will be used as a baseline against which future changes caused by the project activities can be measured and monitored by MEW. The Consultant is required to collect, collate and present baseline information on the environmental and social characteristics of the existing situation around the dam and should include but not be limited to:

- **Physical environment:** geology, topography, soils, climate and meteorology; ground water and hydrology.
- **Biological environment:** flora, fauna and any protected sites, etc.; species of commercial or economic importance, and species with potential to become nuisances, vectors or dangerous.
- **Socioeconomic and cultural environment:** (include both present and projected where appropriate); population affected (numbers and subsistence systems), gender composition, livelihood patterns, standards of living and productive capacity and employment, outward migration, land use where appropriate and property (including houses, crops trees, plants, other properties. etc.); planned development activities; public health; cultural characteristics (including cultural property and heritage) etc. In addition to information on productive activities, source of income, and property rights, the socioeconomic analysis in downstream of each of the seleced sites is essential to provide information on local social and economic organization, potential risks, and local forms of cooperation. The study will also focus on land tenure, transfer systems, usage and rights over communal property; the patterns of social interaction in the affected communities, public infrastructures and social services that will be affected; and social and cultural characteristics of displaced communities. The study will also include a map of community structure, with core-periphery structure and formal and informal social and political organization and relationships.

Task 4: Legislative and Regulatory Framework

The Consultant will identify and describe the pertinent regulations and standards - both local and international -, governing the environmental quality, health and safety, protection of sensitive areas, land use control at the national and local levels and ecological and socio-economic issues. The Consultant will provide a complete

description of Afghan legislation, International Agreements and Conventions ratified by Afghanistan, World Bank requirements, and international best practice standards with particular reference to any concerns/hazard/impact on health, safety, social and environmental issues for all activities and areas involved in the project. The Consultant will analyze the following themes among others:

- Afghan laws and policies regarding resettlement, land acquisition and management;
- Identification of the requirements for staging temporary facilities for accommodation, fabrication, and materials handling;
- Requirements for establishment of materials sourcing sites including borrow pits and stone quarries;
- Afghan laws and standards regarding waste management with reference to the waste classification and disposal;
- Requirements for construction camps especially issues of public health as the area will have to sustain a large workforce during construction;
- Health of employees including provision of first aid/emergency treatment and provision of Personal Protective Equipment (PPE) for personnel;
- Protection of physical cultural resources and guidelines for activities on water bodies including rivers;
- Minimum HSE requirements for workforce on site;
- National Labor law and requirements for child labor; and
- Laws, regulations, and institutional aspect related to natural disaster and emergency preparedness plan.

Task 5: Determination of impacts of project activities

The main objective in assessing the potential effects of the proposed activities will be essentially to permit planning of activities to avoid or reduce undesirable effects and/or to enhance secondary benefits of the project among others. The Consultant will determine, evaluate, analyze and describe all the potential significant changes to be brought about by constructing proposed dams at each of the selected sites as shall be recommended by each of the Feasibility Studies. The Consultant will ensure a special focus on identifying potential downstream impacts of activities at each of the proposed sites. The impacts can be direct, indirect or induced, and cumulative and will encompass environmental, ecological and social impacts, both positive and negative, as a result of each activity intervention that are likely to bring about changes in the baseline environmental and social conditions. There are several issues associated with the construction phase that could potentially affect the biophysical, cultural and socio-economic environment, which the Consultant will have to assess. Examples of some of these issues are the mining of aggregate material required for

the project, potential siltation of the river, the management of noise, dust and traffic issues associated with construction activities, a review of seismic vulnerability of the project, and an assessment of labour and health issues such asthose resulting from an influx of people associated with construction camps. The Consultant will investigate issues relating to ecology, biodiversity, heritage, traffic, noise, property impacts, land use and recreational facilities during and after construction. In the case of socioeconomic impacts, some example can be; land/asset acquisition, livelihood of the affected communities, business and loss of social services.

The Consultant will analyze the potential effects to physical, land, livelihood, biological, and cultural resources that may result from building each of the proposed dams. The Consultant will review each of technical feasibility studies and designs and will assess whether there would be no risk or negligible risk of significant adverse impacts due to potential failure of the dam's structures to local communities and assets. Therefore, the description of the potential impact of each of the selected sites needs to consider the whole range of reservoir and river basin management issues including but not limited to:

- potential impact from short-term or long-term migration to the project area in search for jobs;
- Impacts of construction camps and excavations;
- impact on fisheries, agriculture and other sources of income;
- Impact on downstream irrigation-based agricultural systems and drinking water supply both during reservoir filling phase and routine operation
- Permanent and temporary land/assets acquisition impacts. Resettlement
- Key social and environmental performance indices, e.g. persons requiring resettlement or loss of private and community land vs. additional hectares irrigated/megawatt production capacity (no. persons/MW), area of critical natural habitats or physical cultural resources affected (ha);
- Effect on the hydrology and on the water quality of the river;
- Impact on river flow regime, including changes in volume, pattern and quality of water downstream of the dam;
- Possible loss of cultural property (including archaeological and historical sites) and provision for chance finds;
- Potential impact from short-term or long-term migration to the project area in search for jobs;
- Impact on downstream fisheries, agriculture and other sources of income;
- Impact on public infrastructure, e.g. road and social services, e.g. cemeteries, grazing areas, mosques, and shrines.

The issues above will be assessed in detail by the Consultant so that the full scope of the proposed activities are understood and appropriate mitigation measures can be developed and built into a site specific ESMP/RAP. Implementation of a project may exert a suite of effects during construction that largely end when the project comes into operation. It is therefore recommended that the Consultant discusses the effects

of the project construction (including preparatory phase if any) separately from those of project operation. Furthermore, the assessment of effects will need to be categorized into short-term vs. long-term effects, irreversible versus mitigated effects, and project-specific versus potentially cumulative effects. The classification will also include:

- Desirability of the impacts: positive and negative;
- Probability of the impacts: rare/highly unlikely, possible, probable/certain;
- Magnitude of the impacts: low, medium, high;
- Duration of the impacts: temporary/short-term, temporary long-term, permanent;
- Numbers of entities: individual, local, regional, national, trans-boundary;
- Residual significance after mitigation.

Each impact identified will be classified according to the criteria above indicated. According to the results of the classification, a final evaluation of the importance of the impact will be assigned (high, medium and low).

Task 6. Assessment of Cumulative Impacts

The Consultant will assess each of the selected sites in terms of its irrigation/generation potential under existing and historic conditions, and in terms of the potential of each dam to alleviate or exacerbate any issues in the downstream and upstream environments. For the purpose of these assessments, the Consultant will assess both the effects on the baseline situation and the cumulative effects in combination with feasible future developments at each location.

Identification of Valued Environmental and Social Components (VECs)

Based on the baseline information collected, including initial conversations with stakeholders, the Consultant shall propose a list of Valued Environmental and Social Components (VECs) for the impacted basin. VECs shall be selected based on their value to stakeholders, their significance from a biodiversity, physical (such as for soil stability or flow regulation), economic, and/or social/cultural significance, as well as their potential to be significantly impacted or influenced by water allocation and water-use decisions at a basin level. For biodiversity related VECs, these may include specific species or populations of species based on their commercial value, rarity, endangerment, their role as flagship or umbrella species (e.g., provide benefit to others through their conservation), their importance for ecosystem function (keystone species), their value as indicator species, etc.

The identification shall compile key environmental and social issues in each river basin that will be affected by the implementation of river basin and hydropower plans.

Prioritization of VECs

With the identification of VECs, the Consultant shall carry out initial stakeholder consultations to prioritize the VECs, so as to produce a manageable number that will be the focus of the ESMP. The prioritization shall be carried out with the participatory approach using various tools and techniques.

Task 7: Risk Assessment

According to international practices, all large dam projects (higher than 15m) will have inherent risks and uncertainties associated with construction and potential safety impacts downstream. All significant risks and uncertainties at each of the selected sites will need to be assessed by the Consultant

Task 8: Occupational health and safety concerns

The Consultant will analyze, describe and draw up recommendations to address all occupational health and safety concerns that will be triggered by the different phases of dam construction at each of the selected sites

Task 9: Climate Change Issues

The impacts of dam construction for irrigation and power generation should be seen within the context of global climate change, which might significantly affect the physical environment of the project area. The Consultant should describe and where possible quantify processes and factors such as:

- Changes in amount, type and seasonal/annual distribution of precipitation in the project area and the upstream/downstream watershed of each proposed project site;
- Changes of upstream/downstream hydrological parameters notably flow rates and sedimentary load and their seasonal/annual distribution. They might be controlled by underlying phenomena such as glacial melting and subsequent release of water/sediment trapped in ice, glacial retreat and exposition of additional areas to erosion, changes in vegetation and resulting impact on erosion/sediment generation and microclimate;
- Changes in seasonal/annual demand patterns for water and electricity: shifts in peak demands for energy (heating/cooling) and water (agriculture, irrigation) in the annual cycle, and interaction of these changes with operational requirements and hydrological parameters, such as seasonal flow rates;
- Review the data on the past climate change in Afghanistan and all available future climate change forecasts and assess their impact (a) on the water demand in Afghanistan and (b) on the design and operation of dams at each of the selected sites.

Task 10: Public and Stakeholder Consultations

Project-affected groups and stakeholders must be consulted about the project's potential environmental and social impacts during the ESIA process at each of the selected sites. This purpose is to consider local views when designing the

environmental and social assessments and management plans as well as to provide input into the project design. The consultation process will therefore give stakeholders an opportunity to learn about the project, raise concerns, understand the potential effects, and comment on the project design as well as on the draft ESIA report.

Once a draft ESIA report is available, and before it is finalized, the Consultant will obtain stakeholders' inputs on the report's findings and conclusions and particularly on the mitigations and management plans. Therefore, the Consultant will prepare the materials and information to be disclosed in a form and language that are understandable and accessible to the groups being consulted which will have to cover the following aspects of the project: (i) project design and layout, emphasizing areas to be directly impacted by permanent or temporary works and structures, access and service roads required if any, and areas indirectly impacted by construction or operation (noise, dust, borrow pits, landscape aesthetics etc.), areas impacted by reservoir heightening and downstream hydrological changes; (ii) summary of all major direct and indirect environmental and socio-economic impacts associated with the project, (iii) the approaches and instruments for mitigation of the identified environmental and social impacts. It is also expected that the Draft Final ESIA report, together with the respective Non-Technical Summaries in Pashtun and Dari, will be disclosed locally for 30-60 days on the MEW Website and other locally appropriate locations and websites as well as the World Bank Infoshop.

It is important to note the largely **unsatisfactory consultation processes** which formed part of social and environmental studies conducted as part of the earlier feasibility studies at all selected sites. The Consultant is strongly advised to review these reports to get acquainted with issues raised. The Consultant is also strongly recommended to liaise closely with the IRDP's Mazar environmental and social safeguards team with regard to consultations in a conservative and at times insecure area.

Task 11: Cumulative impacts and Potential Impacts on International Waterways

The Consultant will examine any cumulative impacts and transboundary issues and discuss scope and extent of the potential impact including recommendation on mitigation measures (if any). See Task 6.

D. Scope of the ESMP

14. The main objective of the ESMP is to describe proposed measures to mitigate the potential negative impacts, including any transboundary issues, and the preparation of a monitoring plan, capacity building, and estimated implementation cost. As mentioned above the ESMP must be acceptable to WB with respect to consultation with local authorities and key stakeholders and it should provide adequate details on activities, responsible agencies/entities, and cost including needs for capacity building and training of key agencies and stakeholders to ensure effective implementation of the proposed ESMP. Specifically the following tasks will be conducted by the ESIA Consultant.

D1 Specific ESMP tasks

Task 1: Development of environment and social management plans (ESMPs) to mitigate negative impacts

Depending on the relevance of each impact identified, specific corrective measures have to be identified in order to mitigate the potential negative impacts and eventually to strengthen the positive ones. Mitigation measures could consist of the integration of proposed actions into the designs of the respective components. Besides, appropriate measures can be taken to compensate negative impacts that can occur and cannot be avoided, design appropriate measures to reduce/eliminate the negative identified impacts, to tackle needs and problems pointed out by consultation with stakeholders, to improve local living conditions and to promote local development. The Consultant will identify appropriate measures that can be taken to maximize and/or enhance the positive impacts and avoid, reduce or minimize the negative impacts. S/he shall prescribe and present detailed tangible, practical relevant management/mitigation measures bearing in mind capacity restraints for those who have to implement and monitor their implementation, also bearing in mind the need to first avoid these impacts altogether, or to reverse them and then when these are not possible to manage them in an sustainable way. The ESMP will include measures to avoid, prevent, reduce, mitigate, remedy or compensate any adverse effects on the environment and social in relation to the construction and operation of each of the selected dams. The Consultant will also review adequacy and effectiveness of the Catchment Area Treatment measure recommended as part of the feasibility study of the proposed dam sites.

Task 2: Development of Environmental and Social Monitoring Plan

The Consultant will prepare a specific description, and details, of monitoring measures for the Environmental and Social Monitoring Plan including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, and definition of thresholds that will signal the need for corrective actions as well as deliver a monitoring and reporting procedure. The Consultant should provide a time frame and implementation mechanism, staffing requirements, training and cost outlays.

Task 3: Capacity and Training Needs

The Consultant will identify the institutional needs to implement the environmental and social assessment recommendations by reviewing the institutional mandates and capability of institutions at local, provincial/regional, and national levels and recommend steps to strengthen or expand them so that the management and monitoring plans in the ESIA can be effectively implemented. The recommendations may extend to management procedures and training, staffing, and financial support.

E. ESIA Reporting and Deliverables

E1 Inception Report

15. The Consultant will submit an Inception Report confirming the key findings from the FS/EIA/SIA study and the methodology to be adopted for the ESIA studies, the deployment

schedule of personnel, a schedule of site visits to be carried out and a reporting schedule, within a fixed time from the date of commencement of the assignment. The Consultant may need to carry out a reconnaissance visit to the study area and discuss with local authorities and communities before submitting the Inception Report.

E2 ESIA Report

16. The Consultant will prepare and present to MEW each ESIA including all necessary additional documentation which may be required to satisfy specific Afghan laws and World Bank safeguard policies which may be triggered by the planned project activities. The report will describe and analyze the significant environmental and social issues. All supporting documentations of the data collected and quotations for any references used in interpreting those data which are not appropriate in main text should be presented in appendices or as a separate part. The report will detail the scientific approach (models, methods and criteria) adopted to carry out the studies and will also include maps and drawings at the appropriate scale and refer to all consulted documents. The proposed structure for the ESIA is outlined below:

1. Executive Summary - will be concise and written in a non-technical language;
2. Introduction;
3. Detailed Description of activities and design of proposed dam at each location;
4. Discussion of feasible Alternatives;
5. Description of the area of influence, project footprint and environmental and social baseline condition (including maps and social structure and community relationship and network);
6. Discussion of Afghan national legal, policy, regulatory and administrative framework related to EIA, SIA, dam safety, and natural disaster related to preparation and implementation of emergency preparedness plan;
7. Discussion of cumulative and possible transboundary issues that may be related to the proposed dam in light of international conventions and WB safeguard policies triggered by dam construction and operation;
8. Discussion of the environmental and social impacts of the proposed project for the different phases of its lifecycle;
9. Discussion of the proposed mitigation measures taken the results from consultation with local agencies and communities into account including cost estimate and the agencies/entities responsible for implementation;
10. Presentation of consultations with relevant stakeholders and affected persons;
11. Environmental and Social Management Plan (ESMP) (detailed ESMPs i.e. traffic, waste, emergency, catchment etc.to be submitted separately);possible application of the ESMF for the IRDP-AF will be considered;
12. Environmental and Social Monitoring Plan;
13. Specific Conclusions and Recommendations;
14. References;
15. Annexes (Maps, records of consultations etc.).

E3. Reporting and Feedback Requirements

17. As follows:

i. The reports will be written in English and also translated to Dari and Pashtu. A draft report will be issued for review and comment by MEW, NEPA, World Bank and the Environmental and Social Advisory Panel (ESAP) after which a final report incorporating their comments will be issued by the Consultant.

ii. During the final submission of the report, if changes requested during the draft report stage are not satisfactorily addressed, the Consultant will be required to work further on the document until it is considered satisfactory or acceptable.

iii. All submissions related to the assignment should be submitted to the Project Director of IRDP-AF. Electronic versions of all the reports (draft and final) should be in MS Word document as well as Acrobat and/or other practical forms.

F. Timing, Duration, Estimated Input, and Deliverable

18. It is expected that the study will be carried out soon after the IRDP-AF is effective which is in mid 2016. Duration of the services will be about 18 months assuming that securing in the project area is acceptable.

Deliverables	**Time**
Inception Report	1month after signing contract
Stakeholder Engagement Plan	1month after signing contract
First Progress Report	4 months after signing contract
Second Progress Report	7 months after signing contract
Midterm report	10 months after signing contract
Third Progress Report	13 months after signing contract
Draft ESIA report including ESMP	16 months after signing contract
Final ESIA	6 weeks after approval of draft ESIA

19. The consultancy contract will be a lump-sum contract against submitted and approved deliverables, as per the following disbursement schedule:

- 20% - Upon submission of an acceptable Inception Report
- 20% - Upon submission of acceptable Midterm Report
- 40% - Upon submission and approval of Draft ESIA Report
- 20% - Upon submission and approval of Final ESIA

G. ESIA Consulting Team

20. The ESIA Team should reflect substantial environmental and social assessment experience with complementary skills and backgrounds and substantial experience in World Bank-funded projects and international standards. The ESIA Team will comprise the following minimum members and their respective minimum qualifications as below:

(a) ESIA Team Leader/ESIA Expert

Key qualifications:

The ESIA Team Leader will have proven experience in the environmental impact assessment of water resources projects including irrigation and/hydropower dams. He will have a minimum Masters Degree qualification in environmental science, engineering, natural resources management or a closely related field with a minimum of fifteen (20) years overall experience and ten years (10)years relevant experience in environmental and social impact assessment. The candidate should also have the following:

- Experience in leading an expert team is essential;
- Registered ESIA Practitioner in his/her home country;
- Excellent knowledge of the English language (both spoken and written) and excellent communication skills;
- Knowledge and/or familiarity with the World Bank Safeguard Policies relating to water resources development projects;
- Knowledge and experience on dam safety, risk assessment, and/or preparation and implementation of emergency preparedness plan will be highly advantage;
- Experience in conducting similar assignments with national agencies and World Bank and its affiliates in complex political and security contexts;
- High repute and recognition by peers.

- **Tasks:**

The particular role will be to lead and guide the ESIA Team in all aspects of the assessment and will be the contact person between MEW and the ESIA Team. He/she will perform the following roles:

- Provide overall coordination and leadership to the ESIA Team;
- Take a leadership role in steering stakeholder consultations;
- Play an inter-phase role between MEW and other stakeholders on all matters of the ESIAs;
- Identify impacts of project activities;
- Participate in the elaboration of technical, legal and regulatory norms to comply with environmental requirements in all the phases of project activities;
- Identify and assess environmental and social mitigation measures for the project; and

- Take a lead in the production and be responsible for the quality and acceptability of each of the ESIA Reports.

(b) Sociologist/Social Development Consultant

Key qualifications:

- Graduate degree in Social Sciences, Sociology, or Anthropology or a related field;
- 15 years of relevant work experience;
- Experience with large-scale infrastructure projects including consultation and engagement with local communities;
- Excellent communication/interpersonal skills and ability to work in teams;
- Experience with World Bank projects, Safeguard Policies and Procedures including a track record in complex World Bank safeguard policies work, entailing legacy, corporate risk, and highly complex projects;
- Proficiency with the Land Laws and policies of Afghanistan;
- Excellent knowledge of the English language (both spoken and written) and excellent communication skills;

- **Tasks:**

  - Identify all social, economic and cultural impacts of the project;
  - Take a lead in organizing/facilitating stakeholder consultations;
  - Provide socio-economic input/expertise throughout the assignment;
  - Lead in the formulation of social impact assessment instruments and tools;
  - Provide overall social input in the ESIA Reports.

(c) Environmental Engineer

Key qualifications:

- A Master's Degree (minimum) in Environmental Engineering;
- Knowledge and experience in waste management and disposal including high carbon steel and scrap, electronic and other hazardous waste;
- Knowledge in air quality and noise impact assessment including modelling;
- Have at least 10 years experience in environmental management, ESIA and in developing waste management plans;
- Excellent knowledge of the English language (both spoken and written) and excellent communication skills.

Tasks:

- Participate in identification of impacts of project activities on
- Take a lead in provision of input on waste management throughout the assignment including management of waste for construction camps;

- Conduct modelling if required for dust and noise emissions;
- Participate in the development of the ESIA report;
- Participate in the stakeholder consultations.

(d) Aquatic Ecologist

Key qualifications:

- Must have a postgraduate degree or training in natural sciences (fisheries, aquatic ecology or zoology);
- Must have undertaken an ESIA training;
- Conducted at least 5 ESIA studies in water resources development projects.

Tasks:

- Take a lead in all aquatic ecological assessments of the project;
- Review various literature sources on ecological matters of the project;
- Consult with stakeholder institutions on ecological aspects of the project;
- Participate in write up of Environmental Impact Report.

(e) Terrestrial Ecologist/Vegetation Specialist

Key qualifications

- Must have a postgraduate degree or training in Botany or Plants Ecology;
- Experience in re-vegetation or site rehabilitation especially of borrow pits, quarries and degraded lands, etc.;
- Conducted at least 5 ESIAs studies in development projects.

Tasks

- Compile lists of vegetation species and conservation status within the project area;
- Assess potential impacts of material sourcing such as borrow pits and stone quarries and their management including rehabilitation;
- Take a lead in assessment of potential re-vegetation options of the degraded catchment area of the dam and identify suitable drought resistant plant species for local conditions;
- Provide professional guidance on avoidance of the proliferation of invasive species as a result of project activities.

(f) Occupational Health and Safety (OHS) Specialist

Key qualifications:

- At least postgraduate training in Occupational Health and Safety;
- Minimum of 15 years in safety planning and management;
- Highly knowledgeable in emergency preparedness and disaster management;

- Should have conducted at least 5 OHS assessments relating to large-scale civil works projects in the last 5 years;

Tasks:

- Provide OHS input throughout the assignment;
- Assess and elaborate requirements to meet OHS standards required for the different project activities especially removal of sediment and unexploded ordinances from the reservoir;
- Review the different dam safety improvement designs prepared by the Dam Safety Consultant and assess their suitability and flag up any safety concerns and recommend feasible mitigations or alternative designs or modifications;
- Participate in stakeholder consultations to discuss safety aspects;
- Take a lead in the preparation of the Decommissioning, Traffic Management and Emergency Management Plans;
- Assess requirements to meet OHS standards required for the different project activities and elaborate a feasible OHS Plan;
- Participate in stakeholder consultations to discuss safety aspects.

(g) Hydrologist

Key qualifications:

- The Hydrologist will possess proven experience in river management in developing countries. He/she will have a minimum of BSc Degree qualification in a relevant field as well as post graduate qualifications in river management with a minimum of fifteen (15) years overall experience and seven years (10) years relevant experience.

Tasks:

- Review the sediment removal alternatives and their potential impact on the river's hydrology;
- Assess the potential impacts of river diversions or other activities;
- Assess hydrological issues associated with increasing the dam's crest;
- Overall evaluate the different dam safety enhancement designs on the hydrology of the river downstream flows.

(h) Community Participation/Gender Specialist

Key Qualifications:

- The Community Participation and Gender Specialist should possess a graduate degree in International Development, Gender, Human Rights, or a related field with more than 10 years of relevant work experience. She should possess excellent communication/interpersonal skills and experience in consulting conservative and post-conflict societies. Experience and a track

record in working directly with local communities in complex political and security contexts is essential. Experience of World Bank safeguard policies work; entailing legacy, corporate risk, and highly complex project is highly desirable. She should be very familiar with the Land Laws and policies of Afghanistan and should be very fluent in Dari or Pashtu in addition to ability to write reports in English.

Tasks:

- Provide overall gender expertize and input into the ESIA;
- To guide and lead the consultation process;
- To ensure that all direct and indirect stakeholders are consulted;

To ensure that vulnerable groups are not excluded from consultation processes and to elaborate the necessary requirements for their consultation

H. Scope of RAP

21. A RAP will only be prepared should a decision be made to proceed with construction of a dam. This part describes a generic scope of the TOR in line with WB safeguard policy related to Involuntary Resettlement (OP4.12). Specific site TOR will be prepared taken into account consistency with the ESMF and RPF prepared for the IRDP-AF. Details will be discussed and agreed with the project director of IRDP-AF.

H1. TOR for RAP

22. Objective and scope for RAP preparation are as follows:

Need for a Resettlement Action Plan

The feasibility study for the proposed site(s) may recommend options where land acquisition (temporary and/or permanent). In addition, the decision to build a dam may result in the unavoidable resettlement of people, disruption of community life and networks, permanent or temporary loss of land, assets and livelihoods and communal social and cultural facilities, e.g. cemeteries, shrines, mosques and grazing land.

A Resettlement Action Plan (RAP) will be prepared if land acquisition and resettlement are unavoidable. These terms of reference outline the scope of work to be carried out in preparation of theRAP of the proposed IRDP-AF activities under dam location.

Objective of the RAP

The World Bank‘s Policy on Involuntary Resettlement (OP 4.12) requires that either an RPF or a RAP beprepared when project activities displace people from land or productive resources, andwhich result in the loss of shelter, the loss of assets or access to assets, and the loss ofincome sources or means of livelihood whether or not the affected persons must move toanother location.The objective of the RAPis to address the social issues associated with land acquisition, livelihoods and resettlement (physical as well as economic) to ensure that the population to be

expropriated and displaced by building a dam is formally consulted and adequately compensated and treated.

Scope of Work for RAP Preparation

The RAP will compile information on any Resettlement Actions (RAs) required to be implemented under the IRDP-AF. The RAP will have to comply with the legal framework, resettlement principles, with regard to eligibility criteria for identifying Project Affected Persons (PAPs) and compensation categories and rates, and organizational arrangements set out in the Resettlement Policy Framework (RPF). The Consultant will therefore:

i. Undertake a socio-economic survey of the communities affected by the project;
ii. Conduct a 100 per cent census of the affected persons and identification of vulnerable groups;
iii. Consider the relevant legal provisions for land acquisition and resettlement during preparation of an appropriate RAP.
iv. Develop an eligibility criteria and establishment of a cut-off date;
v. Evaluate and prepare an inventory of the affected properties;
vi. Evaluate all other socio-economic costs;
vii. Conduct public consultations/awareness creation of the relevant stakeholders, taking into consideration the gender concerns and vulnerable groups;
viii. Identification of alternative relocation sites, where affected person might have to be resettled;
ix. Develop adequate livelihood restoration mechanisms;
x. Prepare the resettlement implementation costs;
xi. Preparation of implementation schedule;
xii. Develop a grievance redress mechanism.
xiii. Develop a monitoring and evaluation methodology;
xiv. Prepare and submit a detailed RAP.

H2 Resettlement Action Plan Content

22. The scope and level of detail of a resettlement plan vary with the magnitude and complexity of resettlement. The plan is based on up-to-date and reliable information about (a) the proposed resettlement and its impacts on the displaced persons and other adversely affected groups, and (b) the legal issues involved in resettlement. The resettlement plan covers the elements below, as relevant. When any element is not relevant it should be noted in the resettlement plan.

1. ***Description of the Project Area***

   General description of the project and description of the project area

2. ***Potential Impacts***

   Identification of :

- The project component or activities that give rise to resettlement
- The zone of impact of such component or activities
- The alternatives considered to avoid or minimize resettlement
- The mechanisms established to minimize resettlement to the extent possible during project implementation

3. Objectives

The main objectives of the resettlement program

4. Socio-economic studies

The findings of socio-economic studies to be conducted in the early stages of project preparation and with the involvement of potentially displaced people, including

- The results of a census survey covering:
  - Current occupants of the affected area to establish a basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance.
  - Standard characteristics of displaced households, including a description of production systems, labor and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population.
  - The magnitude of the expected loss – total or partial- of assets, and the extent of displacement, physical or economic
  - Information on vulnerable groups or persons as provided for in OP4.12. para. 8, for whom special provision may have to be made
  - Provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement.
    - Other studies describing the following:
    - Land tenure and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest area) governed by local recognized land allocation mechanisms and any issues raised by different tenure systems in the project area.
    - The patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project.
    - Public infrastructure and social services that will be affected and
    - Social and cultural characteristics of displaced communities, including a description of formal and informal institutions (e.g. community organizations, ritual groups, NGOs) that may be relevant to the

consultation strategy and to designing and implementing the resettlement activities.

5. Legal Framework

The RAP is based on the RPF which sets out the legal and regulatory framework governing resettlement, land acquisition and asset loss for the IRDP-AF

6. Institutional Framework

The findings of an analysis of the institutional framework covering:

- The identification of agencies responsible for resettlement activities and NGOs that may have a role in project implementation.
- An assessment of the institutional capacity of such agencies and NGOs
- Any steps that are proposed to enhance the institutional capacity of agencies and NGOs responsible for the resettlement implementation.

7. Eligibility

Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.

8. Valuation of and compensation for losses

The methodology to be used in valuing losses to determine their replacement cost; and a description of the proposed types and levels of compensation under local law, and such supplementary measures as are necessary to achieve replacement cost for lost assets.

9. Resettlement Measures

A description of the packages of compensation and other resettlement measures, including an entitlement matrix, that will assist each category of eligible displaced persons to achieve the objectives of the policy (see.WB OP 4.12.para. 6). In addition to being technically and economically feasible the resettlement packages should be compatible with the cultural preferences of the displaced persons, and prepared in consultation with them.

10. Site Selection, Site Preparation and Relocation

Alternative relocation sites considered and explanation of those selected covering:

- Institutional and technical arrangements for identifying and preparing relocation sites, whether rural or urban, for which a combination of productive potential, locational advantages, and other factors is at least comparable to the advantages of the old sites with an estimate of the time needed to acquire and transfer land and ancillary resources.
- Any measures necessary to prevent land speculation or influx of ineligible persons at the selected sites.
- Procedures for physical relocation under the project, including timetables for site preparation and transfer and
- Legal arrangements for regularizing and transferring titles to resettlers.

11. Housing, infrastructure and social services

Plans to provide (or to finance resettlers' provision of) housing, infrastructure (e.g. water supply, feeder roads), and social services (e.g. schools, health services) – plans to ensure comparable services to host populations; any necessary site development, engineering, and architectural designs for these facilities.

12. Environmental protection and management

A description of the boundaries of the relocation area and an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage these impacts (coordinated as appropriate with the environmental assessment of the main investment requiring the resettlement)

13. Community participation, involvement of resettlers and host communities

- A description of the strategy for consultation with and participation of resettlers and hosts in the design and implementation of the resettlement activities.
- A summary of the views expressed and how these views were taken into account in preparing the resettlement plan.
- A review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them, including choices related to forms of compensation and resettlement assistance, to relocating as individual families or as parts of preexisting communities or kinship groups, to sustaining existing patterns of group organization and to retaining access to cultural property (e.g. places of worship, pilgrimage centers, cemeteries)
- Institutionalized arrangements by which displaced persons can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that such vulnerable groups as indigenous people, ethnic minorities, the landless, and women are adequately represented.

14. Integration with host populations

Measures to mitigate the impact of resettlement on nay host communities including:

- Consultations with host communities and local governments
- Arrangements for prompt tendering of any payment due the hosts for land or other assets provided to resettlers.
- Arrangements for addressing any conflict that may arise between resettlers and host communities
- Any measures necessary to augment services (e.g. education, water, health and production services) in host communities to make them at least comparable to services available to resettlers.

15. Grievance Procedures

Grievances and complaints raised during the implementation of the RAP will be dealt with in accordance with the Grievance Redress Mechanism set out in Section 8 of the RPF. The Land Acquisition Committee (LAC) established by the Council of

Ministers under the LLE, also performs the duties of a grievance redress committee in relation to the value of land and/or assets acquired. The LAC will use a negotiated approach to reach a consensus on the replacement value of lands and assets. If this approach fails an AP may bring the matter to a Grievance Redress Committee which will try and resolve the issue and make a recommendation within 7- 10 days. If no decision is reached after 10 days, the AP may seek recourse through the legal system as a last resort.

16. Organizational responsibilities

The organizational framework for implementing resettlement , including identification of agencies responsible for delivery of resettlement measures and provision of services; arrangements to ensure appropriate coordination between agencies and jurisdictions involved in implementation; any measures (including technical assistance) needed to strengthen the implementing agencies' capacity to design and carry out resettlement activities; provisions for the transfer to local authorities or resettlers themselves of responsibility for managing facilities and services provided under the project and for transferring other such responsibilities from the resettlement implementing agencies, when appropriate.

17. Implementation schedule

An Implementation schedule covering all resettlement activities from preparation through implementation, including target dates for the achievement of expected benefits to resettlers and hosts and termination of the various forms of assistance. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.

18. Costs and budget

Tables showing itemised cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies, timetables for expenditures, sources of funds, and arrangements for timely flow of funds and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.

19. Monitoring and Evaluation

Arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent monitors as considered appropriate by the Bank, to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs and outcomes for resettlement activities; involvement of the displaced persons in the monitoring process, evaluation of the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed; using the results of resettlement monitoring to guide subsequent activities.

I. Reporting for RAP

23. Reporting requirements are as follows:

Inception

Inception Report will be submitted within **three (3) weeks** of commencing the assignment giving a brief outline of the methodology, detailed work plan and activity schedule, schedule for fieldwork, team composition and staff assignment, reporting schedule, tentative table of content of the draft RAP report and any other key issues regarding the execution of the assignment. The assignment will include an **Initiation Workshop** at the end of the inception phase with MEW. The Consultant may need to carry out a reconnaissance survey before submitting the Inception Report.

RAP Report

The Consultant will prepare a RAP which will include the following chapters and detail the following topics:

1. Description of the project
2. Potential impacts
3. Objectives
4. Socio-economic studies
5. Legal framework
6. Institutional framework
7. Eligibility
8. Valuation and compensation for losses
9. Resettlement measures
10. Site selection, site preparation and relocation
11. Housing infrastructure and social services
12. Environmental protection and management
13. Community participation
14. Integration with host population
15. Grievance Redress Mechanism
16. Organizational responsibilities
17. Implementation schedule
18. Cost and budget
19. Monitoring and evaluation

The deliverables will be in English, in electronic form, on a CD, and in six (6) hard copies. The Consultant will report to the Director of IRDP-AF.

J. Contract and Disbursement Schedule

24. The consultancy contract will be a lump-sum contract against submitted and approved deliverables, as per the following disbursement schedule:

20% - Upon submission of an acceptable Inception Report

40% - Upon submission and approval of Draft RAP Report

40% - Upon submission and approval of Final RAP Report

K. Duration

25. The assignment is expected to take approximately **four (4) months** to complete, from contract signing. However, the Consultant will be responsible for carrying out revisions or improvements etc. as advised by the approving bodies/authorities (including Government of Afghanistan and its agencies, and the World Bank) up to the time the documents get the necessary approvals for project implementation.

L. RAP Consulting Team

(a) RAP Specialist

The Resettlement Specialist will have a Master's degree or PhD in social sciences or related field with at least 15 years relevant professional experience in social organizations and preparation of RAPs, with hands-on experience of large-scale projects.

(b) Sociologist

The Sociologist will be a holder of a degree in social science or related disciplines. A post graduate qualification in social science will be an added advantage. He/She must have a cumulative experience of at least fifteen (15) years and must have done Social Impact Assessment on at least two (2) projects of similar nature and complexity within the last 5 years. Working experience in Afghanistan is an added advantage. Fluency in both written and spoken English and Dari/Pashtu are mandatory.

(c) Community Participation/Gender Specialist

The Gender Specialist should possess a graduate degree in Gender, Human Rights, or a related field with more than 10 years of relevant work experience in large-scale infrastructure projects. She should possess excellent communication/interpersonal skills and experience in consulting conservative and post-conflict societies. Experience and a track record in complex World Bank safeguard policies work; entailing legacy, corporate risk, and highly complex projects is highly desirable. She should be very familiar with the Land Laws and policies of Afghanistan and should be very fluent in Dari or Pashtu in addition to ability to write reports in English.

(d) Valuer

A University Degree in a relevant field and ten (10) years' experience with similar assignments is required.

(e) Surveyor

A University Degree in a relevant field and ten (10) years' experience with similar assignments is required.

(f) Lawyer

A University Degree in Law and must be practicing with relevant experience in similar works and overall minimum of 10 years experience.

Attachment 8 (b): Draft TOR for the Environmental and Social Advisory Panel (ESAP)

(To be finalized during implementation of the AF-IRDP and in close consultation with Panel members)

1. This attachment presents Terms of Reference (TOR) for the Environmental and Social Advisory Panel (ESAP) who will review the outputs of the ESIAs and make recommendations and comments to the Government.

A. Introduction

2. *The IRDP-AF Project:* The Ministry of Energy and Water (MEW) of the Government of Islamic Republic of Afghanistan (GoA) has received a grant from the International Development Association (IDA or the World Bank or WB) for implementation of the Irrigation Restoration and Development Project (IRDP) and preparation of an additional financing (IRDP-AF) to be implemented during 2017-2019. The IRDP-AF activities will include rehabilitation of existing irrigation schemes, undertaking river bank protection, building capacity on hydromet, undertaking simple remedial works of a few existing dams, preparation of detailed designs and environmental and social impact assessment (ESIA) of the priority new dams, development of national dam safety guideline, and other technical assistance related to water resources management and enhancing MEW capacity to effectively plan and manage water resources. These activities will be implemented through the following four components: (A) Rehabilitation of Irrigation Systems and River Bank Protection; (B) Support for Dam Development, Operation, and Maintenance; (C) Water Resources Management and Development; and (D) Project Management and Capacity Building (project details are available at PCU/MEW). The Project Coordination Unit (PCU) PCU of MEW will be responsible for implementation of IRDP-AF.

3. *The WB Safeguards Requirements:* The IRDP-AF is classified by WB safeguard policy as EA category A and the six WB's safeguards polices triggered are as follows: (i) Environmental Assessment OP/BP 4.01, (iii) Pest Management (OP/BP 4.09); (iii) Involuntary Resettlement OP/BP 4.12; (iv) Safety of Dams OP/BP 4.37; (vi) Physical Cultural Resources (OP/BP4.11); and (v) Projects on International Waterways OP7.50. To ensure compliance with these policies an Environmental and Social Management Framework (ESMF) was prepared outlining the principles, the processes, and specific requirements for the environmental and social management of each of the five components including compliance with the Environmental Impacts Assessment (EIA) regulation of Afghanistan. The ESMF also includes specific requirements on dam safety according to OP/BP 4.37 which will be applied to Component B and a revised Resettlement Policy Framework (RPF) in line with OP/BP4.12 which will be applied when land acquisition, resettlement and/or loss of livelihoods occurs in the IRDP-AF project. Main objective of OP/BP 4.37 is to protect downstream populations, ecosystems and investments from consequences of dam failure and ensure that dams are properly designed, constructed, and monitored and also requires that an advisory panel on safety of dam will be engaged during the preparation and construction of new large dams. The OP/BP 4.01 also requires that the project owner of either Category A projects that are highly risky or contentious or that involve serious and multidimensional environmental and social concerns will engage an advisory panel of independent,

internationally recognized environmental specialists to advise on all aspects of safeguard activities to be carried out under the project.

4. ***ESAP:*** To comply with these requirements (OP/BP4.01 and OP/BP 4.37) MEW is establishing an Environmental and Social Advisory Panel (ESAP) and a Dam Safety Panel (DSP) for the IRDP-AF. ***This TOR is for the establishment of the ESAP in line with OP/BP 4.01.***

B. Objectives of the Services (ESAP)

5. The main purpose of the ESAP is to advise MEW/PCU on environmental and social aspects of the IRDP-AF project. Special attention will be given to (a) reviewing the TOR for the Environmental and Social Impact Assessments (ESIAs), ESIAs and related Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs) (if needed) ; (b) assessing key issues to be taken account of and methods to be considered in the preparation of the ESIA and ESMP documents, (c) reviewing the findings and recommendations of these documents and (d) monitoring implementation of these recommendations to be consistent with World Bank's safeguard policies as well as national laws of Afghanistan as detailed in the project's ESMF.

C Scope of the Services

6. Tasks will include:

1. Share information with and advise the PCU/MEW project team on the best international practices in project safeguards implementation approaches and management and provide independent advice on all aspects of the ESIAs and related ESMPs and RAPs.
2. Provide independent advice, guidance, and quality assurance services on all aspects of the ESIAs and related ESMPs and RAPs including the public consultation and disclosure processes, unanticipated environmental and social impacts which may arise during the construction and operational phases.
3. Liaise closely with the Dam Safety Panel on all technical studies to be conducted under component B.
4. Review and provide comments to improve the quality of: the TOR for the ESIA's for the 4 proposed dams in Balkh Mazar region proposed new dams to be identified;the TOR for stakeholder consultations; the draft and final ESIAs reports for the proposed new dams; draft and final Resettlement Action Plans if required,
5. Participate in (i) public consultations on the draft TOR in Kabul and Mazar (ii) comprehensive briefing of selected consultant(s) who will conduct the ESIAs and (iii) workshops in which draft ESIA reports are presented to various stakeholder groups in Kabul and Mazar.
6. Review the decisions of MEW regarding complaints which may arise during the conduct of the ESIAs.
7. Prepare review reports after each mission visit and a final review report after the final drafts of the ESIA reports have been cleared.

8. Urgent ESAP meetings may be called in situations where PCU/MEW needs immediate advice.
9. The scope (and duration of assignment) of the ESAP will be extended to advise on RAP preparation and implementation, if needed for the proposed dams.
10. The ESAP members shall not reveal any commercial or relevant information about the project that he/she might receive from MEW or from other Afghan agencies

7. Scope of the tasks by component will be, but not limited to, the followings:

- Under Component B (a) and in coordination with DSP, the ESAP will review and comment on the scope and quality of the ESIA study and the environmental and social aspects of the detailed designs of the proposed new dams including review and comment on the TORs and their various outputs/reports. The ESAP will provide independent recommendations on quality, improvement (if any), and next steps to ensure compliance with OP/BP 4.01 and other WB's safeguard policies that likely to be required for construction of the proposed dams.
- Under Component B (B-2) and in coordination with DSP, the ESAP in coordination with DSP will review the ESMP/RAPs of the remedial works of the proposed existing dams and provide an independent opinion on quality and next steps taken into account the need to comply with WB OP/BP 4.01 and relevant laws of Afghanistan. During the implementation of remedial works, the ESAP will advise on the effectiveness of the implementation and ways to improve it (if any).
- Under Component B (B-3) and in coordination with DSP, the ESAP will review the TOR and documents related to the development of dam safety guideline from an environment and social impacts perspective taken into account the need for comply with OP/BP 4.37, OP/BP 4.01, and other related WB's safeguard policies as well as the relevant laws and regulations of Afghanistan.
- Under Component C (C-2), during the preparation and undertaking of the SESA study and in coordination with DSP, the ESAP will advise on the scope and activities of the study including review and comment on the TORs and their various outputs/reports the results taken into account the need to comply with OP/BP 4.01 and other WB safeguard policy and relevant laws of Afghanistan.

D. Mode of Operation

8. The ESAP shall comprise one internationally and locally recognized environmental specialist and one internationally and one locally recognized social development specialist. Four panel members in total.

9. Overall, the ESAP will act as an independent advisor, rather than a consultant or provider of technical assistance to PCU/MEW. In terms of organization, the International Environmental Expert **or** the International Social Expert will be designated as the Chairperson of the Panel and will coordinate the activities and communications of the Panel, call and chair its meetings, and liaise as appropriate with PCUCU/MEW. He/she will ensure

the objectivity of the Panel and its members, and provide a balance in the Panel's reviews and recommendations and ensure timely reporting of the Panel.

9. The ESAP will liaise with PCU/MEW to collect information and exchange views on an ongoing basis throughout the ESIA process. It is anticipated that the ESAP will make field visits at key points of the ESIA process to be determined by PCU/MEW in consultation with the Chairperson of the ESAP. The ESAP will establish the schedule for these reviews in coordination with PCU/MEW. The ESAP is expected to have the ability to conduct its work with open access to all project areas that it may be interested in and all the project sites – assuming security permits. The ESAP will also be provided with access to all relevant documents, drawings, and sites in the project areas to facilitate its work. The ESAP shall be included on routine distribution lists of all relevant project communications about the ESIAs in order to increase their effectiveness during infrequent visits.

11. PCU/MEW will make arrangements for any meetings between the ESAP and ESIA Consultants. PCU/MEW will also provide administrative and logistical support for field visits including sufficient security and office space to facilitate the work of the ESAP. The PCU Director will serve as the regular contact point between PCU/MEW and the Panel.

12. The ESAP will carry out its work and may meet with the full range of stakeholders: potentially affected populations, national and local government, community organizations, civil society organizations and nongovernmental organizations if need arises. The ESAP may meet with local communities without interference from PCU/MEW or any Beneficiary Party. The views and opinions of all stakeholders will continue to be actively solicited through the ESAP process. The ESAP may, at its discretion, invite PCU/MEW and the World Bank to accompany it during field visits.

13. PCU/MEW shall upon recommendation of the Chairperson appoint short-term specialists beyond the membership of the ESAP, on an ad-hoc basis, for specific assignments to deal with issues that may arise for which the ESAP has insufficient expertise. PCU/MEW will also be able to hire translators/interpreters to assist the Panel in undertaking its work and to ensure that its findings and recommendations are disseminated in Dari and Pasthto.

E. Qualities of Members of the ESAP

14. The members of the ESAP will constitute a group of high-level, internationally-recognized and nationally recognized professionals. The members of the Panel should among them share cutting edge expertise and profound experience within their areas of expertise. Most importantly, the ESAP members will be of international stature with unimpeachable personal integrity, able to resist any pressure that might be brought to bear on their conclusions.

F. Panel Composition

15. Based on the preliminary understanding of the project issues, the Panel will have four (04) key permanent members, 01 International Environmental Expert and 01 National Environmental Expert, 01 International Social Development Expert and 01 National Social Development/Resettlement Expert. Additional members will be invited and approved on an as-needed basis by MEW upon request by the Chairperson of the Panel.

G. Selection Criteria

16. To ensure the complete independence of the ESAP in addition to satisfying the requirements of high integrity, substantive knowledge and broad experience its members should:

- Not have a conflict of interest with the project or perceived to have one. International Experts shall not be nationals of any of the riparian countries and
- Not have been engaged in positions/consultancies with any of the consultancy firms to undertake the Feasibility Study or ESIA/RAP.

H. Overall Key Competencies

17. The ESAP members should have broad knowledge of environmental and social issues associated with complex, large-scale hydropower or water resources management and infrastructure programs and projects. In addition to environmental or social sector-specific experience, panelists with other types of expertise, such as on governance issues, local communities, and Afghan or regional context, will be necessary. All Panel members should be familiar with and have relevant working knowledge of and experience with World Bank Safeguards Policies, and national environmental and land-related laws and regulations of Afghanistan, have relevant practical and technical expertise in reviewing project reports produced by consulting firms, and have strong analytical and reporting skills and ability to work in teams. The specialists will have a demonstrated capacity to prepare reports in English. In a broader context, the relevant members should have an in-depth understanding of transboundary riparian issues and experience in addressing hydropower and cross-border projects impacts.

I. Minimum Expert Qualification Requirements

(i) International Environmental Expert

18. The Environmental Expert should possess a Post graduate degree in Environmental Science, Environmental Engineering or Natural Resources Management or a closely related field. Previous experience as a PoE member or similar capacity will be a great advantage.

19. The candidate should have at least twenty (20) years of continuous practical experience with the preparation and implementation or supervision of Environmental and Social Impact Assessments. Preferably, he/she should be a registered or certified environmental practitioner in his home country and should have served as an ESIA Team Leader or Independent Environmental Impact Reviewer for a minimum of 10 large-scale projects, 5 of which should be related to large-scale water resources.

20. The candidate should also have significant experience in (a) preparation of environmental assessments for large scale infrastructure projects including dams; (b) methods and model studies for analyses and prediction of environmental impacts, particularly for hydropower projects, (c) design and implementation of environmental management, mitigation and monitoring plans; (d) development of detailed cost estimates and schedules for environmental management, mitigation and monitoring plans; and (e) public consultation and disclosure processes.

21. The candidate should be familiar with the World Bank Operational Policies and procedures related to the Environment assessment and should have strong implementation experience and analytical and reporting skills as well as an ability to work as a member of a team. S/he should have fluency in spoken and written English.

(ii) National Environmental Expert

22. The candidate should have knowledge of environmental specialties with a minimum of 20 years of working experience; have participated in monitoring and supervision of environment management plan implementation for at least 5infrastructure projects financed by WB or other international financiers like ADB, JICA; has experience in working on social-environmental issues under hydropower projects. Minimum requirement for this position is to possess a Master's degree in environmental engineering/science or a closely related field. Higher degree or qualification is preferred. The expert should be computer literate and should have a good command of English (listening, speaking, reading, and writing).

(iii) International Social Development Expert

23. The International Social Development Expert should hold a post graduate degree in social science/ rural development or a related area. S/he should have extensive experience of working on a range of resettlement issues, including the development of resettlement policy frameworks, resettlement plans and harmonizing these frameworks with national laws. Previous experience as a PoE member or similar capacity will be a great advantage.

24. The successful candidate should have overseen at least 10 resettlement exercises and should have served as a Team Leader for a minimum of 10 Social Impact Assessment studies with 5 of them involving large-scale infrastructure projects.

25. S/he should also have extensive experience in (a) the preparation, implementation and review of social impact assessments for large infrastructure projects including hydropower dams (b) developing socially inclusive consultation approaches with different stakeholder groups at local level – public consultations and disclosure processes. (c) livelihood development strategies (d) developing and implementing effective grievance redress mechanisms (e) design and implementation of social management, mitigation and monitoring plans (d) development of detailed cost estimates and schedules for social management, mitigation and monitoring plans and (e) implementation of social development initiatives.

26. S/he should be familiar with the World Bank Operational Policies and procedures related to Social Assessment and Social Impact assessment as well as OP 4.12 on Involuntary Resettlement. S/he should have strong analytical and reporting skills and ability to work as a member of a team and should have fluency in spoken and written English.

(iv) National Social Development and Resettlement Expert

27. The National Social Development/Resettlement Expert should have extensive knowledge of land acquisition and resettlement issues for development projects in areas with ethnic minority communities; an in-depth understanding of Afghan local culture and customs, community organization structures, land tenure systems, conflict resolution mechanisms,

living habits as well as ethnic cultural identities of the ethnic groups; has experience in working on social-environmental issues of hydropower projects with a minimum of 20 years of working experience in resettlement and at least 15 years of experience in resettlement related to hydropower development or other energy and water resources projects; has participated in at least 3 International Financial Institution (IFI)-financed projects such as World Bank or ADB and familiar with safeguard policies including OP 4.10/12 or similar policies and their application to projects. Minimum requirement for this position is to have a Master's degree in sociology, anthropology, political science, or other related fields, with preference given to higher degree. The expert should have good computer skills and a good command of English (listening, speaking, reading, and writing) as well as fluency in both Dari and Pashto languages.

J. Qualification

28. At least a Master's Degree with 20 years of work experience for each of above-mentioned positions. English and Computer skills are must.

K. Specific Reporting Requirements.

29. During the ESIA process the Panel shall review and provide comments on all relevant key documents and reports (draft ESIA TOR, mid-term report, draft final ESIA reports, ESMPs and RAPs if required). Security permitting, panel members will make at least one field visits to dam sites.The ESAP shall prepare a Review Reports following each visit and after the ESIAs are complete. These reports will provide specific and practical recommendations on the ESIA process and the final review report on completion of the ESIAs will include recommendations for implementation of the respective ESMPs, RAPs and project design relating to environmental and social issues. The Panel shall submit the Review Reports to PCU/MEW on time to ensure that PCU/MEW and any other parties adopt the recommendations as soon as possible in order to correct any noncompliance issues. The Review Reports shall be submitted by ESAP or transmitted by PCU/MEW to the World Bank for its review and for public disclosure.

30. The Review Reports signed by all ESAP members, will normally cover, but not be limited to the following: (i) status of environmental and social issues; (ii) actions taken on previous recommendations made earlier in the ESIA process; (iii) issues which need to be addressed as identified by the ESAP, relevant consultants and contractors, or by affected parties and local nongovernmental organizations, etc.; (iv) ESAP's recommendations of specific issues and actions to be taken.

31. All ESAP reports following missions shall become public documents once PCU/MEW and the World Bank have had a reasonable time to comment. If the ESAP wants to reject such comments, that shall be its prerogative. However, they shall be added as an attachment to the final report along with the ESAP's response. The public shall be given access to the reports to increase transparency, independence and public engagement.

32. Final draft report of ESAP shall be published by PCU/MEW when it is received from ESAP and in most of the cases, within 20 days of completion of ESAP's site visit. If

preferable, the World Bank shall disseminate the ESAP reports on its Website or Infoshop as it may find appropriate.

33. The Panel shall submit 5 copies in English language and 5 copies in Dari/Pashtu language of which 1 is original and 4 are duplicates together with 2 CDs (English and Dari/Pashtu languages). PCU/MEW will ensure that copies of each report are provided for access by the public and stakeholders in Dari and Pashto.

L. Length of Assignment

34. The assignment is expected to require the services of each panel member for up to 6 man-months over the project period. Additional days will be added if a RAP needs to be prepared for any of the proposed dam.

M. Responsibilities of MEW

35. MEW shall be responsible for

- Providing the Panel with materials, data relating to the project including reports, figures and information relating to environmental and social activities and aspects of the project.
- Granting unrestricted, access to the entire project area, as well as surroundings or other such areas relevant, as may be requested by the ESAP members and facilitate travel to and within Afghanistan, security and orientation.
- During the missions to Afghanistan and site visits and meetings, MEW shall assign relevant staff as may be requested by the Panel.

Annex 8: Minutes from Consultations on ESMF and RPF

Five sets of consultations on the draft ESMF took place between 27 December 2015 and 9 January 2016 covering all six of IRDP's regions and 27 of the country's 34 provinces.[20] Minutes from these regional consultations are included as: Attachment 9 (a): Mazar; Attachment 9 (b): Jalalabad; Attachment 9 (c): Kandahar; Attachment 9(d): Herat and Attachment 9(e): Kabul. A total of 374 people participated in the five meetings and every effort was made to encourage participation of women. Officials from river basin agencies were actively involved in the planning of the consultations and a senior official from the respective regional river basin agency chaired each of the consultation events. Important points to emerge from the consultations included the need (a) to strengthen the capacity of RBAs and MEW, (b) to strengthen groundwater management and environmental protection,(c) for greater liaison with NEPA at regional level and (d) for better sharing of information/coordination between line agencies.

[20] Consultations took place in Mazar-e-Sharif on 27th December with participants from both Mazar and Kunduz regions and covering 5 provinces (Balkh Jawzgan, Samangan, Saripul, Faryab, Baghlan, Takhar, Badakshan and Kunduz; Jalalabad on 30 December covering 3 provinces (Kunar, Laghman, and Nangahar), Kandahar on 3 January covering 5 provinces (Kandahar, Helmand, Zabul, Nimroz and Uruzgan), Herat on January 7th covering 4 provinces (Herat, Bagdhis, Ghor and Farab) and in Kabul on January 9th covering 10 provinces (Kabul, Kapisa, Khost, Paktia, Panishir, Logar, Parwan, Ghazni, Ghorbad and Madan Wardak)

Attachment 8 (a)

Mazar-e-Sharif Regional Consultation

on the

Environment and Social Management Framework-AF

For the

Irrigation Restoration and Development Additional Financing Project (IRDP-AF)

Venue: Mazar-e-Sharif, Romantic Hotel

27/12/2015

Background

The Government of Afghanistan (GoA) through the Ministry of Energy and Water (MEW) is implementing the Irrigation Restoration and Development Project (IRDP) with assistance from the World Bank (WB). The project became effective on June 15, 2011, and the current closing date is December 31, 2017.This Project is an additional financing of the IRDP (IRDP-AF or AF) and the closing date will be extended to December 31, 2019.

The ESMF has been developed by MEW to address environmental and social concerns and impacts that may arise during the development and implementation of the IRDP-AF. The framework provides general guidelines, codes of practice and procedures for the management of environmental and social issues. Ongoing consultations with various stakeholders throughout the life of the project are a central plank of the ESMF-AF. Consultations help improve a project's design, effectiveness and sustainability. The consultations conducted at regional level; representatives from Panj-e-Amu River covering four province; Kundoz, Badakhshan, Takhar, Baghlan and from North River Basin covering five provinces; Balkh,Jawzjan, Samangan, Saripul and Faryab provinces were participants of the consultation meeting which took place in Mazar-e-Sharif. More 100 participants from line agencies, Mirabs, head of Men and Women CDCs came to consultation meeting.

Summary of proceedings

Eng. Esmatullah Esmati head of North River Basin chaired the consultation meeting and greeting the participants from aforementioned provinces with dissimilar composition of organizations includes; Provincial Sub River Basin Agencies, DAIL,RRD, NEPA, WAD, ARAZI, Provincial cancel from Balkh Province, Representative from governor house, Head of district CDCs (Mem and Women) where IRDP implements its sub projects, representative

from the World Bank, staff from North and Panj Amu Staff. farmers, PCU-IRDP staff of Mazar region, head of Main River Mirabs, Water User Associations, Mula Emams and others.

Mohammad Arif Rasuli Environment specialist at World Bank elaborated the importance of environmental and social framework specially emphasize on wide range of consultation with direct and indirect stakeholders especially vulnerable group, women and community participation in design and implementation process of a sub project. Importance of suggestions from participants for improvement the draft ESMPs is the main purpose of this meeting.

Eng. Zabihullah Esmati head of PCU Mazar Region presented the background and implemented sub-projects in the region and linked the project with IRDP-AF and mentioned that participation of the community is very important as lesson learned from the past, in addition expressed his appreciation from heads of SRBs and their full support during identification and implementation of the sub-project in their respective provinces.

Nessar Ahmad ESDS from IRDP/FAO Mazar Region, explained the Environment and Social Framework of the IRDP-AF and its importance with the requirement need to be consider during sub-project identification design and implementation of each individual sub-project under IRDP-AF, in addition elaborate the Term of Reference (ToR) environment and Social Impact Assessment for the four dams and required action to be taken in the future under IRDP-AF.

Eng. Enayatullah Serat, senior design engineer of Kabul office was one of the facilitator of the meeting talked about history of dams, background of the dams in north river basins, work done up to date of the 22 dams carried out feasibility studies, selection criteria of the four sites with has been considered under IRDP –Af. Then Nessar Ahmad continued presentation elaborate the preparation process of term of reference of the dams, scope of works of the consultants on carrying of the ESIAs including the studies steps and submission of required report of the ESIA to the MEW and donor.

For your more information on timing of each presenter, the agenda of the meeting is attached.

Upon completion of the presentation, the session of the questions/Answer was started;

(Q1): Mohammad Qasim, representative of the Arazy department from Jawozjan province requested that the IRDP staff should have full coordination with Arazy and to follow the Afghan land law for land issues. Because numbers of hydro structures were implemented by other agencies in the province, unfortunately water rights of the command area did not consider on outlet size of the canals. Therefore I strongly appreciate the consultation process with direct and indirect stakeholders of the sub project specially with those whom may negatively affect through implementation of the sub project either by losing their lands or water rights. He also mentioned that there is regulating structure that control/convey water to entire Jawzjan province, unfortunately the controlling structure washed away in consequence the west part the city is suffering from flood and there is no water to the east part of the city, we strongly looking forward to your assistance for rehabilitation of the controlling structure.

(A1) the ESMF emphasize on consultation with direct and indirect stakeholder of IRDP especially with affected persons and governmental line agencies. Your example which were happened in your province strength our steps and confirm that ESMF-AF is structuring in right way. Regarding the structure you have mentioned that; design process of the structure is already completed and submitted for review or approval through IRDP Mazar regional office.

(A2): Ghulam Mohammad Daqeeq head of Samangan Sub-River Basin, expressed his appreciation from IRDP staff for conducting of this consultation meeting, particularly on solving mechanism of social and environmental issues which are very important. He mentioned an example of environmental and social issue which happened on Ghaznigak canal located at border between Samangan province and Khulm district of Balkh province. After conducting environment and social assessment through Mazar IRDP-PCU regional office, an social issue on water rights between Samagan and Khulm was disclosed, we together with PCU staff and community of upstream and downstream tried our best, unfortunately since the issue of water rights exists since last 15 years, thus solution of the issue was beyond of our control, finally Mazar IRDP-PCU postponed rehabilitation of Ghaznigak canal until finding proper solution on the issue.

After two to three years, the GFPR agency German funded Ghazingak intake rehabilitation implemented by CDCs of the villages under supervision of Samangan RRD office. During implementation downstream farmers from Khulm district blocked main road of Mazar-Kabul to stop rehabilitation of the intake.

I appreciate consultation with stakeholders especially with those whom negatively affect from any structures that going to implement along any of river.

(A2): This is the positive impact of social and environmental studies which the ESM-AF recommended that each of sub projects under IRDP-AF should have ESMP in order to avoid similar interruption during implementation and operation of a hydro structure. The ESMF-AF gives priority for consultation.

(Q3): A female social organizer from GFPR raised three questions on rehabilitation of an irrigation scheme:

i)When you plan construction of an intake or other structure along the canal, if the structure requires lands or cut trees, how IRDP compensate to the affected persons?

ii)Majority of women of the villages are not aware from irrigation scheme development, how IRDP /deal/offer awareness to the women and consult with them.

iii)A survey of an irrigation scheme completed, we confidents that there is no social issues, but during construction some people come and interfere to the project and stop construction works, how IRDP handle if face with these kind of situations.

(A3): i) IRDP emphasize on walkthrough along the canal during design stage. The social and environmental staff together with design engineer walk on the canal to identify problem of the canal, whether the anticipated structure require land or cut trees, the staff draw layout of the canal. Based on findings from the walkthrough they organize meeting with community head, Mirabs, Elders whom have experience from the canal, affected persons to talk and

consult with them specially when the structure involve with land issue or cut trees. If cost of donated land more than 10% of total assets of the affected persons, RAP would apply, otherwise the affected person would donate the land to the community or community will pay compensation to the affected person . In any case satisfaction of the affected person is on top priority in IRDP or IRDP-AF. If during construction any tree cut, the project will plant double number of cut trees. An ESMP would develop on any sub project which cover all anticipated negative impact with its mitigation measures and responsible person to take care of it.

ii). There is social inclusion gender assistant whom organize meeting with women CDCs, inform women about development of their irrigation scheme in their villages, she will listen to their voice and transfer their concerns to the design team. design team always give respects to the gender issue of a sub project.

iii). during design stage; consultation carryout with direct and indirect stakeholders; including Mirabs, community and water users, sub river basin agencies, upstream and downstream water users of an intake especially those implement on a river, any hidden issues will come up during various consultation with different stakeholders, which ESMF-AF also emphasis on stakeholder involvement.

(Q4), A religious leader and Khatib Madrasa (local person) from Albors Chimtal (Mullah), he appreciated organizing such consultation meeting and workshop on water issues, he also raised scarcity problem of water in Albors district belong to Balkh province. About 3,000 population of the district even do not have drinking water. How IRDP-AF provide assistance for Albors district.

(A4), indeed, there are many areas similar to Albors district like Ankhy, part of Samangan province, part of Faryab province. MEW through IRDP-AF put steps on water resource management. There is hope that our county could overcome of water shortage in future especially in rural areas.

(Q5), Engineer Tora Shah khan, acting director of Saripul Sub river Basin; raised problem of occupation right of way of river and canals in many places that are happening in Saripul province. The right of way occupation creates environmental and social problems in the province.

(A5), unfortunately, issue of right of way is still one of unsolved issue with MEW. However, major of provinces creates law on right of way in their provinces, solution of right of way is beyond authority of IRDP-AF, however, this could solve through intervention of Mirabs, water user Association and elders.

(Q6), A head of District Development Association in Hazrati Sultan district of Samangan province; firstly he appreciate and thanks to IRDP assistance in rehabilitation their canal in the district in 2015. The rehabilitation was very useful and brought lots of facilities for irrigation service.

(Q7), **Engineer Qahir,** head of Saripul Payani (jawzjan province): he was talking on rehabilitation of Ach Qala irrigation scheme which its survey carried out by PCU and looking for its construction. Acha Qala regulate water to the two part of Jawzjan province , the west

part Jawzjan province is facing with flood problem that damages agricultural lands and properties while east part of the province is facing with water shortage. Also he requests more rehabilitation work on different canals in the province.

(A7), fortunately the proposal of Acha Qala is under review of World Bank, hopefully, you will witness of construction of suitable structure within short period of time through IRDP or IRDP-AF.

(Q8), **A Head of Mirab** in Khulm district thanked the IRDP for rehabilitation of irrigation scheme on Sharqi canal, which brought extraordinary positive impact on water management, flood protection and maintain water to cultivable lands at downstream of Sharqi canal. He stated that we are expecting from IRDP to provide similar assistance on Gharbi canal which farmers are facing with same problem as Sharqi canal. Consultations with various types of stakeholders solve many problems of Sharqi canal and helped us during implementation period. We are against of construction of Ghaznigak intake which planned by GFPR which GFPR did not consult with us regarding construction of the intake which has water right issue; we are downstream of intake of Ghaznigak canal.

(A8), consultation with various stakeholders is on top priority of IRDP and IRDP-AF. The ESMF-AF also emphasise on stakeholder consultation.

(Q9) One of the staff/ representatives of Aybak Samangan Sub River Basin in Khulm district talked about positive impact from IRDP in Khulm district, many positive impacts comes after implementation of Gharib irrigation in Khulm district. The social and environmental activities of IRDP carried out during design, implementation and operation of Gharbi canal were extraordinary useful. Consultation with men and women, consultation with affected person on land donation and cut trees, sharing the mitigation measures on the structure of Sharqi canal, on the access road, establishment GRC on Shariq canal, source of construction materials for Sharqi canal, personal protected equipment during construction phase and many application of environment were the positive work of environmental and social aspects, I cannot see or recommend further activities to which IRDP staff carried out on Sharqi canal during design, implementation and operation stages of the canal.

(A9) thank you very much, we are keeping up our activities to deliver best possible and sustainable service to the stakeholders. Your satisfaction that you expressed on behalf of the community would courage us to be more active especially on environmental and social studies of a sub project.

(Q10), representative from NEPA office in Jawzjan province; he talked on river bank protection of Amu River Bank, which create and damage hectars of lands, houses and properties in two district of Jawzjan provinces closed to Amu Darya, which creates a lot of social and environmental degradation. He also mentioned about canal rehabilitation of two or three canals in Jawzjan and Khuja Do Ko districts. Security is good in the province and rehabilitation work should be more here.

(Q10), regarding river bank protection; there is some small activities of River Bank protection under component A of IRDP-AF. But Amu River bank protection is not included

under this program. Mazar region try their best to implement at least one large sub project in Jawzjan province to maintain irrigation water to Jawzjan city.

Questions and Answers on dams in North River Basin.

(Q1), Engineer Hayatullah , head of Faryab and Shirin Tagab sub river basin, mentioned that construction of dam is very important in Faryab province to provide irrigation water to the city. There is one old dam (SariHouse), Sarihouse reservoir is almost filled by sediment. If government does not take plan for construction of new dam like Dahni Dara, the entire city would face with shortage and water scarcity. We were expecting news for construction of dam than carrying out several studies. Secondly for Sarihouse dam requires to extend height of dam to store more water because existing water reservoir is filled by sediment. Entire Faryab city is facing with water scarcity, volume of water is decreasing in Sarihouse dam and which is insufficient for the province during summer season.

The village which anticipated to come under submerged area of Dahni Dara dam, are ready to relocate, all residential of Faryab city is looking for construction of Dahni Dara dam.

Note: Dahni Dara dam is one of the 22 dams which feasibility studies are completed, ESIA of the dam is under plan of component B of IRDP-AF.

(A1), you are right Faryab province is facing with shortage of water during summer season, carrying out of social environmental impact assessment would be considered on Dahni Dara dam during IRDP-AF. The Head of North River Basin also mentioned that construction of Almar dam is going on in the province. MEW try their best for improving water resources but this needs time to overcome on water shortage. The water resource management is one of the mandates of MEW which comes under components C of IRDP-AF, some construction of dams are going on through MEW like Shah and Aros, Salma and Almar dams in another part of the country.

(Q2), Head of Khulm Aybak Sub River Basin; during last five years all people from Samangan province is looking for ward of construction of Ab-e-Keli dam located at upstream of Khulm Aybak river. you are aware of water shortage of Aybak city, Hazrati Sultan district, and Khulm district which all need this dam. We are expecting to hear construction of the dam rather than finalizing ESIA of the **dams.**

(Q3), The head of a CDC from Hazarat Sultan district of Samangan province; the entire district are facing with shortage of water during summer seasons, he also mentioned water scarcity in the province and emphasise on consider Abe-e-Kely dam located at head of Samangan River. improvement of water management is urgently needed of Samangan province.

(Q4) Abdul Hadi Azizi head of NEPA office in Samangan province, asked whether ESIA of Ab-e-Kely is completed, if yes, why NEPA office in Samangan province do not aware of it.

(A4) only feasibility study of Ab-e-Kely carried out during IRDP and ESIA of Ab-e-Kely will be completed during IRDP-AF.

The closing session of the meeting was chaired by Eng Esmatullah Esmati head of North River Basin;

I appreciate inclusion of Gender in IRDP and IRDP-AF as result of this number of women came from districts where IRDP implemented its sub projects. Based on observation from the participants all of them are looking forward for improvement of water resources, construction of dams and check-dams to store rain water and reduce flood damage during flood seasons. There are several locations or area those are suffering from water shortage and water scarcity.

All steps that presented as key element of ESMF-AF are important, we hope all what are presented may consider during implementation of a sub project.

Overall consultation meeting on ESMF-AF successfully comes to its end. We are aware through this meeting of ESMF-AF all of us give our feedback, we hope all of our suggestions and proposal consider during finalizing.

Community members during discussion

PCU deputy Director presenting Mazar projects

ESDS answering to questions welcoming

ESS staff taking Minute while head of NRB

ESMF-AF consultation meeting Kundoz and Mazar region

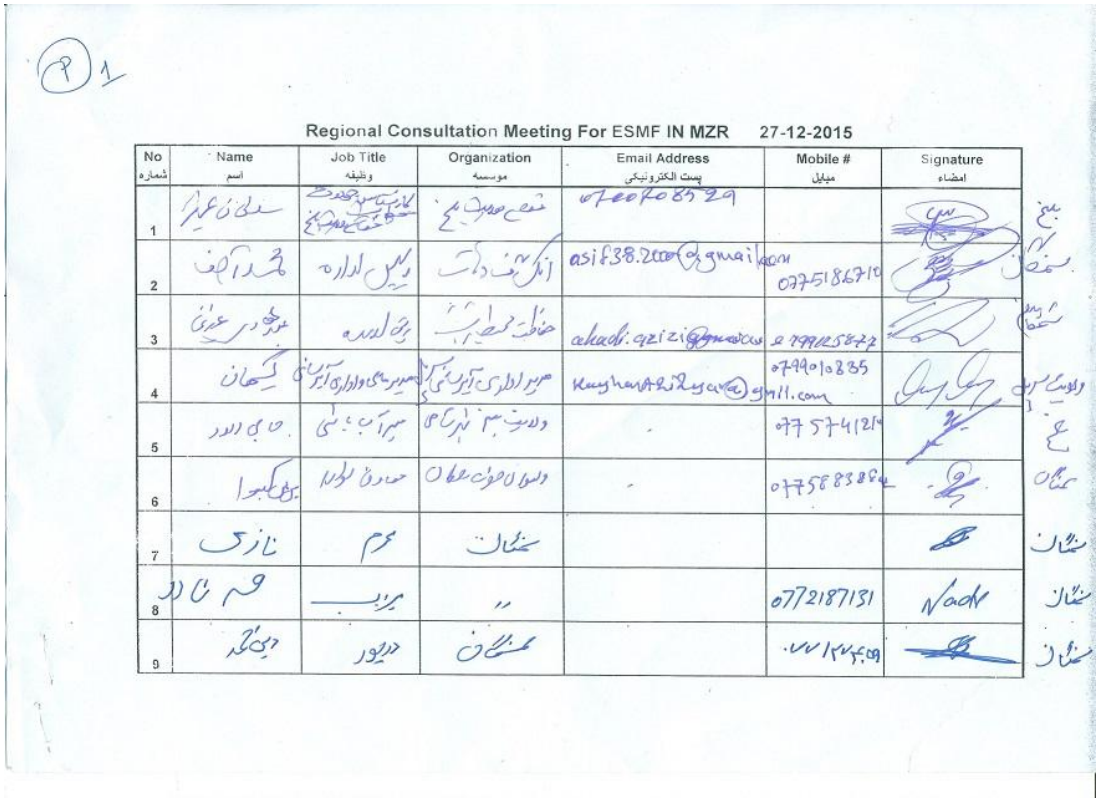
List of participants

No	Name	Title	Organization	province
1	Sayed Aziz	natural disaster specialist	natural disaster department	Balkh
2	M.Asif	Director	RRD	samangan
3	abdul hadi	Director	NEPA	Samangan
4	Kaihan	admin finance manger	water supply dep	Sari pul
5	Haji Wodod	Mirab	Nahri Shahi canal	Balkh
6	Bibi Kubra	Women-CDC	Hazrat Sultan	samangan
7	Nazi	Villager (Mahram)	CDC	samangan
8	Nadir	Mirab	CDC	samangan
9	Din mouhamad	Driver	Samangan	samangan
10	Eng.Aslam	DAIL-Director	Samangan	samangan
11	Eng.torashah	SRB	Sari-Pul	Sari pul
12	Abdullah	SRB-Kokcha	Kokcha	Badakhshan
13	Abdul Latif	Mirab	Jwazjan	Jawzjan
14	Sarwar	Mirab	Jouzjan	Jawzjan
15	Yaqoob	Mirab	Jouzjan	Jawzjan
16	Ali	Mirab	Balkh	Balkh
17	Khalida	local NGO	Balkh	Balkh
18	Matiullah	Water productivity manager	Shabir ghan	Shabir ghan
19	Ms.Hamida	youth association	Balkh	Balkh
20	Safir-Ahmad	youth association	Balkh	Balkh
21	M.Anwar	WAD Manager	Farayab	Farayab
22	Sayeed Ahmad	NRB Finance	Farayab	Farayab
23	Ahmad Shakib	NEPA	Farayab	Farayab
24	Abdul Ahad	land office	Samangan	samangan
25	Mustafa	IT MIS	IRDP	Mazar
26	Basir	admin finance	PCU	Mazar
27	Folad	program Officer	MRRD	Mazar
28	Fida	villager	Samangan	samangan

29	mouhamadullah	Jawzjan-Wad	WAD	Jawzjan
30	Arif	Information-officer	NEPA	Jawzjan
31	khairudin	CDC	DDA	Jawzjan
32	Asadullah	CDC	DDA	Jawzjan
33	Akram	Social worker	MRRD	Jawzjan
34	Gulabudin	ARAZI	Jawzjan	Jawzjan
35	Qadir	Mirab	Balkh	Balkh
36	Nematullah	WUA	Balkh	Balkh
37	Quadratullah	Social officer	PIO	Jawzjan
38	Ah-Farid	SRB	SRB	Balkh
39	hamidullah	planning officer	SRB	Khulm
40	Arduz qul	Mirab	SRB	Khulm
41	Habibullah	Mirab	SRB	Khulm
42	Arif	Mirab Assistant	SRB	Khulm
43	Hussain	NEPA	NEPA	Sari pul
44	Ismatullah	NRB	NRB dorector	Sari pul
45	Najubullah	general manager NRB	NRB	North
46	Eng.Karima	North river basin director	North river basin	North
47	jamila	SIGA	PCU	Mazar
48	Eng.fatima	Manager of ground water	NRB	Mazar
49	Eng.frangis	Solar engineer	NRB	Mazar
50	Ghulam .M	Director	MRRD	samangan
51	Kanishka	Rural Development manager	MRRD	Sari pul
52	Wakil	supervisor	PCU	Mazar
53	Eng.m.Qasim	Supervisor	PCU	Mazar
54	Eng.S.Aqa	supervisor	PCU	Mazar
55	Asal	Mirab	Aqcha	Jawzjan
56	Hashmat	SRB.D	Balkh	Mazar
57	M.Khan	SRB.R	Balkh	Mazar
58	Abdul Aqa	E&M.D	NRB	Balkh
59	Hussain	Social economic officer	North river basin	Kundoz

60	Azim	Executive manager	North river basin	Kundoz
61	Ghulam hazrat	Villager(Mahram)		Balkh
62	Ah.yama	North river basin director	North river basin	River basin
63	Nasir ahmad	Service Manager	NRB North river basin	River basin
64	Ah. Jawid	Villager(Mahram)		Balkh
65	Shah.M	Villager(Mahram)	CDC	Balkh
66	Amin	Regional manager		Kundoz
67	Habib	Mirab	Khulm	Mazar
68	Abdul-rahman	Economy Rep	Balkh	Balkh
69	Razaq	CDC	Nahri shah	Balkh
70	Musa	Plan director	NAD	Balkh
71	Rafi	Samangan	Economic office of samangan	samangan
72	Nasir	GM.of water resource	DAIL	Sari pul
73	Enayatullah	Design engineer	FAO/IRDP	kabul
74	Zahidullah	ESDS	FAO/IRDP	jalalabad
75	Amanullah"Amiri"	ESSS	PCU/HQ	kabul
76	Eng.Fahim	Engineer	FRRD	Mazar
77	Nasima	Engineer	FRRD	Mazar
78	Eng.m.Hasan	Technical Water Supply	Mazar	Mazar
79	Eng.hayatullah	SRB	SRB	Farayab
80	Ghowsuddin	Mirab	SRB	Farayab
81	Arif Rasuli	Sc.ENV.Sp	WB	kabul
82	Sharif	Mirab	Balkh	Balkh
83	Talib	Engineer	PCU	Balkh
84	khairudin	Religious mula	shuraba	Balkh
85	Abd.Rashid	Director	DAIL	Jawzjan
86	Ghafar	Specialist	Jawzjan governor office	Jawzjan
87	Enayat	CDC	CDC	Jawzjan
88	Abdullah	Wakil	SRB	Jawzjan
89	Rahmatullah	Mirab	SRB	Sari pul
90	Eng.Qahir	OIC SRB director	SRB	Jawzjan

91	Din mouhamad	Mirab	Charmgar Canal	Jawzjan
92	Noor Ahmad	safeguard officer	OFWM	Balkh
93	Khwaja Akbar	Irrigation Officer	DAIL	Balkh
94	Mohammad Hassan	Mirab	Sari-Pul	Sari pul
95	Mohammad Hashim	CDC	Shora Canal	samangan
96	Murad	Mirab	Shora Canal	samangan
97	Mohammad Rahim	CDC	Samangan	samangan
98	abdul Baqi	representative	MRRD	Jawzjan
99	Eng.Fardin	PIO director	PIO	Balkh
100	Ahmad Shah	SRB representative	SRB	Kundoz
101	Mehrollah	NRB Eng	NRB	Balkh
102	Ms.Mahjan	Women-CDC	NRB	Balkh
103	hamidullah	Deputy Director	PCU	Kundoz
104	Ataqullah Shafiq	ESSA	PCU	Kundoz
105	Abdul Rahman	Surveyor	PCU	Kundoz
106	Qari Din Mohammad	Engineer	Balkh River Basin	Balkh
107	Nessar Ahmad	ESDS	FAO/IRDP	Balkh
108	Gullam Rasol	head of CDC	Shora Canal	Balkh
109	Abdul Haq	CDC	Shora Canal	Balkh
110	Saeed Mustafa	M&E officer	Governor Officer	Balkh
111	Mohammad Arif	villager	Shorabaa	Balkh
112	Rohullah	Gov.office representative	Governor Officer	Sari pul
113	Mohammad Qasim	Manager of settlement	Arazi	Sari pul



Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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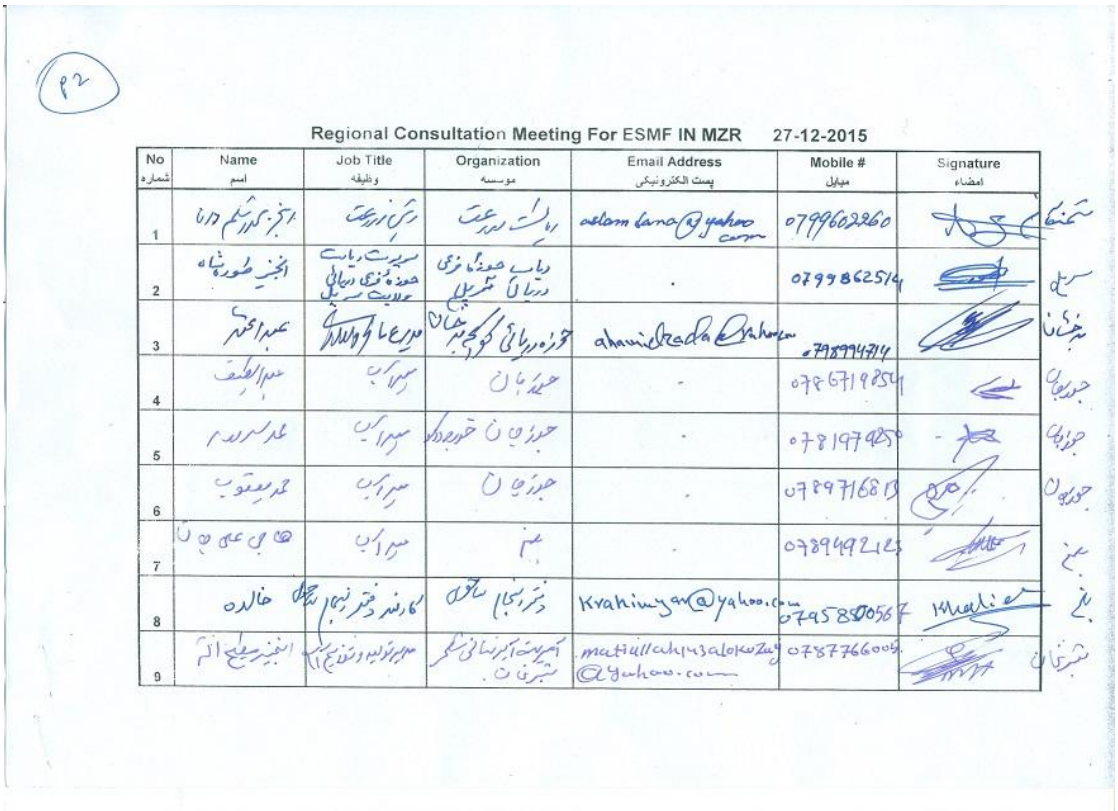
4					0799010835	
5					0775741214	
6					0758838844	
7						
8					0772187131	
9						



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5					0781979857	
6					0789716813	
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1	[illegible]	[illegible]	[illegible]		0799201101	
2	[illegible]	.	.	.	.	
3	[illegible]	[illegible]	[illegible]		۰۷۷۵۰۲۸۷۹	
4	[illegible]	[illegible]	[illegible]		0700502812	
5	[illegible]	[illegible]	[illegible]	ahshakibamini@yah...	۰۷۹۳۸۰۰۰۱۹	
6	[illegible]	[illegible]	[illegible]		۰۷۰۵۹۷...	
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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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2	[illegible]		[illegible]		0798214059	
3	[illegible]	[illegible]	[illegible]	.	0786084466	
4	[illegible]	[illegible]	DRA		0780444478	
5	[illegible]	[illegible]	DRA		0786528918	
6	[illegible]	[illegible]	[illegible]	Akrambik...	0780318045	
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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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3	انجنیر [illegible]	آمر برنامه	حوزه دریایی خلم ایبک		0774382838		خلم
4	آرزو گل	مرکز آبیاری عمومی	حوزه دریایی خلم ایبک		0799797217		سمنگان
5	جمیل	میراب بابی	حوزه دریایی خلم ایبک		0778419293		سمنگان
6	حاجی محمد عارف	میراب بابی	حوزه دریایی خلم ایبک		0774185805		خلم
7	محمد حسین	[illegible]	ریاست [illegible] ولایت سرپل		.7255812 88		سرپل
8	انجنیر عصمت الله	رئیس حوزه دریایی شمال	حوزه دریای شمال		0799449276		
9	مجیب	مدیر عمومی حوزه دریای شمال	حوزه دریای شمال		0799 254088		

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5	غلام محمد دقیق	رئیس	حوزه دریایی خلم سمنگان	gh.daqiq@gmail.com	0700520895 0773481122		سمنگان
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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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جوزجان

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اسم	وظیفه	موسسه	پست الکترونیکی	مبایل	امضاء	ولایت
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ریان حبیب الله	میراب	خلم				بلخ
عبدالرحمن	[illegible]	ریاست اقتصاد		۰۷۰۰۵۰۲۳۴[illegible]		بلخ
عبدالرزاق	عضو شورا	ولسوالی نهر شاهی		۰۷۹۹۱۰۳۳۹۶		بلخ
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Attachment 8 (b)

Jalalabad Regional Consultation on the

Environment and Social Management Framework-AF For the

Irrigation Restoration and Development Additional Financing Project (IRDP-AF)

Venue: Jalalabad UNFAO Meeting Hall

30/12/2015

Background

Since 2011, the Government of Afghanistan (GoA)through the Ministry of Energy and Water (MEW) has been implementing the Irrigation Restoration Development Project (IRDP) with financial support from the International Development Association (IDA or the World Bank, WB) and Afghanistan Reconstruction Trust Fund (ARTF)21. The IRDP became effective on June 15, 2011 and the current closing date is December 31, 2017. An Environmental and Social Management Framework (ESMF) including a Resettlement Policy Framework (RPF) were prepared and have been applied to the project during implementation. The MTR recommended for an additional financing with a 2-year extension and a Level 1 Restructuring to facilitate effective implementation of irrigation investment and addressing water resources management

The draft ESMF has been developed to ensure that the proposed AF project has concrete plans and processes in place to avoid, minimize, and/or mitigate adverse environmental and social impacts of project investments and interventions when they are identified, planned and implemented. To this end, the ESMF of the original project was updated to align with the scope and structure of the proposed AF project taking into account the implementation experience during the original project.

Pre- consultation process- Dissemination of information

The Executive Summary of the draft ESMF was translated into Dari and Pashto and made available to potential participants before the meeting via IRDP website and in hard and soft copies through invitation letter and emails. The hard copies were also distributed during the meeting.

The consultations in Jalalabad region with local people's representatives of men and women CDCs, RRD, DAIL, Department of NEPA, River basins, NGOs, Farmers, DDA and WUAs from four provinces (Nangarhar, Kunar, Laghman and Nuristan).

The Agenda of the meeting was prepared in consultation with the River basin and PCU management in order to cover all necessary information and creating a sound question and answer platform. It was decided to start the meeting by a short introduction on EIRP, IRDP and IRDP-AF with key differences between these phases. A brief report of achievement and plans for the next year was also planned to be presented by PCU director of the region. The presentations were prepared in preferred local language (Pashtu).

Two persons were designated to record the minutes and ` two persons were assigned to record the movie and take photos for media coverage of MEW and IRDP website.

Summary of proceedings

The meeting opened with recitation of holy Quran. **Eng.Mohammad Sadeq Safi, head of Nangarhar Sub River Basin,** welcomed the participants and described the structure of River Basin for water Resource Management and elaborated the responsibility of the MEW based on water Law and briefed overview on EIRP and IRDP activities in the past few years funded by WB and steadily improved the involvement of the community and relevant stakeholders.

Eng. Mirwais Wali Deputy Director of PCU Jalalabad Region presented the background and implemented sub-projects in the region and linked the project with IRDP-AF and confirmed that participation of the community is very important as lesson learned from the past, in addition expressed his appreciation from heads of SRBs and their full support during identification and implementation of the sub-project in their respective provinces.

Eng. Khushal Asifi OIC of UNFAO Jalalabad office outlined the importance of Environment and Social issues for each development activities and expressed appreciation from MEW/IRDP Management team for conducting of such cooperative of consultative workshops and requested from participants for active participation in the workshop for finalization of the ESMF-AF and show their talent and experience, meanwhile said an example of one of the project implemented in Nangarhar province implemented by unknown organization, required environment and Social assessment, but still there is some concerns in the project area.

Zahidullah Bandawal ESDS for Jalalabad region and member of the Environment and Social Safeguard core team of the IRDP, introduced the draft Environment and Social Management Framework of the IRDP-AF and its requirements, procedures and contents, which will be follow during IRDP-AF and its importance for smooth implementation of the project. He highlighted the main contents of the ESMF-AF (including stakeholder consultations with particular emphasis on consultations at community level, GRM, Transect Walk, ECOP, RPF ,Public information and Communication,) in order to brief the participants and encouraged them to express their suggestions, idea and comments for filling of the gaps, improvement and finalization of the ESMF-AF.

The Main Points raised after explanation of the above presentation.

(Q1) The head of Shura and a member of WUA for Salar canal from Kunar Province, expressed his appreciation from MEW/ IRDP staff for conducting of the consultation meeting, added that the process presented in the ESMF-AF are applicable, which has been explained, requested from head of agriculture department to conduct such kind of meetings, in order to know the farmers for improvement of their agricultural products, due to irrigation without agricultural inputs and improvement of water Management system on the field level will not give good result, It is mentionable that most of our required agricultural products imported from neighboring countries and we are just consumers, the improved seeds are not trustable, requested that prior from distribution to the farmers, the improved seed should be test in the demonstration plots in the area than could be distribute to the farmers on time.

(Q2) Eng.Painda Mohammad Director of NEPA on provincial level from laghman province expressed his thanks for conducting of ESMF consultation meeting for implementation of IRDP-AF project, he insisted on having closer coordination with NEPA at the provincial level, he mentioned that for approval of any project document the NEPA must of direct intervention in review and approval of the documents.

(A2) Replied by the IRDP ESS team that IRDP has consultation for each sub project with NEPA provincial offices and has already taken approval from the NEPA head office in 2011 by preparing a pilot ESMP which was officially submitted to them for their review during the initial stages of the IRDP. The ESMP has been reviewed and agreed to follow the procedure for 219 medium Sub-projects. For large sub-projects and dam NEPA will be directly involved in the process.

(Q3) The Mirab and Head of WUA from Surkhrod district, said that as we understand from the presentations, the purpose of the consultation meeting is improvement of environmental and Social concerns and Water Resource Management, meanwhile it is under IRDP-AF components, so therefore we have serious problem in Surkhrod district as well as Jalalabad city and few district with seasonal fast winds and floods, as result of that our crops, soil and orchard including villages face with degradation. So we are requesting for mitigation of mentioned problems to consider BabiKas and KajeYousuf small dams, we have already submitted the request of the communityto the MEW and hope fully to consider the mentioned location for dam construction. He insisted that if we want to do anything for Environment then we have to do some fundamental works that should have strong impacts over environment and agriculture of Afghanistan.

(A3)IRDP is working in the Framework of IRDP-AF consisted 4 components as you have seen in the presentation; It has been confirmed that Dam unit will be established in the MEW and will be responsible for Dam related issues.

(Q4)Eng. Esmail Dawolat Zae Director of Agriculture, Irrigation and Livestock of Laghman Province, expressed his appreciation for conducting of the consultation meeting, which cause coordination between relevant Departments, in addition mentioned that the Pest Management OP 4.09 operation Policy of the WB is included in the ESMF-AF is very important. He also asked the purpose of Water Resource Management.

(A4) The ESS team replied that the broad aim of WRM was to improve the use and management of water in a sustainable way.

(Q5) The Mirab of Narh-re-Shahi canal from Laghman Province, confirmed the procedure from initial survey up to completion of the sub-project for Environment and Social issues, which mentioned in the ESMF-AF and express his appreciation for receiving their comments and suggestions. He requested for construction of New dams in Laghman province on Alingar and Alishang Rivers, and said that we requested from Minister of Energy and Water came to laghman province last month for inauguration of some projects and promised that the WatanGato and Kala Goosh will be consider under IRDP-AF, and emphasized that the promise will not be kept in thepaper but hope to see it in the field.

(A5) The IRDP-AF consists of 4 components as you have seen in the presentation; It has been confirmed that Dam unit will be established in the MEW and will be responsible for Dam issues.

(Q6)Dr. Abdul Latif Head of Public Health Department of Laghman Province expressed his appreciation from MEW/IRDP staff for conducting of consultative workshop, which will create strong coordination between line departments, in addition added the importance of the drinking and irrigation water.

(A6) Thanks from the good feedback, IRDP will be in close contact with respected department in future as well.

(Q7)Najebullah Kunary head of Environment Protection Department from Kunar Province also expressed his appreciation and mentioned that it is positive movement and encouraged all line departments and relevant stakeholders for conducting of such consultation meetings, added this is a good direction and will keep as a sample for development activities in the in the region, in addition outline that environment protection need for time we should be in patient.

(A7) Thanks from your feedback, IRDP appreciates your cooperation and contribution with IRDP team during consultation for each project in Kunar Province.

(Q8)Eng. Sayed Abdul Rahim Sadat head of Laghman sub-River Basin, requested construction dams that has already mentioned by Mula Jan on Alingar and Alishang Rivers, due to seasonal floods damage the agricultural land, houses, infrastructures and mostly the farmers are faced with shortage of water in late summer. He expressed his appreciation from IRDP staff for conducting of consultative meetings, the procedures implemented in the IRDP project had good result for smooth implementation of the sub-project activities, and requested for additional establishment of Hydrology station along Kabul River belong to Laghman Province.

(A8)as you are fully involve with IRDP since long time, the request for hydrology station along Kabul River belong to Laghman Province, it is noted by PCU Deputy Director of Jalalabad office for further process.

(Q9)Eng. Sher Mohammad head of Nuristan Sub-River Basin, requested that EIRP and IRDP funded by WB, but without Sub-River Basin Building nothing has been done in

Nuristan province, we hope to consider small dams and river bank protections as well as rehabilitation of Irrigation system in Nuristan Province. The same issue has been raised by one of the elder from Nuristan province and expresses his support from IRDP activities in Nuristan province.

(A9) The issue has been replied by PCU Deputy Director, Nuristan province irrigations were not matching with WB criteria, in addition security Problem prevent us to cover Nuristan province, we hope that the security situation will get better to cover the Province.

(Q10) Shafiqullah from Nangarhar Environment Protection Agency expressed his appreciation and said that ESMF-AF is a good opportunity for awareness creation among the line departments and communities to know the importance of the improvement.

(Q11) A female Social Safeguards Staff from OFWM project suggested that it will be better if we have some budget in the ESMF for community meetings especially for women who try to spare their time and attend our consultation meetings during the different stages of project.

(A11) it was replied by Ms.Husnia the National Gender and Social Development Officer of IRDP that the IRDP social inclusion and Gender team have always tried to conduct the meeting with village women in most appropriate timing so that it should not affect women's personal work specially during the harvesting seasons and also IRDP is trying to consider more trainings for women in order to maximize their interest and participation.

(Q12) A female social worker from Kunar Women Affairs department appreciated the invitation of women from different places and mentioned that it will better if one woman from WAD should accompany the IRDP team staff during their site visits in case there is no female staff at the provincial level and some incentive should be given for them. There will be a common benefit.

(A12) Ms.Husnia from IRDP mentioned that IRDP has Gender and Social safeguard staff in each regional office , and at the provincial level they continue their women mobilization with the support of a women CDCs and volunteer village organizer. Due to many factors,women outreach remains challenging in Afghanistan ,therefore IRDP team try to use different approaches and doing consultation with other organizations is one them. IRDP appreciates the support of line departments, however there is no budget allocated yet to pay incentive for the support of stakeholders. We will take account of your good suggestion and will discuss with the donors.

(Q13) Eng. M. Sadeq Safi head of Nangarhar Sub-River Basin evaluate the ESMF-AF consultation meeting positive and appreciate the active participation of the participants from different areas and department in eastern region and insure them that your suggestions and comments will be add in the final version of the ESMF-AF.

Photo:

Opening of Meeting

Head of Nangarhar Sub River Basin Opened the Meeting

Eng. Mirwais Wali PCU Deputy Director

Presented activities under EIRP and IRDP to link it with IRDP-AF

Ms.MalalaiMashal from OFWM department of Nangarhar asking question

Sub River Basin confirmed the main points of the ESMF-AF and requested for Construction of dam and River Bank protection.

List of Participants:

List of Participants for Consultation Meeting on

Environment and Social Management Framework for Additional Financing
ESMF-AF in Jalalabad Region 30th Dec 2015

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37	Ismail	DAIL Direct Laghman	0799028009	Laghman	
38	Husnia	GSDD	0780207112	Kabul	
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List of Participants for Consultation Meeting on

Environment and Social Management Framework for Additional Financing
ESMF-AF in Jalalabad Region 30th Dec 2015

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56	Noor M	Head of CDC	0707272266	Noristan	
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61	Noorullah	Head of CDC	0706044187	Noristan	
62	Sherin. M	Mirab		Noristan	
63	Ehsanullah	Mirab	0706949414	Noristan	
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67	Shir. M	WMD-Director		Noristan	
68	Abdulshakoor	Driver		Noristan	
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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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8	[illegible]	[illegible]	شورای ولسوالی		۰۷۹۹۰۰...	[signature]
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Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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7	[illegible]	[illegible]	[illegible]		۰۷۷۳۰۴۴۴۹۰	
8	[illegible]	عضو شوره	عضو شوره		۰۷۷۰۱۸۴۸۴	
9	عبدالباقی	DRA [illegible]	انکشاف دهات		۰۷۹۹۰۱۱۴۹۲	

Regional Consultation Meeting For ESMF IN MZR 27-12-2015

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9	[illegible]	ESDS	FAO		0776043145	

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اسم	وظیفه	موسسه	پست الکترونیکی	مبایل	امضاء	ولایت
[illegible]	رئیس شورای ... ولسوالی	شورا		۱۷۱۰۰۵۴۰۷۷۲	[signature]	بلخ
[illegible]	[illegible]	شورا		۰۷۸۹۱۸۷۹۳۷	[signature]	بلخ
سید مصطفی	کارمند ...	دفتر دولتی		۰۷۹۷۷۴۳۹۹	[signature]	بلخ
محمد عارف	[illegible] / دریور	PCU			[signature]	

P14

اسم	وظیفه	موسسه	پست الکترونیکی	مبایل	امضاء	ولایت
احمد داود	کارشناس ولایت	مقام ولایت سرپل		۰۷۸۶۰۶۳۰۶۶	[signature]	سرپل
[illegible]	[illegible]	اداره مستقل اراضی		۰۷۹۹۵۳۸۷۱۳	[signature]	״
عبدالبصیر	دریور	انکشاف دهات		0771478633	[signature]	سمنگان
جان محمد	دریور	ریاست زراعت		0779229081	[signature]	سمنگان
نجیب الله	دریور	P.C.U		079684181 99	[signature]	کندز
[illegible]	دریور	P.C.U		0783636431	[signature]	بلخ
حاجی سعید	دریور	حوزه دریای [illegible]		0798561820	[signature]	بلخ
سیف الرحمن	دریور	P.C.U		0700402934	[signature]	״
[illegible]	دریور	P.C.U		0799011771	[signature]	״
امیر	cleaner	P.C.U		0791381919	[signature]	״
[illegible]	cleaner	P.C.U		0775151031	[signature]	״

Attachment 9 (c)

Kandahar Regional Consultation

on the

Environment and Social Management Framework-AF

For the

Irrigation Restoration and Development Additional Financing Project (IRDP-AF)

Venue: Kandahar, Human Right Meeting Hall

03/01/2016

Introduction

Representatives from Helmand River Basin covering five province; Zabul, Helmand, Oruzgan, Nemroz and Kandahar were participants of the consultation meeting which took place in Kandahar city. Around 90 participants from line agencies, Mirabs, head of Men and Women CDCs came to consultation meeting.

Summary of proceedings

The meeting opened by Abdul Ali Shamsi Deputy Governor of Kandahar province, welcomed to the participants and expressed his appreciation from MEW/IRDP staff for conducting of ESMF-AF consultation meeting, added the importance of the Water Resources Management, requested for cleaning and increasing the capacity of water harvesting of Dahla Band located in Kandahar province, due to 7 districts irrigated by mentioned dam, requested from MEW for more improvements in this section, furthermore insisted for serious monitoring of the construction works of the sub-project, said that Kandahar province facing with the shortage of water, expressed his appreciation from MEW/IRDP team from implementation of high quality works in the region, encouraged all line departments to collect the idea and need of the people and prepared their plans for their respective ministries for implementation. Meanwhile thanked from Environment and Social team for collecting of the idea and suggestion of the elders, mirabs, Men and women CDCs and line departments before finalization of the ESMF-AF.

Eng. Sher Mohammad Ataee head of Arghandab Sub River Basin chaired the consultation meeting and greeting the participants from afore mentioned provinces with different composition of organizations includes; Provincial Sub River Basin Agencies, DAIL,RRD, NEPA, WAD, ARAZI, University Lecturer, men and women CDCs, mirabs, farmers and Representative from governor house (Deputy Governor), Head of district CDCs (men and

women) where IRDP implements its sub projects, Arghandab Sub River Basin staff, PCU-IRDP staff of Kandahar Region, Water User Associations and others.

Eng. Gul Ahmad National Team Leader FAO/IRDP outlined the importance of Environment and Social issues for each development activities and expressed appreciation from MEW/IRDP Management team for conducting of such cooperative of consultative workshop in Kandahar region and requested from each and every one line departments, head of sub-River basins and all participants for cooperation better planning and implementation of the proposed sub-projects in each province.

Eng. Samiullah head of PCU Kandahar Region presented the background and implemented sub-projects in the region and linked the project with IRDP-AF and stressed that participation of the community is very important as lesson learned from the past, in addition expressed his appreciation from heads of SRBs and their full support during identification and implementation of the sub-project in their respective provinces and thanked from all participants for their participation in the consultation meeting for ESMF-AF.

Zahidullah Bandawal ESDS for Jalalabad region and member of the Environment and Social Safeguard core team of the IRDP, introduced the draft Environment and Social Management Framework of the IRDP-AF and its requirements, procedures and contents, which will be follow during IRDP-AF and its importance for smooth implementation of the project. The Key differences between IRDP and IRDP-AF highlighted the main contents of the ESMF-AF (Stakeholders consultation, GRM, Transect Walk, ECOP, Public Information and Communication, in order to know the participants and encouraged them to express their suggestions, idea and comments for filling of the gaps, improvement and finalization of the ESMF-AF.

For your more information on timing of each presenter, the agenda of the meeting is attached.

Upon completion of the presentation, the session of the questions/Answer was started;

(Q1): Qand Agha head of Helmand sub-River Basin raised the issue of drainage, is it included in the IRDP-AF for improvement of environment and water Resource Management?, in addition expressed his appreciation for including of River bank protections under IRDP-AF, meanwhile thanked from IRDP Management team for conducting of the consultation meeting in Kandahar region that they understood the IRDP-AF and draft ESMF with its contents, the contents are applicable and can be useful for smooth implementation of the project.

(A1): The IRDP-AF is working under specific framework (A,B,C and D components) as presented, however It is important issue and we will transfer the message to IRDP management team.

(Q2): Obaidullah from Human Rights raised two issues:

- Traditional water distribution system, caused looses of water from u/s to d/s and reverse, do IRDP-AF have any plan for prevention of the water looses?
- How do you deal with land acquisition, when require for canal extension?

(A2):

- The community traditional water distribution system is prefixed distribution system from their grand fathers and cannot be changed up to improvement and reliable water in the source as a result of that the u/s and d/s water users could be satisfy that they have reliable water every time, in this case water looses could be reduce.
- As you have seen in the ESMF-AF presentation, for land acquisition IRDP-AF will follow Afghan national land acquisition law and WB RFP.

(Q3): A farmer from Oruzgan province, raised the issue of Agha Jan band that the technical survey has been completed by MEW, but there is no any construction works in the field, which is very important for irrigation, in addition requested for canal cleaning which cannot be clean by community.

(A3): Eng. Samiullah DD for PCU Kandahar Region replied that the list of canals have been collected from heads of Sub-River Basins, the mentioned canal is included in the plan.

(Q4): How IRDP-AF deals with duplication of the sub-projects, as community elders submitted their request to any organizations for rehabilitation of their irrigation systems?

(A4): PCU/IRDP regional offices conducting Regional Coordination Committee Meeting in each three months and share his plan with line departments to prevent duplication in the region.

(Q5): Agha Mohammad expert for sector department from Helmand Province summarized his speech with two suggestions;

- Cleaning and increasing the capacity of water reservoir and electricity production of Dahla Band
- Capacity building of the provincial staff of sub River Basins
- Bed opening should be transfer from center to provinces; it will facilitate the opportunities to select the contractors, who are familiar in the field as a result of that social problems will be decreased.

(A5):

- MEW is working to improve all existing dams and increase the capacity as well, but IRDP-AF will not be able to response for all existing dams, however the issue could be write in the minutes of the meeting.
- Capacity building of the SRB staff could be continue by IRDP-AF team in the future as well.
- Transfer of bed opening is procurement issue and will transfer to the management team.

(Q6): A lecturer for Kandahar University expressed his appreciation and adds that the checklist should be prepared for screaming of the project, whether need for EIA and SIA, meanwhile requested that if EIA and SIA require for Kandahar province, will be better to have our Idea as well.

(A6): Based on approved ESMF for IRDP, the checklists have been prepared for Environment and Social assessment, for EIA and SIA consultation will be done with all direct and indirect stakeholders.

(Q7): A residence of Helmand province, as we saw in the presentation, the number of implemented sub-projects in the provinces under EIRP and IRDP were not same, what is your future plan for sub-project implementation?

(A7): Eng, Samiullah and Eng. Gul Ahmad response, based on different problems including security did not implemented same in each province related to Kandahar Region, for future plan we received plan from each Sub-River Basin, need your cooperation and support as well for implementation.

(Q8): Eng. Kabeer from Urozgan Sub- River Basin, does IRDP-AF has any plan to prevent cutting of forests?

(A8): As you have seen in presentation IRDP-AF has work on four components and trying to prevent cutting of trees where construction work is considered, if cut any tree close to the structure, replace the cut tree with plantation of two plants.

(Q9): Ghulam Mohammad head of Environment Protection Department of Kandahar Province do you want to prepare EIA for your each individual sub-project?

(A9): Based on Environment law and WB policy requirement, each development activity has been categorized as category A, B and etc, EIA will be prepared for large project and could be sent to NEPA for their review and comments, in addition IRDP ESS staff prepared pilot ESMP through international expert and officially sent it to NEPA by MEW, the pilot ESMP for 219 existing canals has been cleared with following of the procedures set out in the ESMP.

(Q10): a female representative from AWC, a local NGO, asked about the participation of women in different components of projects whether they are also involved in all components or not .she mentioned that we already know about the IRDP because the Social Inclusion and Gender staff of Kandahar PCU office comes to AWC for giving information about IRDP project, we really appreciate it.

(A10): women specially female households are our direct stakeholders and they are considered in all components of IRDP during the different stages of each sub project whether is a canal or dam we have to conduct consultation separately with women of the villages and mobilize them through a volunteer village women organizer and also try to include them in the grievance redress committees.

Conclusion:

The closing of consultation meeting chaired by Eng. Mohammad Qasem Safi head of Helmand River Basin, expressed his appreciation for men and women and all stakeholders participated in the meeting. Based on observation from the participants all of them are looking forward for improvement of water resources, construction of new dams and check-dams for rain water harvesting and reduce flood damage during seasonal floods. As it is clear that more than 85% of the population is engaged with agriculture and support their life through agriculture production. The issue of environment and Social Management is very important, which has been presented by IRDP team for receiving your comments and suggestion based on afghan culture and laws. Meanwhile he added that Environment is global

issue and we should take care, therefore need community and line agencies strong cooperation for improvement, requested from MEW to increase the capacity and improvement of few existing dams such as Kajaki, Dahala and Kamal Khan Band located in the region, due to several locations or area those are suffering from water shortage and water scarcity.

All steps that presented as key element of ESMF-AF are important, we hope all what are presented may consider during implementation of a sub project.

Overall consultation meeting on ESMF-AF successfully comes to its end. We are aware through this meeting of ESMF-AF all of us give our feedback, we hope all of our suggestions and comments consider during finalising of ESMF-AF. At the end requested from MEW to conduct such meetings in each province and collect the idea, suggestion of the elders, mirabs and farmers for preparing of applicable strategy for water Resource Management and agriculture improvement.

د افغانستان اسلامي جمهوريت
د اوبو او انرژی وزارت
د هلمند عمومی سیندیزه حوزه
دپروژو دانسجام اداره

د اوبو لګولو دشبکو د بیا رغوني او پراختیا د اضافي مالي مرستو پروژه (IRDP-AF)
د چاپیریال او ټولنیزو چارو د تنظیم په چوکاټ (کړنلاره) د سلا مشورو غونډه

شماره	وخت		موضوع	وړاندی کوونکی
	پیل	پای		
۱	۸:۳۰	۹:۰۰	د ګډونوالو راجسترکول	محترم عبدالقیوم ستانکزی
۲	۹:۰۰	۹:۰۵	دقران پاک دځو مبارکو ایاتونو تلاوت	انجنیر محمد صدیق صمیم
۳	۹:۰۵	۹:۱۵	د غونډی پرانسته دکندهار ولایت دمقام دقدرمن مرستیال والی صاحب په عالمانه وینا باندی	قدرمن مرستیال والی عبدالعلی شمسی
۴	۹:۱۵	۹:۳۰	دغونډی ګډون والو ته ښه راغلاست او د مشورتي غونډې د هدف په اړوند لنډ معلومات	انجنیر شیر محمد عطایی د ارغنداب رود دفرعی سیندیزی حوزی قدرمن ریس صاحب
۵	۹:۳۰	۱۰:۱۵	په کندهار زون کي د پروژو د آنسجام دآمریت په کړنو باندی لنډ معلومات	انجنیر سمیع الله (مومند) دکندهار زون دپروژو دانسجام آمر
۶	۱۰:۱۵	۱۰:۲۵	د چاپیریال او ټولنیزو چارو دارزښت په اړه باندی لنډ معلومات	انجنیر صاحب ګل احمد
۷	۱۰:۲۵	۱۰:۴۰	د چاي وقفه	
۸	۱۰:۴۰	۱۱:۰۰	د چاپیریال او ټولنیزو چارو د تنظیم معرفي کول او دIRDP-AF په پروژه کښی دهغی ارزښت	انجنیر صاحب زاهدالله بانډه وال دIRDP په پروژه کی دچاپیریال ساتنی او ټولنیزو چارو دخوونديتوب دکليدی تيم غړی
۹	۱۱:۰۰	۱۲:۱۵	دګډونوالو ترمنځ ازاد بحث او د هغوی نظر اخستنه	دناستی ګډونوال

۱۰	۱۲:۱۵	۱۲:۳۰	دمشورتی غونډې نتیجه گیری	انجنیر صاحب محمد قسیم (صافی) دهلمند دعمومی سیندیزی حوزی ریس
۱۱	۱۲:۳۰	۱:۳۰	د غرمې ډوډۍ او لمونځ	

ځای: کندهارولایتدمیرویس روغتون غرب طرفته دحقوق بشرد دفتردغونډوتالار.
داړیکیشمیره:۰۷۸۷۴۳۲۰۸۲
وخت: دسهار۰۸:۰۰بجی

List of Participants

داوبو او بریښنا وزارت

دهلمند عمومی سیندیزه حوزه دپروژو دانسجام امریت

دچاپیریال ساتنی په هکله باندی دعامه پوهاوی د ۰۳/جنوری/۲۰۱۶ نیټی دناستی دګډون والو دحاضری لست

شماره	نوم	اداره	وظیفه	تیلفون شماره	ایمیل ادرس	امضا
۱	زاهدالله ساپیزوال	FAO/IRDP	ESDS	0779814297	Zahidullah@airp-afg.org	
۲	نثاراحمد خرم	~ ~	~	0776043145	nesar.Khuram@eirp-afg.org	
۳	امان الله خان (امیری)	pcu/Kabul	ESSS	0700390919	amanullah@eirp-afg.org	
۴	انجنیر سمیع الله	pcu-kdh	امرازون	0700602472		
۵	انجنیر شیر احمد	FAO-kdh	NTL	0700303421		
۶	صلاح الدین	FAO-kdh	Admin.Finance			
۷	انجنیر محمد صدیق	FAO-kdh	Q-C-M	0703166460		
۸	احمد شاه	ریاست حوزه فرعی ارغنداب	مدیر ساحوی خوابگاه	0795249624		
۹	انجنیر سید محمد	ریاست حوزه فرعی دریایی ارغنداب	رئیس	0700301399		
۱۰	انجنیر محمد قسیم صافی	حوزه عمومی دریایی هلمند	رئیس حوزه	0704374850		
۱۱	حاجی عبدالحکیم	حوزه دریایی هلمند	مدیر جمع اوری ارقام	0707002715		
۱۲	اغا محمد	ریاست خدماتی مشوره	کارشناس	0706409834		
۱۳	عبدالشکور	زابل ولایت	میراب عینی زائی	0787432082		
۱۴	عبدالله جان	زابل ولایت	میراب بجوری	0706930552		
۱۵	عیسی محمد	حوزه عمومی هلمند	کارمند	0708524795		
۱۶	کریم الله	~	مدیر حقوق اب	0702989845		
۱۷	توریالی	~	نظارت و کنترول	0704468335		
۱۸	عبدالباری	~	کارمند	0708302018		
۱۹	تورجان	~	مدیر عمومی خدمات	0707419841		
۲۰	نعمت الله	ریاست موادخوراکی	کارمند	0702752231		
۲۱	عبدالله	حوزه عمومی هلمند	مدیر حفظ مراقبت	0707951994		

داوبو او بریښنا وزارت

دهلمند عمومی سیندیزه حوزه دپروژو دانسجام امریت

دچاپیریال ساتنی په هکله باندی دعامه پوهاوی د ۰۳/جنوری/۲۰۱۶ نیټی دناستی دګډون والو دحاضری لست

شماره	نوم	اداره ارزګان	وظیفه	تیلفون شماره	ایمیل ادرس	امضا
۲۲	عبدالشکور	ریاست زراعت	مدیر ترویج	0795877500		
۲۳	زیور خان	کاریز کانال	میراب	0703283536		
۲۴	بلبل	قلعه بست کانال	میراب	07031[illegible]182		
۲۵	نثار ګل	اداره محیط زیست هلمند	مدیر حفظ میراث	0748062050		
۲۶	بخت الله	ریاست حوزه فرعی دریایی ترنک	امر تنظیم اب	0797363561		
۲۷	سفر خان	ریاست حوزه فرعی دریایی ترنک	مدیر حفظ مراقبت	0797244161		
۲۸	محمد ولی	نهر ... مرکزی کانال	میراب	0703392800		
۲۹	حاجی عبدالله	... مرکزی ...	نماینده	0703862746		
۳۰	حاجی محمد حق	ارزګان ولایت ... کانال	میراب	0707158662		
۳۱	انجنیر جمعه ګل	ریاست حوزه دریای ارغنداب	امر برنامه	0703758097		
۳۲	انجنیر وحید الله	ریاست حوزه دریای رود ارغنداب	امر تنظیم اب	0702511571		
۳۳	عبدالعزیز	اداره حقوق بشر	معاون د مطبوعاتو	0700331157		
۳۴	انجنیر عبدالله	KFZ-IRD	ارزګان مدیر ساحوی	0700327668		
۳۵	انجنیر خان آغا	ریاست حوزه فرعی دریای هلمند	رئیس	0700162239		
۳۶	انجنیر نصرالله	ریاست حوزه فرعی دریای هلمند	انجنیر تاسیسات اب	0705212735		
۳۷	عبدالواسع	اداره حقوق بشر	رئیس شعبه	0700346393		
۳۸	حاجی نور محمد	اداره ضد مواد مخدره	معاون استخباراتو	0700672022		
۳۹	جلیل کاکړ	AWC	مسؤل	0703960350		
۴۰	رویا	AWC	کارمند	0708237847		
۴۱	شګوفه	اداره حقوق بشر	کارمند	0700835422		
۴۲	آمنه	اداره حقوق بشر	کارمند	0790690349		

داوبو او بریښنا وزارت

دهلمند عمومی سیندیزه حوزه دپروژو دانسجام امریت

دچاپیریال ساتنې په هکله باندې دعامه پوهاوی د ۰۳/جنوری/۲۰۱۶ نیټې دناستې دګډون والو دحاضرۍ لست

	نوم	اداره	وظیفه	تلفون	ایمیل	امضا
۶۵	محمد اسماعیل	د ولایت مقام	[illegible]	0700343827	Ismail-abid2011@[illegible]	
۶۶	محمد	ارګ	[illegible]	0797510334		
۶۷	محمد عارف	〃	انجنیر نظارت	0703553783		
۶۸	فضل الله	[illegible]	[illegible]	0793072631		
۶۹	محمد [illegible]	[illegible]	رئیس	0798267218		
۷۰	انجنیر [illegible]	[illegible]	رئیس	0700320602		
۷۱	حبیب الله	[illegible]	[illegible]	[illegible]		
۷۲	انجنیر وزیر احمد	[illegible]	[illegible]	0700271174		
۷۳	عبدالجلیل حلیمی	[illegible]	[illegible]			
۷۴	[illegible]	ولایتي شورا	رئیس شورا	0703702292		
۷۵	[illegible]	ولایتي شورا	[illegible]	0709940484		
۷۶	عبدالقیوم	امریت انسجام پروژه	مالي و اداري	0786435153		
۷۷	اکرام الله	〃	مدیر [illegible] معلوماتي	0783601647		
۷۸	انجنیر محمد خالد	〃	QC. A.	0793517409		
۷۹	انجنیر عبدالرحمن	〃	مسئول نظارت	07		
۸۰	انجنیر محمد [illegible]	〃	مدیر [illegible] و کنترول [illegible]	0785688510		
۸۱	انجنیر عبدالکریم	〃	مسئول محیط زیست	0787432082		
۸۲	انجنیر قدرت الله	〃	مسئول M&E	0788326985		
۸۳	انجنیر عصمت الله	〃	دیزاین انجنیر	0788261041		
۸۴	انجنیر [illegible]	〃	سروییر	0789707906		
۸۵	محمد امین	حوزه [illegible]	مامور	0703079245		
۸۶	امین الله	[illegible]	مدیر عمومي اداري	0705867506		

داوبو او بریښنا وزارت

دهلمند عمومی سیندیزه حوزه دپروژو دانسجام امریت

دچاپیریال ساتنی په هکله باندی دعامه پوهاوی د ۰۳/جنوری/۲۰۱۶ نیټی دناستی دګډون والو دحاضری لست

۴۳	نجیب جان	ریاست حفاظت محیط زیست	کارشناس محیط زیست	0707169424		
۴۴	غلام محمد	"	رییس	0704272593		
۴۵	سبز پری جان	اداره حقوق بشر	کارمند	0700835664		
۴۶	محمد	دکندهار ولایت [illegible]	معاون	0703007/11		
۴۷	اکبر احمد دوار احساس	کندهار پوهنتون	استاد	0704178983		
۴۸	عبد الرشید	[illegible] امنیت	نماینده	0700303089		
۴۹	محمد بشیر	"	"	0708004441		
۵۰	عبدالقادر	دهلمند دکرنی ریاست	[illegible]	0707716474		
۵۱	شکریه جان	اداره حقوق بشر	کارمند	07080690339		
۵۲	رحمت الله دوست	کندهار پوهنتون	استاد	0700355599		
۵۳	فدا محمد	"	"	0700311965		
۵۴	محمد [illegible]	تخنیکی داری کانال	میراب تنظیم	0708104632		
۵۵	عبدالاحد	ریاست حوزه فرعی ارغنداب	دارغنداب ولسوالی [illegible]	0708534577		
۵۶	جان محمد	ژیړی ولسوال				
۵۷	صفت الله	دزابل زراعت ریاست	مدیر مالی اداری	0795260551		
۵۸	محمد طاهر	دزابل ریاست [illegible]	مدیر مالی و اداری	0705253123		
۵۹	عبدالخالق	اداره حقوق بشر	مسئول لوژستیک	0700958118		
۶۰	مشعل محمد	"	مامور لوژستیک	070034612		
۶۱	حاجی عبدالغفور	دکندهار ولایت [illegible]	مدیر تنظیف قانون	0708823192		
۶۲	زرمینه جان	ریاست امور زنان	مدیر نشرات	.		
۶۳	روحینه	"	کارمنده	.		
۶۴	شوکیه	"	"	.		

داوبو او بریښنا وزارت

دهلمند عمومی سیندیزه حوزه دپروژو دانسجام امریت

دچاپیریال ساتنی په هکله باندی دعامه پوهاوی د ۰۳/جنوری/۲۰۱۶ نیټی دناستی دګډون والو دحاضری لست

شماره	نوم	اداره	وظیفه	تیلفون شماره	ایمیل ادرس	امضا
۸۷	نادر احمد	PCU-Kdh.	دریور	0700354171		
۸۸	خان احمد	〃	دریور	0700079688		
۸۹	عالیه	〃	کارمند خدماتی	07		
۹۰	محمد ابراهیم	〃	امر بر	0707296197		
۹۱	محب الله	FAO-Kdh.	دریور	0700307454		
۹۲	سید محمد	FAO-Kdh.	کارګر	0700[illegible]372558		
۹۳	عین الله	〃	کارګر	0700334107		
۹۴	محمد هارن	〃	کارګر			
۹۵						
۹۶						
۹۷						
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ESMF-AF Consultation Meeting Photos

Briefing of the meeting to the deputy Governor

Deputy Governor opening Speech

ESMF-AF consultation meeting Kandahar Region

List of participants

No	Name	Title	Organization	province
1	zahidullah	ESDS	IRDP/FAO	Jalalabad
2	Nessar Ahmad	ESDS	IRDP/FAO	Mazar
3	Amanullah	ESSS	PCU	Kabul
4	Eng.Samiullah	director	PCU	Kandahar
5	eng.Gul Ahmad	team leader	IRDP/FAO	Kandahar
6	Salahudin	Admin Finance	IRDP/FAO	Kandahar
7	Eng.Sediq	Q&C engineer	IRDP/FAO	Kandahar
8	Ahmadshah	director	SRB Zaranj	Nimroz
9	samir ahmad0	director	SRB Arghandab	Kandahar
10	Eng.Mohammad qasim	director	SRB helmand	Helmand
11	Haji abdul Hakim	Data officer	SRB helmand	Helmand
12	Aqa mohammad	specialist	Sectoral sevices department	Helmand
13	Abdul Shokor	Mirab	Musazai canal	Zabul
14	Abdulllah jan	Mirab	Baughdi district	Zabul
15	Faiz Mohammad	specialist	Helmand River Basin	Kandahar
16	Karimullah	Wate right manager	Helmand River Basin	Kandahar
17	Toryalai	Q&C and Monitoring specialist	Helmand River Basin	Kandahar
18	Abdul bari	Data officer	Helmand River Basin	Kandahar
19	Torjan	manager public services	Helmand River Basin	Kandahar
20	Nematullah	representative	Narcotic department	Kandahar
21	Abdullah	O&M officer	Helmand River Basin	Kandahar
22	Abdul Qahar	developing officer	DAIL	Uruzgan
23	Zewarkhan	Mirab	Khari canal	Uruzgan
24	Bulbul	Mirab	Qalai bust canal	Kandahar
25	Nessar Gull	O&M officer	NEPA	Kandahar
26	Bakhtullah	Water management manager	SRB qalat	Kandahar
27	Safar Khan	O&M officer	SRB qalat	Kandahar
28	Mohammad wali	Mirab	Panjwai district	Kandahar
29	Haji abdullah	CDC	Panjwai district	Kandahar
30	Haji mohmmad Haq	Mirab	Nachin canal	Uruzgan
31	Eng.JumaGul	program officer	SRB Arghandab	Kandahar
32	Eng.Wahidullah	Water management manager	SRB Arghandab	Kandahar
33	abdul aziz	communication officer	Human right office	Kandahar
34	Eng.Abdullah	construction manager	IRD	Kandahar

35	Eng.Khan Aqa	director	SRB helmand	Helmand
36	Eng.Asrarullah	Eng.Water resources	SRB helmand	Helmand
37	abdul wasi	receptionist	Human right office	Kandahar
38	Haji noor mohammad	investigation officer	Narcotic department	Kandahar
39	sayed jalil kakar	CEO	AWC	Kandahar
40	Roya	gender officer	AWC	Kandahar
41	Shogofa	communication officer	AWC	Kandahar
42	Amina	gender officer	Human right office	Kandahar
43	Mohmmad ismail	environment specialist	Gov.office	Zabul
44	Mohmmad	Mirab	Urozgan	Uruzgan
45	Mohmmad Arif	Monitoring Eng.	Urozgan	Uruzgan
46	Fazullah	representative	NEPA	Uruzgan
47	Mohammad Shabir	director	SRB urozgan	Uruzgan
48	Eng.Abdul Qayom	director	DRR	Kandahar
49	Hasibullah	secretary	Human right office	Kandahar
50	Eng.Farid Ahmad	sectorial directorate rep	Sectoral sevices department	Kandahar
51	Abdul Hakim	Sectorial director	kandahar province	Kandahar
52	M.Nabi ulfat	head of CDC	Nadali shura	Kandahar
53	Enatudin	CDC	kandahar province	Kandahar
54	abdul Qayom	Admin Finance	PCU	Kandahar
55	Ikramullah	IT	PCU	Kandahar
56	Eng.Khalid	Q&C	PCU	Kandahar
57	Eng.Abdurahman	M&E	PCU	Kandahar
58	Eng.Qasim	Q&C	PCU	Kandahar
59	Eng.Abdul karim	ESSA	PCU	Kandahar
60	Eng.Qudratullah	M&E	PCU	Kandahar
61	Eng.Ismatullah	design Eng	PCu	Kandahar
62	Eng.Shamshull habib	surveyor	PCU	Kandahar
63	Mohmammad amin	civil servant	SRB Helmand	Helmand
64	Aminullah	Admin Finance	Narcotic department	Helmand
65	Ms.Najiba	environment specialist	NEPA	Kandahar
66	Ghulam mohammad	director	NEPA	Kandahar
67	Sabzpari	social officer	Human right office	Kandahar
68	Mohammad	assistant	economy department	Kandahar
69	Eng.Ahmad Fawad	professor Environment	Kandahar University	Kandahar
70	Hezbullah	officer	MoI	Kandahar
71	Majidullah	officer	MoI	Kandahar
72	abdul Qadir	procurement manager	DAIL	Helmand
73	Ms.Sharifa	social officer	Human right office	Helmand
74	Rahmatullah	professor Environment	Kandahar University	Kandahar
75	Fida Muhammad	professor Environment	Kandahar University	Kandahar
76	Abdul Bari	Mirab	Dari Canal	Kandahar
77	Abdul Ahad	Water management manager	SRB Arghandab	Kandahar

78	Jan Mohammad	Mirab	Zhelai district	Kandahar
79	Sefatullah	Horticulture manager	DAIL	Zabul
80	Mohammad Tahir	Admin Finance	NEPA	Zabul
81	Abdul Khaliq	logistic	Human right office	Kandahar
82	Fazal Mohammad	logistic	Human right office	Kandahar
83	haji abdul ghafor	legal officer	press	Kandahar
84	Ms.Zarmina	communication officer	WAD	Kandahar
85	Ms.Razia	officer	WAD	Kandahar
86	Ms.Sweta	officer	WAD	Kandahar

Attachment 9 (d)

Herat Regional Consultation

on the

Environment and Social Management Framework-AF

For the

Irrigation Restoration and Development Additional Financing Project (IRDP-AF)

Venue: Herat Province, Harirud Murghab River Basin Building

07/01/2016

Introduction

The consultations conducted at regional level in Herat Region at Harirud Murghab River Basin.

Representative from Sub River Basin Agencies, line agencies; NEPA, MAIL, MRRD, Provincial Disaster management, Women Affair Department, ONFWM, HLP, Mirabs , head of CDCs men and women where IRDP implemented its sub projects at the four provinces under administration of Harirud Murghab River Basin; Herat of Farah, Badghis, and Ghor provinces participated in the consultation meeting. Moreover, Engineer Mohammad Gul Hamidi acting director of PCU, from IRDP environmental and social core team Amanullah, Zahidullah and Nessar Ahmad were participants of the consultation meeting.

Summary of proceedings

Eng. Zadran , director of plan from Harirud Murghan River Basin chaired the consultation meeting and welcomed the participants from aforementioned provinces and organizations. He appreciated improvement of irrigation infrastructures, rehabilitation of irrigation schemes, and construction of intakes through activities of IRDP in the region and showed his appreciation about IRDP-AF extension up to December, 2019. He also elaborated the value of environmental and social affairs of the project which requires views, suggestions of participants for finalisation of ESMF-AF.

Engineer Mohammad Gul Hamidi, acting director of PCU talked on history of improvement activities through financial aid of donors on water sector which began in 2002 in Herat region. World Bank's supports started in 2003 through Emergency Irrigation Rehabilitation Project with small scale works that ended in 2011. Successful implementation of EIRP motive WB to continue its financial assistance through IRDP until December,2017. During midterm review of IRDP in mid of 2015, WB agreed to extent IRDP through adding additional finance till end of December, 2019. Further on, he thanks from community cooperation, PCU and FAO staff for their hardworking on successful implementation of EIRP and IRDP. He gave full details on changes which occurred on objectives of IRDP and the four components of the projects which going to be financed through IRDP-AF, Environmental and Social studies are integral part IRDP-AF which is valued by MEW and

donor and urges the participants to give their feedbacks, views and suggestions to improve the draft environmental and social framework of IRDP-AF which going to be presented by environmental and social IRDP team.

Engineer Ratib Nasimi head of PCU Herat Region presented the backgrounds and implemented sub-projects from 2003 to 2015 in the region and shared the work plan of PCU Herat regional office and linked the project with IRDP-AF and stressed that participation of the community is very important as lesson learned from the past, in addition expressed his appreciation from heads of SRBs, community representatives, PCU and FAO staff from their full support during identification, design and implementation of the sub-projects in the region.

Nessar Ahmad, presented Environment and Social Framework of the IRDP-AF and its importance with the requirement of needs to be consider during sub-project identification design and implementation of each individual sub-project under IRDP-AF.

For your more information on timing of each presenter, the agenda of the meeting is attached.

Upon completion of the presentation, the session of the questions/Answer was started;

(Q1): Ms.Parween Gender social inclusion assistance of OFWM: asked about the negative impact of rehabilitation of an scheme, and wanted more elaboration on how people or environment will be negatively affected.

(A1) firstly; negative impact of rehabilitation of an hydro structure like intake, retaining wall, culvert, etc could happen if anticipated structure does not or cannot incorporate on existing width of canal or river, unfortunately at this time right of way of canals and river are not clarify otherwise majority of permanent structure would be placed within right of way of canal or river and may not requires land other than its right of way. next impact could realize during transect walk on canal during survey of the canal, like; if the proposed structure do not have access road for transportation of construction materials, which may damage cultivable land or cut tree for access road, if the proposed structure requires cut tree during construction, water rights specially for rehabilitation of outlet, distribution structure, or intake structure. Based on the negative impact relevant mitigation measures would imply to avoid or reduce the environmental and social impact.

(Q2) A land owner/farmer from Guzar district: he appreciated the social and environmental studies that were carried out during survey, design and implementation of sub project in their area. He also mentioned cooperation of community on provision of security, facilities to the project staff as well as the contractor during implementation of their project. He requested the project to continue rehabilitation of irrigation scheme, construction of check-dam to restore rain and snow water to their area to improve source of water.

(A2) the Ministry of Energy and Water is in the process of thinking about these projects that will be inshallah planned because MEW also feels such infrastructures are important for water management.

(Q3) Engineer Abudl Habib Karimi, director of underground water from Harirud, Murghab River Basin; Firstly degradation of underground water are continue at its fastest speed

specially in urban areas, while underground water is fundamental factor of live on earth, which directly impact on health, unfortunately no one take steps toward protection and improvement of underground water yet. The MEW can improve through rehabilitation of forests and storing of rains or snows during winter which could recharge underground water.

He also requested machinery to clean canal and river sediments which sometimes cleaning of sediments are beyond of human capacity in particular location.

(A3) components of IRDP-AF are limited to its scope of work and objectives, which cannot work on underground water directly. However MEW could be involved on preparation of strategies, capacity building and institutional development for underground water.

(Q4) A representative from Zenda Jan District; we are satisfied by implementation of IRDP sub project in the district, we are requesting IRDP to work on rehabilitation of remaining canals in the district.

(Q5) The head of on of the CDCs in Ghorian district: number of irrigation structures that are financed and implemented by other donor, create water rights issue in the district.

(A5) To avoid such problems from IRDP-AF, the ESMF-AF emphasis on consultation with wide range of stakeholders to come up sustainable design acceptable with all water users or stakeholders

(Q6) Engineer Zahir from Farroud Sub River Basin: Cutting forest is main cause for flash flood, temperature warming and other environmental degradation in the area.

(A6) Activities of IRDP-AF do not have any negative impact on forest; moreover it's strongly prohibited by laws and policies.

(Q7) Engineer Hayatullah from NEPA in Herat: Based on NEPA regulation, each of development sub project must have an EIA and the implementing agency should share the EIA with NEPA for clearance.

(A7) rehabilitation of irrigation schemes under component A of IRDP are categorized by two types; medium and large. The medium sub project has ESMP while the large sub project has ESMP with limited Environmental Assessment. Pilot ESMP for IRDP sub project was prepared at the beginning of IRDP and submitted to NEPA for clearance. After evaluation, NEPA issued clearance for the pilot ESMP, since rehabilitation of canal does not have significant negative social and environmental impact. Therefore, the NEPA issued clearance for all sub projects which were implemented under IRDP and strictly follow method of the pilot ESMP. Also MEW will submit EIA of the dams to NEPA for clearance.

(Q8) Engineer Abdul Zahir from disaster department: early warning signal during heavy rain would reduce flood damage does the IRDP-AF has any plan to install such system for awareness of flood.

(A8) IRDP-AF under component C, is focusing on water resource management, installation of hydromet station for improvement of hydrological data of rivers, which would provide data of pick river and lean river discharge for decision makers. For installation of early warning system of the flood at ministry level Afghanistan fire & disaster department, MIAL,

MRRD, MEW and HaWA Nawardi organization are working on the system which is very important during flood time.

The closing consultation meeting chaired by Eng.Zadran director of plan at Harirud Murghan River Basin; I appreciate inclusion of Gender in IRDP and IRDP-AF as result of this number of women came from districts where IRDP implemented its sub projects, involvement of beneficiaries including vulnerable provide chance to hear their voice, transect walk along the canal would give clear picture of main problem of the canal to the design engineer and environmental and social staff, grievance redress mechanism is very important for the sub project any minor problem occurring during construction phase would solve immediately, or the affected person's voice would transfer further to satisfy him or them. Participants are requesting more works for rehabilitation of the canals since rehabilitation of irrigation scheme at their area improve accessibility of water service. Still there are a lot of intakes, or other structures are needed for other canals which IRDP does not consider yet. Moreover water resource management are essential for this river basin, because a lot of rain or snow milt and its water wasted away. The provinces under coverage area of the Harirud Murghab have places that MEW can plan infrastructures to harvest water.

Overall all presentation of environmental and social framework of irrigation restoration development project was useful and it's all plans are for the benefit of environment and social where the project going to be implemented. At the end we are appreciated the valuable consultation meeting which make us aware of the details of IRDP-AF as well the ESMF of the project. Hope similar awareness take place occasionally for awareness of community and beneficiaries

Opening remarks by PCU director

SRB director giving comment

CDC asking question

CDC asking Question

List of participants

No	Name	Title	Organization	province
1	abdul Zahir	Manager	Natural Disaster department	Hirat
2	Mohammad Nasim	Eng. Monitoring	River Basin	Hirat
3	Eng.Habibullah	water programing director	SRB Murghab	Hirat
4	Mohammad Shoaib,	M&E officer	River Basin	Hirat
5	abdullah	Head of CDC	Qalai Quchi	Hirat
6	Ahmad Shekib	ESSA	PCU	Hirat
7	Nazim Mohmmad	Mirab	Tagab canal	Badghis
8	Sayed Azizullah	Head of CDC	Qaragho canal	Badghis
9	abdul rahim	Head of CDC	SRB Ghor	Ghor
10	Ghulam Sakhi	Mirab	SRB Ghor	Ghor
11	Ms.Najeeba	SIGA	PCU	Hirat
12	Ms. Suhaila	Survey and Design	PCU	Hirat
13	Ms. Sediqa	IT manager	River Basin	Hirat
14	Eng.Abdul Zahir	Director	SRB Farah	Farah
15	Mohammad Nadir	CDC	Marin district	Farah
16	Mohammad younis	CDC	Dara bad payen	Farah
17	Mohammd hyaqob	Director	SRB Murghab	Badghis
18	Faiz Ahmad	admin finance	River Basin	Hirat
19	Ubaid	M&E officer	PCU	Hirat
20	Ms.Parween	safeguard officer	OFWM	Hirat
21	Eng.Ghani	ground water manager	River Basin	Hirat
22	Masood	admin finance	PCU	Hirat
23	Hidayatullah	Environment officer	NEPA	Hirat
24	Ms.Aziza	safeguard officer	NHLP	Hirat
25	Abdul Aziz	CEO	HMRBO	Hirat
26	Juma Khan	head of CDC	Ghor	Ghor
27	Haji Habibullah	head of CDC	farah	Farah
28	Ms.Zahra	Engineer	RRD	Hirat
29	Abdul Fatah	village leader	zindajan district	Hirat
30	Qudoz	village leader	zindajan district	Hirat
31	Ms.Sakina	CDC	zindajan district	Hirat
32	Ms.Khadija	CDC	zindajan district	Hirat
33	haji Mirza	WUA director	Gozara district	Hirat
34	Abdul Wahab	representative of village	Payan block	Hirat
35	Haji Hamayon	Engineer	River Basin	Hirat
36	Ghulam Rabani	officer	River Basin	Hirat
37	Safiullah	officer	SRB Murghab	Hirat
38	Mir Ahmad	Mirab	Mirhasan district	Hirat

39	Gullab Baloch	director WUA	Kaihan district	Hirat
40	Faisal Ghafori	legal advisor	SRB	Badghis
41	Eng.Ghulam mohammad	irrigation manager	DAIL	Hirat
42	Nessar Ahmad	ESDS	IRDP/FAO	Mazar
43	ahmad Ratib	director	PCU	Hirat
44	Amanullah	ESSA	PCU	Kabul
45	Zahidullah	ESDS	IRDP/FAO	Jalalabad
46	Eng.Mohammad Gul	director	PCU	Kabul
47	eng.Ahmad Shah	Team Leader	IRDP/FAO	Hirat

Kabul River Basin and National Consultation Meeting on

Environment and Social Management Framework-AF

For the

Irrigation Restoration and Development Additional Financing Project (IRDP-AF)

Venue: Kabul River Basin Building

09/01/2016

Introduction

The consultations conducted at National level including the Kabul River Basin.

The primary and secondary stakeholders such as line agencies; heads of CDCs of IRDP provinces under administration of Kabul River Basin ;NEPA, MAIL, MRRD, Provincial Disaster management, Women Affair Department, OFWM, directorate of geology survey, Engineering service departments of MEW,Arazi, Mirabs , Kabul city, Parwan, Khost, Paktia,Logar,Panjshir,Kapisa,Ghazni and Representative from Sub River Basin Agencies participated in the consultation meeting. Moreover,a representative from the contracted construction company and the External Monitoring Agency (SMART) were also invited in this meeting.

The meeting was opened and chaired by General Director of Kabul River Basin Eng.Marouf Masir with the rich participation of IRDP management Engineer Mohammad Gul Hamidi acting director of PCU and Eng.Sayed Sharif Shobair Coordinator of IRDP and advisor the the Minister of MEW who patiently supported the social and environmental core team Husnia, Amanullah, Zahidullah and Nessar Ahamd by answering to the most of questions and comments of the participants.

Summary of proceedings

The meeting was opened by Eng.Marouf Masir by welcoming the guests and giving brief about the objective of the consultation meeting and importance of the participation of the stakeholders towards achieving MEW's objectives and goals followed by presenting the brief introduction of IRDP by Eng.Mohammad Gull Hamidi.

There were two presentations; the first one was on ESMF-AF presented by Husnia the Gender and Social Development Officer of IRDP and the second was about Dams studies and ESIA ToR which was presented by Eng.Enayatullah Serat Design Engineer at Kabul Regional PCU office.

The maximum time of meeting was allocated for participant's comments and discussions. It was decided to list the name of commenters and those had questions in advance prior to open discussion session in order to give chance for everyone to share their comments and suggestions so that maximum ideas should be covered.

Priority was given to female participants to share their comments and questions. It was pre decided to inform the participants to give their name, title, organization and name of their ideal persons for the answer. The key points and questions raised is noted as below

Summary of questions/comments and answers:

(Q1) Ms. Eng.Zuhra Ahmadzai Director of Logar SRB indicated her concern about the following points:

- Unavailability of information sources about some dams inside MEW and she suggested that there must be bank of information established at the MEW level to provide reliable information for decision makers.
- Land acquisition procedure should be clearly discussed with community specially the acquired land should be surrounded or marked in order to minimize the potential future conflicts of interest among community and government.
- The restored area close to the dams should be rented to the private sector in order to be a source of income for future safety and O&M of the dam especially for the emergency cases.
- During the cost estimation of the dams during the design stage, amount of money must be allocate for the O&M of the small damages in order to cover the financial gaps in future.

(A1)

- The IRDP team confirmed that MEW has planned to establish a dam unit; it will contain facilitation of information too.
- Dam safety is added under IRDP-AF for component B which will cover two existing dams as pilot for critical minor safety and O&M.
- It was also mentioned that a canal and river right of way policy is drafted by MEW and will be soon finalized which will cover all related issue.

(Q2) Abdul Rafiq Ghoyour representative from NEPA showed his concern about the avalibility of different policies in different organizations and asked whether it is necessary for all organizations to have a different Environment Frame work , or it will be better if all ministries should implement the national law prepared by NEPA. He also mentioned that a work certificate must be provided by NEPA to all implementing agencies after the review of their proposals and reports.

(A2) the IRDP team explained the impertinence of ESMF-AF for IRDP; that is because IRDP have to implement the World Bank policies too .the Current ESMF and ESMF-AF prepared in line with NEPA and other National Laws which is a guideline for preparing different type of documents for individual sub project of IRDP based on their Environment and Social measurers and specifications of different components.

(Q3) Ms.Eng.Najia Kharoti the Advisor to the Ministry of MRRD and responsible on the Environment issues asked about the combination of GRC members, its ToR and the qualification of the ESS team of IRDP and whether they are contracted or civil servant?

(A3)It was replied by IRDP team that GRCs has a mechanism which is also the ToR of the committee and the members are representative from affected person (men and women), CDC, Mirab, SRB staff, IRDP ESS staff and Deputy Director of regional PCU and a representative from the contractor.

The ESS team of IRDP are hired based on their past experience and qualification on Environment and Social issues, they are currently contracted by PCU and FAO. One focal point are also introduced by SRB offices. ESMF-AF will emphasis on building capacity of SRB staff and GRC members.

(Q4) Dr.Ishaq Sahib zada from OFWM asked about the study of Naghlu and Daronta Dams which land issues and should be studied as lesson learnt. He also showed his concern about the lack of RFP for IRDP.

(A4) it was replied by IRDP team that Under IRDP there is no study of Naghlu and Daronta dams are available which has land issues. It was also confirmed by IRDP team that RFP is available which is currently under review and approval which will be disclosed soon.

(Q5). Eng.Shafiq head of Ghazni SRB mentioned that during past 10 years some small dams have been constructed by other organizations without considering environment and social issues that community refer to us after being affected adversely, but we have no response to them and we have no idea who will be responsible for these impacts. Therefore we appreciate that IRDP have such good ESMF that even they invite stakeholders to participate in its development.

(A5) It was replied that based on Water Law MEW is the owner of the all constructed dams and all issues will be responsibility of MEW .the one who raised question, was asked by Eng.Marouf Masir Director of Kabul River Basin to prepare the list of all constructed dams in Ghazni in order to have evaluation and add them in the O&M plan and to consider recruiting a responsible person to look after their maintenance.

(Q6) Abdull Rab Samadi , representative of Arazai mentioned that the main objective of this meeting is to discuss about the acquisition of land and assets and resettlement of the affected community ,he expressed concern such as:

- He pointed on the word Acquisition (**استملاک**) that ,it is no more used in Arazi and has been replaced with the term **بدیل معیشت** (compensation for livelihood) because in case of resettlement we do not deal only with land acquisition, there are other means of assists for livelihood.
- Arazai is involved in land issues of all those ministries who deal with large scale project which requires land acquisition. We are facing problem due to their incorrect estimation of the costs. We believe this is not an easy work, therefore it is better that the ministries implementing dynamic projects like MEW must have a land acquisition unit who should deal with all type of asset and land acquisition issues or either it should be prepared by external experts or agencies.

(A6) it was replied by the IRDP team that IRDP will prepare a Resettlement Action Plan based on the available RPF with the support of national / international expertise.in addition, MEW does not face problem with acquisition issues only, but also there are continues social and environmental and safety issues in the developing projects of MEW, therefore it has been planned to strengthen the institutional capacity of MEW.

(A6.2) Eng.Marof Head of Kabul River basin appreciated the participation of Arazi representative and he mentioned that most of the time MEW face problem with the current laws because most of the assets and lands due to decades of conflicts does not have acceptable prove of entitlements, therefore acquisition process is challenging and sometimes impossible, MEW's staff have therefore repeated commuting to Arazi department and therefore most of MEW's projects remain pending.

Conclusion:

The meeting was closed by appreciation from guests by Kabul River basin director with the some recommendations and suggestions and a presenting a summary of key suggestions and questions raised by the participants.

He insisted that IRDP should take account of all suggestions made by the stakeholders in order to avoid potential gaps in the future.

It was suggested by the Kabul River Basin GD that this meeting must be a good start for strong collaboration between the IRDP and respected stakeholders for future supports. Pointing on the importance of social inclusion in IRDP-AF, he also recommended the ESS team of IRDP to conduct a meeting specifically about the social inclusion, safeguard issues where all the stakeholders especially CDCs, Mirabs and farmers should be attending.

He also emphasized on the communication essence and more focus and investment should be considered for this part of the ESMF.

List of participants

No	Name	Title	Organization	province
1	Shirnawaz	Head of CDC	Tanai district	Khost
2	Amir Shah Khan	Member of Youth Association	Youth association	Khost
3	Mohammad Kazim	Assistant Mirab	Nahri Khwaja	Kapisa
4	Mohammad Malang	head of WUA	Afghan Canal	Kapisa
5	Mohammad Hamid	CDC	Afghan Canal	Kapisa
6	Abdullah	Assistant Mirab	Afghan Canal	Kapisa
7	Mohammad Nasim	Director	SRB	Khost
8	Eng.Najia Kharoti	Advisor to Minister	MRRD	Kabul
9	Saeed Bibi	SIGA	PCU	Kabul
10	Bilal	Environment specialist	Energy services directorate	Kabul
11	Painda Mohammad	Project coordinator	Kabul RB	Kabul
12	Nissar Ahmad	ESDS	IRDP/FAO	Mazar
13	Zahidullah	ESDS	IRDP/FAO	Jalalabad
14	Amanullah	ESSS	IRDP/PCU	Kabul
15	Husnia	GSDO	IRDP/FAO	Kabul
16	Mirwais	ESDS	PCU	Kabul
17	Assadullah Oryakhail	CEO	SMART engineering	Kabul
18	Mir Salam	Director	SRB	Kapisa
19	Eng.Ghulam Rabani	Director	SRB	Panjshir
20	M.Tahir Shafaq	Director	SRB	Paktia
21	Haji Basir	Mirab	Gardiz	Paktia
22	Habibullah	CDC	Gardiz	Paktia
23	Eng.Zuhra	Director	SRB	Logar
24	Haji Abdul Rafi	ESIA specialist	NEPA	Kabul
25	Matiullah	OIC director	SRB	Maidan wardak
26	Haji Mohammad Din	Head of CDC	SRB	Maidan wardak
27	Eng.Sayed Wali	Director	SRB	Ghorband
28	Haji Qasim	Mirab	Parwan	Parwan
29	Eng.Shafiqullah	Director	SRB	Ghazni
30	Eng.Khawja Hashim	Hydrologist	Geology survey directorate	Kabul
31	Hasib Payab	Advisor to Minister	MAIL	Kabul
32	Dr.Ishaq Sahibzada	ESS specialist	OFWM	Kabul
33	Dad Mohmamad	head of WUA	Rahmat abad canal	Logar
34	Salih Mohammad	Head of CDC	Nerkh district	Logar
35	abdull Rahman	CDC	Ghazni	Ghazni
36	Khwaja Mohammad Anwar	Mirab	Logar	Logar
37	Wali	Assistant Mirab	paktia	Paktia
38	Salih Mohammad	head of WUA	maidan wardak RB	Maidan wardak

39	Dr.Marghalari Khara	head of health sector	Ministry of Women affairs	Kabul
40	Eng.Ghafor hedayat	Director	Kabul SRB	Kabul
41	Sayed abdul Basir	representative of people of Ghazni	Ghazni	Ghazni
42	Farid Ahmad	Director	water programing directorate Kabul SRB	Kabul
43	Abdul Rab Samadi	Director of settlement	Arazi	Kabul
44	Mohammad unis	M&E manager	Kabul River basin	Kabul
45	Shafiqullah	Mirab	Panjshir	Panjshir
46	Khair mohammad	Mirab	Shakardara district	Kabul
47	Hayatullah	Head of CDC	Ghazni	Ghazni
48	Shah mohammad	Mirab	Ghorband district	Parwan
49	Sayed Sharif shobair	Coordinator	IRDP/FAO	Kabul
50	Eng.Marouf Masir	director	Kabul River basin	Kabul
51	Eng.Mohammad Gul	director	PCU	Kabul
52	Eng.Karima	deputy director	water programing directorate Kabul SRB	Kabul
53	Latifullah kohistani	ESSA	PCU	Kabul

Annex 9: Project Areas

A. Project Area

1. Introduction.

This Annex provides brief description of the project areas. The IRDP has national coverage and covers all the five river basins and 34 provinces. The project areas therefore contains different geographical features and climatic conditions: it spreads from northeastern outskirts of Hindkush mountains to deserts in the south and west part of the country. The country has arid to semi-arid climate with annual average rainfall of about 300 mm. Precipitation occurs mainly in winter and falls on the higher ground as snow. Harsh winter, earthquakes, droughts, and flooding are the main natural disasters and often destroy agricultural lands, remove the surface soil, and cause landslides. Roughly about 12% of country's land is arable, and majority of food produce comes out of irrigated agriculture. Further details about the project areas are described in the following sections.

2. Component A:

This component involves rehabilitation of traditional irrigation schemes and river bank protection of selected rivers. Activities under this component spread to all the 34 provinces in the country as shown in the Figures 1a and 1b. In terms of irrigation, roughly about 47 schemes would be rehabilitated covering 75,000 ha area under the AF. These are mostly large schemes (preferably about 2500 ha) mostly at the lower end of the larger river valleys. They all are existing gravity schemes and provide irrigation mostly for a single crop. The nature of the rehabilitation works involve strengthening of the side intakes, improvements in the main conveyance systems (aqueducts, siphons and other forms of wash structures), canal safety works (escape and overflow escape structures as well as other structural protection works) and water measurement and distribution structures. The identified schemes and their basic features are shown in the Table A1. below. Final selection of the individual irrigation schemes for rehabilitation will be done during implementation phase following approved selection criteria.

Figure A1a. Location of Irrigation Schemes under AF

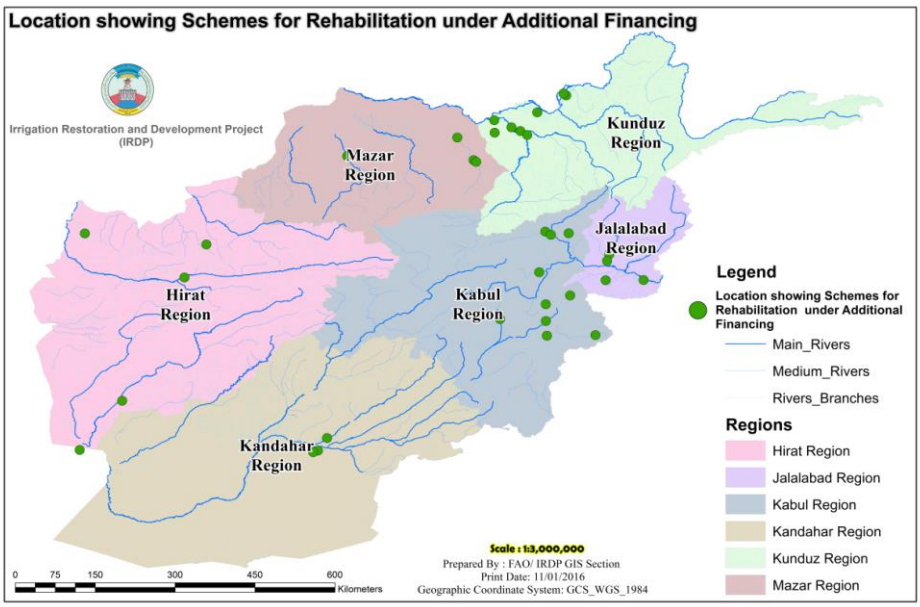
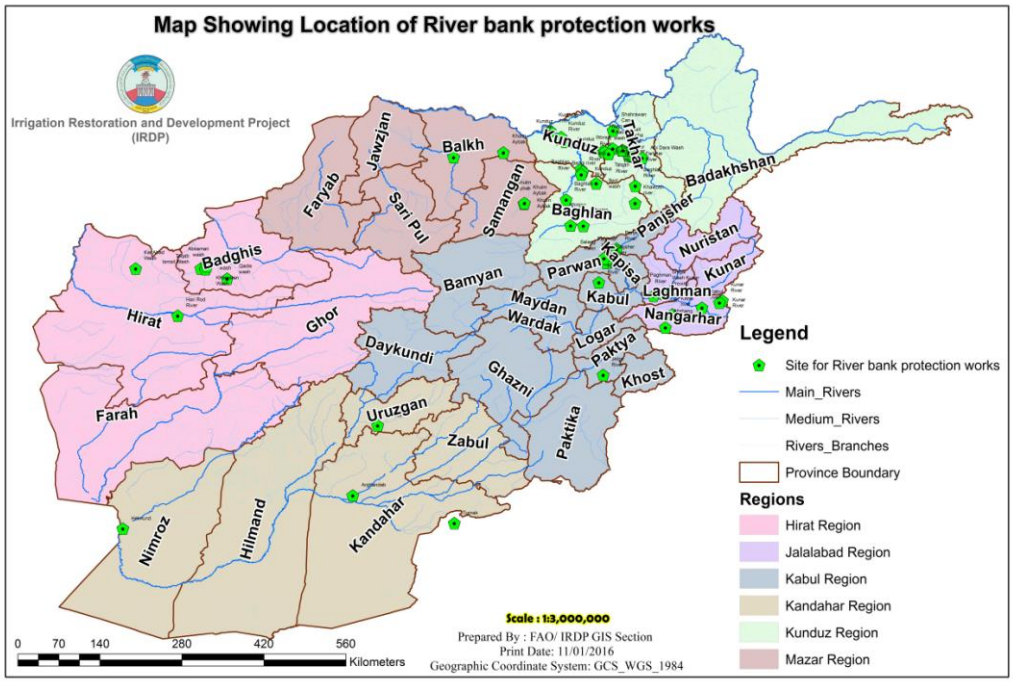


Figure A1b.

Location of river bank protection works



Likewise, the river bank protection works spreads over all the major river basins and regions. In total, 64 locations in the five river basins have been identified for final consideration. These schemes have been divided into seven groups based on proximity of each locations. Basic features of the river bank protection works area given in Table A1b below, whereas the location is already shown in the Figure A1b. The schemes are mostly located in the north-east part of the country which are the most flood risk areas due to higher snowfall, and steeper terrain. The nature of the physical work mainly involves protection of the eroded banks. Some of the key remedial interventions included: earthen embankments along the river banks with or without stone pitching, spurs or groynes with launching apron, Gabion walls or masonry walls, channelization of the rivers course. In addition, local technologies like bamboo/wood piling, sand bag spurs and bio-engineering approaches would be also used.

Table.A1a showing basic feature of irrigation systems in the region for AF

River basin	Region and nos. of province	Nos. of irrigation scheme	Total irrigated are in ha	Main crops	Total HHs	Poverty status in %	Topographic features
Harirud-Murghab	4, Heart	9	10022	Wheat, barley vegetable, rice	17150	30-65	Mountainous, narrow valleys, and flat plains
Kabul	4, Jalalabad	4	5750	Wheat rice, corn vegetables	11800	29-63	Mountainous and flat plains
Kabul	12, Kabul	12	14300	Wheat, orchards, vegetables	68871	22-52	High mountain, narrow valleys
Helmand	Kandhar	6	18700	Wheat, barley, melons, vegetables	96730	40-70	Deserts, flat plain, mountainous valleys
Panj-Amu	Kunduz	11	19843	Wheat, rice, corn, vegetables, cotton	48460	40-60	High mountain, flat valleys

Northern	Northern	5	6810	Wheat, vegetables, orchards	15990	35-60	Mountains, and valleys
Total		47	75425		258911		

Table A1b. Basic Features of the river bank protection works under the AF

River basin	**Region**	**Priority locations**	**Length of protection in m**	**Total population**
Harirud-Murghab	Heart	10	9900	37000
Kabul	Jalalabad	7	3483	25400
Kabul	Jalalabad	7	3900	27000
Helmand	Kandhar	4	3200	24000
Panj-Amu	Kunduz/SW	11	1375	12000
Panj-Amu	Kunduz/NE	19	1825	18000
Northern	Northern	6	2620	25000
Total		64	26303	168400

3. Component B Dams.

This component involves two key activities. The first involves the preparation and studies for new dams whereas the second involves dam safety of the existing dams. Under the first activity, feasibility studies of the six dams have been already completed. The location of these dam sites are presented in Figure A2 (highlighted yellow). All these dams are in northern river basin which is also a closed river basin. The existing feasibility studies report need further review especially in economic analysis and in water balance. Based on these review, the project will conduct an ESIA and detail design of the most feasible dams about two to three). Key characteristic of the six dams in which feasibility level studies have been conducted are shown in below Table2a.

The second activity is mainly targeted at ensuring safety of the existing dams. The location of the existing dams is also shown in Figure C (blue colored) and their basic features are given in Table f. It can be seen that of these dams were built before 1980s, and there was little, if any maintenance work until early 2000s. Therefore, condition is not good, there is a strong presence of erosion, sedimentation, concrete cracking (due to settlement) and a very common problem is electro-mechanical, gates and engines are broken, or inoperable. This activity would therefore focus on safety of the existing dams through preparation of a dam safety guidelines and maintenance of few dams following a standard dam safety procedure. Future maintenance would follow the standard safety guidelines that would be prepared by the project. The selection of these few dams shall be done during implementation stage based on government priorities and appropriate selection criteria.

Figure A2. Location of Dams

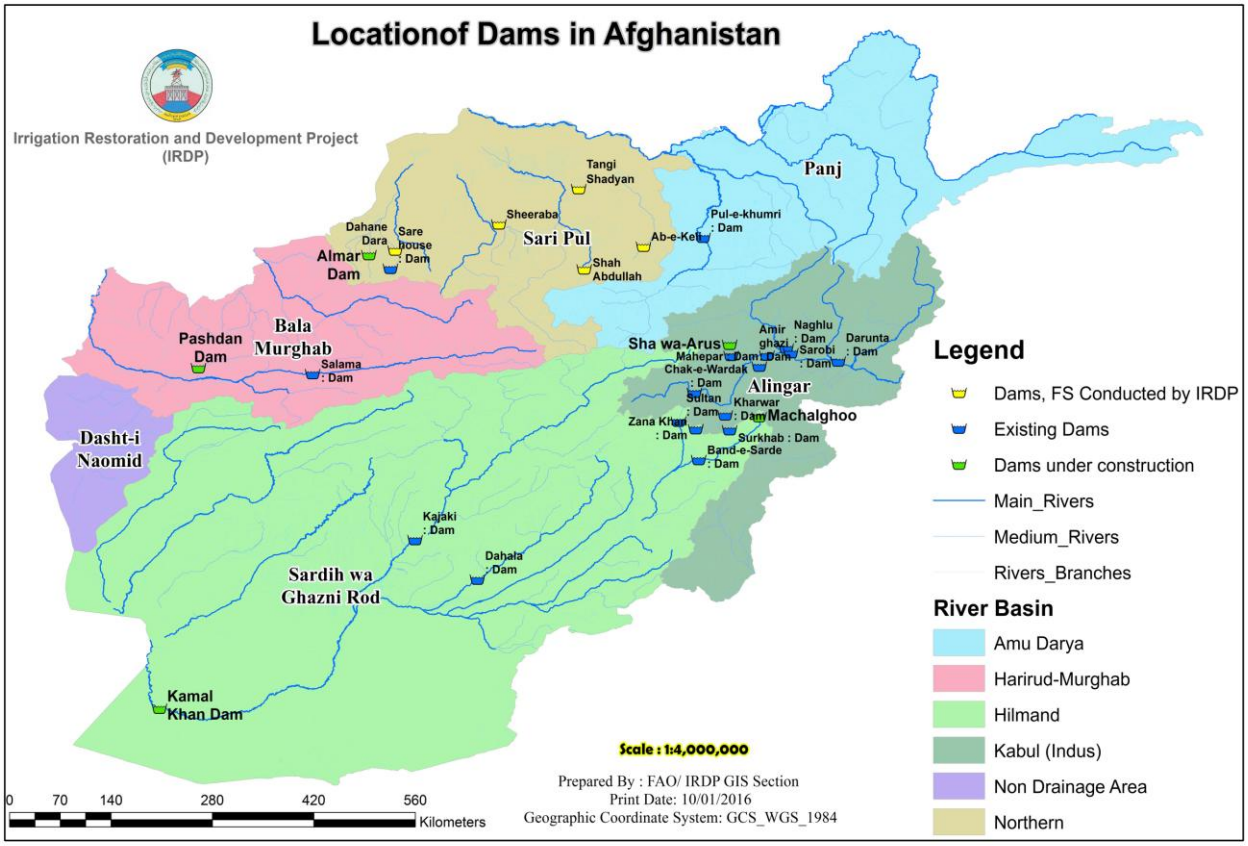


Table A2a. Basic features of dams with FS studies

	Province	Dam height in m	Command are in ha	Storage Volume in MCM	Surface Area in KM2	Development cost in million USD
Sheer Aba	Sari pul	63	6250	41.86	3.94	61.87
Dahan-e-Dara	Faryab	64.5	3000	19.88	1.014	30.00
Ab-e-Keli	Samanganj	64	1700	8.85	0.36	40.77
Tangi Shadyan	Balkh	67	670	4.31	0.25	17.12
Shah Abdullah	Samanganj	74	2250	4.99	0.14	63.5
Mastej Sabj	Saripul	72	596	3.54	0.14	12.21

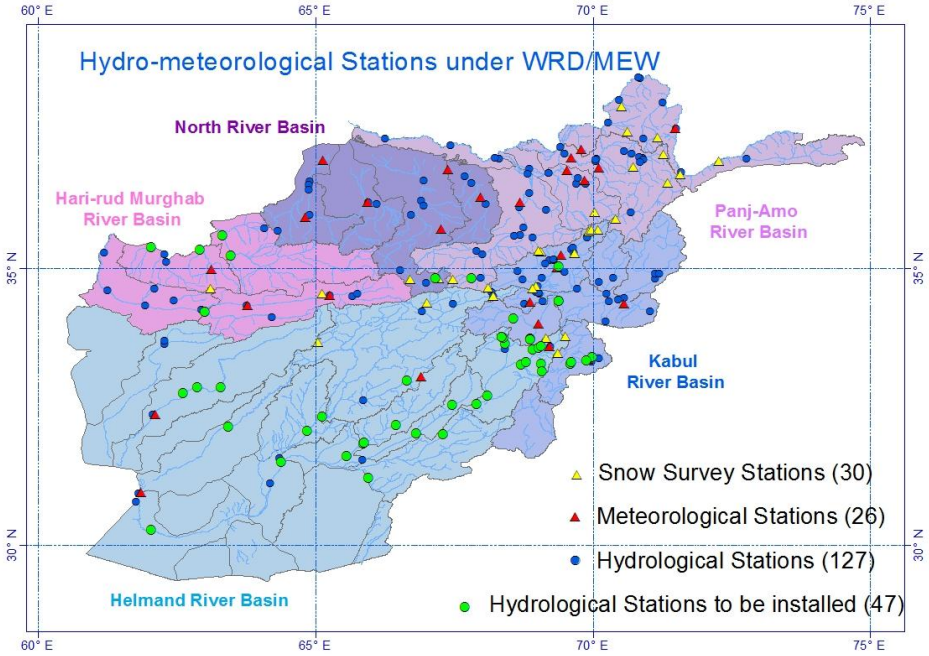
Table A2b. Basis features of Existing dams.

No	Project Names	Location			Dam Type	Length	Height	Start Date	Completion date
		Province	District	Village		(m)	(m)	(Year)	(Year)
1	**Qargha**	Kabul	Paghman	Qargha	Earthen	450	24	1953	1957
2	**Darunta**	Nangarhar	Daroonta	Daroonta	Earth fill with clay core	194	22	1957	1966
3	**Pul-i-Khumri 1**	Baghlan	Polikhomer	Center	Concrete	DNA	33.5	DNA	1950
4	**Pul-i-Khumri 2**				Concrete	22	4	1959	1962
5	**Amir Ghazi**				Rockfill with clay core	DNA	23	1915	1918
6	**Naghlo**	Kabul	Sarobi		Concrete	DNA	110	1960	1967
7	**Sarobi**	Kabul	Sarobi	Sarobi	Concrete	DNA	48	1951	1957
8	**Sarehouse**	Faryab	Maimana	Sarawz	Earthen				
9	**Kajaki**	Helmand	Kajaki	Kajaki	Earthen	DNA	91	DNA	1953
10	**Sardeh**	Ghazni	Andar	Sardeh	Earthen	400	30	DNA	1959
11	**Chak Wardak**	Wardak	Chak	Chak	Rockfill with clay core	DNA	DNA	1936	1941
12	**Sultan**	Ghazni	Khwaja ome	Khwwaja Or	Rockfill with clay core	300	50	DNA	DNA
13	**Dhala**	Kandahar	Shah Wali K	Dahla	Rockfill with clay core	520	50	DNA	1962
14	**Kharwar**				Concrete	DNA	36	DNA	DNA
15	**Surkhab**	Logar	Mohammad	sarkhab	Rockfill with clay core	130	36	DNA	
16	**Zankhan**	Ghazni	Zanakhan	Zankhan		210	25		
1	**Mahipar**	Kabul		Mahipar	Concrete	DNA	DNA	1964	1966
2	**Jabalsaraj**	Parwan	Jabul Saraj	Jabul Saraj	Concrete	DNA	DNA	1915	1920
3	**Band-i-Amir**	Bamian	Yakawlang	Band-e Ami	Natural	DNA	DNA	DNA	DNA
4	**Balkh**				Concrete	DNA	2.5	DNA	DNA
5	**Charikar**				Concrete	DNA	DNA	DNA	1976
6	**Chardara**				Rockfill with clay core	DNA	DNA	DNA	DNA
7	**Assadabad**	Kunar	Assadabad	Center	Concrete				
8	**Ghowr**				Concrete	DNA	DNA	DNA	DNA
9	**Khanabad**				Concrete	DNA	DNA	DNA	1960
14	**Pul-e Hashemi**	Herat	Herat		NEW Consruction				
10	**Arghandab**				Earthen	DNA	50	1947	1952
11	**Grishk**				Concrete	DNA	DNA	DNA	DNA
12	Bughra				Concrete				
13	Darweshan				Concrete				
14	Nahr-e Saraj				NEW Consruction				

Component C:

Like component A, it has also country-wide coverage as indicated in the map in Figure 3 below Key activities would involve continuation of data collection and analysis from the existing stations and establishment of additional stations. In addition, this also involves hydrological services and river basin planning including: master plan preparation of Panju-Amu river bank protection works, river basin planning of Kabul river basin and Balkhab sub-basin, and early warning systems in Kabul and Hari-rud river basin.

Figure A3. Activity Location under component C



B. General Information on the Baseline Status for the River Basins in Afghanistan

1. Introduction – The Five river basins

The sources of most of Afghanistan's rivers come from the mountains especially the Hindu Kush while large amount of water flow in spring and early summer and change to stream or disappear during the remaining time. The highest elevation area of Afghanistan lies at the centre of the country and drains outwards all directions. Considering the drainage destination, the country can be divided into five major River Basins, namely, Panj Amu Basin, Northern Basin, Harirod Murghab Basin, Hilmand Basin and Kabul (Indus) Basin. Panj Amu Basin drains towards Amu River which is the boarding river between Afghanistan and Uzbekistan, Tajikistan and Turkmenistan. The Northern Basin drains towards the North but dry up within the national boundary. Harirod Murghab River basin has multiple outlets draining off toward Northwest (Turkmenistan). Similarly, Helmand has multiple outlets draining towards south west (Iran).

Likewise, Kabul River basin drains towards the east though multiple outlets to Pakistan ultimately contributing to the Indus River. The catchment areas, and water availability of each river basin is shown in table B1 below. The data in the table shows that the country has high degree of spatial variation in water availability. In addition, Afghanistan also has high degree of temporal variation in preparation. Managing the high degree of spatial and temporal variation is the key challenges of water management in Afghanistan.

Table B.1 Watet in five river basins of Afghanistab

S. N.	River Basins	Water availability			Land area	
		Recent TCP Study	Watershed Atlas	Other sources	In Km2	In %

1	Panj Amu	30.6	48.1	30.5	95,946	15
2	Northern	3.4	1.9	2.2	70,995	11
3	Harirod-Murghab	7.2	3.0	3.4	78,060	12
4	Helmand	18.1	11.0	10.4	327,662	51
5	Kabul	20.0	22.0	20.6	71,267	11
	Total	**79.3**	**86.0**	**57.1**	643,929	100

2. Description of Specific River Basins

The previous table shows that Helmand is the largest river basin covering almost half of the country's area holds only about a quarter of its water resources, whereas Panj-Amu basin which holds only about 15% of country's area holds almost 45% of its available water resources. Out of 79 BCM, about 44 BCM is already used in various uses, mostly agriculture (more than 90%) and there is still a high potential for development of water resources. Except for the Panj-Amu basin and central part of Afghanistan origin of Harirud, Helmand and Kabul river), the rest part of the country is already water stressed. All of these basins have high degree of spatial and temporal variation in precipitation, and therefore in water availability. Managing these variability remains a key challenge, and future would demand more storage schemes, both in surface and groundwater. Further characteristics of the five river basins are provided in the box below.

Box B.1: Key characteristics of the five river basins

(1) The Helmand River Basin and the western flowing rivers: The 1,300 km long Helmand River rises out of the central Hindu Kush mountains, close to the headwaters of the Kabul river. The river flows in a southwesterly direction, then westwards to its terminus in the Sistan marsh or depression along the border with Iran. The Helmand River flow is mostly supplied by the upper catchment areas that receive snowfall in the winter months. The river and its tributaries, such as the Arghandab and Ghazni rivers, drain about 29 percent of Afghanistan's area or about 190,000 km^2. The Adraskan or Harut Rud, the Farah Rud, and the Khask Rud Rivers also drain into the Sistan marsh. These rivers drain the southwestern part of Afghanistan, which is about 80,000 km^2 or 15 percent of Afghanistan's area. The outflow of the Helmand River to Iran is about 6.7 km^3/year.

(2) The Hari Rod and Murghab River Basins: The Hari Rod River, which has a drainage area of about 40,000 km^2, or 6 percent of the area of Afghanistan, flows west from its source 250 km west of Kabul through the city of Herat and into Iran. At the Iranian border, the river turns northwards and eventually empties into the Tejen Oasis in Turkmenistan. Because of the narrow and elongated configuration of this river basin, the Hari Rod does not have significant tributaries. Another river, the Murghab River, with a drainage area of 40,000 km^2, or 6 percent of the area of Afghanistan, also dried out in Turkmenistan. The outflow of the Hari-Rod River, which becomes the border between Afghanistan and Iran is 1.07 km^3/year. Based on the agreement between Iran and Turkmenistan regarding this flow, it is considered to enter the Islamic Republic of Iran. The outflow of the Murghab River to Turkmenistan is 1.25 km^3/year. This brings the total natural inflow to 10 km^3/year and the total natural outflow to 42.22 km^3/year.

(3) The Kabul River Basin: The Kabul River originates in the central region of the Hindu Kush, about 100 km west of Kabul, and has a drainage area of 54 000 km^2 in Afghanistan. It flows eastward through Kabul and, after entering Pakistan, joins the Indus river east of Peshawar. Its main tributaries include the Logar, Panjsher (with its own major tributary the Ghorband), Laghman-Alingar and Kunar rivers. Most of these rivers are perennial with peak flows during the spring months as their drainage area encompasses the snow-covered central and northeastern parts of the Hindu Kush. The Kabul River is the only river in Afghanistan that is tributary to the Indus River which reaches the Indian Ocean. Other minor Indus tributaries, with a combined drainage area of 18,600 km^2, drain southeastern Afghanistan and all flow eastwards into Pakistan and eventually join the Indus River. The Kabul River and other tributaries of the Indus together drain 11 percent of Afghanistan water resources. The Kunar river joins the Kabul river at Jalalabad, about 180 km downstream of the border. The outflow of the Kabul River to Pakistan, which is 80 km further downstream, and of several other tributaries of the Indus that originate in Afghanistan is an estimated 21.5 km^3/year. They all join the Indus River in Pakistan.

(4) The Northern flowing rivers: These rivers originate on the northern slopes of the Hindu Kush and flow northwards towards the Amu Darya river. Most of these rivers dried out on the Turkistan plains before reaching the Amu Darya River. From west to east, the main rivers include the Shirin Tagab, the Sarepul, the Balkh and the Khulm Rivers. These river

basins cover 12 percent of Afghanistan, or about 75,000 $km^{2.}$

(5) The Amu Darya river basin: The Amu Darya River, also called the Oxus in Afghanistan, originates in the Afghanistan part of the Pamir River. Formerly called the Abi-Panja, it forms over 1,100 km of Afghanistan's northern border with Tajikistan and Turkmenistan. Two main tributaries drain Afghanistan, the Kunduz River (and its tributary the Khanabad) and the Kokcha River, both originate in northeastern Hindu Kush. The rivers are perennial with substantial flows from snowmelt in the spring months. These two river basins, and the upper drainage area of the Amu Darya, cover 14 percent of Afghanistan or about 91 000 km^2. The Amu Darya does not enter Afganistan. The total flow of the river, where it flows from Tajikistan to the border, and where the border river is called the Panj River, is an estimated 33.4 km^3/year. According to an agreement in 1946 with the Former Soviet Union, Afghanistan was entitled to use up to 9 km^3 of water from the Panj River. The contribution of Afghanistan to the Amu Darya is 6 km^3/year from the Kunduz tributary and 5.7 km^3/year from the Kokcha tributary. The incoming flow of the Kunar River, from Pakistan to Afghanistan, is an estimated 10 km^3/year.

4. Project Specific Baseline

a. Irrigation Rehabilitation and River Bank Erosion Protection

The targeted rehabilitation works under the AF are traditional Farmer's managed schemes, developed and managed by farmers so far and confront different physical challenges. Some of the key challenge include: erosion of headworks in many case due to degradation of river beds) and canals, heavy siltation due to uncontrolled flow at the intake, vulnerability from floods and canal breach due to uncontrolled flash floods in the drains that crosses canal alignment. They have also water management challenges: high degree of seepage, poor water distribution arrangements due to lack of appropriate water control structures, lack of safety structures, lack of measuring structures. All these have impacted the water delivery services. The systems therefore lack adequacy, equity and reliability to support agriculture production and productivity.

Majority of rivers (small scale) and streams in Afghanistan are seasonal, bearing water (measurable amount) mostly in spring time, from February to July. However, they are subjected to flash floods due to combined effect of rainfall and snowmelt. During the flood, these rivers carry tremendous amount of silts and debris due to high slopes in the upper catchments and inflict heavy damages to the surrounding farm lands. These flash floods are usually the major reasons for loss of lives and livelihoods in rural areas. Fro example, in 2014, more than 14,000 families especially in the northern areas were affected, and more than 6,500 had their homes destroyed. The extent of flooding in 2014 was 2-3 times higher than annual averages. The major damages usually occur due to erosion of and over toping of the adjoining banks. Unless appropriate actions are taken, these kinds of flash floods will continue to inflict heavy damage to the rural economy.

A fully silted canal rehabilitated with appropriate water control structure

b. Dam Safety

Existing dams in Afghanistan, built before 1970s have similar problems and issues in regard of Dam Safety, as well as appropriate Operation and Maintenance, according to anecdotal reports form MEW engineers in the O&M Directorate. Two dam safety review visits to two dam sites confirmed these accounts. Those are Qargah and Darunta in Kabul and Jalalabad area, shown in Figures 1 and 2 below.

Qargah Dam

Darunta Dam

It was assessed that almost all of the existing dams in Afghanistan do not have complete Dam Documentation, and some have none of the documents required at the Dam Site Office (and in addition at the Dam Registry at the MEW, which is yet to be formed).
Those documents are:

- Design reports and drawings, as well as the as-built survey and drawings;
- Operation and Maintenance Manual;
- Dam Safety Comprehensive and Annual review reports;
- Dam break analysis, dam cathegorization and Emergency Preparedness Plans;
- Standard Operation Procedures.

Further, there is an issue with excessive sedimentation in most of the dams, although the Project will not tackle measures to remediate that, only recommendations related to re-forestation of the catchment (which has been done on some of the sites, notably Tangy Shaydan).

A most common problem with the existing dams is reduced functionality of the gates, sluices and the engines that operate them. Next common problem found at the dams is erosion of the earthen slopes, mostly the outside ones (since inside slopes are often lined with rip-rap or

concrete. Spillway channels, where found, are also often eroded, with concrete or gabion lining and side slope protection cracked, or generally damaged. These problems could be attended to within the next phase of IRDP, under component B, where the damage is found to pose a hazard and may result in possible dam failure posing danger to the downstream population.

c. Dam Construction

Two new sites, which were among the 21 designed by WAPCO (at Pre-Feasibility level) and which are on the top of the priority shortlist, Tangy Shaydan and Ab-e-Kely have been visited by the IRDP engineering staff (including the International Specialists).

Tangy Shaydan Location

Figure 4: Ab-e-Kely location

The restructuring of the project included removal of the action "construction of the dams", and concentrating on preparation of quality technical documentation (Feasibility Studies and detailed design) and safeguards instruments (Environmental, Social, Gender, Resettlement), which would enable possible follow-up projects to support construction.

Table B2 below gives main features of the two dams.

Table 1: Main Features of Tangi Shadyan and Ab-e-Keli Dams

No	Parameter	Catchment Area	Project Cost	River Bed Level	Dam Height from River Bed	Gross Storage	75% Water Availability	Cost Gross Storage per m3	Cost per ha
	Dam Site	[km2]	[Million USD]	[m]	[m]	[MCM]	[MCM]	[USD]	[USD]
1	Ab-e-Keli	2,454	40.77	1,703	60	8.67	23.7	4.7	24,000
2	Tangi Shadyan	124	17.12	858	54	4.31	7.25	3.97	26,000

No	Parameter	Installed Capacity	Population Supplied with Drinking Water	Irrigation Area	Additional Energy Benefit	Submerged Area	Discounted Benefit Cost Ratio	Internal Rate of Return	Ranking
	Dam Site	[MW]	[number]	[ha]	[MU]	[ha]	[ratio]	[%]	
1	Ab-e-Keli	2x960	54,000	1,700	3.81	35.78	1.5	14.53	1
2	Tangi Shadyan	3x360	1,850	670	2.23	25.55	0.8	7.86	2

C. Overall Assessment on the Project's Impacts and Possible Mitigation Measures

1. Overall environment and social impact of the IRDP-AF is expected to be positive as described below.

Irrigation Rehabilitation and River Bank Protection. The irrigation rehabilitation works will generate considerable positive social and enviromental impacts. These works will enable more precise extraction of water intake regulate the water flow, and decrease seepage through various rehabilitation measures including repair of the headworks, resectioning and lining of the damaged canal. Further, rehabilitation of the riverbed at the intake will increase the stability of the river, benefitting downstream both in environmental and socal terms. On the social side, the rehabilitation works will not increase the rural livelihood but also enable more equitable distribution between upstream and downstream population. The below photoes illustrate the situation before and after rehabilitation works carried out under the original project.

Rehabilitation contributes to both: erosion contol and efficient water distribution

River Bank Protection Works will also similarly generate considerable positive social and environmental impacts. Because of their small sizes, while these works would not have major environmental and social impacts, they would stabilize the ground stability of the river bank, reduce the erosion thus turbility of the river water, protect properties and human lives in the concerned communities.

river bank protection to control erosion and contributes to safe farming

Based on the baseline collected, there are no critical natural habitats or cultural heritage places near the potential project areas, and the anticipated negative social and environmental impacts are minor. there are possibilities for increased in dust/air pollution, noise/vibration, water pollution, waste generation, sedimentation/soil contamination, local traffic/accidents, and nuisance to local residents. However, these impacts could be mitigated through the application of good construction practices with close supervision and monitoring of contractor performance and the required mitigation measures will be prepared and implemented as part of the ESMP. In addition, During operation, (a) water-logging, flooding, and/or salinization in some areas; (b) possible conflicting demands on surface or ground water supplies including the potential spread of infection and disease through the inappropriate use of irrigation canals for water

supply, bathing or human waste disposal, and/or concerns on safety of dams and/or erosion of river bank in downstream areas; and (c) toxicity to human/animal health and local water/ecology due to improper use, storage, and disposal of pesticides, fertilizers, and other toxic chemicals.

Dam Safety. In general, dam safety works will generate substantial positive social and environmental impacts through reducing the dam failure which will devastate downstream communities and environment. Based on the baseline information, there are no critical habitat or cultural heritage to be affected by the dam safety works for all the identified as potential project sites; therefore, mitigation through the investment-specific ESMPs and ECOP will be adequate.

Dam Construction. As mentioned, six potential sites has been identified, and the AF project would provide technical assistance to further process preparation for construction of the dams for some sites out of these six. In general, these six identified sites are very sparsely populated, and the current economic use of the lands is limited. Nevertheless, the potential environmental and social impacts are significant. However, during the implementation of the project, detailed social and environmental impact assessment (ESIA) shall be carried out assessing the potential impacts on overall environment (including water quality, ecologies, water balance and ground water), social (impacts on the current water users and resettlement) and develop appropriate monitoring program and mitigation measures.