

# Environmental Assessment and Review Framework

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Project number: 48042-001  
July 2016  
DRAFT

## AFG: Panj-Amu River Basin Sector Project

Prepared by the Ministry of Finance, Ministry of Energy and Water, and Ministry of Agriculture, Irrigation and Livestock for the Asian Development Bank.

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## CURRENCY EQUIVALENTS

(as of 7 June 2016)

Currency unit	–	Afghani (AFN)
Afs1.00	=	\$0.01445
\$1.00	=	Afs68.99

## ABBREVIATIONS

ADB	–	Asian Development Bank
AFG	–	Afghanistan
DAIL	–	Departments of Agriculture, Irrigation, and Livestock
EA	–	Executing agency
EARF	–	Environmental assessment and review framework
EIA	–	Environmental impact assessment
EMP	–	Environment management plan
EMR	–	Environmental monitoring report
EU	–	European Union
FSDC	–	Feasibility study / design consulting services
GoIRA	–	Government of the Islamic Republic of Afghanistan
GRM	–	Grievance redress mechanism
IA	–	(i) Implementing agency (ii) Irrigation association
IEE	–	Initial environmental examination
ICS	–	Implementation consulting services
MAIL	–	Ministry of Agriculture, Irrigation, and Livestock
MEW	–	Ministry of Energy and Water
MOF	–	Ministry of Finance
MRM	–	Midterm review mission
NEPA	–	National Environmental Protection Agency
NRM	–	Natural resources management
O&M	–	Operation and maintenance
OFWM		On-farm water management
PC	–	Public consultation
PCM		Public consultation meeting
PCU	–	Project Coordination Unit

## ABBREVIATIONS

PIO	– Project Implementation Office
PMO	– Project Management Office
RBA	– River basin agency
SEMP	– Site environmental management plan
UNMACA	– United Nations Mine Action Centre for Afghanistan
UXO	– Unexploded ordinance
WRDIP	– Water Resources Development Investment Project
WUA	– Water user associations

## WEIGHTS AND MEASURES

°C	– degrees Celsius
ha	– hectare, 10,000 m <sup>3</sup>
jerib	– 0.2 ha
km	– kilometer
m	– Meter

## GLOSSARY

Command area	– Nominal or design area to be irrigated
Community Development Council (CDC)	– Established under the National Solidarity Program managed by Ministry of Rural Rehabilitation and Development (MRRD), a village-level group for improving and strengthening local governance through cooperation and volunteer participation of community members to promote, develop and maintain welfare of the community and strengthen sense of unity, cooperation and solidarity. Such groups plan for and encourage ecologically sustainable economic and social development
Ecosystem	– All living organisms and plants in a region and their relationships with each other and their environment (per Afghanistan's Water Law and Environment Law)
Impacts	– Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended (OECD 2002)
Integrated water resources management (IWRM)	– Coordinated development and management of water, land and related resources to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems (Global Water Partnership)

## GLOSSARY

Irrigation association (IA)	– Groups of irrigation farmers established with Ministry of Agriculture, Irrigation, and Livestock (MAIL) assistance to manage secondary and tertiary canals
Irrigation system or scheme	– System comprising an area of irrigable land and its irrigation
Main or primary canal	– Canal that conveys water from main intake / headworks to offtakes
Main system	– Headworks plus main canal(s) in an irrigation system
Mirab bashi	– Water master responsible for overall management of a surface water system (Kunduz and Balkh)
Mirab	– Water master responsible for main and secondary canal sections (Herat)
On-farm water management (OFWM)	– (Improved) water management at the farm level eg by construction of field canals, water distribution management, field levelling, crop planning to match water supply, etc
Outcome	– Likely or achieved short-term and medium-term effects of an intervention's outputs (OECD 2002)
Outputs	– Products, capital goods, and services that result from a development intervention; may also include changes relevant to the achievement of an intervention's outcomes resulting from the intervention (OECD 2002)
Risk	– Factors that affect or are likely to affect the successful achievement of an intervention's objective (OECD 2002)
River basin approach	– Integrated management to manage water resources in a river basin
River basin management	– Management of water resources within a river basin, often focusing on water sharing
River basin	– A catchment area with water naturally flowing in a common course (the area from which water drains to a river where it enters the sea, a terminal lake, or joins another river)
River sub-basin	– A subdivision of a river basin that is itself a river basin
Secondary canal	– A canal into which water flows from a primary canal via a secondary intake
Secondary intake	– Opening in a primary canal through which water flows into a secondary canal; in modern systems, the gate or proportional divider used to control flow at this point
Water user association (WUA)	– An association of water users (normally within a system) formed to manage irrigation infrastructure at the main canal level, and water distribution along the main canal for different users - irrigation, hydro power, flour mills or other industrial water uses.

## GLOSSARY

Watershed / catchment management	– Management of land and water within a watershed or catchment, often focusing on management to reduce water pollution or soil erosion
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## NOTES

In this report, "\$" refers to US dollars.

The Afghanistan calendar year commences on 21 March. The current year is 1395 from 21 March 2016 to 20 March 2017. In 2011, the Government of the Islamic Republic of Afghanistan (GoIRA) changed its fiscal year end to 20 December, three months before the end of the Afghan calendar year.

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## I. INTRODUCTION

### A. Purpose of the Document

1. This environmental assessment and review framework (EARF) document describes the procedures to be followed in the environmental assessment of subprojects prepared and implemented under the Panj-Amu River Basin Project (hereinafter the Project). The Project will incorporate the environmental safeguards required by ADB (2009) *Safeguard Policy Statement*, ADB (2012) *Environment Safeguards, A Good Practice Sourcebook*, GoIRA environmental laws and regulations, and any subsequent modifications and additions agreed by the Executing Agency (EA) and ADB. This EARF is disclosed on the ADB website as part of the Report and Recommendations of the President for the Project.

### B. ADB & GoIRA Environmental Assessment Frameworks

2. The procedures set forth in this document have been formulated to satisfy the environmental assessment frameworks of the Government of the Islamic Republic of Afghanistan (GoIRA) and the Asian Development Bank (ADB), as defined in their respective environmental policies, guidelines, laws, and regulations. These are documented in Section III. .

## II. THE PROJECT

### A. Justification and Rationale

3. Since 2004, the European Union (EU) has supported the Government of Afghanistan (GoIRA) in its reconstruction efforts by funding integrated water management programmes in the Panj Amu river basin. The current programme, the Panj-Amu River Basin Programme, will end in mid-2016.

4. The Project continues this EU support in partnership with ADB as co-financier and administrator. This will improve GoIRA ownership of fund management, increasing sustainability and conforming to EU policy in Afghanistan of moving funding on-budget or into co-financing arrangements.

5. The importance of the Project is in its impact on the well-being of rural communities in the basin, and in its support for GoIRA's sector investment plan, the \$1.1 billion National Water and Natural Resources Development Program.<sup>1</sup>

### B. Activities, Costs, Financing, Impact, Outcome, and Outputs

6. The proposed project will increase agricultural productivity in the Panj-Amu River Basin<sup>2</sup> through improving access and use of irrigated water at farm, scheme and river levels. The project will improve yields, cropping intensities and irrigated areas on a command area of 74,500ha, resulting in increased farm incomes and reduced rural poverty for over 400,000 beneficiaries, improved food security, import substitution, especially for wheat, and an increase

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<sup>1</sup> Though the plan's nominal three-year period has concluded, the plan remains in place with elements still in need of financing.

<sup>2</sup> Covering the provinces of Badakshan, Takhar, Kunduz, Baghlan and part of Bamyan.

in exports for high-value products such as fruit and nuts. Additional benefits include a reduction in conflict over water use, and an increase in sales of agricultural inputs such as fertilizers.

7. The Project will be financed through an ADB sector grant. It will be implemented over the seven-year period from late 2016 to late 2023, at an estimated cost of \$76.75 million (\$50 million in EU funds, \$26 million in ADB funds and \$0.75m in government counterpart funds).

8. The Project's intended impact, outcome, and outputs are:

- *Impact:* increased per-capita income and reduced poverty among rural and pastoral communities.
- *Outcome:* Increased agricultural productivity in the Panj-Amu river basin
- Outputs:

Output 1: Water allocation and availability improved. This output will provide the capacity and resources for MEW, and associated river basin agency (RBA), and sub-basin agencies (SBAs) in the Panj-Amu river basin, to: (i) improve the conveyance and allocation of water to irrigated areas through rehabilitating and upgrading head works and main canals in priority schemes; (ii) establish and strengthen the capacity of 112 water user associations (WUAs) to operate and maintain (O&M) conveyance infrastructure in these schemes to better distribute water between the head, middle and tail end of canals more equitably; and for them to work with RBA and SBAs to facilitate water sharing between schemes; and (iii) enhance the capacity of MEW, RBA and SBAs for more effective water allocation between schemes to benefit downstream users. In addition, support will also be provided to Afghan members of the Afghanistan-Tajikistan transboundary technical working group to prepare them for technical meetings and strengthen their ability to conduct negotiations regarding the set-up and operations of the Pyanj River Basin Commission.

Output 2: Command areas enhanced. This output will provide the capacity and resources for MAIL, and associated DAILs in the Panj-Amu river basin, to: (i) improve irrigation infrastructure at the secondary and tertiary canal level, in schemes identified for improvement under Output 1 in order to secure an integrated approach; (ii) establish and strengthen the capacity of at least 105 IAs to operate and manage irrigation infrastructure in these schemes to improve distribution of water within schemes; and (iii) improve water use efficiency at the farm level by improved on-farm water management and agronomic techniques (such as land levelling, bed and furrow irrigation, and intercropping) with at least 6,300 farmers having improved knowledge from 21 demonstration plots.

Output 3: Watersheds properly managed and protected. This output provides the capacity and resources for MAIL, and associated DAILs in the Panj-Amu river basin to improve community-based watershed management. This output includes (i) preparation of a community-based natural resources management technical manual and guidebook; (ii) training of DAILs' staff as master trainers who will conduct training of communities; (iii) identification of approximately 21 watershed/rangeland sites for restoration and protection; (iv) creation of community forestry/rangeland associations for these sites; and (v) preparation and implementation of natural resource management plans for these sites. These activities will help restore 10,500 hectares of forestry and/or rangeland in the vicinity of 21 prioritized subprojects and protect irrigation structures under Outputs 1 and 2 from flash floods and sedimentation.

## **C. Implementation Arrangements**

### **1. Project Proponents**

9. The Project proponents are the Government of the Islamic Republic of Afghanistan (GoIRA), ADB, and the EU. The Project Executing Agency (EA) is the Ministry of Finance (MOF). The Implementing Agencies (IAs) are MEW and MAIL. MEW will be involved in Output 1. MAIL will be involved in in Outputs 2 and 3.

### **2. Project Management Offices**

10. Project management offices (PMOs) will be established within the Kabul headquarters of MEW and MAIL. Each will monitor and evaluate progress, procurement, accounting, and report findings regularly to MOF and ADB.

11. MEW PMO will oversee all MEW donor-assisted projects. MEW PMO will have a full-time environmental safeguards officer who will be shared equally between the Project and the ongoing Water Resources Development Investment Project (WRDIP).

12. MAIL PMO will be based in the Irrigation Directorate, but will include the Output 3 Natural Resources Management (NRM) Coordinator based in the NRM Directorate, to avoid creating two MAIL PMOs. A part-time environmental safeguards officer will be hired.

### **3. Project Implementation Offices**

13. MEW PMO will establish Project Implementation Offices (PIOs) under the RBA. MAIL PMO will establish PIOs in the Project area DAILs.

### **4. Consulting Services**

14. MEW PMO and PIOs will be supported by a feasibility study / design consulting services (FSDC) team. Both MEW and MAIL PMO and PIOs will be supported by an implementation consulting services (ICS) team.

### **5. Project Coordination Unit**

15. The existing MOF Project Coordination Unit (PCU) will facilitate coordination among MOF, MEW, and MAIL and consolidation of financial reports.

### **6. ADB Review Missions**

16. ADB will conduct review missions twice annually during the first two years of Project implementation to:

- (i) assess implementation effectiveness and propose any necessary adjustments to the implementation arrangements;
- (ii) monitor implementation progress against expectations, identify constraints, and define actions to address them; and
- (iii) ensure compliance with ADB safeguards conditions set out in the grant agreement and financial framework agreement. In particular, EMP implementation will be scrutinized.

17. Three years following grant effectiveness, ADB will field a comprehensive midterm review mission (MRM) to assess performance, identify problems, and reach formal agreement with GoIRA on any needed changes to the scope of work or implementation arrangements to address shortfalls. MOF, MEW, MAIL, and ADB will jointly prepare full terms of reference for the MRM during the second year of implementation. Prior to MRM, MEW and MAIL will each submit a detailed progress report on their respective components, including documentation of safeguards implementation.

#### **D. Physical Interventions Eligible for Project Financing**

18. Physical interventions eligible for Project financing comprise:

- (i) Irrigation works on main irrigation canals
  - (a) Headworks excluding large<sup>3</sup> hydroelectric dams – new, rehabilitated, and upgraded
  - (b) Offtakes and cross-regulators – new, rehabilitated, and upgraded
  - (c) Main canal development – (re)excavation, lining, erosion protection, wash structures, etc; new, rehabilitated, and upgraded
- (ii) Irrigation works on higher-order canals - new, rehabilitated, and upgraded

19. In addition, subprojects will incorporate non-irrigation physical works necessary to:

- mitigate adverse impacts of the subproject on the environment;
- mitigate adverse impacts of the environment on existing irrigation infrastructure or on new subproject works (e.g. wash structures); and
- provide domestic and livestock water access points along canals.

#### **E. Subproject Selection Criteria**

20. In July 2015, RBA staff, in collaboration with each of the six sub-basins, prepared a list of irrigation schemes to be considered for rehabilitation and upgrading (R&U) under the Project.

21. In November 2015, the Project preparation consultant prepared a long list of 408 potential subprojects in all six sub-basins, having an estimated total cost of US\$164 million. This list comprised potential subprojects in the RBA schemes plus in priority schemes identified by MEW and by donors other than ADB (eg FAO, USAID). Generally speaking, data on the potential subprojects was limited and unreliable.

22. In December 2015, MEW and MAIL stakeholders agreed to a list of 62 priority subprojects for rehabilitation and upgrading that MEW, the RBA, and the SBAs had selected from the long list of 408. Surveys were undertaken of each listed subproject to determine its location and command area and generate a description of its R&U needs.

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<sup>3</sup> According to the definition adopted in 1932 by the International Commission on Large Dams, “large” storage dams are those having a height of 15 m or 50 feet from deepest foundation level to crest (W. Flogl, n.d., *The History of the World Register of Dams*. [http://www.icold-cigb.org/userfiles/files/CIGB/History\\_of\\_the\\_WRD.pdf](http://www.icold-cigb.org/userfiles/files/CIGB/History_of_the_WRD.pdf))

23. The Project preparation team assimilated this information into an MS-Excel spreadsheet, and then evaluated each subproject using an implicit least-cost analysis of a set of eligibility and prioritization criteria.

24. Eligibility criteria to exclude unsuitable subprojects were (subprojects failing one or more criteria were dropped):

- An irrigation rehabilitation and upgrading project. i.e. Not for example a river training project, dam or building.
- No significant potential environmental impact as outlined in the ADB Safeguard Policy Statement (June 2009). More specifically, GoIRA Category 1 subprojects, and Category 2 subprojects for which NEPA requires EIA, are excluded from Project financing as are ADB Category A subprojects.
- Not in an environmentally protected area.
- Approved by government (i.e. government priority)
- No major social impact, i.e., no significant resettlement impact as outlined in the ADB Safeguard Policy Statement (June 2009) for category A for resettlement.

25. Seven subprojects were found to be ineligible and 55 to be eligible.

26. Prioritization criteria used to rank the eligible subprojects were:<sup>4</sup>

- Command area size – small (<400 ha), zero points; medium (400 to 3000 ha), three points; large (>3000 ha), six points
- Sub-basin command area size – smaller (>3000 ha), three points; larger (<3000 ha), zero points
- Accessibility 1 – Within two hours travel of SBA, one point
- Accessibility 2 – No major winter cut-off, one point

27. Prioritized projects were put into three categories:

- Priority one – six or more points, 21 subprojects including two subprojects in the Sharawan-Takhar scheme
- Priority two – three to five points, 24 subprojects
- Priority three – zero to two points, 11 subprojects

28. The RBA and SBAs were then asked to identify three representative subprojects (RSPs), of high priority in relatively secure and accessible areas, to be the first studied and designed during Project preparation and rehabilitated and upgraded during Project

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<sup>4</sup> Additional prioritization criteria were formulated and evaluated, but found not to contribute to ranking:

- Headwork present or feasible to build one, one point. Generally speaking, a headwork can be built in any canal if located away from erosion (if any) at the main intake
- Low risk one point. Higher-risk project types (dams, river training, etc) already ineligible
- Enough water to meet irrigation demand, one point. No survey data was available on flow at intakes. All basin rivers are thought to have sufficient flow; if any do not, then interventions would help to address this. Water availability is best examined at feasibility.
- Logistics and security: – Safer area, one point. While important, variations over time make it of limited usefulness for subproject selection. The security context is best reviewed at the time of feasibility study, and should continue to be reviewed through implementation.

implementation. The three so identified were Sharawan-Takhar, Seyaab, and Laqi (a priority two subproject chosen before completion of the ranking).

29. The final Project priority subproject list comprises a total of 22 subprojects – the 21 priority one subprojects plus RSP Laqi.

## **F. Cumulative Impacts**

30. The cumulative negative impact of all sub-projects under the project will be low. This can be concluded from the fact that: (i) selection criteria for the eligible sub-projects included that there would be no significant potential environmental impact not would sub-projects be located in an environmentally protected area; (ii) works will be predominantly of a small-scale and predominantly consist of the upgrading of existing structures; (iii) an assessment of the representative sub-projects confirms minimal environmental impact, mainly the removal of a small number of trees, which will be re-planted, at the point where structures will be rehabilitated and upgraded along the public right of way of the canals.

31. Positive environmental impacts will be larger. Watershed management and protection work under output 3 will reforest and landscape barren hillsides, protecting against erosion and flash flooding. Tree planting will also contribute to climate change mitigation through carbon sequestration. Improved water allocation will also have a positive impact on the environment through improving water availability for environmental river flows.

## **III. POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK**

### **A. Afghanistan**

#### **1. Legal System**

32. Under the Constitution of 2004, the current formal system of laws blends customary and Islamic legal traditions within a constitutional order defined by civil codes and formal courts. Customary law reflects the varying norms of the country's tribes, clans, and, more recently its rival political parties and armed groups. With respect to legal enforcement and administration, the reach of the formal judicial system remains limited, and community-based informal systems continue to handle most disputes.<sup>5</sup>

33. The Constitution of Afghanistan (2004) states that no law can be contrary to the beliefs and provisions of Islam (Article 3), but also that courts are to use Hanafi jurisprudence only for issues not provided for in the Constitution and other laws, and then only within Constitutional limits (Article 130); Shia law is to be used in specific situations involving Shia persons (Article 131).

34. Constitutional articles pertaining to environmental management are:

- Article 40 [Private Property]
  1. Property is immune from invasion.

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<sup>5</sup> Khan, H. M. (2015). *Islamic law, customary law, and Afghan informal justice*. Special Report No. 363. United States Institute of Peace. Retrieved from <http://www.usip.org/sites/default/files/SR363-Islamic-Law-CustomaryLaw-and-Afghan-Informal-Justice.pdf>

2. No person shall be forbidden from acquiring and making use of a property except within the limits of law.
  3. Nobody's property shall be confiscated without the provisions of law and the order of an authorized court.
  4. Acquisition of a person's property, in return for a prior and just compensation within the bounds of law, is permitted only for securing public interests in accordance with the provisions of law.
  5. Inspection and disclosure of a private property are carried out only in accordance with the provisions of law.
- Article 51 [Compensation]
    1. Any person suffering undue harm by government action is entitled to compensation, which he can claim by appealing to court.
    2. With the exception of situation stated in the law, the state cannot claim its right without the order of an authorized court.
  - Article 15 [Environment] The state is obliged to adopt necessary measures for safeguarding forests and the environment.<sup>6</sup>

## 2. International Environmental Agreements

35. The Constitution binds the state to abide by the UN charter, international treaties, international conventions that Afghanistan has signed, and the Universal Declaration of Human Rights (Article 7).<sup>7</sup>

36. International agreements relevant to environmental management of water resources development to which Afghanistan is a party are (listed in order by the year in which each came into force):

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1975) – *international cooperation to control trade in species threatened with extinction or in danger of becoming so; in species whose trade interferes with regulation of trade in extinction-threatened species; and, in species identified by a Party under national-level trade control to prevent/restrict exploitation, for which international cooperation is needed*
- Convention on the Conservation of Migratory Species of Wild Animals (also called Convention on Migratory Species, CMS, and the Bonn Convention, 1983) – *conserve terrestrial, marine and avian migratory species throughout their ranges*
- UN Convention on Biological Diversity (1993) – *objectives were to conserve biological diversity; promote sustainable use of biological diversity; and (iii) seek more fair and equitable sharing of the benefits genetic resource utilization*
- UN Framework Convention on Climate Change (1994)– *stabilize greenhouse gases in the atmosphere at levels that will not change the climate system in dangerous ways*

<sup>6</sup> Constitution of Afghanistan (2004). English translation retrieved 21 Mar 2016 from [https://en.wikisource.org/wiki/Constitution\\_of\\_Afghanistan](https://en.wikisource.org/wiki/Constitution_of_Afghanistan)

<sup>7</sup> This Article, unambiguous as it may appear, however leaves open to interpretation many aspects of the incorporation and compatibility of international law with Afghan domestic law. See for example: Galland, M., Berquist, E., Handler, S. G., Reed, N., & Sulmeyer, M. (2011). *An introduction to international law for Afghanistan*. Afghanistan Legal Education Project (ALEP) at Stanford Law School. Retrieved from <https://www-cdn.law.stanford.edu/wp-content/uploads/2015/12/Intro-to-International-Law-for-Afg.pdf>

- UN Convention to Combat Desertification (1996) - *combat desertification and mitigate drought effects in countries experiencing serious drought or desertification*
- Kyoto Protocol (2005) – *extended the Convention on Climate Change*

37. In addition, Afghanistan has signed but not ratified:

- UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property (1970) – *protect cultural property against theft and promote restitution of stolen items*
- Ramsar Convention on Wetlands (1975) – *promote conservation and sustainable use of wetlands*
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1992) – *reduce movements of hazardous waste between nations, prevent transfer of such waste from developed to less developed countries (LDCs); minimize waste amounts and toxicity; promote environmentally sound management at or near generation sites; assist LDCs in environmentally sound management of their wastes; does not address radioactive waste*
- Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane (1993) – *protect the species through concerted, coordinated actions to prevent disappearance of remaining populations*
- UNIDROIT Convention on Stolen or Illegally Exported Cultural Objects (1995) – *attempts to fill gaps in the UNESCO convention by making the final owner of a stolen cultural item who cannot show due diligence responsible for restitution*
- UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2006) – *safeguard, ensure respect for, and raise awareness at local, national, international levels, and provide for international cooperation and assistance.*

### 3. National Legislation, Policies, and Regulations

#### a. Environmental Management

38. **Environment Act (2007)** sets forth national administrative roles and coordination with provincial authorities; establishes management frameworks for natural resource conservation, biodiversity, drinking water, pollution control, and environmental education; and defines enforcement tools.<sup>8</sup>

39. **National Environmental Impact Assessment Policy (2007)** follows on from the Environment Law and sets forth a policy vision, principles, strategy, and process for environmental assessment in Afghanistan. The emphasis is on ensuring that projects with potentially significant impacts are identified to the national environmental regulator, the National Environmental Protection Agency (NEPA), and follow adequate due diligence procedures. The document provides a range of additional useful information on NEPA and environmental assessment in the Afghanistan context.

40. **Environmental Impact Assessment Regulations. Official Gazette No. 939 (Mar 2008).** Schedule I that list project types likely to have significant impacts (Category 1) or potentially adverse impacts (Category 2); and the industries likely to give rise to pollution. Schedule II provides the clearance certificate application form.

<sup>8</sup> Taylor, D. A. (2006). Policy: new environment law for Afghanistan. *Environmental Health Perspectives*, 114(3). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1392251/>

41. **Administrative Guidelines for the Preparation of Environmental Impact Assessments (Jun 2008).** These guidelines were prepared as a companion to the 2008 Regulations, to guide proponents on interacting with the National Environmental Protection Agency, on public consultation, and roles and responsibilities of stakeholders.

42. **Water Law (2009).** The Water Law states that water is owned by the public and that Government is responsible for water protection and management. It assigns responsibilities to government institutions for management and protection of water resources, water ownership, and regulates water ownership fees, rights, permits, and usage.<sup>9</sup>

43. **Law on the Protection of Historical and Cultural Properties, Issue No. 828 (2004).** After defining the material falling within its scope, the law sets forth the State's interest and rights in such materials, specifies prohibited and regulated activities involving such materials, and establishes enforcement measures such as penalties and fees.

44. **Pesticide Regulations (1989).** Afghanistan has had pesticide regulations since 1989, but they have never been enforced due to lack of resources.<sup>10</sup> A draft Pesticide Law dating from 2009 has yet to be enacted.

45. **Environmental standards.** Afghanistan has not established national environmental standards or guidelines for air quality, noise, or water quality in respect of human health, aquatic health, irrigation, soil, etc. In the absence of national standards, an accepted international practice is to follow the guidance provided by IFC (2007) *Environmental, Health, and Safety Guidelines*.<sup>11</sup> The Ministry of Mining, for example, uses this publication in its environment, health, and safety regime.<sup>12</sup>

#### b. Public Consultation

46. The *Environment Law* (2007), Article 19, provides a legal framework for public consultation during environmental assessment:

##### Article 19. Public participation

- *Affected persons may express their opinion on a proposed project, plan, policy or activity, preliminary assessment, environmental impact statement, final record of opinion and comprehensive mitigation plan, before the approval of the project, plan, policy or activity, and the proponent must demonstrate to the National Environmental Protection Agency that affected persons have had meaningful opportunities, through independent consultation and participation in public hearings, to express their opinions on these matters on a timely basis....*

<sup>9</sup> Ahmad, T. (2013). Legislation on use of water in agriculture: Afghanistan. Retrieved from <http://www.loc.gov/law/help/water-law/afghanistan.php>

<sup>10</sup> USAID Afghanistan. (2008). Afghanistan Accelerating Sustainable Agriculture Program (ASAP). Retrieved from [http://pdf.usaid.gov/pdf\\_docs/Pnadm436.pdf](http://pdf.usaid.gov/pdf_docs/Pnadm436.pdf)

<sup>11</sup> International Finance Corporation. (2007). Environmental, Health, and Safety Guidelines. Retrieved from <http://www.ifc.org/wps/wcm/connect/554e8d80488658e4b76af76a6515bb18/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES>

<sup>12</sup> Ministry of Mines (n.d.) Afghanistan Environmental, Health & Safety Regime [webpage] <http://mom.gov.af/en/page/3993/3996/4695>

- *The National Environmental Protection Agency shall not reach a decision on any application for a permit until such time that the proponent has demonstrated to the satisfaction of the National Environmental Protection Agency that the proponent has distributed copies of the document to affected persons, informed the public that the document is being made available for public review by advertising the document and displaying a copy of it for inspection, and convened and recorded the proceedings of a public hearing.*
- *After the National Environmental Protection Agency has reviewed the conditions set forth in item 3 above, the National Environmental Protection Agency shall reach a decision and inform the public of that decision and make available any relevant documentation or information for public review.*<sup>13</sup>

### **c. Information Disclosure**

47. In December 2014, the *Access to Information Act* was signed by the President of Afghanistan. It has four objectives:

- To ensure the right of access to information for all citizens from the government and non-government institutions
- To observe article 19 of International Covenant on Civil and Political Rights [ie freedom to seek, receive and impart information and ideas of all kinds etc] [consistent with the tenets and provisions of Islam; Article 3, Afghanistan Constitution].
- To ensure transparency and accountability in the conduct of governmental and nongovernment institutions.
- To organize request processing and provision of information

## **4. National Environmental Regulator and Proponents' Environmental Management Capacity**

### **a. National Environmental Protection Agency**

48. First established in 2003 with the assistance of the United Nations Environment Programme (UNEP), in 2007 NEPA was formally recognized in the Environment Law. In 2015, NEPA had a staff of 850 staff and was active in each of Afghanistan's 34 provinces.

49. NEPA is responsible for environmental policymaking and is the national environmental regulatory agency. NEPA areas of work include oversight of the environmental impact assessment process and support for climate change adaptation, pollution control, and sustainable development.<sup>14</sup>

### **b. Ministry of Energy and Water**

50. MEW is responsible for national water resources planning including basin planning; collection and analysis of hydrometric data; multipurpose dam/reservoir development; and the

<sup>13</sup> Unofficial English translation.

<sup>14</sup> UNEP helped to establish Afghanistan's National Environmental Protection Agency (NEPA). (2015, January 16). Retrieved from <http://capacity4dev.ec.europa.eu/unep/blog/unep-helped-establish-afghanistans-national-environmental-protection-agency-nepa>

planning, construction, operation, and maintenance of water conveyance works. MEW is represented at the sub-national level by River Basin Agencies (RBAs) and Sub-basin Agencies (SBAs). MEW has no organizational units or line staff specifically assigned to environmental planning, assessment, and management. In 2011, MEW was reorganized along basin and sub-basin boundaries, with business units focused on regulatory and management functions.

### c. Ministry of Agriculture, Irrigation, and Livestock

51. With regard to irrigation, MAIL is responsible for on-farm water management at the secondary- and higher levels in all irrigation schemes. MAIL has no organizational units or line staff specifically assigned to environmental planning, assessment, and management.

## B. ADB

### 1. Policies

52. **Safeguard Policy Statement (2009)**. SPS 2009 is ADB's current main safeguards policy document. It describes the common objectives and policy principles of ADB's safeguards, and outlines the delivery process for ADB's safeguard policy. It promotes sustainability through protection of people and the environment from the adverse impacts of projects, and by supporting the strengthening of country safeguard systems. It presents a consistent, consolidated framework for environment, resettlement, and indigenous people safeguards.<sup>15</sup>

53. **ADB Operations Manual, Safeguard Policy Statement, Section F1/BP [Bank policies] & Safeguard Review Procedures, Section F1/OP [operational procedures] (2013)**. These documents operationalize SPS 2009. The policy sets forth the scope of SPS 2009 applicability to ADB operations, and the procedures describes the safeguards process and outputs, including consultation and disclosure requirements, through the various stages of project preparation.

54. **Public Communications Policy (2011)** guides ADB's efforts to be transparent and accountable to the people it serves, which it recognizes are essential to development effectiveness. The policy recognizes the right of people to seek, access, and impart information about ADB's operations, and it aims to enhance stakeholders' trust in and ability to engage with ADB, through proactive disclosure, presumption in favor of disclosure, recognition of the right to access and impart information and ideas, country ownership, limited exceptions, and the right to appeal.

### 2. Guidance

55. **Environmentally Responsible Procurement (2007)**. provides guidance to ADB staff, consultants, and executing agencies on ERP, defined as "a systematic approach to the purchase of goods and services that are thought to be less damaging to the environment than other goods and services that serve the same purpose," specifically, products that "reduce waste, improve energy efficiency, limit toxic by-products, contain recycled content or are reusable, and are produced with the least environmental impact...[and] services...that help improve the environment, are rendered with minimum environmental and social impacts, and use resources and energy efficiently.

<sup>15</sup> ADB (n.d.). *Safeguard policy statement* [webpage] <http://www.adb.org/documents/safeguard-policy-statement>

56. **Complaint Handling in Development Projects - Grievance Mechanisms: A Critical Component of Project Management (2010).** This document presents definitions, concepts, rationale, and history relevant to the ADB project grievance redress mechanism.

57. **Complaint Handling in Development Projects - Building Capacity for Grievance Redress Mechanisms (2010).** This document presents a framework and practical suggestions for building the capacity of an organization to manage an effective grievance redress mechanism.

58. **Environment Safeguards, A Good Practice Sourcebook (2012).** This draft working document aims to add clarity, provide technical guidance, and recommend good practices in SPS (ADB 2009) implementation. It updates the *Environmental Assessment Guidelines* (ADB 2003).

59. **Selected References for Good Practice In Environmental Safeguards Implementation (2014).** This internal Central and West Asia Department (CWRD) document presents internet hyperlinks to exemplary environmental safeguards documents (IEEs, EIAs, EARFs, etc) prepared for CWRD country projects.

## C. Environmental Screening & Categories

### 1. ADB

60. ADB water resources projects and subprojects are screened using a rapid environmental assessment checklist for irrigation projects (Appendix 1). This checklist captures the type; location, sensitivity, scale, nature, and magnitude of potential environmental impacts; and availability of cost-effective mitigation measures. Based on the checklist findings, the project or subproject is assigned to one of the following ADB environmental categories:<sup>16</sup>

- **Category A** – likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment (EIA), including an environmental management plan (EMP), is required.
- **Category B** – potential adverse environmental impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination (IEE), including an EMP, is required.
- **Category C** – A proposed project is likely to have minimal or no adverse environmental impacts. An EIA or IEE is not required, although environmental implications need to be reviewed.

61. The category of a project is determined by its most sensitive component (output). Outputs 1 and 2 of this Project define it as category B.

62. Subprojects assigned to Category A are excluded from Project financing.

### 2. Government of Afghanistan

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<sup>16</sup> ADB (n.d.) Safeguard categories. <http://www.adb.org/site/safeguards/safeguard-categories>

63. As set forth in the 2008 EIA Regulations, a project or subproject is assigned to one of the following environmental categories:

- **Category 1** – likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented, and affects an area broader than the sites or facilities subject to physical works.
- **Category 2** – if its potential adverse environmental impacts on human populations or environmentally sensitive areas (e.g. wetlands, forests, grasslands and other natural habitats) are less adverse than those of Category 1 projects. These impacts are site-specific, and few are irreversible.

64. In addition, EIA Regulations Schedule I lists project types that are automatically assigned to these two categories. Category 1 and 2 projects must obtain a Certificate of Compliance from NEPA prior to starting construction. Certificate applications consist of a screening report and the application form in EIA Regulations Schedule 2.

65. The regulations state that a proponent intending to undertake multiple projects in a particular area should prepare a single screening report and assign the environment category appropriate to the projects' collective potential environmental impacts. Separate screenings are unacceptable.

#### **IV. INITIAL ENVIRONMENTAL EXAMINATION & ENVIRONMENTAL MANAGEMENT PLANS**

##### **A. Inputs, Responsibilities, and Accountability**

66. Responsibility for supervision of EARF implementation, including subproject IEE-EMP preparation, rests with the MEW PMO for Output 1 interventions and MAIL PMO for Output 2 interventions. PMO environment safeguard officers, with support provided by an international consultant, will screen and classify potential subprojects and prepare IEE-EMPs for Category B subprojects. The PMOs will ensure that IEE findings are locally disclosed and that EMP measures (including for RSPs) are incorporated into civil works designs and contracts as needed. For output 1, preparation of IEE-EMPS will be assigned to a Feasibility study / design consulting services firm.

##### **B. IEE and EMP Contents**

67. **Requirements.** Subproject IEEs will be prepared to satisfy ADB and GoIRA requirements, including any relevant new policies, laws, and regulations promulgated subsequent to this EARF, and any modifications and additions to the EARF agreed by the EA and ADB. IEEs prepared to this standard are expected to be adequate for current GoIRA clearance application requirements.

68. **Environmental Management Plans.** IEEs will include Environmental Management Plans (EMPs) consisting of a (i) mitigation plan, (ii) monitoring plan, (iii) public consultation and information disclosure plan, and grievance redress mechanism. Each of these should address subproject pre-construction, construction, and operation phases (and, if relevant, decommissioning):

- **Mitigation plan** – documents the potential environmental impacts of each activity and the proposed mitigation measures for that impact; performance indicators; institutional responsibilities; and cost estimates (Table 3). Mitigation measures that are physical works are required to be incorporated into subproject civil works

designs. Any proposed environmental enhancement measures are included in the mitigation plan. Enhancement measures (i.e. measures that improve the baseline environment, manage or reduce adverse subproject impacts) that are physical works and are within the scope of Project financing, are required to be incorporated into subproject civil works designs.

- **Monitoring plan** – identifies institutional responsibility for monitoring; approximate costs; detailed monitoring work plans with specific parameters, methods, locations, frequencies, analyses, critical values, and associated actions; and a reporting plan.
- **Public consultation and information disclosure plan** – documents the actions proponents will take during pre-construction, construction, operation (and, if relevant, decommissioning) to (i) inform communities about scheduling of potentially disruptive events, (ii) disclose results of environmental monitoring, and (iii) pre-disclose the workings of the grievance redress mechanism.<sup>17</sup>
- **Grievance redress mechanism** – arrangements to ensure that stakeholders know where and how to lodge complaints and to address and resolve complaints effectively and in a timely manner.

69. **IEE scope and updating.** To the extent that a subproject's feasibility study lacks information (e.g. related to exact siting or construction activities), the EMP prepared at feasibility may also lack detail. In this case, the EMP must be updated to reflect the final design, before the IEE is reviewed and given clearance.

70. **Implementation phase review of RSPs IEE-EMP.** The Project environment team will review and revise the IEE-EMP of the RSPs to ensure its consistency with final RSP engineering feasibility studies and designs, and incorporate any changes to or additional information about the Project.

71. **EMP workplans.** Based on the RSPs EMP, Project management in collaboration with the environment specialists will develop their own detailed RSPs EMP workplan to ensure that all required RSP mitigation, monitoring, public consultation, and disclosure activities including reporting are carried out. Once established for the RSPs, the workplan can be revised and expanded to the other subprojects.

### **C. Custody and ADB Review/Clearance of Subproject IEEs**

72. As soon as possible after completion, draft IEEs will be placed on file with PMO/PIOs, whereupon PMO will promptly submit it to ADB for review and approval if it falls within any of the following groups:

- (i) Among the first three draft subproject IEEs produced during Project implementation
- (ii) Of a subproject costing \$1 million or more
- (iii) Subject of a request for ADB review, made to PMO/PIO by any Project staff or subproject stakeholder prior to tendering of subproject civil works.

73. For IEEs in group (i) or (ii) above, or in group (iii) once an ADB review request has been received, local disclosure of IEE findings begins after ADB clearance has been received. For all other IEEs, local disclosure begins immediately after the IEE is placed on file with PMO/PIOs.

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<sup>17</sup> Environment Resource Management. (1999). Public consultation in the environmental assessment process: a strategic approach (Environmental Assessment Sourcebook Update No. 26). World Bank, p. 2.  
<http://www.ifc.org/wps/wcm/connect/54c46b8048855702bb44fb6a6515bb18/PublicConsultation.pdf>

74. In cases where local disclosure starts and a request for ADB review is subsequently received, local disclosure will be suspended until the results of the ADB review are received by PMO. If review results warrant, the IEE-EMP and/or local disclosure information materials (e.g. local language brochure) will be appropriately modified prior to re-starting local disclosure.

## **V. ENVIRONMENTAL MANAGEMENT PLAN IMPLEMENTATION & MONITORING**

### **A. Pre-Construction**

#### **1. Application to National Environmental Protection Agency for Environmental Clearance**

75. PMOs are responsible to prepare and submit an application for an environmental clearance certificate to National Environmental Protection Agency (NEPA) for each GoIRA Category 2 subproject, and to obtain such clearance prior to the start of construction. At NEPA's option, the NEPA approval process may include public notification followed by a waiting period for public comment; applications are deemed automatically approved if NEPA does not respond within a stipulated time period.

#### **2. Incorporation of EMP Mitigation & Enhancement Physical Works in Engineering Designs**

76. PMOs are responsible to ensure that any EMP mitigation and enhancement physical works have been incorporated in subproject engineering designs, with design engineers (contracted to the FSDC firm under output 1) undertaking the necessary technical work.

#### **3. Incorporation of EMP Construction-Phase Mitigation Measures In Tendering & Contracting**

77. For subprojects with IEE-EMP, the PMOs will ensure that:

- Subproject tender documents are properly assembled to
  - (i) include standard construction contract environmental safeguard clauses (Appendix 2),
  - (ii) require bids to include a Site Environmental Management Plan (SEMP) setting forth the bidder's approach to providing the required construction-phase mitigation and monitoring measures (during technical evaluation of submitted bids, EA may request PMOs to task their environment staff and/or consultants to assist in evaluation of SEMP); and
  - (iii) require contractors to commit to obtain mine and unexploded ordinance (UXO) clearance confirmation, with copies submitted ADB, prior to commencement of civil works.<sup>18</sup>

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<sup>18</sup> In Afghanistan, obtaining UXO clearance confirmation is considered to be part of the environmental clearance process. MEW PMO will ask both the United Nations Mine Action Centre for Afghanistan (UNMACA) and local communities for information on the presence or absence of UXO in each proposed subproject area. If a possible presence of UXO is found, clearance must be undertaken by UNMACA or by a mine action organization accredited by UNMACA. Communities are not allowed to clear mines by themselves and will be penalized (e.g. future ADB funding to the area will be reduced or cancelled) if they elect to clear mines on their own.

- Bidders, construction contractors, construction supervisors, and any other entities involved in subproject environmental safeguards have access to subproject IEEs
- Tenders are prepared for implementation of any EMP measures not included in SEMP
- Contracts and workplans for construction supervision include supervision of EMP implementation (whether undertaken within SEMP or implemented separately)
- Project management monitoring and reporting systems track and report EMP implementation indicators

## **B. During Construction & Operation**

78. During subproject construction and operation, the PIO responsible for the subproject will undertake the following tasks:

- Supervise and monitor EMP implementation
- Include summaries of EMP implementation supervision and monitoring in regular progress reports
- Identify promptly deficiencies and adverse impacts observed during EMP monitoring, and take action to address these
- Prepare biannual environmental monitoring reports (EMR), documenting achievements and deficiencies in EMP implementation, and submit to PMO (see example EMR outline, Appendix 3)
- Undertake EMP public consultation activities

79. PMOs are responsible to ensure that that subproject PIOs perform their assigned tasks in environmental monitoring and reporting, and in the grievance redress mechanism (GRM).

## **VI. REPORTING**

80. **ADB-required IEEs.** As mentioned above, the PMOs (with FSCD support under output 1 and the support of an international consultant under output 2) will prepare IEE-EMPs for each ADB Category B or GoIRA Category 2 subproject. IEE-EMPs of ADB Category-B subprojects meeting any of the criteria set forth in Section IV. C will be submitted to ADB for review and approval.

81. **Environmental clearance applications submitted to NEPA.** As mentioned above, for GoIRA Category-2 subproject, an environmental clearance application will be submitted to NEPA. If NEPA directs preparation of EIA for a subproject, it will be excluded from Project financing.

82. **Biannual environmental monitoring reports.** PMOs, assisted by the ISC environment consultant, will produce biannual environmental monitoring reports and submit them to ADB for disclosure on the ADB website. These reports should include summaries of environmental progress, achievements, and deficiencies related to EMP implementation, monitoring data collected, information on (non-) compliance notices issued to contractors, complaints received from stakeholders through GRM or other routes, and actions taken to rectify problems.

83. **ADB review mission reports.** ADB review missions will review and report on adherence to environmental covenants.

84. **Contractor recordkeeping and reporting.** Contractors will maintain records of emissions, spills, and complaints, and provide copies to the relevant PIO / PMO.

85. **Public consultation reporting.** Public consultation during IEE will be recorded in a public consultation record (see formats in Appendix 4) and included in the IEE as an appendix.

86. **GRM reporting.** During construction, stakeholder complaints, and actions taken to resolve them, will be recorded in log books kept by WUA chairpersons. Biannual environmental monitoring reports will review all active log books and summarize the GRM activity during the period.

## VII. PUBLIC CONSULTATION AND INFORMATION DISCLOSURE

### A. Overview

87. **ADB requirements.** ADB's environmental safeguard policies require public consultation meetings (PCM) at an early stage of the IEE process for environment Category B investments. Adequacy of PC and information disclosure is one of the criteria used to determine compliance with ADB safeguard policies. Requirements for Category B subprojects are documented here. Category A subprojects are excluded from Project financing.

88. **Category B.** PCM during the early stages of the IEE process and throughout project implementation will be undertaken, to address any environmental issues of concern to local communities, NGOs, governments, and other interested parties.

89. **Category C.** PCM are not required but may be held if warranted by the nature of the subproject, its environmental and social issues, or stakeholder interest.

90. **Objectives.** PCM seeks to (i) explore genuine local demand for the proposed works; (ii) foster participatory, comprehensive, and accurate preparation of the works, (iii) strengthen WUA and irrigation associations (IAs), (iv) support commitment and participation of WUAs and IAs in implementation, (v) contribute to effective and transparent communication between implementing agencies and WUAs / IAs, and (vi) provide opportunities for both men and women to participate and contribute to planning of interventions beneficial to them.

### B. Public Consultation During IEE Preparation

91. At least one round of PCM will be held during the IEE study to present the subproject proposal to stakeholders and collect their comments, suggestions, and concerns. Typical IEE PCM in a proposed subproject will consist of three or more meetings with men from the head, middle, and tail areas of the irrigated area, and two or more meetings with women from the head, middle, and tail. Smaller subprojects may need fewer meetings, and larger ones more.

92. Sample questionnaires for men and women meetings and a sample reporting format are provided in Appendices 3, 4, and 5. These can be modified as implementation progresses to incorporate lessons learned from earlier PCMs.

### C. Local Availability of IEE

93. PMO/PIOs will promptly provide a copy of the IEE, in printed or electronic form, to any subproject stakeholder, Project staff, or member of the public on request.

#### **D. Local Disclosure of IEE Findings**

94. IEE and social safeguards findings relevant to local stakeholders will be disclosed in a form, place, and languages accessible to them. A single combined environmental and social disclosure will be provided that includes:

- (i) What will be affected by the subproject?
- (ii) When will these effects occur?
- (iii) When and how will the effects be mitigated and/or compensated and how?
- (iv) How were concerns expressed by stakeholders in the IEE public consultation meetings addressed by the Project proponents? Have any concerns not been addressed, and if so, which ones and why?
- (v) Who is available to listen to concerns, answer questions, and receive complaints?

95. The PMOs will prepare a presentation of this information in English and in Dari translation, and, after reviewing it with representative local stakeholders (WUA and IA members, mirabs, elders, district governors, women, etc), print and distribute brochures and/or handbills to be placed in public places (typically local mosques),

#### **E. Implementation-Phase PC Programmes**

96. All EMPs should include appropriate implementation-phase PC. Implementation-stage PC is supervised by the relevant PMO and PIO as part of the implementation program. Its purpose is to advise stakeholders of project implementation activities and of monitoring results.

#### **F. Disclosure of Subproject IEEs on ADB Website**

97. IEEs of the three RSPs will be disclosed on the ADB website. Subproject IEEs prepared during Project implementation will also be disclosed.

### **VIII. STAFFING REQUIREMENTS AND BUDGET**

98. Environmental safeguards will be managed and implemented by the PMO and PIOs with support from the ISC and FSDC:

- (i) The MEW PMO environment safeguards officer will be available to the Project on a half-time basis, and the MAIL PMO environment safeguards officer on a one-third time basis. They will support and provide input to subproject screening, categorization, IEE-EMP preparation, public consultation meetings, disclosure, and to pre-construction and construction-phase EMP implementation.
- (ii) A budget has been provided for PMO and PIO staff to undertake public consultation meetings and construction-phase monitoring visits.
- (iii) The FSDC will be responsible for environmental due diligence of MEW sub-projects. The design firm budget, including the cost of surveys, has been calculated as eight per cent of the civil work costs.
- (iv) The ISC will include an international environmental safeguards specialist for two person-months to provide training to the national PMO environmental safeguard officers, particularly in MAIL, and to help set up systems.
- (v) PIO construction supervisors will monitor EMP implementation by contractors, and are the proponent representatives at the GRM entry level.

- (vi) Escalated grievances may be referred to SBAs/DAILs, district governors, and PMOs.
- (vii) No equipment purchases related to environmental activities are anticipated.

**Table 1:Activity-Responsibility Matrix, Subproject Preparation & Pre-Construction**

	<b>Subproject preparation</b>	Screening & categorization of candidate SPs	Plan, conduct, and document IEE public Category-B SPs	Prepare IEE-EEMP for environmental Category-B SPs	<b>Pre-construction</b>	Prepare, submit environmental clearance application to NEPA for each SP, respond to NEPA queries	Archaeology inspection of excavation sites, rescue archaeology / excavation monitoring as required	Incorporate physical mitigation & enhancement measures into SP designs per EMP	Incorporate environmental safeguard materials into tender documents	Review contractor Site Environmental Management Plans (SEMPs) during bid evaluations	
Intl env specialist (FSDC)		★	★	★		●	●	●	●	●	
Natl enviro safeguards officer (PMO)		★	★	★		★	●	●	●	★	
Natl archaeologist (FSDC)							★				
Natl design engrs (FSDC)		●	●	●				★			
Natl procurement specialist (FSDC)									★		
Natl procurement specialists (PMO)									★		
Team Leader (FSDC)		★	★	★		●	★	★	★	●	
ADB project officer		ⓘ	ⓘ	ⓘ		ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	
PMO project director/manager		★	★	★		★	★	★	★	★	
<b>R – Responsible</b>	★	Those who do the work to achieve the deliverable or task									
<b>A – Accountable</b>	★	Those who accept/approve/are responsible for the completion of the deliverable or task									
<b>C – Consult</b>	●	Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication									
<b>I – Inform</b>	ⓘ	Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication									

Table 2: Activity-Responsibility Matrix, Construction, O&amp;M, and Duration of Project

	<b>Construction</b>	Construct physical mitigation & enhancement works per EMP	(i) Construction supervision of contractor implementation of SEMP to mitigate routine construction-phase impacts & liaison with GRM focal points in WUAs	Tree plantation to mitigate adverse impacts of tree removal at constructions sites on landscape & habitat values	<b>Operation &amp; maintenance</b>	Est/strengthen WUAs & IAs in priority schemes re improved water, soil, & agricultural pest management, resilience to climate & other variability; strengthen IWRM planning capacity MEW & basin entities	<b>Duration of Project implementation</b>	Biannual monitoring reports to ADB over seven year implementation period – 14 reports	MEW public consultation & communication programme	Provide continuity, support and MEW/GoIRA liaison for environmental safeguards; responsible for supervision of progress, monitoring, and reporting	
Intl env specialist (ISC)			●					●	●	●	
Natl enviro safeguards officer (PMO)	●	●	●		●			★	●	●	
PIO construct supervisors		★	★	★				●	★	★	
Contractors		★		★							
PIO technical officers						★					
PIO Directors		★	★	★		★		●	★	★	
Team Leader (ISC)		ⓘ	ⓘ	ⓘ		ⓘ		ⓘ	ⓘ	ⓘ	
ADB project officer		ⓘ	ⓘ	ⓘ		ⓘ		ⓘ	ⓘ	ⓘ	
PMO project director/manager		★	★	★		★		★	★	★	
R – Responsible	★	Those who do the work to achieve the task									
A – Accountable	★	Those who are ultimately answerable for the correct and thorough completion of the deliverable or task									
C – Consult	●	Those whose opinions are sought, typically subject matter experts; and with whom there is two-way communication									
I – Inform	ⓘ	Those who are kept up-to-date on progress, often only on completion of the task or deliverable; and with whom there is just one-way communication									

**Table 3:Mitigation Plan Summary Template**

<b>Project Stage</b>	<b>Project Activity</b>	<b>Potential Environmental Impacts</b>	<b>Proposed Mitigation Measures</b>	<b>Institutional Responsibilities</b>	<b>Cost Estimates (USD)</b>
Pre-Construction Phase					
Construction Phase					
Operation and Maintenance Phase					

**Table 4:Monitoring Plan Summary Template**

<b>Project Stage</b>	<b>Mitigation Measure</b>	<b>Parameters to be monitored</b>	<b>Location</b>	<b>Measurements</b>	<b>Frequency</b>	<b>Responsibilities</b>	<b>Cost (USD)</b>
Pre-Construction Phase							
Construction Phase							
Operation and Maintenance Phase							

## SCREENING CHECKLIST FOR CANDIDATE SUBPROJECTS

**Instructions:**

- (i) The Project team completes this checklist for each potential subproject to support its classification as ADB environment category A, B, or C.
- (ii) The checklist focuses on environmental issues and concerns. Social screening instruments should be used to screen for social dimensions such as involuntary resettlement, indigenous peoples, poverty reduction, and gender.
- (iii) Complete checklist items for the “without mitigation” case to identify potential environmental impacts. Document potential mitigation measures in the “remarks” column.

**Subproject name:**

**Subproject location:**


*Village, district, lat, long*

Screening Questions	Yes	No	Remarks
<b>A. Subproject Siting</b> Is the Subproject area adjacent to or within any of the following environmentally sensitive areas? (attach additional sheets if needed for remarks)			
▪ Protected Area			
▪ Wetland			
▪ Mangrove			
▪ Estuarine			
▪ Buffer zone of protected area			
▪ Special area for protecting biodiversity			
<b>B. Potential Environmental Impacts</b> Will the subproject cause...			
▪ loss of precious ecological values (e.g. result of encroachment into forests/swamplands or historical/cultural buildings/areas, disruption of hydrology of natural waterways, regional flooding, and drainage hazards)?			
▪ conflicts in water supply rights and related social conflicts?			
▪ impediments to movements of people and animals?			
▪ potential ecological problems due to increased soil erosion and siltation, leading to decreased stream capacity?			

Screening Questions	Yes	No	Remarks
▪ Insufficient drainage leading to salinity intrusion?			
▪ over pumping of groundwater, leading to salinization and ground subsidence?			
▪ impairment of downstream water quality and therefore, impairment of downstream beneficial uses of water?			
▪ dislocation or involuntary resettlement of people?			
▪ disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?			
▪ potential social conflicts arising from land tenure and land use issues?			
▪ soil erosion before compaction and lining of canals?			
▪ noise from construction equipment?			
▪ dust during construction?			
▪ waterlogging and soil salinization due to inadequate drainage and farm management?			
▪ leaching of soil nutrients and changes in soil characteristics due to excessive application of irrigation water?			
▪ reduction of downstream water supply during peak seasons?			
▪ soil pollution, polluted farm runoff and groundwater, and public health risks due to excessive application of fertilizers and pesticides?			
▪ soil erosion (furrow, surface)?			
▪ scouring of canals?			
▪ clogging of canals by sediments?			
▪ clogging of canals by weeds?			
▪ seawater intrusion into downstream freshwater systems?			
▪ introduction of increase in incidence of waterborne or water related diseases?			
▪ dangers to a safe and healthy working environment due to physical, chemical and biological hazards during project construction and operation?			
▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?			

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> <li>▪ social conflicts if workers from other regions or countries are hired?</li> </ul>			
<ul style="list-style-type: none"> <li>▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?</li> </ul>			
<ul style="list-style-type: none"> <li>▪ community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project (e.g., irrigation dams) are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?</li> </ul>			



## **STANDARD CONSTRUCTION CONTRACT ENVIRONMENTAL SAFEGUARD CLAUSES**

### **A. Environmental Protection and Control of Pollution**

#### **1. General**

99. The Contractor shall observe and comply with all National Laws, Government Regulations, Presidential Decrees, and Ministerial Regulations pertaining to environmental protection, pollution control, waste management, and biodiversity protection. In conducting his/her construction activities, the Contractor shall take all necessary precautions to minimise environmental disturbance to the project area and surroundings and to prevent the escape of polluting substances into streams, water courses, and ground water. The Contractor shall also utilise all necessary practicable methods and devices as are available to prevent and otherwise minimize atmospheric emissions or discharges of air contaminants.

100. Except where otherwise agreed or provided for by the Employer or expressly stipulated in Particular Specifications or Technical Specifications forming part of the Contract Documents, no separate payment will be made for complying with the provisions of this Clause and attendant sub-clauses; and all costs shall be deemed to be included in the prices for the Contractor's mobilisation for construction, and the various rates and lump sum items for the works included in the priced Bill of Quantities.

#### **2. Pollution of Water Courses and Streams**

101. The emission of polluting liquids or other waste into drains, water courses, or ground water shall not be permitted.

102. No concrete or cement washings from the works or drainage from the Contractor's concrete batching and mixing areas, asphalt (hot mix) plants, or other manufacturing or production facilities shall be allowed to discharge into streams or drains without passing through an adequate system of settling ponds.

103. Storage of fuels, fuelling and maintenance of plant and vehicles, etc. shall take place only on sites and under conditions that do not allow spilt fuels to be discharged to water bodies. Fuel storage and fuelling areas shall be equipped with adequate protective measures to confine and retain accidental spillages. No drainage from fuel store and plant maintenance depots shall be allowed to be discharged without passing through an adequate arrangement of oil traps and separators.

104. Washing of vehicles shall not be permitted in streams but only in specially designated and equipped areas.

105. Operations in quarries and borrow areas shall be carried out in such a way as to minimize any possible pollution from particulate matter entering the streams. Adequate sanitary waste control facilities shall be provided in site offices and workers camps, and sewage waste shall be collected regularly and disposed in accordance with relevant environmental legislation.

106. The Contractor shall accordingly be responsible for the installation, operation and maintenance of a comprehensive drainage system to all areas of the Works. The system shall be constructed such that no discharges of oil, cement, silt or other liquid or solid waste matter can enter the streams and water courses at the site; and it shall have all necessary solid waste

and sediment traps, settling ponds, oil separators, etc., required to ensure that pollution of streams watercourses and natural bodies of water does not occur. The Contractor shall be responsible for maintaining the system to the satisfaction of the Employer's Construction Supervisor and all costs of providing the system shall be deemed to be included in the various rates and lump sum items for the works included in the priced Bill of Quantities.

### **3. Air Pollution**

107. The Contractor shall take all necessary steps to minimize air pollution resulting from his/her operations.

108. Except where stipulated in these Specifications for the disposal of natural vegetation and organic materials from clearing operations, the burning of waste materials for disposal, particularly oil and petroleum wastes, rubber, plastics and similar materials will not be permitted.

109. During the performance of the work required under the Contract or of any operations appurtenant thereto, whether on the Project Site or elsewhere, the Contractor shall take all steps necessary, and shall furnish all labor, equipment, materials and means, required to reduce dust nuisance from the Works, and to prevent dust originating from his/her operations from damaging crops, orchards, cultivated fields, and dwellings; or causing a nuisance to persons. The Contractor shall be held liable for any damage resulting from dust originating from his operations including on Government roads, rights-of-way or elsewhere.

110. The emission of dust into the atmosphere shall not be permitted during the manufacture, handling and storage and handling of cement and of concrete aggregates, and the Contractor shall use such methods and equipment as are necessary for the prevention, or the collection and disposal, of dust during such operations. All truckloads of loose materials shall be covered during transportation

111. Concrete batching and mixing areas, asphalt (hot mix) plants, or other manufacturing or production facilities shall be sited at least 500m from the nearest habitation. Emission outlets shall be fitted with pollution control devices in compliance with relevant current Government emission control legislation.

112. The cost of spraying water on haul roads, access roads, government roads, aggregate stockpiles, etc.; or of any other methods of reducing the formation of dust; and the cost of furnishing and applying materials to maintain the works areas, adjacent areas, and roads, in a dustless condition, shall be deemed to be included in the various rates and lump sum items for the works included in the priced Bill of Quantities.

### **4. Noise Pollution**

113. The Contractor shall take all necessary precautions to minimize the amount of noise and vibrations coming from construction activities

114. The Contractor shall ensure that all plant and equipment is properly maintained in good operating condition, and that noisy construction activities shall be effectively sound reduced by means of silencers, mufflers, acoustic linings or shields, acoustic sheds or screens or other means, to avoid disturbance to any nearby noise sensitive receivers. All plant and equipment shall comply with relevant Government legislation covering sound emissions.

115. Quarry operations and blasting shall be undertaken so as to minimize blasting and disturbance during the night and, insofar as possible, noise, vibration and dust. Operation of trucks and heavy vehicles and machinery shall be restricted to the hours of 06:30 to 19:00.

116. All necessary measures shall be undertaken to protect schools, hospitals and other adjacent noise sensitive receptors, including the use of noise barriers.

## **5. Damage to Property, Crops, and Vegetation**

117. The Contractor shall limit the movement of his/her employees and equipment within the project area and on adjacent land, including access routes approved by the Employer's Construction Supervisor, so as to minimize damage to natural vegetation, crops and property, and shall endeavor to avoid any damage to land.

118. The Contractor shall strictly ensure employees and equipment do not enter any sensitive environmental areas that are demarcated as "no-entry" zones.

119. The Contractor shall preserve existing trees, plants and other vegetation that are to remain within or adjacent to the Works and shall use every precaution necessary to prevent damage or injury thereto. Trees or shrubs shall only be felled or removed where such impinge directly on the permanent works or necessary temporary works areas; and where such is approved by the Employer's Construction Supervisor.

120. On completion of the Works all areas disturbed by the Contractor's construction activities shall be restored by the Contractor to their original condition, or as may be acceptable to the Employer.

121. The Contractor shall be responsible directly to the Employer for any excessive or unnecessary damage to crops or lands arising from his/her operations, whether within the project area, on lands adjacent thereto, or adjacent to approved access roads: and deductions will be made from the payment due to the Contractor to cover the cost of such excessive or unnecessary damage, as determined by the Employer.

## **B. Reporting**

122. The Contractor shall maintain a record of all emissions and spills of liquid, solid and gaseous matter which occur at the site, whether into water courses, streams, on land, or into the air. This record shall be compiled daily and shall include details of date, time and nature of the event, along with details of the remedial and clean-up measures carried out.

123. Copies of these records shall be given to the Employer monthly.

124. The Contractor shall also maintain a record of any complaints made by any Governmental or Community Organization or by the public, regarding his/her operations. This record shall contain the date and time of receipt of the complaint, the name and address of the complainant and the action taken to remedy the situation. Copies of these records shall be given to the Employer monthly.

### **C. Environmental Management Plan**

125. The requirements of this clause and attendant sub-clauses on Environmental Protection and Pollution Control notwithstanding; the Contractor shall observe and comply with all relevant environmental protection and mitigation, monitoring, and reporting requirements in the Environmental Management Plan (EMP) as stipulated in the Particular Specification. In the event of any conflict between the foregoing sub-clauses and the environmental protection and mitigation measures and pollution control requirements of the EMP, the EMP shall take precedence.

126. The Contractor shall prepare and submit to the Employer's Construction Supervisor a Site Environmental Management Plan (SEMP) demonstrating the manner in which the Contractor will comply with the requirements of the foregoing subclauses on Environmental Protection and Pollution Control, the EMP, and any particular environmental mitigation measures as stipulated in the Particular Specifications or Technical Specifications forming part of the Contract Documents.

127. The SEMP shall be submitted within 15 working days of the Contractor receiving the Notice to Proceed With the Works, and shall include a waste management plan detailing procedures for waste management for the site covering all solid, liquid and gaseous waste materials and emissions. The waste management plan shall include procedures for the collection and disposal of all waste materials in such a way as to ensure that no damage is caused to the environment. Training shall be provided to workers about the appropriate implementation of the SEMP and waste management plan measures.

128. Where stipulated in the Particular Specifications or Technical Specifications forming part of the Contract Documents, and provision has been made in the Bill of Quantities; payment for the implementation of the SEMP will be made in accordance with the Unit Rates, Lump Sum or Provisional Sum Items included in the Priced Bill of Quantities.

## EXAMPLE OUTLINE, ENVIRONMENTAL MONITORING REPORT

**Abbreviations**  
**Executive Summary**  
**Table of Contents**

### I. INTRODUCTION

[Boilerplate that is the same for all EMRs of a particular Project. Describes the reason for the report; its relationship to other reports eg one in a series of biannual monitoring reports required by ADB; purpose of the report eg document results of monitoring activities carried out per IEE-EMP monitoring plan(s); report structure. Length about ½ page]

[Identify the dates of this reporting period.]

### II. PROJECT DESCRIPTION

[Boilerplate that is the same for all EMRs in a series. Project name, acronym, numbers; location, purpose, proponents, financing, summary of physical works, schedule – ½ page]

### III. PHYSICAL PROGRESS

[Summary of physical progress (i) to date and (ii) during the reporting period]

### IV. STATUS OF FOLLOW UP ACTION ITEMS FROM PREVIOUS EMR

[This section presents a table listing follow-up action items from the previous EMR, actions taken during the reported period, whether or not the issue has been resolved, and if not a description of what remains unresolved and the follow up plan]

List of action items from last section of previous EMR	Action taken during reported period		Issue resolved at end of reported period	
	Y/N	Description of actions taken	Y/N	Description of unresolved issue & follow up action items
Action item 1				
Action item 2				
Action item 3				
[Add'l lines as needed]				

### V. MONITORING

#### A. Planned And Undertaken During The Reported Period

[This section presents a text summary of any mitigation deficiencies / adverse impacts found by the monitoring and actions taken to address them, accompanied by a table - structured similarly to the IEE monitoring summary table – that provides details of the monitoring planned and actually undertaken during the reported period.]

Subproject		Mitigation measure	Monitored parameters	Location	Results of monitoring / measurements	When measured	By whom
No	Name						

### B. Monitoring Due During The Next Reporting Period

[This section presents a table that lists the monitoring provisions of EMPs and EARF (if there is one) that apply to the next reporting period]

Subproject		Mitigation measure	Monitored parameters	Location	When to measure	By whom
No	Name					

## VII. PUBLIC CONSULTATION & INFORMATION DISCLOSURE

### A. Planned And Undertaken During The Reported Period

[This section presents a table showing the public consultation and disclosure events that were planned and actually occurred during the period, tagged to date, subproject location, participants, issues raised etc. as appropriate.]

### B. Consultation And Disclosure Due During The Next Reporting Period

[This section presents a table that lists the consultation and disclosure provisions of EMPs and EARF (if there is one) that apply to the next reporting period.]

## VIII. GRIEVANCE REDRESS MECHANISM

[This section provides information about grievances received during the period, actions taken on new and ongoing grievances, and unresolved issues at the end of the period.]

## IX. FINDINGS AND ACTION ITEMS

[Summarize main points of monitoring, public consultation and information disclosure, GRM, corrective actions taken, actions items to be undertaken, and recommendations for adjustments to the reported activities (monitoring, public consultation and information disclosure, GRM, corrective actions.)]

## PUBLIC CONSULTATION MEETING RECORD FORMATS

### A. Format for the List of Public Consultation Meetings

**Instructions:** Enter meeting information, one row per meeting. Add rows as needed.

**Table \_: List of Public Consultation Meetings**

N	Date	Meeting description				Conducted by	Stakeholders participating	
		Location					Gender & men's occupations	No
		Position on canal	Qeshlak (village)	District	Province			
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

**B. Format for Public Consultation Meeting Notes**

**Instructions:** Enter meeting information, one table per meeting. Add tables as needed.

<b>Table &lt;n&gt;: Meeting &lt;meeting number&gt; – SP &lt;SP name&gt; &lt;location within SP&gt;, &lt;men or women&gt;</b>	
<b>Meeting date &amp; time:</b>	<enter date and time>
<b>Place:</b>	<enter meeting place village, district, province, and GPS coordinates if available>
<b>Topics:</b>	See agenda and questionnaire, Table <m>
<b>Attending:</b>	Proponents: <list of consultants, ministry/department staff, district government representatives and staff> Stakeholders: per sign-in sheet below, <how many> men - <list men's occupations>
<b>Concerns raised by stakeholders</b>	
<summary phrase for concern #1>	1. <Description of concern as stated by stakeholder(s)>
<summary phrase for concern #2>	2. <Description of concern as stated by stakeholder(s)>
<summary phrase for concern #3>	3. <Description of concern as stated by stakeholder(s)>
	<Add as many rows as needed to list all concerns raised by stakeholders>
<b>Outcomes &amp; conclusions</b>	
<All stakeholder concerns, or Stakeholder concerns numbered (list of concern numbers)> will be accommodated by the Project. <If some concerns cannot be accommodated, complete the following section> Stakeholder concern <number> <describe Project response or inability to respond.>	
<b>Action items for proponents</b>	
1. <List proponent action item for concern #1> 2. <List proponent action item for concern #2> 3. <List proponent action item for concern #3> 4. <List proponent actions for each concern>	
<b>Reported by:</b>	<name of proponent representative who facilitated the meeting and took or checked the final notes>